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**INYUVESI
YAKWAZULU-NATALI**

**Students attrition in TVET colleges: A case study of at Elangeni TVET College in South
Africa**

By

Wiseman Vuyani Zulu

9802118

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School of Management, Information Technology, and Governance, College of Law and
Management Studies

Supervisor: Dr. Sybert Mutereko

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DECLARATION

I, Wiseman Vuyani Zulu, student number 9802118 wish to declare that:

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ABSTRACT

The TVET colleges are the cornerstone in addressing unemployment, poverty and building the economy of the Republic of South Africa by producing well equipped artisans. TVET colleges are expected to enrol 2.5 million students by 2030. TVET colleges are responsible for the sound throughput at the end of each academic calendar/ cycle. In the past, technical colleges/ or Further Education and Training Colleges which are now known as TVET Colleges were perceived as the institutions in which to dump slow learners who could not make it in main stream schools. Today TVET Colleges are expected to be the institutions of choice as is the case in the global community. The main challenge faced by the TVET Colleges and the Department of Higher Education and Training at large is that a number of students who enrol at the beginning of the cycle drop out during the year, and as a result, the mandate of the TVET Colleges cannot be achieved. Therefore, the objective of this study is to ascertain the reasons behind this high attrition rate, and to endeavour to identify solutions to curb this attrition and maintain retention. The results of this study reflect that there are a number of factors behind the high attrition rate in the institutions of higher learning, the TVET Colleges in particular. This study concludes that all stakeholders have a huge role to play in order to reduce the high attrition rate in TVET Colleges. This study finally recommends a number of retention strategies and last but not least that the TVET Colleges need to focus more on the retention rather than enrolment.

Key words: TVET Colleges, attrition, retention.

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LISTS OF ACRONYMS

AS	Academic Senate
CHE	Council of Higher Education
CMT	Campus Management Team
COGTA	Cooperative Governance and Traditional Affairs
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
ETVET	Elangeni Technical Vocational Education and Training
FET	Further Education and Training
IMT	Institutional Management Team
KZN	KwaZulu Natal
NCV	National Certificate Vocational
NATED	National Accredited Technical Education Diploma
NDP	National Development Plan
NQF	National Qualification Framework
PQM	Program Qualification Mix
RSA	Republic of South Africa
TVET	Technical Vocational Education and Training

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CHAPTER 1: INTRODUCTION AND OVERVIEW

1.1 Introduction

The main focus of this study is to explore the reasons behind the high student attrition rates in the (TVET) Technical Vocational Education and Training colleges in South Africa. The aim of this chapter is to provide an outline of the study. This chapter provides the background to the study, the problem statement/ research problem, the research questions, the research objectives, significance of the study, brief methodology, and definitions of terms, limitations and delimitations of the study. Last but not least, this chapter concludes by presenting the blueprint of the chapters of the thesis at large.

1.2 Background to the Study

The former public Further Education and Training (FET) colleges were renamed as TVET colleges in 2012. The transition occurred between 2012 and 2015. The TVET colleges provide for two sets of persons. The first set are the vocation oriented students rather than the normal Grade 12; after three years they qualify for National Certificate Vocational (NCV). The NCV was introduced in 2007. The second are those students who have completed their Grade 12 and intend to further their studies in a technical or vocational field through NATED, the National Accredited Technical Education Diploma. After 18 months they receive the N6 certificate which is equivalent to NQF L5. These NATED students have to do an in-service training for 18 months and thereafter they qualify for a National N Diploma which is equivalent to NQF L6. In South Africa there are 50 TVET colleges and 260 campuses which are scattered across all provinces, and in almost all districts. The courses offered in TVET colleges vary from engineering studies, to business studies and consumer studies.

The Constitution of the Republic of South Africa states that all citizens have a right to further education and training. The South African TVET colleges ought to play a huge role in equipping the citizenry with relevant skills in order to curb the shortage of artisans in the country. The *National Skills Development Act* aimed to provide an institutional framework to devise and implement the national sector and workplace strategies to develop and improve the skills of the South African workforce (DHET, National Skills Development Plan, 2017). It is crucial for TVET colleges to train more artisans in order to reduce the unemployment rate, reduce crime, thus growing the economy of the country at large. The mandate of the Department of Higher Education

and Training is to strengthen and expand the public TVET colleges and turn them into attractive institutions of choice for school leavers. The total headcount has increased from just over 345 000 in 2010 to an estimated 650 000 in 2013. The mission of DHET is to increase the student enrolment to 1 000 000 by 2015 and 2, 5 million by 2030 (DHET, White Paper for Post School Education, 2013).

The biggest challenge facing the TVET colleges in South Africa and the threat to the National Development Plan (NDP) is the low throughput rate and high attrition rate. Available data suggests that the average certification rate for NCV and NATED courses is between 30% and 50% per level. Certification rates exaggerate accomplishment, yet the attrition is not encapsulated. Therefore, the more realistic approximation is that about 2% of students who enrol for NCV at Level 2 graduate in a period of three years, and only 10% graduate in a period of six years. The low throughput rates are more evident particularly in engineering and IT-related programs (DHET, White Paper for Post School Education, 2013). A recent performance and expenditure review commissioned by the Treasury General lays bare some of the colleges' failings. It found that the average throughput rate in NCV courses in 2013 ranged from a dismal 0, 6% in civil engineering to 5.9 % in tourism; the national certificate rate was just 32.5% for first year students and the dropout rate was 28%. Nevertheless, despite the low throughput rate across all programs in the TVET sector, there are students who complete their studies within the stipulated time. The very low throughput rates result in a high cost per graduate, hence, the spending per learner per year is approximately R27 000 for NCV courses, and thus the cost per graduate is estimated to be over R450 000 (DHET, White Paper for Post School Education, 2013).

This research is thus motivated by the high student attrition rate in TVET colleges in South Africa. The high student attrition rate in TVET colleges ultimately defeats the purpose and reasons for the existence of TVET colleges which is to train more artisans with the aim of reducing unemployment, crime and poverty in the country. The high rate of attrition in South African TVET colleges contributes to more than 50% of youth unemployment in South Africa which may in turn lead to an increase in the high rate of crime. This will also result in low economic growth and thus poverty.

1.3 Research Problem/Statement of the Problem

The strategic goal of the DHET is to increase the number of skilled youths by expanding access to education and training for the youth. The mission of DHET is to increase the student enrolment to 1 000 000 in 2015 and 2, 5 million by 2030 (DHET, White Paper for Post School Education, 2013). The constitution of the Republic of South Africa states that all citizens have a right to further education and training.

The United Nations draws attention to the fact that nations need to eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous people and children in vulnerable situations (UN, 2015). The United Nations points out that by 2030 nations need to ensure that inclusive and equitable quality education is available and promote lifelong learning opportunities for all. The United Nations highlighted that nations need to ensure equal access for all women and men to affordable quality technical vocational and tertiary education, including university, and to substantially increase the number of youth and adults who have relevant skills including technical and vocational skills for employment, decent jobs and entrepreneurship (UN, 2015).

Despite this, the high attrition rate in TVET colleges in South Africa defeats the aims and goals of the National Development Plan (NDP), and Sustainable Development Goals. Previous research has established that about 56% of the enrolled had dropped out from their institutions without graduating, and 14% were still existing in the system beyond the standard time to complete a qualification (Scott, Yeld, & Hendry, 2007). The delight of being accepted into higher education in South Africa lasts for a very short time for a majority of students, as they are faced with numerous challenges which often results in a high attrition rate (Moodley, 2015). Because of this problem, it can be argued that the mandate for DHET cannot be achieved due to the persisting attrition witnessed in higher education and training, and in the TVET colleges in particular.

1.4 Aim of the study

This study seeks to critically examine the existing mechanisms in place to prevent student attrition at TVET colleges in South Africa and explore other possible mechanisms to curb the high attrition rate in South African TVET colleges. The study examines the situation of the Elangeni TVET College as a case study which is situated in KwaZulu-Natal and comprises of five campuses.

1.5 Research Questions

- What is the nature and extent of attrition at Elangeni TVET College?
- What are the causes or reasons behind attrition at Elangeni TVET College?
- Are there any already available mechanisms to deal with attrition at Elangeni TVET College?
- What more could be done to curb the attrition rate in at Elangeni TVET College?

1.6 Research Objectives

- To measure the nature and extent of attrition at Elangeni TVET College.
- To discover the causes or reasons behind attrition at Elangeni TVET College.
- To ascertain the already available mechanisms to deal with attrition at Elangeni TVET College.
- To explore the extent to which attrition could be curbed at Elangeni TVET College.

1.7 The Significance of the Study

The aim of this study is to examine the reasons for the high attrition rate in the TVET colleges in South Africa. The study will assist the Management of TVET colleges and DHET at large to better understand the reasons behind the high attrition rate in order to develop relevant policies to reduce the attrition and also to be able to deliver their mandate accordingly. Understanding the causes of the high attrition rate will also help the Management of TVET Colleges to focus on developing mitigating strategies. The study will also help the students themselves to refrain from dropping out from the institutions of higher learning, the TVET colleges. In return, the country at large will benefit as the TVET colleges will be able to produce the number of artisans required to boost the economy of South Africa.

1.8 Brief Research Methodology

This study is a case study. It used several methods, particularly the questionnaires and interviews to collect data. There were questionnaires which were run through paper surveys which will be furnished to randomly nominated participants. The researcher will supervise the completion of the questionnaire. It consisted of two categories of questions: the first category would be the bio-data from the respondents and the second category were questions associated with the research questions. Out of eight campuses of Elangeni TVET College, respondents will be drawn from five campuses. There were also be interviews for both students and staff. Students interviewees would comprise of those who are still studying and those who dropped out. Staff interviewees would comprise of CMT members, Lecturers and SLOs.

1.9 Student Attrition: Definitions

Attrition is the dropping out of students attending the college due to several causes. It is also defined as the practice of students departing their schooling, chiefly due to institutional structures and procedures (Rienks & Taylor, 2009). Occasionally the term is used to label all procedures making students leave their training. **Permanent dropout** is the act of departing the college prematurely and never coming back. **Temporary dropout** is the deed of departing the college temporarily and returning later. **Dropout rate** is the percentage of students who depart the college without attaining a first qualification (Grayson & Grayson, 2003). **Early attrition warning system** is the process of observing and detecting students who are likely to not achieve scholastically or to experience difficulties in adjusting to the college setting (Davidson, 2001).

Attrition is the opposite of **retention**. As stated above **attrition** refers to the rate of student dropout in the TVET colleges. Retention means that the cohort of students who enrolled at the beginning of the first year are expected to complete their studies at the end of their final year in the same number. Retention rate is the proportion of a distinct set of students who persist in the institution of higher learning for some well-defined time. **Retention** refers to the successful completion of students' academic goals of qualification attainment. **Completion rate** is the proportion of students who attend or honour the full duration of their studies until they graduate (Levitz, 2001). **Graduation rate** is a numbers exercise employed by institutions of higher learning which signify the projected proportion of the cohort of students that has accomplished a program/ course or the number of graduates, divided by the populace at the representative graduation age.

1.10 Limitations and Delimitations

The limitations that the researcher anticipates comprise of the poor attendance of students who have already dropped out from the college. Due to financial and time constraints and work commitments the researcher is only able to collect data from one institution which is Elangeni TVET College in KwaZulu Natal province.

The delimitations of the study are that the researcher will focus on the Ministerial programs such as NCV and NATED, yet there are other offerings taking place in the TVET sector such as the Occupational programs. Out of eight campuses the researcher decided to limit the study to five campuses of which the findings can be generalised to the rest of the campuses of Elangeni TVET College. The study will also focus on three years of data.

1.11. Outline of the Dissertation

The study comprises of five chapters. Chapter 1 presents an introduction to the study and presents its background, research problem, research questions, research objectives and chapter layout. Chapter 2 covers the conceptual framework of student attrition and attrition from the South African perspective by discussing the literature available. This chapter also discusses the theories underpinning the study, which are Durkheim's Theory of Suicide as Applied to Dropout and Interactionist theories. Further, Chapter 2 also discusses retention mechanisms. Chapter 3 discusses the methodology used in the study. The chapter explains the research design, sampling methods and data collection methods to be utilized during the study. The chapter concludes by examining the ethical considerations that need to be attended to when conducting such a study. Chapter 4 analyzes and interprets the data of the study, using graphs and tables to present the findings. This chapter concludes by discussing the findings of the study. Chapter 5 provides a summary of the study, recommendations, and the conclusion of the study. The recommendations should assist the TVET colleges in reducing the high student attrition rate.

CHAPTER 2: CONCEPTUALISING STUDENT ATTRITION

2.1 Introduction

This chapter seeks to conceptualise the reasons behind the high attrition rate in higher education at large and in TVET colleges as deliberated on by various writers across the globe. It will begin by defining attrition in TVET colleges, and then contextualise this into the South African situation, then explore the reasons behind the high attrition rate in the TVET colleges. This chapter will further explore the theories that are underpinning the attrition in TVET colleges. This chapter will also consider retention mechanisms.

2.2 Student Attrition: Definitions

This chapter builds on the definitions presented in Chapter One. In general, the term ‘attrition’ is mostly used in the working environment and is defined as the random and uncontrollable lessening of employees due to resignation, retirement, sickness or death (Rienks & Taylor, 2009). However, *attrition* also refers to the quantity of students who leave their studies before the end of the academic calendar. Institutions of higher learning regard all forms of early leaving as “dropping out”, which they consider a concern because dropping out impacts on the institutions’ financial income and eventually affects the institutions’ sustainability. *Attrition* rate is used as a performance indicator of higher education providers; and is regarded as the proportion of students who dropout from formal education within a quantified period (Rienks & Taylor, 2009).

In the TVET college sector, when reference is made to attrition, it can be viewed as “dropping out”. Therefore, when students succumb to attrition or drop out, they decrease the throughput rate of the college. College success rates are generally measured by the number of registered students that they keep in the system until completion of their studies ultimately affecting their pass and throughput rate. Attrition has regularly been ‘portrayed as having a unique personality profile or as lacking in a particularly important attribute needed for college completion’ (Lawrence, 2016). Defining *dropout* correctly is not always easy; individuals and institutions normally associate personal failure with the term dropout. Some students perceive their departure as a positive step. Some students may enrol at a college with no intention of finishing with a diploma. Students have their own goals and plans, and their educational goals do not necessarily call for degree completion. The term dropout sometimes creates a perception that the individual has failed to meet the academic and social standards of the institution. The term ‘dropout’ tends to have negative

connotations hence the term ‘departure’ is more suitable and needs to be used instead (Lawrence, 2016). The following are the attrition related definitions which play a huge role in trying to reduce the high attrition rate in TVET Colleges.

Academic integration is defined as the paired processes whereby students grow into part of the higher education framework. Academic integration is perceived to have two scopes. The physical, and stricter, signifies meeting unambiguous principles of the education, such as achieving adequate levels of education. The other one is normative, and more relaxed, and signifies understanding the more implied normative structure in the education system, such as cherishing some things more compared to others (Tinto, 1999).

Coaching is functioning with the student, classifying their talents, desires and goals, creating a coaching strategy that they agree to, embrace and need to achieve, then functioning with the students to help them to achieve them (Wisker, 2008).

Counselling is a process of facilitating the work of students, valuing the work of students and functioning with the resources of students; creating an unquestioning rapport with a positive climate in order to allow the expression of students’ emotional states and amplification of life circumstances (Wisker, 2008).

Mentoring is when a more knowledgeable, probably grown-up person is assisting/mentoring someone less knowledgeable, to endow and empower them to improve essential skills in order for him or her to be an effective student, subject to the perspective, and to heighten his or her own coping approaches, and accomplishment (Wisker, 2008). **Peer tutor/mentor** students are students who are proficient and supervised to deliver applied aid and delicate support to students of comparable age or know-how, comprising of action preparation, common sharing, problem solving, decision-making, and paying attention (Wisker, 2008).

Peer Group is viewed by Astin (1996) from two perspectives which are the individual or psychological point of view and sociological point of view. From the individual point of view, a peer group is a pool of individuals with whom the individual classifies and associates and from whom the individual pursues approval and endorsement. From a sociological viewpoint a peer group can be well-defined as any group of individuals in which participants categorise, associate with, and pursue approval and recognition from each other (Astin, 1996).

Persistence means the tenacity of students who continue to study regardless of facing many difficulties and they will ‘stick it out’. These students display a strong commitment and individual goals. Parents and families play a huge role in helping these students to cope with difficulties which helps students to persevere irrespective of dilemmas and hardships. Some students who experience difficulties in meeting the academic performance demands tend to continue, and only vacate when they are compelled to. In short, *persistence* is the aspirations and deeds of students to endure in the institution of higher learning and complete their courses despite any given external forcing factors. **Non-persister** is a student who drops off from the institution of learning before the end of the academic calendar (Berger, 2000).

Progression is the process which empowers students to pass from one level of a qualification to the subsequent level.

Social integration denotes the congruency amongst the students and the social atmospheres of the education system. This involves both interfaces with peers and staff of the institution of higher learning. Social integration is a vital part of hypothetical replicas for student retention, which are the Student Integration Model (Tinto, 1999) and the Student Attrition Model (Bean, 2000).

Dropping out versus Retention

Student attrition and retention are extensively used notions and are classically distinguished as two sides of the same coin. *Dropping out* is leaving the institution of higher learning prematurely, and *retention* is staying in university until completion of a degree (Hagedorn, 2006). *Retention* and *Persistence* are terms often used interchangeably; as in the same way with *Dropping out* and *Attrition*. Retention is highly complex as the students may decide to change from one institution to another throughout their educational career. The previous students who dropped out might change their mind and return to the same college, or move into another college of choice (Hagedorn, 2006). It has, though, been established that withdrawal from an institution of higher learning can result either from forced withdrawal (academic dismissal) or from voluntary withdrawal. While voluntary withdrawal is based on a students’ own attrition decisions, forced withdrawal usually arises from unsatisfactory levels of academic performance or from the breaking of well-known rules regarding appropriate academic and social behaviour (Tinto, 1999).

2.3 Student Attrition and Achievement

While there is enormous curiosity and continuing focus on the access and achievement of students in the institutions of higher learning, there is also much concern about proportionally high dropout rates (Thomas, 2002). The large body of international research explores the high student attrition rates in the institutions of higher learning. According to Maslov (2012) the attrition rates are the forecasters of educational achievement amongst institutions of higher learning. He highlights that dropout rates are deemed to be one of the crucial pointers used to rate achievement in the institutions of higher learning. Maslov holds the view that the student dropout rates symbolize the wasteful use of resources if students who dropout without graduating cannot be absorbed into the labour market. Further, Maslov argues that keeping of records in the higher education institutions should be restructured by using electronic databases to keep all student data; in order to allow smooth continuous data analysis and monitoring of students' achievement. Maslov maintains that for the achievement of both society and students, it is imperative to lessen the rate of dropout. He further suggests that understanding of the reasons for non-academic achievement and success is also imperative for institutions of higher learning that are trying to maintain high retention rates and improve support strategies for under and non-achieving students. Maslov adds that scrutiny of dropout and reasons for lack of academic achievement might produce numerous long-term paybacks.

Like Maslov, Fike (2008) explored the factor affecting retention of a 9200 strong new student intake who registered in a community college over a period of four years in West Texas in 2008. He highlights the effect of progressive education programs and e-based programs on student perseverance. Fike holds the view that extra challenges include assistance in funding, guardians' academic achievement, the length of tuition hours registered and dropout within the first semester, and involvement in the Student Support Services program. However, Fike overlooked the factors/attempts that institutions embarked on in attempts to keep the cohort of current students until they completed their studies such as academic support, bursaries for tuition fees, transport fees, accommodation and meals. Both Maslov (2012) and Fike (2008) agree that the attrition rates are pointers or forecasters of the achievement of the institutions of higher learning.

Although Fikes' methodology was well balanced as it contained four independent variables which were gender, high school grades, entrance exam grades, and year of enrolment, his study had some

flaws. The main limitations of Fike's study is that it only focused on one college and therefore his findings cannot be applicable to all other colleges in different geographical areas.

Like Maslov and Fike, Lola (2014) examined factors that affect throughput in higher learning which are: students' academic achievement, students' gratification and the students' intentions to drop out from the institution of higher learning. These factors are based on the students' perceptions of several factors which are academic, ecological, and mental and their own environment. Lola's framework draws from Tinto's (1999) dropout intentions model. Lola holds the view that attention should be paid to the prominence of using a mixture of conceptual frameworks and models to identify the actual pointers of students' academic achievement, gratification and attrition intentions. Lola maintains that the quality of academic performance will lead to the gratification and thus lessen the attrition intentions of students in institutions of higher education and training.

Despite their limitations, Fike (2008) and Maslov (2012) and Lola's (2014) works are useful for understanding the causes of student attrition in the institutions of higher learning, and it allows the researcher to further explore the areas which were not covered in order to ensure that the findings will be useful and applicable to the TVET sector in South Africa at large.

2.4 Student Attrition and Recruitment

It has previously been observed that student recruitment is crucial for getting students registered, but as soon as they get registered, institutions of higher learning are not doing enough to keep them throughout the full stipulated academic calendar. According to Maslov (2012) institutions of higher learning need to focus on reducing the high attrition rate of students by enhancing the student placement procedure and having vigorous strategies to identify and support students with academic problems. Maslov holds the view that the institutions of higher learning do not regard student retention as a serious matter. He further suggests that extra attention should be dedicated to the high dropout rate.

Both Maslov (2012) and Fike (2008) argue that it is more expensive to garner new students than to keep the already existing students. They hold the view that institutions of higher learning normally focus on getting new students (student recruitment) rather than keeping the already existing student (student retention); and that institutions of higher learning incur a lot of expenses related to student recruitment and related expenses which are for traveling and recruitment

consumables. Maslov and Fike emphasize that there is a need to pay more attention to the strategies that reduce the high attrition rate than to recruit new learners.

Although both Maslov and Fike have emphasized that institutions of higher learning need to focus more on keeping existing students rather than recruiting new ones, they neither provide nor suggest how the institutions of higher learning should keep existing students.

2.5 Causes of Attrition

Recent evidence suggests that if institutions of higher learning are serious about making a difference in students' lives, it is critical to understand the reasons behind student dropout or why they choose to continue with their studies. In an attempt to ascertain the factors leading to high attrition rates in institutions of higher learning, Klaus (2016) explores the degree to which students dropping out from a vocational video-based online exercise about media design for workers of micro, small and medium-sized enterprises, vary from working students' online learning experience, computer attitudes, and computer anxiety. In his research he included the different demographic variables to establish the connection amongst the attitudes and dropout. He found no differences between the dropout and learner groups on all demographic variables; and there were also no differences found between the dropout and the learner groups in online learning experience; but rather the attitudes of the dropout group were more negative, and they reported a higher level of computer anxiety. Klaus argues that the students' computer attitude and computer anxiety add to student dropout regardless of the profession. He draws attention to the fact that future research should concentrate on when attrition take place. However, Klaus' study focused on working students and never covered the students who were not working, but chose e-learning in order to get concrete reliable data. He also overlooked the physiological factors that can hinder progress and even result in attrition such as blindness and physical disability. Again, while he is correct, there are many other factors that need to be taken into consideration, like foundational background, access to e-learning, environmental factors, other tasks, prior learning, and psychological factors. He should have also explicitly focused on the infrastructure as the bases of access to e-learning. The learner who stays in a rural area where a network is problematic is more likely to drop out than a learner who stays in an urban area where network is always available. Therefore, his study was a bit biased in that sense and his findings cannot be applicable to all geographical locations.

In exploring the persisting high attrition rate in institutions of higher learning, Shakizah (2016) identified the main relevant causes which are training facilities, learning materials, timetabling, staff attitudes, class environment, hostel problems, and lack of extracurricular activities, lecturer attitudes, external influences and student goals. Shakizah holds the view that the institutions of higher learning lack facilities and training equipment, and the learning material is always exhausted. He also highlights that lecturers do not have proper class and workshop schedules, and there are often poor and uncomfortable classroom conditions. He further suggests that lecturers have negative attitudes towards students, and do not care about students. Shakizah also highlights that a number of lecturers do not have extracurricular activities. Recent research has also established that some students are forced by their parents to study in institutions of higher learning, and hence cannot wait for graduation and want to get a job quickly (Lola, 2014). Many a times the students lose interest in their studies, or else there are family economic challenges and parents force students to drop out from college in order to find a job and help support their families (Lola, 2014).

Shakizah's (2016) findings confirm Tinto's (1999) findings which show that the reasons behind the high attrition rate of students are lack of proper learning facilities, poor learning materials, shortage of student hostels, class environment which is not conducive to proper teaching and learning, poor academic support and extracurricular activities, and staff attitudes towards students.

In an attempt to discover motives behind the high student dropout rate in institutions of higher learning, Hauser (2012) identified the students who did not drop out from institutions of higher learning as persisters and those students who dropped out as non-persisters. He holds the view that student characteristics, institutional factors, academic and occupational goals and commitments, financial assistance and other individual factors, are imperative for student retention in institutions of higher learning. However, Hauser emphasised that the characteristics and attitudes of students in the community colleges and the students in the universities are not the same. Many experts however, contend that and suggest that the characteristics of students in higher education are exactly alike irrespective of whether they are at colleges or in universities (Tinto, 1999).

2.6 Student Attrition from a South African Perspective

Extensive research has established that the delight of being accepted into institutions of higher learning in South Africa lasts for a very short time for a majority of students due to a persisting

high attrition rate. According to Moodley (2015) the dropout rates could be narrowed by growing the output altitudes in the South African Department of Higher Education and Training. Moodley conducted a qualitative study which detected the challenges that students come across which lead to the huge attrition rates. He found that there is improper selection of career by students because the information given to students is very limited or is not available at all prior to leaving school and beyond. He also found that poor academic performance as well as scarce funding are the main reasons for the high student attrition. He observed that the use of English as a medium of instruction worsens the situation as the students cannot cope with this medium, and this impacted on their academic success and therefore influenced in the high attrition rate. Moodley holds the view that the role that need to be played by the higher institution departments is to align their academic support programs with courses that are deemed to produce high failure rates in order to help students to cope. He maintains that higher education institutions only introduce student retention strategies as a corrective measure instead of as a preventative measure hence student attrition continues on an annual basis.

Recent research has also established that in South Africa, only five per cent of coloured and black students complete their studies in higher education, and this requires a thorough and tactical and advanced strategy in order to curb the persisting high attrition rate, particularly for formerly underprivileged students. Like Pillay's (2010) and Ngcobo's (2010) findings, Moodley argues that issues such as accommodation and shortage of financial assistance on top of the academic demands add difficulties to students' progress to the next level. Drawing from Moeketsi and Maile's (2008) findings, Moodley further highlighted that the Human Sciences Research Council revealed that in 2005, of the 120 000 students who registered in the Department of Higher Education and Training in the year 2000, 36 000 (30%) dropped out during their first academic year. Some 24 000 (20%) dropped out during their 2nd and 3rd academic years. Amongst the 60 000 remaining students, only 22% graduated within the stipulated three-year academic calendar in general studies.

The recent research has shown that student attrition cost the South African National Treasury about five billion rand in subsidies and grants into the Department of Higher Education and Training institutions without any return on the investment. To some institutions the attrition rates are as high as 80%; and one out of three students in higher education and training dropped out between the year 2000 and year 2004. In one institution of the cohort that started in the 2000 academic

calendar year, 7% dropped out at the end of the year. This cohort has grown to 12% in the second year and 17% at the end of the third year (DHET, National Skills Development Plan, 2017).

Further, previous research has established that 20% of the attrition is from undergraduate students who are in contact courses. In 2004, this student attrition rate increased with an average dropout rate in undergraduate programs of about 23%. In 2005 the attrition rate remained at 50% of the overall number of students registered in South African institutions at large. The year 2000 cohort study piloted by the Department of Education (DoE) painted a more disturbing overall picture, as by the end of 2004 (five years after registering), only 30% of the overall first time enrolled student intake into the sector had completed and graduated. About 56% of the enrolled students had dropped out from their institutions without graduating, and 14% were retained in the system (Scott, Yeld, & Hendry, 2007).

There is some evidence to suggest that there is a huge contrast in the dropout rates of students in relation to the demands of the Department of Higher Education and Training, which calls for the total enrolment in higher education institutions to increase from 900 000 in 2011 to 1 500 000 by 2030 (DHET, White Paper for Post School Education, 2013). The (NDP) National Development Plan backs this with a target intake of 1 620 000 by 2030. Moreover, the push for an increase to 400 000 graduates in a year in the face of the already steadily increasing number of students dropping out from higher institutions further paints a very bleak picture for non-achievement of set targets (Moodley, 2015). Although Moodley’s (2015) study is well grounded in traceable literature, it is more descriptive of the situation while lacking explanation of the main causes behind student attrition in the institutions of higher learning. Also, Moodley focussed on the attrition in one sector of the higher education sector which is the university sector, while leaving out the TVET college sector. His study is also biased in that it focused only on the full time student population, while leaving out the E-learning students, distance education students and part time students. His study sourced information mainly from government publications, and lacks the input of researchers and writers.

Table 2. 1: Enrolment and public spending on TVET Colleges, 2010/11 to 2014/15

	2010/11	2014/15	Nominal growth	Real growth
TVET (enrolment)	358 393	702 383		18,3%

Public funding of TVET colleges – subsidies and NSFAS (‘000)	R4 269 739	R7 818 661	16,3%	10,2%
TVET (public funding per enrollee)	R11 914	R11 132	-1,7%	-6,9%

Source: Extracted from the summary of the White Paper on Post-School Education.

As articulated in the above table, as much as there is an increase in the number of students registering in the TVET sector, the growth in funding has decreased proportionally from 2011 to 2015 due to the high attrition rate. Therefore, it seems to be very difficult for DHET and the TVET sector in particular to achieve its mandate.

2.7 Retention Mechanisms

The existing body of research on student attrition suggest that researchers should place more focus on the remedial action which is aimed at reducing the student attrition rates at higher education institutions (HEIs). According to Thomas (2002) the institutions of higher learning need a holistic approach in order to ensure retention. Thomas holds the view that the approach should acknowledge all six factors which are: individual and academic factors, socio-cultural, organizational, structural, and policy and their inter-relationships which are affecting high attrition rates. Moreover, he suggests that the Department of Higher Education and Training needs to create the retention mechanism which must be supported by policies to attack broader socio-economic and cultural inequalities.

Like Demetriou & Schmitz-Sciborski (2011), Thomas (2002) suggested that the institutions of higher learning need to identify the importance of optimism and personal strengths, and adopt a positive mindset about finding suitable student retention mechanisms. Further, Thomas suggests that the issue of student dropout could be related to the ‘mutual sicknesses’ which have various therapies, each made to suit the circumstances of the particular situations. He also stresses that as an increase in student attrition is anticipated year in and year out, the rate will escalate exponentially should no proper remedy be employed.

2.7.1 Devise the Approach

There is no speedy fix to high student attrition rates in the institutions of higher learning; nor is there a solitary organisational approach that can be applied across all institutions, as diverse student cohorts require different kinds of outreach. According to Du Plooy (2014) a justifiable student retention approach can be formulated if institutions know which kinds of students best suit their institutions, if all of the administrative and academic functions essential for a fruitful plan are utilised, and if an approach is based on actionable study, and if individuals are eager to create indispensable modifications. Above all, it is significant to have elasticity in approaches to maintain a diversity of students (Du Plooy, Davis, & Bezuidenhout, 2014).

In response to the high student attrition rates at South African institutions of higher learning, Du Plooy, Davis, & Bezuidenhout (2014) explored an institutional approach for growing student retention and success at the University of Pretoria. This approach was established by the Steering Committee for Student Success which chose a two-pronged procedure as a podium for a unified institutional extensive model. A research approach using a progressive research paradigm as similarly suggested by Richey and Klein (2005) and a systems theory (Charlton and Andras, 2003) approach should also be taken into consideration (Du Plooy, Davis, & Bezuidenhout, 2014).

Like many other writers, Ogude (2012) claims that the institutions of higher learning need to devise an approach which allows the students to have access to broad academic, financial, psychosocial, and other facilities using well established, great-impact practices which comprise of extra classes, peer mentoring, tutoring, psychological counselling, and academic guiding. Ogude emphasizes the significance of the provision of institutional headship, and teamwork amongst all stakeholders in order to achieve the joint impact and the plasticity of the approach to accommodate faculty concerns and the alignment to the tactical intention of the institution of higher learning in order to ensure accomplishment at all levels. This approach, in retrospect, shows the institution's effort in retaining students in the institution of higher learning.

2.7.2 Enrollment and Learning Support

The institutions of higher learning must be mindful of the kind of students that will jell well in the institution. According to Swail (1995) it is vital to note that how an institution of higher learning selects its potential students versus what financial assistance it offers is the core of the institutional foundation in which it builds retention. He further emphasizes three facets in the category of

student enrollment which are student identification, placement and induction. The numerous institutions of higher learning in South Africa are worried about the high failure rate among students as this will corrode their worldwide competitiveness, and as a result have raised admission requirements since 2011 (Makoni, 2010). The institutions of higher learning also do not have a proper constant instrument that they use for selection and placement and as a result they chop and change the tools year in and year out. In the case of TVET colleges, the Program of All-Inclusive Care for the Elderly (PACE) instrument was being used but they have since changed and a new one called College Advancement Program (CAP) is being used.

Pocock (2012) holds the view that once the students are enrolled in the institutions of higher learning, there has to be an academic support program to lessen student attrition by adding learning skills support and peer to peer tutoring; such programs have resulted in as much as 15% growth in retention rates. Pocock further recommends that to deal with the student's absence of readiness there should be a student support program. The intentions of the program are to prepare students with relevant skills for institutions of higher learning, comprising of precise proficiencies that support students in refining their skills for learning. This plan should be focused at first year students who need direction to overcome the challenges of life in higher institutions of learning. The size of the institutions of higher learning should be concurrently complemented by the establishment of suitable and sufficient support for all learners.

The institutions of higher learning should focus on learning support in order to ensure student retention such as tutorials and extra classes. Swail (1995) suggests that institutions of higher learning should divide learning support into six categories namely academic counselling, extra tuition, mentoring, tutoring, research opportunities, and bridging programs. He further claims that the institutions of higher learning need to offer proper guidance that responds to the needs of the students (Swail, 1995). Further, Swail maintains that the continuing development of curriculum and teaching and learning practices are two significant factors that are key to student retention. Recent evidence has shown that the Council on Higher Education (DHET, White Paper for Post School Education, 2013) has noted that a curriculum structure can be either permitting or restraining in relation to key objectives.

2.7.3 Financial Assistance and Environment

Extensive research has established that it is not enough to enroll, and offer learning support to students in the institutions of higher learning as the majority of them are coming from low-income families, and many are from disadvantaged communities so finance is the major factor which causes attrition. According to Swail (1995) financial aid is a vital part of the framework in order to increase student retention. In South Africa, (NSFAS), the National Student Financial Aid Scheme was introduced to help students who were underprivileged and was redeveloped in the year 2012 to improve the efficient distribution of student finances. This new model empowers NSFAS to classify students who potentially qualify for higher education, and give students the necessary information on the availability and accessibility of student financial aid and at the same time provide career guidance and appropriate information on registering in institutions of higher learning (DHET, White Paper for Post School Education, 2013). The students will have to follow all application processes and awarding would be determined by the means test to pay for tuition, accommodation, meals and transport and even private accommodation, where necessary.

Most South African students have and are studying through NSFAS in the institutions of higher learning, where they receive tuition grants, meals and accommodation grants. However, this has not helped to reduce the high attrition rate in the institutions of higher learning. There is an assumption that some students only register to 'catch the cow'. The DHET has gone as far as introducing the 80% attendance policy which compels the students to attend classes before they receive their monthly allowances.

Recent evidence shows that supporting students with financial aid only might not necessarily reduce the attrition rate in the institutions of higher learning; the social integration of students in the campuses has to be effective. Swail (1995) holds the view that a positive climate and atmosphere of support encompassing the joint involvement of the activities of support staff, faculty members, administrative workforce, and other students of the institution of higher learning is key to student retention.

Although the above retention mechanisms seem to be plausible they are also too general. They are neither scientific nor underpinned by any theory or conceptual framework. Nevertheless, they are embedded in academic rigour, though this is not sufficient. They neither seem to be realistic nor tried and tested in order to curb the high attrition rate in the institutions of higher learning, the

TVET colleges in particular. They are simple and vividly tell what must be done, but without the how part of it being clarified.

2.8 Retention Theories

The existing body of research on student attrition suggests that regardless of the very extensive literature on attrition from higher institutions of learning, a lot remains unidentified regarding the reasons behind the attrition process. Nevertheless, there are a number of theories that try to explain the reasons behind high attrition rates and how they should be curbed; however, for the purpose of this study only one theory will be used which is Durkheim's Theory of Suicide as Applied to Dropout.

2.8.1 Durkheim's Theory of Suicide as Applied to Dropout

The lack of social integration into the life of the institution of higher learning may result in little effort to be part of that college social system and this will raise the likelihood of attrition. According to Durkheim (Durkheim, 1961), suicide is more likely to happen when individuals are inadequately integrated into the citizenry fabric; especially when the sense of affiliation (sense of belonging) and value integration is lacking. Student attrition is largely an echo of a students' psychological reply to the atmosphere, and largely owing to an individual's personal capability or readiness to stay in the college. Understanding students' skills and capabilities are imperative in forecasting students' attrition choices, cultural and social capital along with the larger process of social integration. Student dropout or persistence is chiefly the result of individual students' inner weaknesses or strong points (Durkheim, 1961).

Further, Durkheim (1961) compares the college and the community in a sense that when one regards the institutions of higher learning as a social system each with its own social structures and values, then attrition is unavoidable. Therefore, the social conditions impacting on attrition in the social system of the institution of higher learning, in the same way could resemble those that lead to suicide in society in general (Durkheim, 1961).

Further, Durkheim (1961) holds the view that since there is a distinction between the social domains and academic domains in a college the students may achieve integration in one area and not in the other domain. Hence, the student can plausibly be integrated into the social sphere of the institution of higher learning and still drop out due to inadequate integration into the academic domain of the college with resultant poor academic achievement. On the contrary, the student may

perform sufficiently in the academic sphere and still drop out due to inadequate integration into the social life of the college. The ideal relationship is one that is reciprocal between the two domains of integration, or else the excessive emphasis on integration in one domain would probably detract from one's integration into the other domain. Therefore, too much time spent on social activities at the expense of academic studies will definitely create difficulties and possibly lead to student attrition in the institutions of higher learning.

Spady (1970) holds the view that higher learning institutions comprise of both academic and social systems, and it is therefore imperative to distinguish between structural and normative integration in the academic domain of the institution of higher learning from that in the social domain in the institutions of higher learning. The strong link between a person's involvement in the academic and social domains of the college, and his future academic achievement is crucial. It is also necessary to note that the withdrawal from college can be either the result of forced withdrawal (dismissal), or from voluntary withdrawal (suicide); which rises primarily, not necessarily, from inadequate levels of academic performance (poor grades) and/or from the violation of well-known rules regarding appropriate academic and social behavior such as cheating during exams or student strikes, but due to a lack of college social integration (Spady, 1970).

According to Bean (2000), Durkheim's (1961) theory of suicide does not necessarily on its own, provide a theory of attrition which helps to explain how different students come to adopt various forms of attrition behavior. It is rather a descriptive model that stipulates the conditions under which variable types of attrition happen. Amongst the set of extra factors required to account for such intra-societal differences are those relating to characteristics of students, the psychological attributes that predispose some individuals toward suicidal responses (Bean, 2000).

To develop a theoretical model of attrition from a college, researchers need to include the background characteristics of individuals as well as motivational factors and expectations of students such as those calculated through levels of motivation for academic achievement; career and educational expectations. For instance, the student who is doing mechanical engineering n6 is expected to have passed pure mathematics with good marks in high school and have passed the college placement test with good marks, as opposed to a person who is willing to do office administration, who is expected to have passed just math literacy and not pure mathematics.

Students register at college exhibiting varying attributes (that Durkheim omitted), which have a direct impact upon their performance in college. These attributes include sex, race, ability, pre-college experiences such as academic and social attainments, the high school grade-point averages, and family backgrounds such as the expectational climates, value climates, and social status attributes. In simple terms, it is the interaction between the student's commitment toward the goal of college accomplishment and his commitment to the college that regulates whether or not the student decides to drop out from the college and the kinds of dropout behavior the student embraces. Student attrition is chiefly subjective affected by particular characteristics such as psychological attributes, students' frame of mind about their adaptations to the setting, and the motivational elements of educational and social integration. Personal attributes such as maturity levels or intelligence characteristics, are critical in modelling academic ability, an individual's abilities, impacting their academic motivation to study, and ultimately influences the students' attrition behavior (Du Plooy, Davis, & Bezuidenhout, 2014).

According to Becker (1964) students see economic paybacks, (which Durkheim omitted) from investment in training, academia, nutrition and health. Individuals can raise their stock of human capital over various educational and training experiences. In order for individuals to earn more salary in the world of work they need to persist or else they will get low paying jobs should they choose to dropout from college.

Further, in contrast to Durkheim's (1961) theory, Berger & Milem (2000) hold the view that student attrition is due to organizational influences the college atmosphere forces on student behavior (which Durkheim omitted). Berger and Milem suggest that student attrition is parallel to turnover in the work-place. The organizational characteristics of the college, which are institutional resources, size, faculty-student ratios, structure, may have a robust impact on students' socialization patterns, and therefore on their dropout behavior (Berger, 2000).

Despite the limitations and omissions, Durkheim's (1961) theory is useful for understanding the causes of student attrition in the institutions of higher learning, and it allows the researcher to further explore the areas which were not covered in order to ensure that the findings will be useful. If one were to create one's own theory on student attrition, one would call it: *Inner drive*. This is simple because many a times the students who are exposed to colleges with less resources still persist and perform with good marks just solely owing to the *inner drive/motivation* of success

that they have. Secondly, there are students who face particular challenges coming from poor backgrounds, but they still persist despite the odds and complete the duration of their studies in the college, regardless of the fact that a college may be situated in a deep rural area and lack resources. Some students even sell sweets to other students in order to make ends meet while at college. In contrast, there are those students who come from wealthy families, study in the urban colleges where the environment is conducive, and lack nothing, but they still decide to dropout due to the lack of *Inner drive*.

2.9 Synthesis

A large body of research about student dropout rates in higher institutions of learning exists but most of this research focuses on universities rather than colleges. There are very few which are trying to address the attrition problem in the college sector and TVET colleges in particular. This on its own raises the question as to why researchers are not focusing on the TVET college sector, because this sector has been around for a long time in South Africa and has existed for many years in the international community. By virtue of pre-requisite entrance requirements demanded by the universities and the different students' attributes, this author strongly believes that universities and colleges may be experiencing different reasons for student attrition hence the research that has been undertaken at universities might not be applicable in the TVET college sector. For instance, TVET colleges recruit and enroll potential students from Grade nine to Grade twelve, yet universities only accept the potential students who passed Grade 12 with good marks. Therefore, the reasons behind attrition in universities and in TVET Colleges might not necessarily be the same. There is still a lot of research needed with regards to TVET colleges.

Most researchers place more focus on the students who are enrolled in the institutions of higher learning, as either the first years, second years, third years and fourth years as opposed to potential students who are not yet registered in a college. The researcher believes that the research / literature should also focus on the community at large, including the primary schools and high schools because that is where the potential students of institutions of higher learning are coming from. In the same way, the theories or models should also be designed in such a way that they integrate not just the social elements in the institutions of higher learning, but the social elements in the community itself and as well as in the schools where the students are recruited from.

For this researcher, the literature that is extensively deliberated on above provides impetus for one to continue with the current study, because more than 50% of it is based on the situation at universities and not at TVET Colleges. That gap provides the researcher with fertile ground to explore the reasons behind attrition in the TVET college sector.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

As specified in the title, this chapter presents the methodology of the thesis. The writer will discuss the research paradigms, research strategy, the research method, the research approach, the methods of data collection, the sampling, the research process, the type of data analysis, the ethical considerations and finally, the research limitations of the study. The current study is a case study using a mixed method approach for gathering data.

3.2 Research Paradigm

For any study to be authentic it has to be backed by an appropriate research methodology. The research methodology is a process like any other function. Durkheim (1961) holds the view that the research process has three major dimensions which are: *ontology, epistemology and methodology*. He further suggests that the research paradigm is an all-inclusive system of interconnected exercise and philosophy that explain the nature of analysis alongside these three dimensions. The word paradigm derived from the Greek word *paradeigma*, meaning *pattern* was coined by Kuhn (1962) to symbolize a theoretical outline jointly used by researchers to provide them with an appropriate model to scrutinize glitches and thus discovering answers. Creswell (2014, p. 35) defines a research paradigm as “a universal theoretical orientation about the world and the origin of study that a researcher carries to a study. Du Plooy (2014) holds the view that a research paradigm divulges how the scholar proposes to crack the research problem and at the same time displays the scholars’ philosophical process. Saunders, Lewis and Thornhill (2012) describe a paradigm as an explanation of the process for gathering and clarifying the information of phenomenon. Similar to other scholars, Kuhn defines a paradigm as “a cohesive bunch of substantive ideas, variables and glitches associated with conforming procedural methodologies and tools” (Kuhn, 1962). Du Plooy (2014) suggests that paradigms are frequently used in societal discipline studies. Extensive research has established that there are three main paradigms in research that could be embraced by a scholar as a world viewer being *positivism, constructivism, and pragmatism* (Hall, 2013). *Positivists* hold the view that there is a solitary realism that could be branded and calculated. They employ quantifiable study approaches as the information gathering method. *Constructivists* suggest that there is no solitary realism or certainty and henceforth desires to be construed. They prefer to use qualitative research approaches.

Finally, *pragmatists* are certain that the greatest method used is one that solves the problem. The chief attributes of the pragmatists is that the realism is continually contended, interpreted and renegotiated (Du Plooy, Davis, & Bezuidenhout, 2014). This study employs the pragmatist paradigm.

From the above research paradigms, the researcher adopted pragmatism for the purposes of this study because it is the most suitable one as it embraces contention, interpretation and renegotiation. Moshe et al. (2015, p. 2) hold the view that the term ‘pragmatic’ is derived from the Greek word “pragma” which refers to the practice, work, the action of activity, and thinking. Similarly, Onwuegbuzie (2007) suggests that pragmatic scholars are more likely to encourage the cooperation among scholars irrespective of theoretical orientation. Kumar (2010) suggests that this kind of study permits scholars to achieve diverse objectives, and those objectives are linked to different worldviews. Further, Feilzer (2010) defines the pragmatic study as the study which purposes in discovering answers to an explicit problem by using mutually, quantitative and qualitative research methods. A pragmatic paradigm is aimed at producing information and which allows a researcher the opportunity to research areas of curiosity by means of approaches that are appropriate and consuming results in an optimistic routine according to the value system of the scholar (Hill, 1984). The proposed study embraces the realism focussed theoretical reasons behind high attrition rates in the institutions of higher learning, the TVET colleges.

As this study concentrated on the reasons behind high attrition rates in the institutions of higher learning, the pragmatic paradigm was tried and tested to authenticate its validity within the TVET colleges. A pragmatic paradigm is appropriate to this study as it utilizes both qualitative and quantitative methods which permit the scholar to test the authenticity of the models identified. In addition, this study looked at the possible retention strategies that could be employed in an attempt to curb high attrition rates in the institutions of higher learning, the TVET colleges in particular.

3.2.1 Ontology of Pragmatism

Ontology is a scheme of certainty that echoes an understanding of specifics around what establishes the realities. Ontology is defined by Johnson (2014) as the theoretical location concerning the nature of realism and it drives to advance a consciousness of its origin. According to Du Plooy (2014) the ontology of pragmatism is the study of reality. While Oppong (2014) identifies three types of the ontological perspective of reality as *critical realism, realism, and,*

idealism, not necessarily dissimilarly, Saunders et al. (2012) provides sub-segments of ontology as being subjectivism and objectivism. Critical realism concentrates on regression and consistencies grounded on flexible models (Archer, Rutzou, Gorski, & Steinmetz, 2016). The ontological realism for respondents in this research is made up of their know-how and associations. Their certainty fluctuates as per their understandings, philosophies and know-how (Du Plooy, Davis, & Bezuidenhout, 2014). Moreover, this study brings itself into line with Oppong's classification for its plasticity and embraces critical reality as its ontological theoretical position.

3.2.2 Epistemology of Pragmatism

Epistemology concentrates on what constitutes legal information and how such information can be acquired. It is intended to provide clarification on how information is made (Du Plooy, Davis, & Bezuidenhout, 2014). It is with regard to the most suitable methods of questioning into the origin of the world (Easterby-Smith, Thorpe, & Jackson, 2012). Information is perceived from the positivist standpoint as objective, while the interpretivist perception holds the view that truth under no circumstances can be accurately perceived (Oppong, 2014). The 3rd epistemological location, as suggested by Oppong (2014) is epistemic relativism which suggests that information can be expressed from numerous points of view subject to numerous impacts and interests. In essence, to recognise the reality, information should consequently be positioned within a specific societal context or historical perception. Henceforth, the epistemological location of this study is relativism as it is embedded in the social elements.

The social element is embedded in this study, as it explores how students socialize in the institution of higher learning to an extent that impacts on the high rate of student attrition. The epistemology is established in such a way that explains the place of knowledge within a variety of students either persists (students who persist/ continue with their studies) or those who dropout (non-persisters) in the institution of higher learning, the TVET colleges. In line with the pragmatic philosophy, the best method for understanding reasons behind TVET college students' attrition is to find out what causes a change in students' initial choice to be at the TVET College and then drop out.

3.2.3 Axiology of Pragmatism

The term pragmatic axiology refers to the notion that realizes an optimistic value towards an end. There is no assurance to some degree that something is worthy or not good. The achievement is obtained through teamwork. According to Du Plooy (2014) the axiology is the study of ethics and

worth findings; and it aids the scholar in obtaining a comprehension of the ethics of a specific paradigm. It is the part of the study philosophy that concentrates on the place of worth in the study process. This research brings substantive worth in trying to establish a thorough comprehension of people's distinctive certainties (Du Plooy, Davis, & Bezuidenhout, 2014). This study disregards the notion that research is worth-free, nevertheless, holds the view that individual perceptions of the respondents along with their sentiments and views directs the research. Therefore, the scholar holds the view that the opinions and sentiments, to some extent, influenced this study as the scholar has an intense interest in the high student attrition rate in the institutions of higher learning, the TVET colleges in particular. Nevertheless, the researcher reported the opinions and sentiments of all respondents without manipulating them to suit the outcome of the study. This study strives to gain a thorough insight into the opinions and sentiments about student attrition in TVET colleges. Finally, this study strives to get the insights, opinions and views from both students who have left the college and those who have persisted as well as from the CMT, academic staff and support staff of the TVET College regarding the state of affairs on attrition with a firm understanding that values in TVET students are strongly ethical to channel the processes of the study towards desired outcome.

3.3 Research Design

The research design is a plan being used to gather information from respondents. It defines how the study is undertaken, and it précis's the processes for steering the research (Kruger, 2007). It affords a framework for collecting and analysing data. There are three kinds of research design: descriptive, casual and exploratory (Almalki, 2016). Descriptive research is research intended to provide a picture of a situation and the contributors in a precise way (Marshall & Rossman, 2006). The selection of research design echoes choices about the significance devoted to numerous scopes of the study process. This study employed a research design which is descriptive and is scrutinized chiefly through qualitative methods but incorporating a minor quantitative element. Descriptive research is designed to provide a picture or status quo of a situation as it happens naturally. It can also be used to validate present matters, make rulings, and establish new models. This method comprises recording, describing, and analysing the processes of the situation being researched. A descriptive method permits the scholar to see a cross section of the target population and draw conclusions about the variables. The descriptive design is preferred for this study due to the fact that it is suitable for examining the reasons behind student attrition in TVET colleges. Qualitative

scholars have a tendency to scrutinize data inductively. In an interpretive and descriptive case study, the scholar scrutinizes and interprets theories of the study situation against the background of a theoretical framework. According to Merriam (1998) qualitative case studies frequently encompass theories, concepts, and models. An inductive technique is then utilized to back or contest model assumptions.

There is an abundance of literature that has been written about the research design. Pandrey & Pandey (2015) hold the view that the research design is the foundation for a study and is employed as a guide towards the gathering and scrutiny of information. Similarly, Kruger & Mitchel (2007) suggest that the research design is a map which directs the scholar in getting reliable information from the participants. Creswell (2014) also defines a research design as a request-for-information method that strives to collect raw information from the respondents minus colluding subjective ideological views of the scholar within the parameters of the study. According to Du Plooy (2014), when the research design is qualitative, the scholar is advantaged in terms of the quantity and depth of information that can be attained from a compound and multi-faced perspective in a particular social framework. The scholar normally gains deep insights about a situation by concentrating on the respondents' know-how and sentiments (Creswell, 2014).

3.4 Research Approaches

This study used both qualitative and quantitative approaches to gather data, which is termed mixed method. Mixed method study is a logical amalgamation of qualitative and quantitative techniques in a solitary study with the aim of getting a complete image and deep insight into a phenomenon (Chen, 2006, p. 75). The main motive behind this kind of research is that both qualitative and quantitative research, in amalgamation, offer a richer insight into a study problem as opposed to a single research approach. If used alone, both quantitative and qualitative research approaches have some shortcomings, but when used as mixed method, they become stronger. A mixed method approach aided the scholar to obtain more in-depth knowledge and information about the issue being researched. The table below outlines the characteristics of both qualitative and quantitative research methods:

Table 3.1: Qualitative and Quantitative Features

Qualitative Research	Quantitative Research
The objective is a comprehensive, complete description.	The purpose is to categorize features, calculate them, and create numerical models in an endeavor to give details of what is observed.
A scholar may perhaps only partially know beforehand what she/he is looking for.	The scholar knows exactly beforehand of what he/she is looking for.
Commended for earlier phases of the study.	Commended for latter phases of the study.
The design arises as the research unfolds.	All features of the research are cautiously planned prior data is gathered.
Scholar is the information gathering instrument.	Scholar utilizes tools, such as surveys or kit to collect statistical data.
Information is gathered through pictures words or objects.	Information is gathered from statistics and figures.
Subjective: person analysis of actions is imperative, e.g., uses respondents' opinion, in-depth interviews etc.	Objective: wants exact dimension & analysis of target concepts, e.g., utilizes surveys, questionnaires etc.
Qualitative information is more rich, time intensive, and not generalized.	Quantitative information is more effective, can test hypotheses, less contextual detail.
Scholar becomes one-sidedly immersed in the matter at hand.	Scholar remain objectively detached from the matter at hand.

Adapted from: Miles & Huberman (1994, p. 40).

3.5 Research Site

The research site for this study is situated in South Africa in Kwa-Zulu Natal, around Durban. The Elangeni TVET College is the focal point of this study. Elangeni TVET College has its central office in Pinetown. It has eight campuses, seven of those campuses (Pinetown, Mpumalanga, Qadi, Ntuzuma, KwaMashu, Inanda, and KwaDabeka) are scattered under eThekweni Municipality and one campus (Ndwedwe) falls within Ilembe District Municipality and one in Ndwedwe Municipality.

Below is the map of the location of Elangeni TVET College showing where all campuses and the

head office are situated. The respondents were situated on five of the campuses only given their programme offerings.

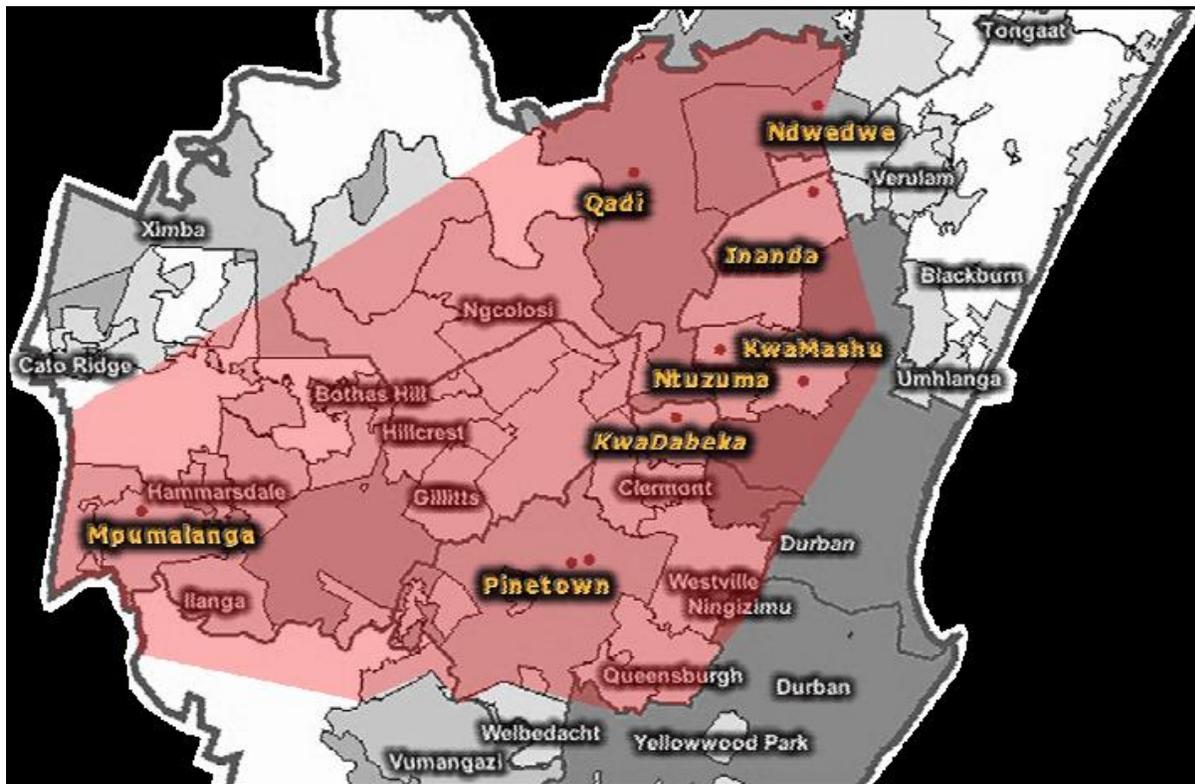


Figure 3.1: This map is taken from the Elangeni TVET College website (<https://www.elangeni.edu.za>)

3.6 Target Population

A research study needs to have a specific group of people who are targeted as the respondents and this is called the target population. Du Plooy (2014) holds the view that the population included by a scholar in a research is called the accessible population. There are necessary limitations to be set by a researcher in order to select the population that will make available the data required by the scholar (Du Plooy, Davis, & Bezuidenhout, 2014). For the purpose of this research, five out of eight campuses of Elangeni TVET College were targeted. There were five groups within the target population, comprising of students and staff. Within the groups there were selected seven students who have dropped out, seven students who have persisted, two staff member from the Campus Management Team, three Lecturers, and one Student Liaison officer. Multiple tools were used to collect data, namely a questionnaire and interviews. There were two student interviews in each campus, and two staff interviews in each campus, a total of twenty in five campuses. Finally, there

were fourteen student questionnaires in each campus, seven for persisters and seven for those who dropped out; and there were six questionnaires for staff in each campus, two for CMT, one for SLO, and three for Lecturers. Table 3.2 below summarises the total numbers of participants in each category. The data collection unfolded over a period of one month.

3.7 Sampling Strategies

This study employs non-random sampling. Non-random sampling is a practise of choosing a sample from a populace deprived of utilising arithmetical/ probability theory. Non-random sampling is relevant for this study because it is not expensive and it allows the researcher to use the closest and most accessible respondents when working on a limited budget and within a limited time frame and because of the difficulty of locating students especially those who had dropped out from the College. There are different types of non-random sampling which are nonprobability and probability sampling strategies. As much as the target population has been identified, there has to be a way of sampling. According to Du Plooy (2014) research strategies are utilised by a scholar to choose a sample from the target population. Out of eight campuses of Elangeni TVET College, only five were sampled based on their (PQM) Program Qualification Mix, and based on where the campus is located. Ntuzuma campus is located in the township and is 100% an Engineering campus and offers all programs such as the (NCV) National Certificate Vocational, (NATED) National Accredited Technical Education Diploma, and Occupational skills courses. KwaMashu campus is also located in the township and 95% of its offerings are Business studies and Consumer studies in NCV, NATED but in Occupational Skills courses it offers a mixture of soft skills with a little bit of Engineering skills such as the Refrigeration skills course. Ndwedwe campus is located in a deep rural area and offers a mixture of engineering courses and business studies in NCV, NATED and in Occupational skills courses. Pinetown campus is located in a purely urban area and it mostly offers Business studies and Consumer studies and a little bit of Engineering studies in NCV, NATED, and in Occupational Programs. Mpumalanga campus is located in the centre of a township but is also very close to the rural areas, and offers a mixture of Business studies, Engineering and Agriculture in NCV, NATED and Occupational skills courses.

Table 3.2: Sample Size

Elangeni TVET College (campuses)	Population (5524 students) (238 staff)	Sample	Sampling method	Questionnaire	Interview	
Ndwedwe	54 dropped out students, 471 persisters	14	PURPOSIVE (Criterion Sampling Technique)	14	2	
	33 Staff	6		6	2	
Ntuzuma	71 dropped out students, 641 persisters	14		14	2	
	44 Staff	6		6	2	
KwaMashu	74 dropped out students, 668 persisters	14		14	2	
	46 staff	6		6	2	
Mpumalanga	125 dropped out students, 1031 persisters	14		14	2	
	65 staff	6		6	2	
Pinetown	105 dropped out students, 865 persisters	14		14	2	
	50 staff	6		6	2	
TOTAL		100			100	20

3.8 Recruitment Strategy

After receiving permission from the Elangeni TVET College Rector (Gate-keeper) in the College Central Office for the study to proceed, the identified potential respondents were invited via emails and by phoning them to partake in the study. The list of the potential respondents were received from TVETMIS department as they are the custodian of student data. They have records of all students who have dropped out and those who are continuing. The dropped-out students were not selected in any particular way; those who could found over the phone first were requested to form

part of the respondents. Having a list from TVETMIS helped to have a pool of potential respondents. Continuing students would be approached as per their availability and without using any specific criteria, however trying to balance the number of respondents in terms of gender and the programs. The selection of participants was random and covered the spectrum of students of the college. All the potential respondents were invited a month in advance; and were reminded one week in advance before the in-depth interviews commence.

3.9 Data Collection Methods

3.9.1 In-depth Interviews

In this study, the in-depth interviews was applied as part of the data collection methods. An in-depth interview is a data collection method that permits the researcher to pose questions to a participant/ respondents with the intention of learning more about their views, opinions and beliefs on a specific issue (Du Plooy, Davis, & Bezuidenhout, 2014, p. 189). Similarly, Kumar (2010) holds the view that the in-depth interview is a platform where the scholars have the freedom to conduct the interview in a systematic desired way with liberty regarding questions and follow-up questions to pose within the framework of the study concerned. Moreover, an in-depth interview is one way a researcher can find in-depth information. There were 20 interviews in total: two student interviews in each campus, and two staff interviews in each campus. The researcher used the interview guide developed by the researcher with the assistance of the supervisor. The researcher used both the tape recorder and note-taking to record the interview.

3.9.2 Document Analysis

Document analysis is a significant area of information gathering. For the purpose of this research, document analysis was carried out for background information and to undertake the literature review. According to Bowen (2009) document analysis is the practice of scrutinising and analysing documents with the intention of giving direction, understanding as well as meaning in order to develop empirical knowledge. Documents reviewed as part of document analysis may comprise a range of documents such as organizational or institutional reports; newspapers; background papers; journal articles; books; survey data; and various public records” (Bowen, 2009, p. 28). For the purpose of this study, document analysis was used because it is effective and adaptive. Data analysis is data selection rather than data gathering and hence it is less time intense (Bowen, 2009). The documents that were used for information about the college are the TVETMIS statistics report;

DHET strategic planning; and reports from Statistics South Africa. All these documents contain the information regarding student attrition and retention rates.

3.9.3 Survey Method

There are various methods of collecting quality data. One of them is a *survey*. According to Du Plooy (2014) the *survey* is an inspection of phenomena, and in the context of research, survey means the tool of collecting information which comprises of a sequence of questions intended to get data from respondents. The questions are formulated in the form of questionnaires, sampling polls and interviews. The benefit of utilising the survey method in a study is that it is flexible and fairly low-cost and a large number of respondents can be included and reached from a distance. Surveys can be easily managed in numerous ways such as in face-to-face interviews, email, online, and on paper. Moreover, conducting a study using a survey method afforded the researcher and respondents the opportunity for very honest and explicit answers.

For the purpose of this study, the researcher utilized a questionnaire to explore the opinions of the respondents. A questionnaire is a survey instrument used to gather information from persons about themselves. According to Gillham (2007), the questionnaires are just one of a variety of ways to get data from individuals by asking direct or indirect questions. In this study, a descriptive questionnaire comprised of open-ended and closed questions that were furnished by the respondents. Further, Gillham (2007) highlighted that open ended questions lead to a better level of data detection, nevertheless the amount and type need to be restricted to save time thus ensuring quality of responses. The researcher supervised the completion of the questionnaires. It consisted of two categories: the first category was the bio-data information from the respondents and the second category posed questions associated with the research questions. There were two student interviews in each campus, and two staff interviews in each campus, a total of twenty in five campuses. Finally, there were fourteen student questionnaires in each campus, seven for persisters and seven for those who dropped out; and there were six questionnaires for staff in each campus, two for CMT, one for SLO, and three for Lecturers. Table 3.2 below summarises the total numbers of participants in each category. The data collection unfolded over a period of one month.

3.10 Data Quality Control

It is vital to scrutinise the data for the purpose of ensuring the authenticity and quality of information received. According to Du Plooy (2014) data quality control is a process achieved

through ensuring that the collected data is both valid and reliable. The notions of validity and reliability are more applicable to quantitative research as these concepts relate to the measurability of the results. Nevertheless, qualitative scholars are more concerned with studying people's opinions, feelings, and experiences. They are therefore not so much concerned with reliability and validity (measurability of results) but rather honesty and correctness of the gathered information and the results. Honesty and correctness of information gathered comprises the four pillars which are transferability, dependability, credibility, and conformability (Du Plooy, Davis, & Bezuidenhout, 2014).

Qualitative method also includes the concept of credibility. A qualitative study relies on the correctness of the scholar to interpret the collected information. (Du Plooy, Davis, & Bezuidenhout, 2014). Further, Du Plooy (2014) suggests that the longer the time with the potential respondents, the increase in in-depth knowledge of their situation which increases the credibility of the gathered information and the results. This researcher allowed 30 minutes per interviewee guided by the time frames in the literature.

The transferability of results from one study to another is preferred where possible. Du Plooy (2014) holds the view that the transferability in qualitative research means the capability of applying the findings to a different study area and producing similar outcomes. It is not easy to realize transferability when doing a study which is qualitative in nature as the perception of people and their experiences fluctuate from one place to another or when doing a single case study. Nonetheless, the scholar tried to realize transferability by carefully and comprehensively defining the procedures embraced for collection of information and interpretation in such a way that another scholar can track and duplicate in a diverse setting for the purposes of the research (Kumar, 2010). The information need not only to be transferrable but must also be reliable for the success of the study. The term reliability is mostly associated with quantitative research and relates to dependability and the researcher must strive to make sure that alike findings could be achieved if the similar study is piloted elsewhere (Kumar, 2010). Reliability is however hard to accomplish in a qualitative research, nevertheless, for this research the scholar endeavoured to attain transferability by complementing the interviews and questionnaires. Finally, the data collected has to confirm the interpretation of the findings. According to Du Plooy (2014) the confirmability in a qualitative research links to the extent that the findings and the interpretation of the scholar are sustained by the collected information. The scholar endeavoured to carefully and

comprehensively define the procedures selected for the collection of information and interpretation and make sure that the interpretation of the results reflect the information acquired from the respondents and not to the perception of the scholar (Du Plooy, Davis, & Bezuidenhout, 2014).

3.11 Pilot Testing

Before an actual study is conducted, it is advisable to do a pre-study or pilot test. Again Du Plooy (2014) holds the view that pilot studies are small versions of a specific research. Pilot tests are customarily utilized to pre-test the capacity of the instrument or mechanism and are habitually denoted as pretests. In pilot testing, the scholar run tests on a smaller segment of the real populace that the scholar pulled the sample from, without using the same segment in the actual study. The advantage of the pilot test is that it serves as a warning for likely mistakes and problems with the tool may arise. The pilot test sample for this study was drawn from the Ndwedwe campus of Elangeni TVET College. This is due to the fact that the researcher is working on this campus, and therefore it was easier to get access to participants. The real study was conducted across five campuses of the Elangeni TVET College. The respondents were allocated an hour to answer the questionnaire as well as discussion. If there were problems with the tool, the researcher had a chance to revise, amend and rephrase the tool in order to eradicate confusing questions with the help of the specialists.

3.12 Measurements

The tools for gathering data for this research were interviews and questionnaires. Interview guides made sure that the complexity of interview questions was carefully organized and applied for optimum data collection. A survey questionnaire was designed to solicit the reasons behind the high attrition rate in TVET Colleges. A few broad themes were covered in the questionnaire to gain some insights into the nature of attrition at Elangeni TVET College; the respondents' views on the mechanisms to deal with attrition at Elangeni TVET College; and what should be done to curb attrition in TVET Colleges. The aim is to analyze and to deconstruct these mechanisms at the level of students (both persisters and those who dropped out) and staff. The respondents were asked how they view the high rate of attrition at Elangeni TVET College. The data collection instrument included a five step Likert scale where respondents were asked to rate their level of agreement in terms of high attrition rate (1 = Strongly disagree, 2 = Disagree, 3 = Somewhat agree, 4 = Agree and 5 = Strongly agree). The questionnaire also contains open-ended questions where

respondents expressed themselves further or add any views regarding the high attrition in Elangeni TVET College). The Cronbach alpha coefficient of reliability was 0.73. An interview guide was also used to gain some deeper understanding of the high attrition rate in Elangeni TVET College.

3.13 Data analysis

It is imperative to ensure that data is scrutinised using the relevant data analysis tools. Du Plooy (2014) holds the view that qualitative data analysis tools and techniques are applied in order to ensure meaning, structure and order to information that was documented from the identified respondents.

3.13.1 Qualitative Data Analysis

According to McMillan et al. (2006) qualitative data analysis is a methodical procedure of identifying, coding, categorizing, and interpreting information to offer descriptions of a particular phenomenon of interest that is incorporated into all stages of qualitative research. As far as research analysis is concerned, it involves breaking-up the information into practicable patterns, trends, themes, and relationships (Mouton, 2001). The main motive behind the analysis of data is the review of relations amongst constructs, concepts, variables, with the aim of establishing an interpretation that either disproved or supported the facts or theories or particular deductions that were prepared prior to the research. De Vos et al. (2011) suggest that qualitative data must be interrogated, organized and systematic, to allow the scholar to classify themes, patterns, and codes to determine connections, establish descriptions, make interpretations, pose critiques, and produce theories.

For this research, a qualitative content analysis process was employed to analyze the information. (Tharenou and Cooper 2007) hold the view that qualitative content facilitates a systematic and logical step-by-step method and permits the scholar to go beyond simple comparative, descriptive and explanatory activities. The approach for the analysis of the qualitative data was based on the content analysis procedures of Bowen (2009) and was outlined in two categories as per the nature of the information captured.

3.13.2 Quantitative Data Analysis

It is also vital to consider quantitative data analysis. Quantitative data analysis is well-defined as an orderly approach to investigations during which data collected by the scholar is converted into numerical data (Du Plooy, Davis, & Bezuidenhout, 2014). Quantitative data analysis frequently defines phenomena, answering the 'what' and 'how many' questions that a scholar might have. Quantitative analysis permits the scholar to ascertain which phenomena are expected to be sincere likenesses of the behaviour and which are simply chance manifestations. Quantitative information analysis procedures comprise information coding, information cleaning, information presentation and information interpretation and deliberation (Du Plooy, Davis, & Bezuidenhout, 2014). Employing descriptive analysis aided the scholar in presenting quantitative explanations in a convenient way, and is also utilised to make huge amounts of information simpler in a practical way.

3.14 Ethical Considerations

Ethics play a crucial role in research as they touch the range of stakeholders within a study. Du Plooy, Davis, & Bezuidenhout (2014) hold the view that ethics in a study refers to the level of honesty and devotion to a study's morals and expert ethics.

3.14.1 Informed Consent

Respondents and contributors are to be acquainted with the research in advance and requested in advance to participate in the research; they were formally familiarised with the study by the researcher and they had to give their approval for their inclusion. The participants were informed accordingly of what the researcher needed from them during the interviews a; and that their identities and answers would be kept private by all means possible. They were made aware of what would be needed from them during their participation, and how their identities will be kept anonymous, and how the results will be utilized. It is necessary that one states in writing that the participants have to sign for their consent and keep those documents on record. Consent letters to participate were given to participants and all the participants appended their signature to give consent.

3.14.2 Gate Keepers Letters

It is of paramount importance that consent to conduct the research is approved by the senior members of the organisations identified to provide data for the research. The researcher sourced a gate keeper letters from the respective organisations. For this research, the Rector of Elangeni TVET College was the one expected to grant permission. In her absentia one deputy rector was in charge. The draft letters are attached to the appendix section of this document.

3.14.3 Collecting Data from Participants

In collecting information from the identified respondents, the scholar prioritised the participant's psychological and physical ease. It is very important to refrain from asking embarrassing questions and questions that create discomfort. Participant's time must not be wasted and the researcher needs to organise the interviews effectively and efficiently.

3.14.4 Dealing with Sensitive Information

For this study, the researcher made sure that any sensitive data provided by contributors was protected and that the contributors were not put under pressure or unwarranted influence nor harmed in any way in order to give/get information. Du Plooy, Davis, & Bezuidenhout (2014) hold the view that the act of harming the participants comprises triggering participants to recall emotionally hurting memories; creating situations where a participant's future prospects may be damaged.

3.14.5 Confidentiality versus Anonymity

For the purpose of this study, the anonymity of respondents had to be guaranteed; the names of the respondents are not mentioned and their real identities are not recorded. A password secured document was created to secure data obtained during the research. The password was made available to the supervisor and the researcher only. This was done in keeping with the University rules. The obtained data for the purposes of this research will thus be disposed of through burn and shredding after a period of 5 years. Code names (see Table 3.3) instead of the actual names of the respondents are used in the study whenever qualitative data from interviews are presented (see Chapter 4).

Table 3.3: Example of classification of respondents

<i>Respondents</i>	<i>Description</i>	<i>Codes</i>
Campus Manager	KwaMashu	CMKM1
Campus Manager	Mpumalanga	CMMP2
Campus Manager	Ntuzuma	CMNT3
Campus Manager	Pinetown	CMPTN4
Senior Lecturer	KwaMashu	SLKM1
Senior Lecturer	Mpumalanga	SLMP2
Senior Lecturer	Ndwedwe	SLNDW3
Senior Lecturer	Ntuzuma	SLNT4
Senior Lecturer	Pinetown	SLPTN5
Student Liaison Officer	Ndwedwe	SLONDW1
Student Liaison Officer	Pinetown	SLOPTN1
Student	KwaMashu	STUKM1
Student	Mpumalanga	STUMP2
Student	Ndwedwe	STUNDW3
Student	Ntuzuma	STUNT4
Student	Pinetown	STUPTN5
Lecturer	KwaMashu	LKM1
Lecturer	Mpumalanga	LMP2

Lecturer	Ndwedwe	LNDW3
Lecturer	Ntuzuma	LNT4
Lecturer	Pinetown	LPTN5

3.15 Limitations of the Study

For the purpose of this study, the limitations that the researcher anticipates comprise of the poor participation of students who have already dropped out from the college. Secondly, the researcher is not sponsored and hence has limited financial resources for the study. Due to financial and time limitations, the researcher only conducted the study in one college which is Elangeni TVET College in Kwa-Zulu Natal province.

The delimitations of the study are that the researcher focused on the Ministerial programs such as NCV and NATED, yet there are other offerings taking place in the TVET sector such as the Occupational skills programs. Out of eight campuses the researcher limited the study to five campuses. The study also focused on the last three years of data.

CHAPTER 4: DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The aim of this study was to explore the reasons behind the high student attrition rates in the (TVET) Technical Vocational Education and Training Colleges in South Africa. The aim of this chapter is to present and discuss data collected from the interviews conducted and from the questionnaires filled in by the respondents. The chapter utilizes graphs and tables to present the data. It also gives an account of the key findings of the study.

The chapter firstly provides a summary of the demographic information about the respondents. Following this introduction, it presents the data according to the four broad research questions. The chapter presents data collected about the nature and extent of student attrition in TVET colleges. Then the chapter presents the data collected about the causes or reasons behind student attrition in TVET colleges namely Elangeni College. The chapter presents data about any already available mechanisms to deal with student attrition in TVET colleges. Fourthly, the chapter presents the data related to what more could be done to curb the student attrition rate in TVET colleges. This chapter also discusses the findings of the study as informed by the conceptual framework discussed in Chapter 2. Finally, a synopsis of the chapter is provided.

4.2 Demographic Information

This section provides respondents' demographic information in terms of the campus they study in, their age, field of study, positions/designation in the TVET College and highest qualification. This information was collected from the questionnaires.

4.2.1 Campus of Students and Staff in the TVET College

The researcher needed to know the campus of the respondents in Elangeni College because that could have implications for their understanding of student attrition. Figure 4.1 shows the campus of the respondents in the TVET College.

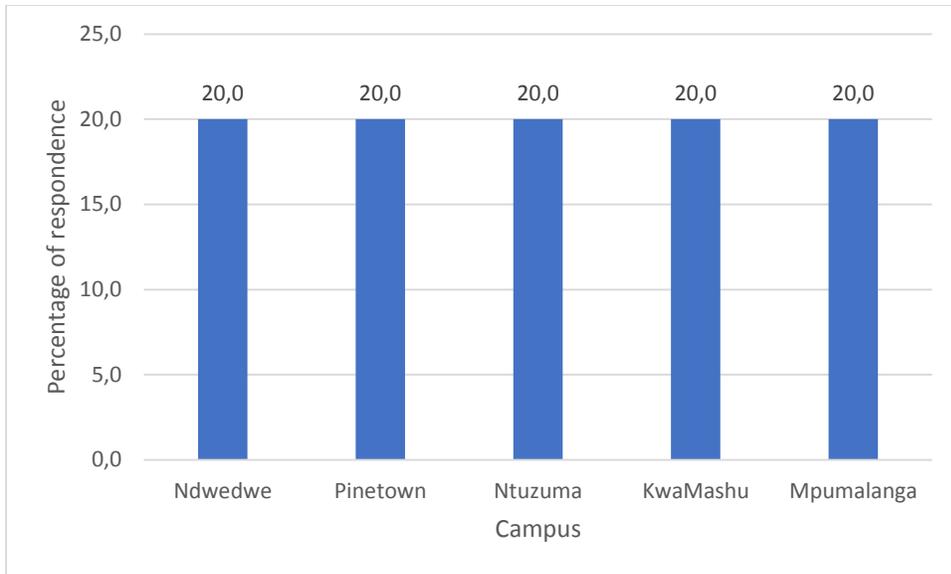


Figure 4.1: The classification of the respondents according to their campus in the TVET College

There were 20 participants from each of the five campuses of Ndwedwe, Pinetown, Ntuzuma, KwaMashu and Mpumalanga. All campuses had an equal number of respondents selected to participate in the study.

4.2.2 Age of Students and Staff in the TVET College

The researcher needed to know the age of the respondents in the TVET College because that could have implications for their understanding of the student attrition. Figure 4.2 shows the age of the respondents in the TVET College.

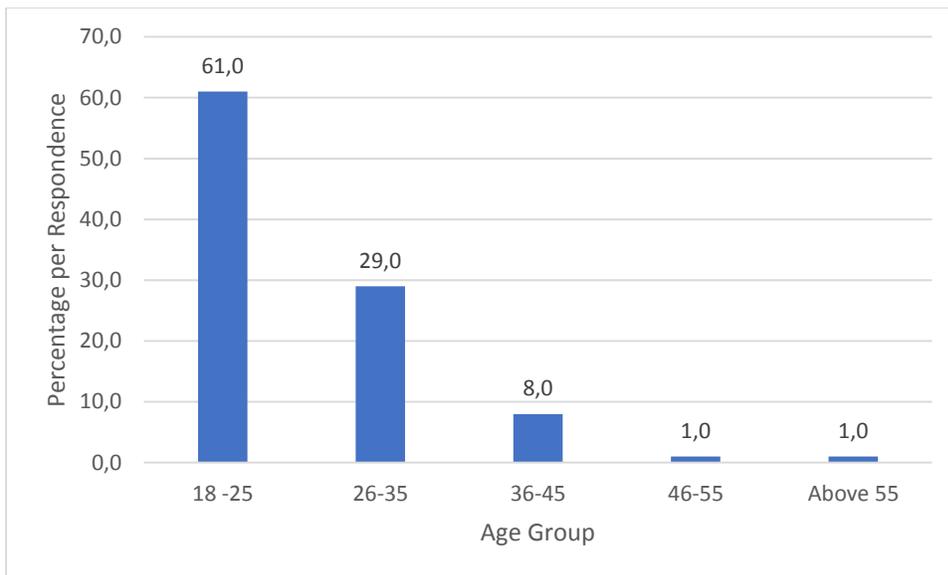


Figure 4.2: The classification of the respondents according to their age in the TVET College

The majority of participants were between the ages of 18-25, the highest percentage of 61%; followed by participants within the age range 26 to 35. The percentage of participants between the ages of 36 to 45 was 8%. A minority of participants were between the ages 46 to 55 at 1%, and above 55 years at 1% also. These were staff. It was not surprising that the majority of participants were between the ages of 18 to 25 because the TVET College is dominated by the youth and the student participants formed this group. It was also interesting that the youth were keen to partake in the study.

Further analysis was done to determine if the age of the respondents was associated with particular campus.

Table 4.1: Campus and age of the respondents

			Age					Total	
			18 -25	26-35	36-45	46-55	Above 55		
Campus	Ndwedwe	Count	15	2	2	0	1	20	
		% within Campus	75,0%	10,0%	10,0%	0,0%	5,0%	100,0%	
	Pinetown	Count	16	2	2	0	0	20	
		% within Campus	80,0%	10,0%	10,0%	0,0%	0,0%	100,0%	
	Ntuzuma	Count	14	3	2	1	0	20	
		% within Campus	70,0%	15,0%	10,0%	5,0%	0,0%	100,0%	
	KwaMashu	Count	16	2	1	1	0	20	
		% within Campus	80,0%	10,0%	5,0%	5,0%	0,0%	100,0%	
	Mpumalanga	Count	14	2	2	1	1	20	
		% within Campus	70,0%	10,0%	10,0%	5,0%	5,0%	100,0%	
	Total		Count	75	11	9	3	2	100
			% within Campus	75,0%	11,0%	9,0%	3,0%	2,0%	100,0%

Table 4.1 reveals that a slightly higher proportion (17) of respondents aged between 18 -25 came from Ndwedwe campus and 16 came from KwaMashu campus. Some respondents (12) came from Mpumalanga campus; followed by Ntuzuma campus with 9 respondents. The campus with lesser respondents (6) aged between 18 -25 came from Pinetown campus. The eldest person who was above 55 years came from Ndwedwe campus. The association between campus and age was not significant, the campuses were not significantly associated with the age of respondents as shown by the chi-square test ($\chi^2 = 22.457$, $df = 16$, $p = 0.444$). Overall, these results provide an important insight into the age of participants per campus for the study of students' attrition in TVET College.

4.2.3 Gender of Students and Staff in the TVET College

The researcher needed to know the gender of the respondents in the TVET College because that could have implications for their understanding of the student attrition. Females may experience the TVET sector differently from males. Figure 4.3 shows the gender of the respondents in the TVET College.

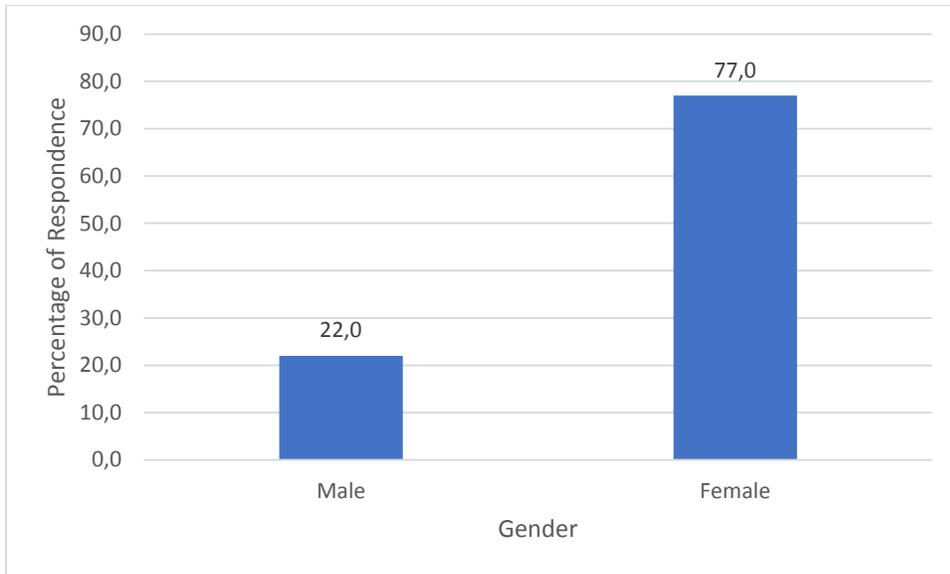


Figure 4.3: The classification of the respondents according to their gender in the TVET College

Figure 4.3 reveals that the majority of participants were females at 77% while males formed a minority at 22%. It is not surprising that most participants were females because it is common knowledge that females are enrolling in large numbers in TVET colleges. According to DHET, in their report: Statistics on Post School Education and Training in South Africa (2016), the number of females enrolled in NCV were 63.1% and males were 36.9%. Therefore, the findings of this study support DHET statistics. This may also mean that most of the students dropping out from the TVET college are females.

4.2.4 Field of Study

The courses in which students are/ were doing, may have an influence on the reasons behind student attrition in the TVET College. Engineering students may perceive the TVET College differently from Business studies students and their experience and challenges may be different. Some courses of study are more difficult than others. Figure 4.4 shows the classification of the respondents according to their field of study.

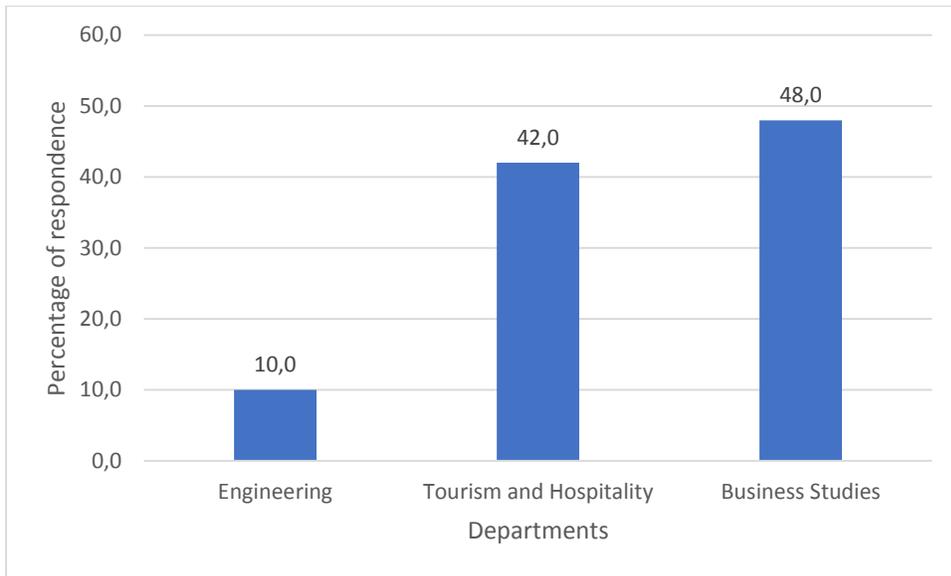


Figure 4.4: The classification of the respondents according to their field of study

Figure 4.4 reveals that the majority of participants were enrolled in Business studies with 48%, followed by Tourism and Hospitality with 42% of participants. The other participants were from Engineering studies with 10%. The low participation of Engineering department could be due to non-random sampling.

4.2.5 The Highest Qualifications of the Employee Respondents

The level of education of employees may influence their thinking about student attrition in the TVET College. Education and training is considered to have a positive impact on the success and realization of organizational goals. It is possible that the higher the qualification of an employee, the greater the chance that the employee will be well versed about student attrition in the TVET College. Figure 4.5 shows the academic qualifications of the respondents (staff).

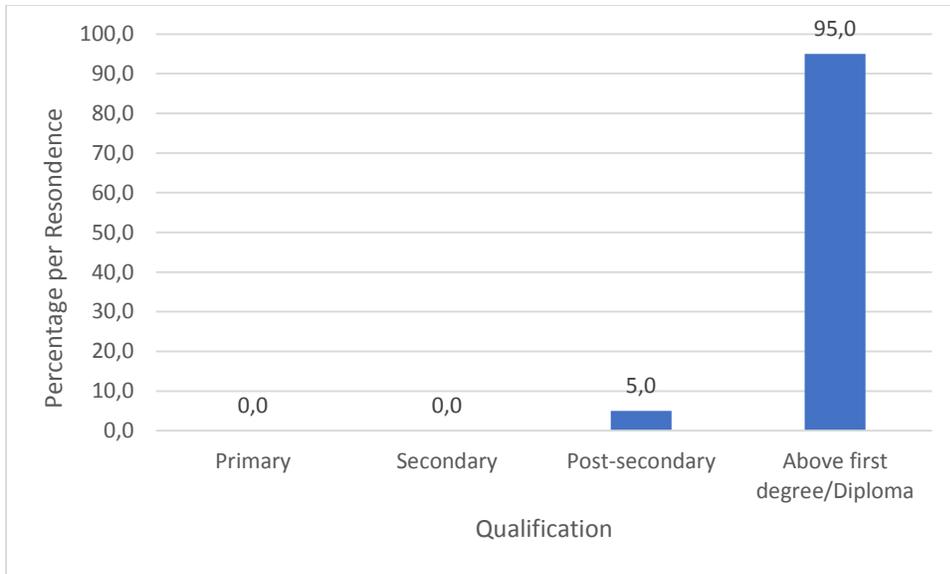


Figure 4.5: The highest qualifications of the staff respondents

Figure 4.5 reveals that 95% of the staff holds a qualification above the first degree/ diploma. This could be because in an academic institution it is compulsory that lecturers need to have a technical qualification plus a professional teaching qualification. Only 5% of staff hold a post-secondary qualification. This could be due to the fact that in TVET colleges the support staff such as SLOs may hold a post-secondary qualification such as N4 – N6 and/ or first diploma/ degree.

4.2.6 Marital Status of Students and Staff in the TVET College

The researcher needed to know the marital status of the respondents in the TVET College because that could have implications for their understanding of the student attrition, and some students may drop out from the college due to marriage problems. Figure 4.6 shows the marital status of the respondents in the TVET College.

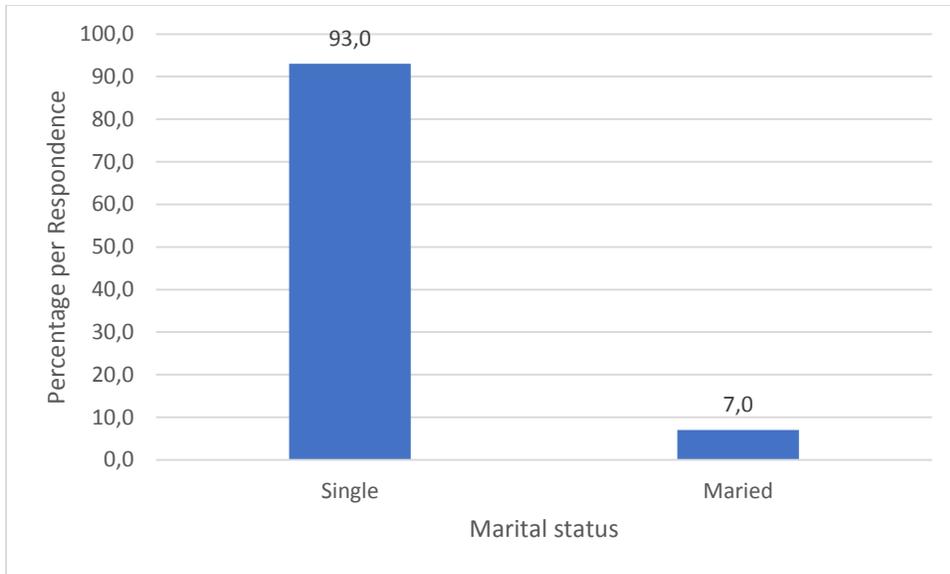


Figure 4.6: The classification of the respondents according to their marital status in the TVET College

The majority of respondents were not married at 93% as is expected of students. This may be because the majority of students in the TVET College are still very young as alluded to earlier on. Only 7% of respondents were married. It is possible that the majority of those who are married are staff members. Therefore, marriage status is not the reason for student attrition, since the majority of them are still single.

4.2.7 Categories of Respondents in the TVET College

There are several categories of the respondents such as students who are still studying, students who have dropped out, lecturers, senior lecturers, campus managers, and student liaison officers. Knowing about these categories is indispensable in this study because they will contribute valuable realistic information towards the reasoning behind student attrition in the TVET College as they will be tapping into their own experience. The kind of responses one can expect to get from these different categories within the TVET College may not necessarily be similar. Figure 4.7 shows the categories of the respondents. The staff categories of participants were deliberately chosen because they work closely with students on a weekly basis and some are students themselves.

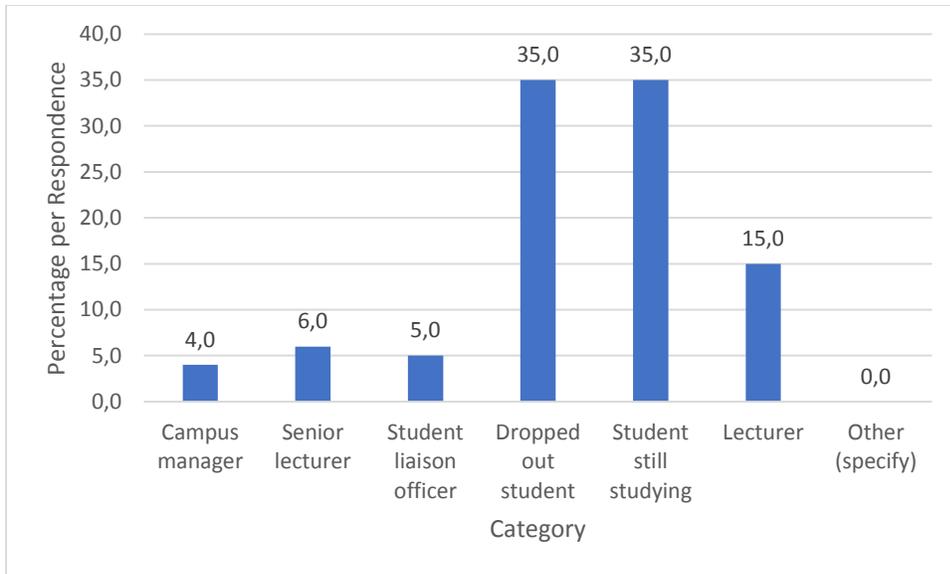


Figure 4. 7: Categories in the TVET college

Figure 4.7 reveals that the majority of participants were students who are still studying, at 35%. The percentage of students who had dropped out from the college was also 35%. Some of the students who had dropped out from the college were reluctant to participate in the study as opposed to those who were still studying; but eventually participated. This could be caused by the low self-esteem of being non-persisters. Other participants were lecturers at 15%. A minority of the participants were from CMT members with 4% being Campus Managers, 5% being SLOs and 6% being senior lecturers. As indicated in Table 3.2, there were 14 student participants in each campus which amounted to 70. There were two CMT members who participated from each campus, comprising of Campus Managers and Senior Lecturers which amounted to 10. There were five SLOs, one from each campus. Lastly, there were 15 Lecturers, three from each campus.

The above section presented respondents' demographic information, collected through the questionnaires.

The next section of this dissertation is concerned with the nature and extent of student attrition in TVET Colleges.

4.3 Nature and Extent of Student Attrition in TVET Colleges

In line with the conceptual framework and the first research question in this study, data was sought to determine the nature and extent of student attrition in TVET Colleges. Four sub-themes were identified in this regard, to which the respondents who were staff members and students were asked

to comment. The four research themes referred to above were (1) the rate of student dropout, (2) the programs in which the attrition is evident (3) the levels in which the attrition is evident (4) the years in which the attrition is evident.

4.3.1 Respondents' Perception of Rate of Student Attrition

The rate of dropout points toward the weightiness of the attrition in the TVET College. The staff and students respondents were asked in an interview, and questionnaire whether there was a high level of students dropping out from the TVET College, and their responses are shown in Figure 4.8.

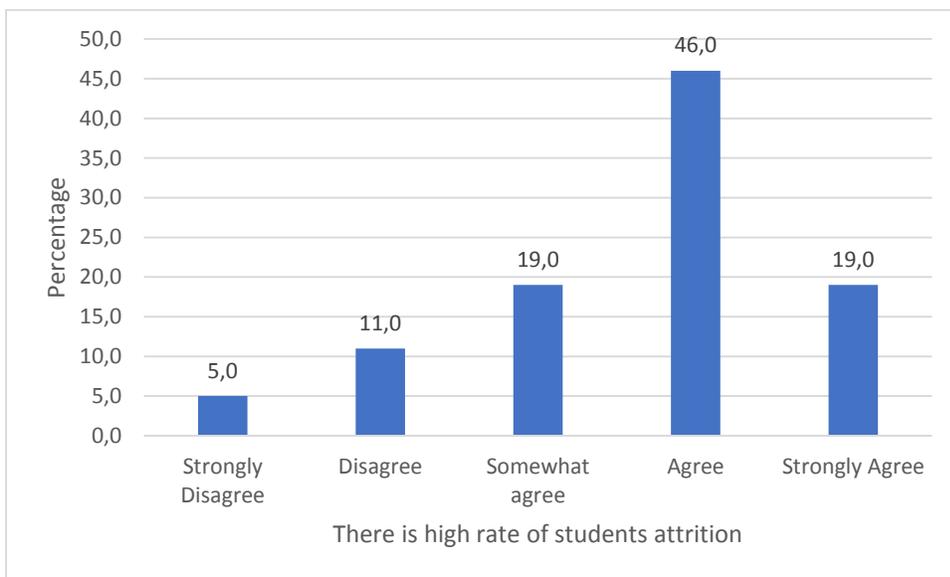


Figure 4.8: Student Attrition Rate

Figure 4.8 reveals that a large majority of respondents replied to the 'agree' option, some 46% of participants agreeing that there is a high rate of student attrition in the TVET College, followed by those who somewhat agreed and strongly agreed at 19% respectively, making up a total of 84% who agreed to varying degrees. Respondents who disagreed formed 11%. The lowest percentage are those respondents who strongly disagreed at 5%. This is what the researcher had anticipated in the study as alluded to in the background in Chapter 1, that there is high rate of attrition in the TVET college. This is also confirmed by the secondary data provided by Elangeni TVET College Management Information System as illustrated by means of the line graph in Figure 4.12 below.

4.3.2 Programs in which the Attrition is Evident

There are many programs offered in the TVET college such as Civil Engineering & Building Construction, Electrical Infrastructure Construction, Engineering and Related Design, Finance Economics & Accounting, Information Technology and Computer Science, Hospitality, Office Administration, Primary Agriculture, Safety in Society and Tourism. The rate of student attrition in the TVET College may differ from one program to another. The respondents were asked if they had observed the high rate of students dropping out from the TVET College happening in a particular program, and their responses are shown in Figure 4.9.

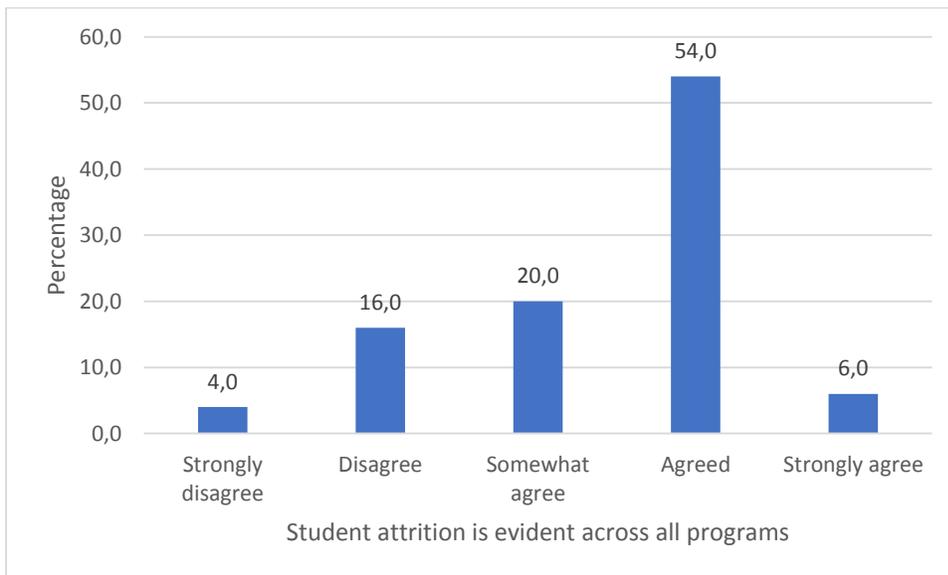


Figure 4.9: Programs in which the attrition is evident

Figure 4.9 reveals that 80% of participants agreed to varying degrees that student attrition is evident across all programs in the TVET College. This is an indication that the student attrition is not necessarily attached or associated with a particular program offered at the TVET College. This was confirmed by the secondary data received from ETVETMIS as illustrated by means of the line graph in Figure 4.12. Further analysis was done to determine if the views of the respondents were associated with the departments they came from. The results are shown in Table 4.2.

Table 4.2: Departments and their views on student drop out across all programs

			Students drop out across all programs					Total	
			Strongly disagree	Disagree	Somewhat agree	Agreed	Strongly agree		
Departments	Engineering	Count	0	1	2	1	0	4	
		% within Departments	0,0%	25,0%	50,0%	25,0%	0,0%	100,0%	
	Tourism and Hospitality	Count	2	5	10	21	4	42	
		% within Departments	4,8%	11,9%	23,8%	50,0%	9,5%	100,0%	
	Business Studies	Count	2	9	8	27	2	48	
		% within Departments	4,2%	18,8%	16,7%	56,3%	4,2%	100,0%	
	Student support services	Count	0	1	0	5	0	6	
		% within Departments	0,0%	16,7%	0,0%	83,3%	0,0%	100,0%	
	Total		Count	4	16	20	54	6	100
			% within Departments	4,0%	16,0%	20,0%	54,0%	6,0%	100,0%

Table 4.2 reveals that the proportion of respondents (25%) who disagreed with the statement were from the engineering department. Some respondents (23%) who somewhat agreed came from the tourism and hospitality department. Most respondents (83.3%) who agreed were from the Student Support Services department. Some respondents (9.5%) who strongly agreed were from the tourism and hospitality department. Only a small percentage (4.2%) of respondents who strongly disagreed were from both tourism and hospitality, and business studies department each. However, their views were not significantly associated with the department of respondents as shown by the chi-square test ($\chi^2 = 8.394$, $df = 12$, $p = 0.754$). Overall, these results provide an important insight into the departments of participants on the study of student attrition in TVET College. This is also in line with what one campus manager revealed in the interview as follows:

The students' attrition is evident across all programs but it is more and quicker in other programs such as Information Technology and Computer Science (ITCS), and Financial Economic and Accounting (FEA). (CMKM1)

The above comment is in line with the information illustrated in the bar graph in Figure 4.12 that the student attrition occurs across all programs. Figure 4.12 indicates that the ITCS student attrition was at a rate of 50% and the EFA student attrition rate was 51%. In total, these results provide an important insight into the student attrition in Elangeni TVET College. The results reveal that there is a high percentage of student attrition in all programs.

4.3.3 Level in which the Attrition is Evident

The courses are offered in different levels in the TVET College ranging from level 2, level 3, and level 4 in NCV; as well as N1 to N6 in NATED. The rate of student attrition in the TVET College may differ from one level to another. The respondents were asked if they had observed the high rate of students dropping out from the TVET College in a particular level, and their responses are shown in Figure 4.10.

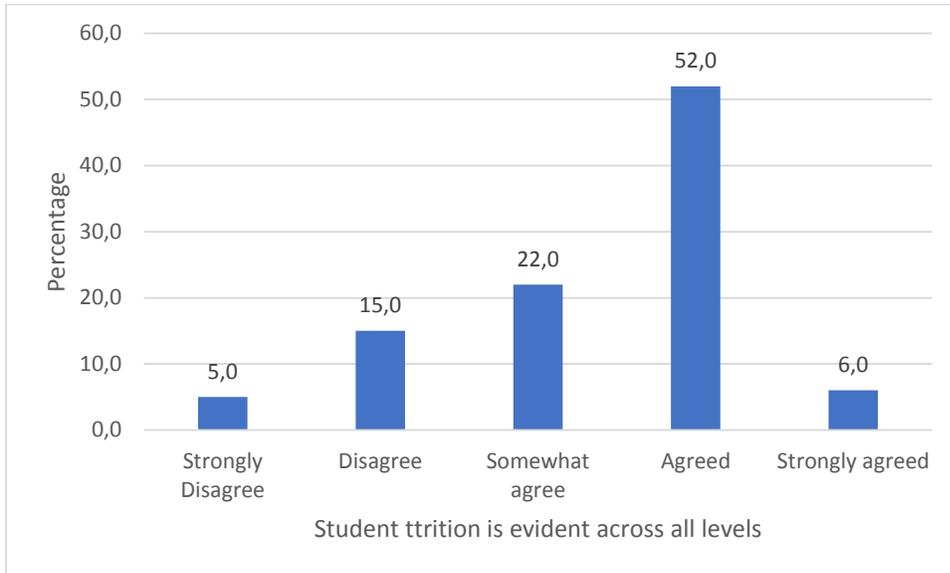


Figure 4.10: Level in which the attrition is evident

Figure 4.10 reveals that the category of responses: agreed, received the vast majority of responses, namely 52% who agreed that student attrition is evident across all levels in the TVET College. This is followed by 22% of respondents who somewhat agreed. The large majority of respondents (80%) agreed to varying degrees with this statement whilst only 15% of respondents disagreed with the statement. Only 5% and 6% of respondents strongly disagreed and strongly agreed respectively. The statistics provided by the ETVETMIS confirms that the student attrition happens across all levels as illustrated by means of line graph in Figure 4.12. The data provided by respondents in the questionnaires concerning the level in which student attrition takes place in the TVET College were also confirmed by a campus manager in one interview as follows:

Students' attrition happens across all levels but it is more in the first year students because the majority of them were pushed by their parents and some were misled by their former

high schools with the notion that TVET College is easy; as soon as they realise that TVET system is even more difficult they immediately drop out from the TVET College. (CMMP2)

This campus manager’s perception confirms the information illustrated in Figure 4.12 that the student attrition occurs across all levels. For example, Figure 4.12 indicates that in 2016 Tourism enrolment was 300, the same group of students had shrunk to 213 in 2017 and ended up at 198 which amounted to a 34% attrition rate. Overall, these results provide an important insight into the student attrition in Elangeni TVET College. The results reveal that there is a high percentage of student attrition in all levels.

4.3.4 Years in which the Attrition is Evident

The rate of student attrition in the TVET College may differ from one year to another. The respondents were asked if they had observed the high rate of students dropping out from the TVET College every year, and their responses are shown in Figure 4.11.

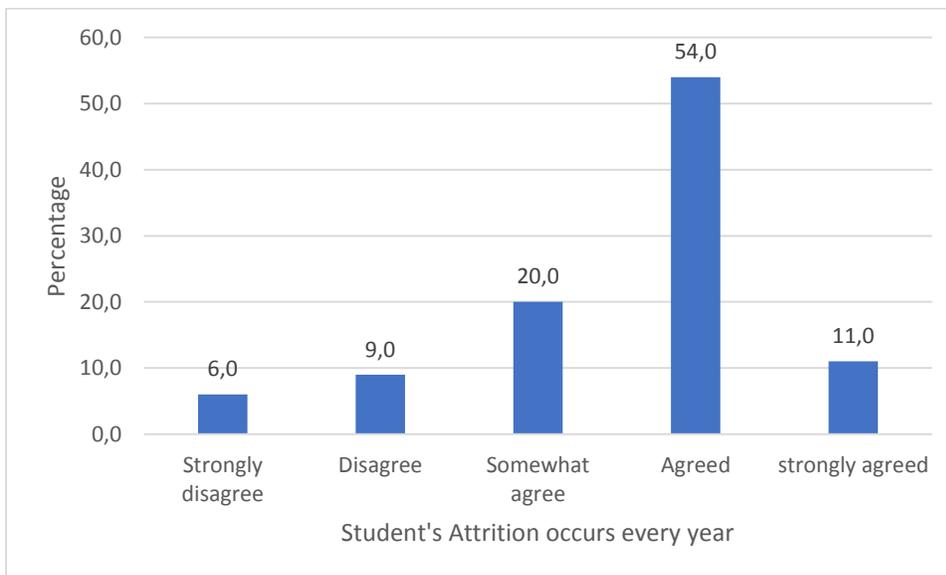


Figure 4.11: Years in which the attrition is evident

Figure 4.11 reveals that the highest percentage of responses were in the category of ‘agreed’, 54% of respondents agreed that student attrition occurs every year; while 20% of respondents somewhat agreed, and 11% strongly agreed. Respondents who strongly disagreed made up 6% with 9% disagreeing with the statement. The statistics provided by ETVETMIS show that there is a high rate of student attrition and it occurs every year, as shown in Figure 4.12. A large majority (85%) agreed to varying degrees with the statement. The Figure 4.12 which is based data drawn from the

documents shows the size of the cohort of 2016 to 2018 of Elangeni TVET College across all campuses and all programs.

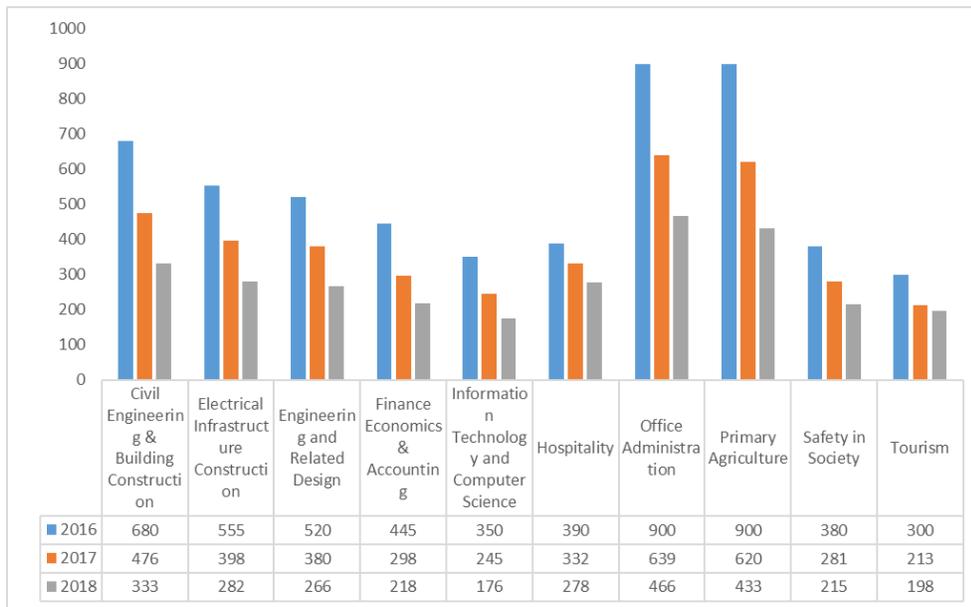


Figure 4.12: 2016 to 2018 Cohort

Figure 4.12 reveals that there has been a constant increase in student attrition in the TVET college in all programs across all campuses; for example the 2016 cohort started as 680 in civil engineering and building construction, the same cohort decreased to 476 in 2017, and further decreased to 333 in 2018. The student attrition *mean* and *median* is at 46% and 49% respectively; this is the indication of the seriousness of the student attrition faced by the TVET college based on the 2016 to 2018 statistics. The program that has the *smallest* student attrition is hospitality with 29% followed by tourism with 34%. The program that has the *highest* student attrition is civil engineering and building construction with 51%. It is striking to note that the majority of programs that experience higher student attrition are engineering studies as the *mode* is at 49% for both engineering and related design, as well as electrical infrastructure construction. This is the indication of how serious student attrition is defeating the mandate of the DHET which is to equip 30 000 artisans by 2030 as prescribed by the NDP. This information confirms what the researcher had indicated in the background in Chapter 1 that there is high rate of student attrition in TVET colleges and that it increases every year. This high rate of student attrition is caused by a number of factors as deliberated in the following section (4.4). The data provided by respondents in the

questionnaires concerning the years in which student attrition takes place in the TVET College were also confirmed by a campus manager in one interview as follows:

Students' attrition happens every year and gradually increases every year. Instead of decreasing it is increasing. (CMNT4)

The above comment is in line with the information illustrated in Figure 4.12 that the student attrition occurs every year. For example, office administration had an initial enrollment of 900 students in 2016 but ended up with 466 students in 2018 which amounts to 48% student attrition. The next section of this dissertation is concerned with the causes or reasons behind student attrition in TVET colleges.

4.4 The Causes or Reasons behind Student Attrition in TVET Colleges

In line with the conceptual framework and the second research question, this study sought to determine the causes or reasons behind student attrition in TVET Colleges. Six sub-themes were identified in this regard, to which the respondents who were staff members and students were asked to comment. The six research sub-themes referred to above were (1) the dissatisfaction about the programs offered, (2) the inadequate induction and student placement (3) the unavailability of academic support and extramural activities (4) the inadequate information about financial support, (5) the poor quality of teaching and learning, (6) the lack or inadequate infrastructure.

4.4.1 Dissatisfaction about the Programs Offered in TVET College

The satisfaction or dissatisfaction of students about the courses offered in the TVET College may determine their staying or leaving in the TVET College. The staff and students respondents were asked in an interview, and questionnaire whether they were satisfied about the courses they were doing in the TVET College, and their responses are shown in Figure 4.13.

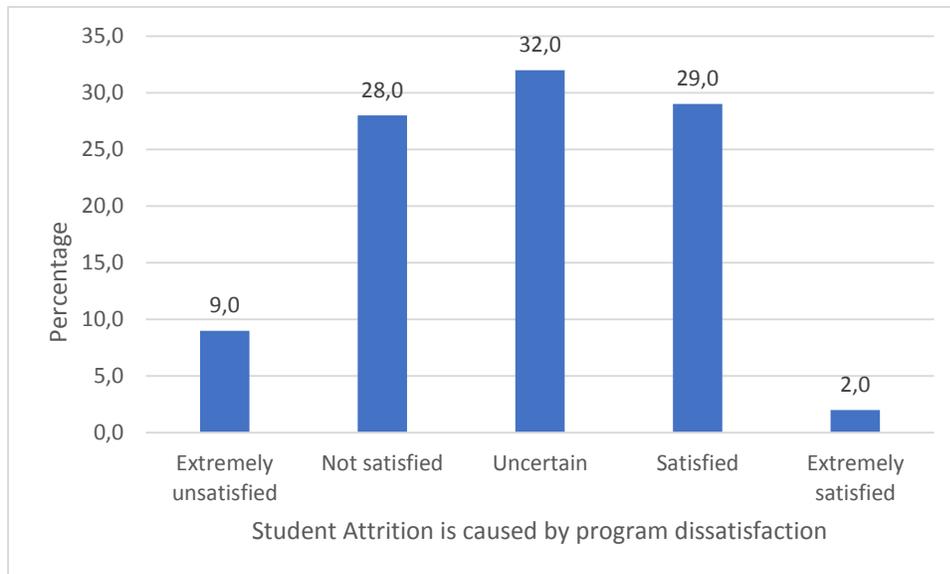


Figure 4.13: Dissatisfaction about the programs offered in TVET College

Figure 4.13 reveals that the majority of respondents were in the ‘uncertain’ category at 32%. In terms of dissatisfaction with programs offered, 28% of respondents were not satisfied with the courses offered in the TVET College. A closer inspection of the figure shows that only 2% of students were extremely satisfied. Either side of ‘uncertain’, slightly more respondents were dissatisfied than satisfied. Students who are not satisfied with what is at their disposal are likely to drop out from the TVET College. In one interview the student respondents highlighted as follows:

We only come to the college because we don't have anywhere to go, otherwise we wouldn't be at the college. (STUPT5)

TVET Colleges are supposed to be institutions of choice, however, it appears to be the opposite. The above comment is in line with the general perceptions of the respondents on the questionnaires. This is an indication that TVET colleges need to do a thorough program community needs analysis before they decide on offering a particular program.

4.4.2 Inadequate Student Induction

Proper student induction and placement play a huge role in informing students about the “ins and outs” of college. Therefore, the well informed and correctly placed student is unlikely to drop out from the college. The respondents were asked if they were inducted prior to their registration and whether they went through the selection process in the TVET College. Their responses are shown in Figure 4.14.

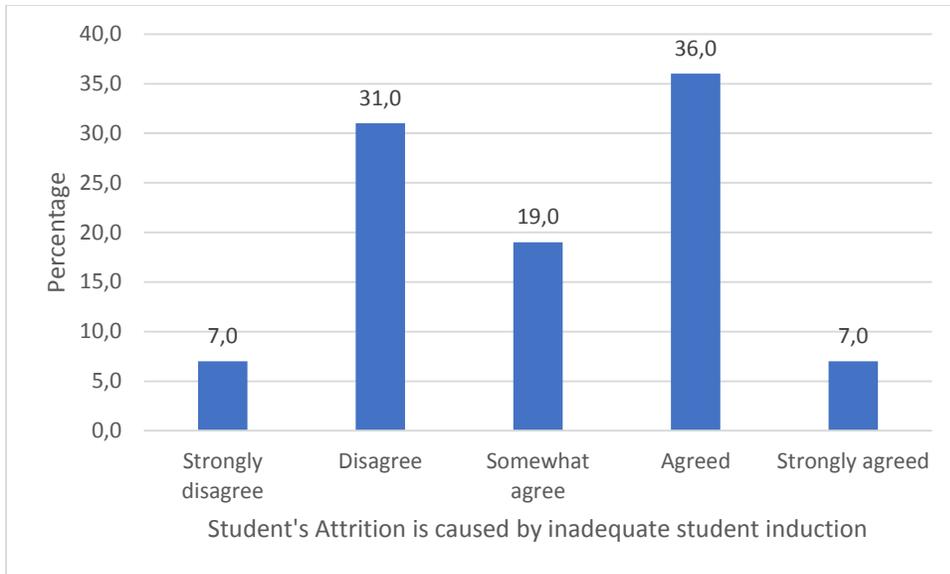


Figure 4.14: Inadequate student induction in TVET College

Figure 4.14 reveals that 36% of respondents agreed that student attrition is caused by inadequate student induction, closely followed by those who disagreed at 31%. Other respondents who somewhat agreed comprised 19%. Only 7% of respondents both strongly agreed and strongly disagreed that student attrition is caused by inadequate student induction. Thus, the majority of students tended to agree (62%) that lack of an induction program was a mitigating factor in attrition.

During the interviews, one interviewee stated that:

The induction only happens one month after the students have registered and therefore it does not serve its purpose, as result many students dropout as soon as they find out from the induction that NCV L4 is equivalent to Grade 12. The career guidance does not give detailed information as the induction does. (SLNDW3)

The above comment is in line with the general perceptions of the respondents on the questionnaire. This indicates that the induction and career guidance are only done for the sake of compliance and is not taken seriously by the college. This therefore defeats the purpose of the reason for induction if it is done after the students have already registered. Finding relevant the information after students have registered, may cause them to drop out.

4.4.3 Inadequate Student Placement

Proper student placement plays a huge role in informing students about the “ins and outs” of the college. Therefore, the well informed and correctly placed student is unlikely to drop out from the college. The respondents were asked if they were properly placed after writing the selection and placement test in the TVET College. Their responses are shown in Figure 4.15. It is a common practice that before the potential students are registered in the TVET College they have to undergo career guidance, then write a selection and placement test before they are registered.

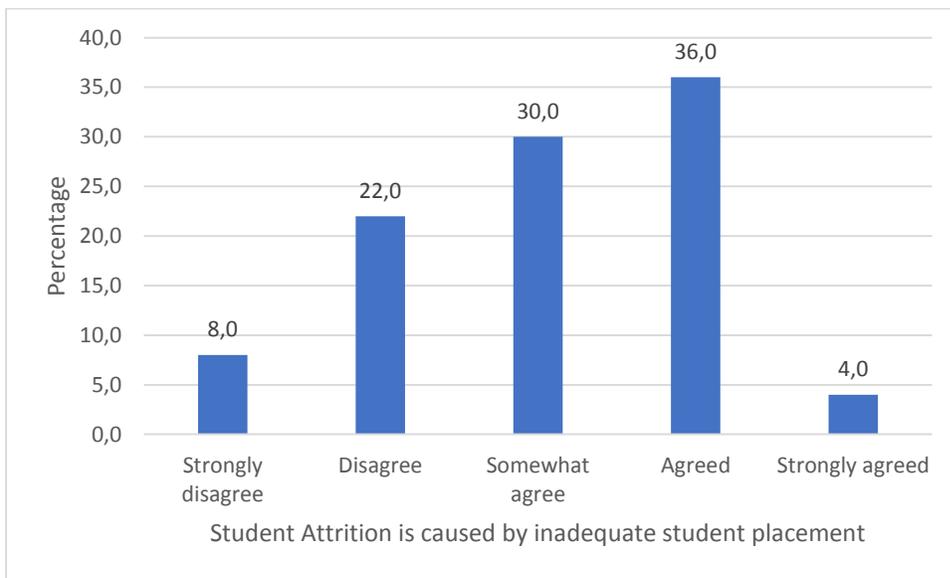


Figure 4.15: Inadequate student placements in TVET College

Figure 4.15 reveals that a large percentage, 36% of respondents, agreed that student attrition is caused by inadequate student placement, followed by those who somewhat agreed at 30%. Other respondents at 30% somewhat agreed with the statement which says that student attrition is caused by the inadequate student placement. Overall, a majority (70%) agreed to varying degrees with the statement. The fewest respondents strongly disagreed and strongly agreed at 8% and 4% respectively with the statement. This is one area which is crucial and has a huge impact in determining whether the student will complete his studies or will drop out from the TVET College.

4.4.4 Unavailability of Academic Support

Academic support helps to assist students who are not coping academically. The respondents were asked if were they receiving academic support in the TVET College, and their responses are shown in Figure 4.16.

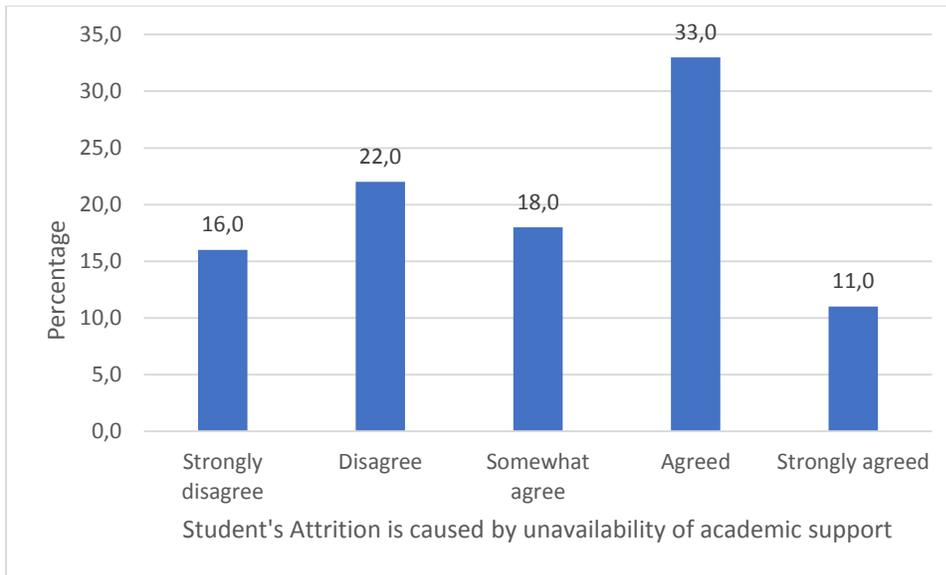


Figure 4.16: Unavailability of academic support

Figure 4.16 reveals that 33% of respondents agreed that student attrition is caused by the unavailability of academic support in the TVET College, followed by 22% of respondents who disagreed. Respondents who somewhat agreed represented 18%, followed by those who strongly disagreed at 16%. The least number is that of respondents who strongly agreed at 11%. Overall, a majority of respondents (62%) agreed to varying degrees with the statement. These results are confirmed by on lecturer in one interview as follows:

The academic support is not as a strong as it supposed to be at the college. The lecturers are dragging feet when they supposed to do the fill the fill the gap activities at the beginning of the year, in Maths and Maths Lit. The tutorials were also reduced this year and are only offered at request by the students. (LNT4)

This indicates that the academic support provided is only done for the sake of compliance and not for sincere purposes of supporting students. The TVET Colleges need to make use of the funding allocated for academic support effectively and efficiently, especially in subjects experiencing high failure rates.

4.4.5 Unavailability of Extramural Activities

The extra-mural activities are meant to relax the minds of students while boosting academic achievement indirectly. The respondents were asked if there were extra-mural activities in the TVET college, and their responses are shown in Figure 4.17.

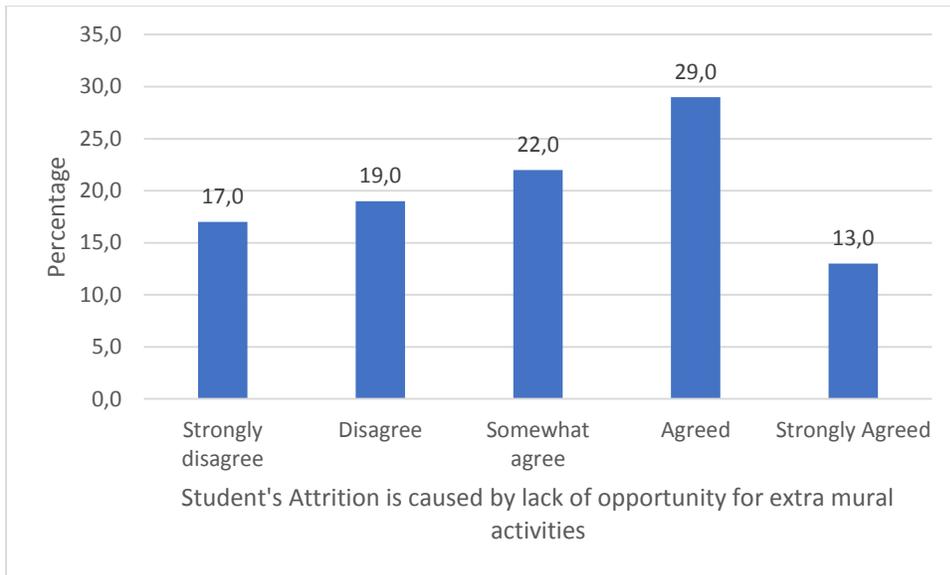


Figure 4.17: Unavailability of extramural activities

Figure 4.17 reveals that 29% of respondents agreed and 22% somewhat agreed respectively that student attrition is caused by the unavailability of extra mural activities. At least 13% strongly agreed with the statement. Those respondents who disagreed made up 19% and those who strongly disagreed comprised 17%. Overall, a majority agreed to varying degrees (64%). This is in contrary to what one student liaison officer said in the interview as follows:

There are a number of extra mural activities organized by the college using SRC budget such as the music festival, sports, athletics, and book review competition. (SLOPTN5)

The above comment is not in line with the perceptions of the respondents on the questionnaire. This indicates that the extramural activities available are insufficient. The TVET College needs to take extra mural activities very seriously by allocating time, funding and planning because it helps students to relax and to be ready for academic pressure.

4.4.6 Inadequate Information about Financial Support

The state financial support (NSFAS) helps relieve parents from the burden of paying tuition fees and transport and accommodation. The respondents were asked if they received sufficient

information and assistance in accessing NSFAS in the TVET College, and their responses are shown in Figure 4.18.

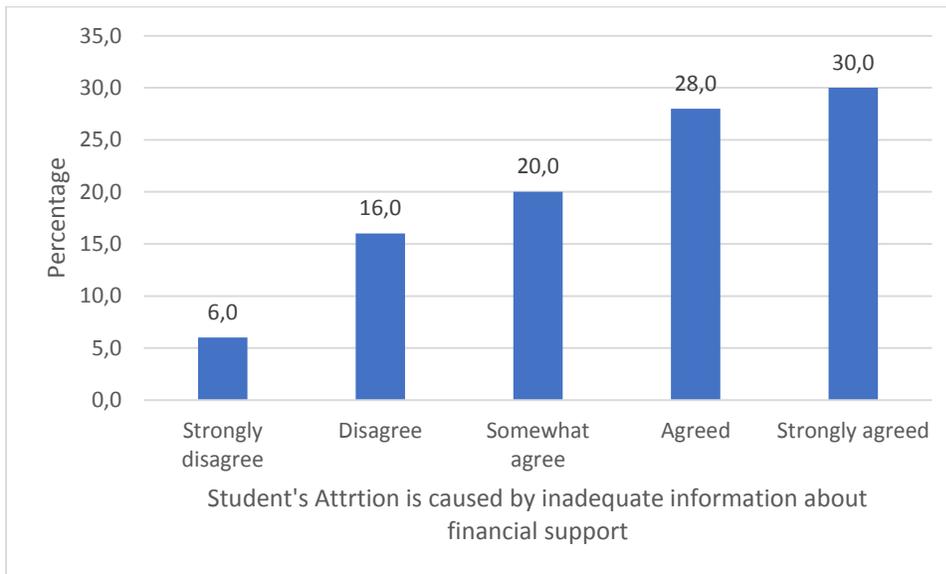


Figure 4.18: Inadequate information about financial support

Figure 4.18 reveals that the highest percentage (30%) of responses came from respondents who strongly agreed that student attrition is caused by inadequate information about financial support, followed by those who agreed at 28%, followed by those who somewhat agreed at 20%, followed by those who disagreed at 16% and least were those who strongly disagreed at 6%. Thus, the vast majority of respondents (78%) agreed to varying degrees to the statement. However, this is contrary to what one campus manager said in one interview as follows:

There is more than enough information about financial support, in such a way that there is a dedicated desk dealing with NSFAS in a campus; and there is a dedicated computer Lab where students are assisted to apply online for NSFAS immediately, before they even start the actual registration. There are also posters and flyers distributed in the community at large prior the registration. There is also a slot in the community radio where the college informs the community about the availability of NSFAS and application process. There are also other bursaries received from SETAs and private companies such as Afripipe and many more. (CMKM1)

This contradiction could be due to the fact that students were only referring to the accommodation and transport allowance and not tuition or that finance information was lacking at school level.

The campus manager could also be focusing on the tuition and not the transport and accommodation allowances. Nevertheless, during pre-registration the potential students need to be given financial support information and a chance to apply for NSFAS online.

Additional analysis was done to determine if the views of the respondents were associated with their departments. The results are shown in Table 4.3.

Table 4.3: Department related to inadequate information about financial assistance

			Inadequate information about financial support					Total	
			Strongly disagree	Disagree	Somewhat agree	Agreed	Strongly agreed		
Departments	Engineering	Count	0	0	0	2	2	4	
		% within Departments	0,0%	0,0%	0,0%	50,0%	50,0%	100,0%	
	Tourism and Hospitality	Count	4	6	8	9	15	42	
		% within Departments	9,5%	14,3%	19,0%	21,4%	35,7%	100,0%	
	Business Studies	Count	2	9	9	16	12	48	
		% within Departments	4,2%	18,8%	18,8%	33,3%	25,0%	100,0%	
	Student support services	Count	0	1	3	1	1	6	
		% within Departments	0,0%	16,7%	50,0%	16,7%	16,7%	100,0%	
	Total		Count	6	16	20	28	30	100
			% within Departments	6,0%	16,0%	20,0%	28,0%	30,0%	100,0%

Table 4.3 reveals that the highest number of respondents who strongly agreed with the statement were from the tourism and hospitality department with 15 respondents, followed by those who agreed with the statement coming from business studies with 16 respondents. The four engineering respondents were equally divided between agreeing and strongly agreeing with two respondents in each. The highest number of those who strongly disagree was from tourism and hospitality with four participants. Only a small percentage, 9.5% of the tourism and hospitality department strongly disagreed. However, their views were not significantly associated with the department of respondents as shown by the chi-square test ($\chi^2 = 10.088$, $df = 12$, $p = 0.608$). Overall, these results reveal that the information on financial support is not adequately cascaded to students accordingly.

4.4.7 Poor Quality of Teaching and Learning and Monitoring

If the quality of teaching and learning is not of a good standard students may feel that they are wasting their time and hence resort to dropping out from the TVET college. The student

respondents were asked if they received quality teaching from their lecturers in the TVET college, and their responses are shown in Figure 4.19.

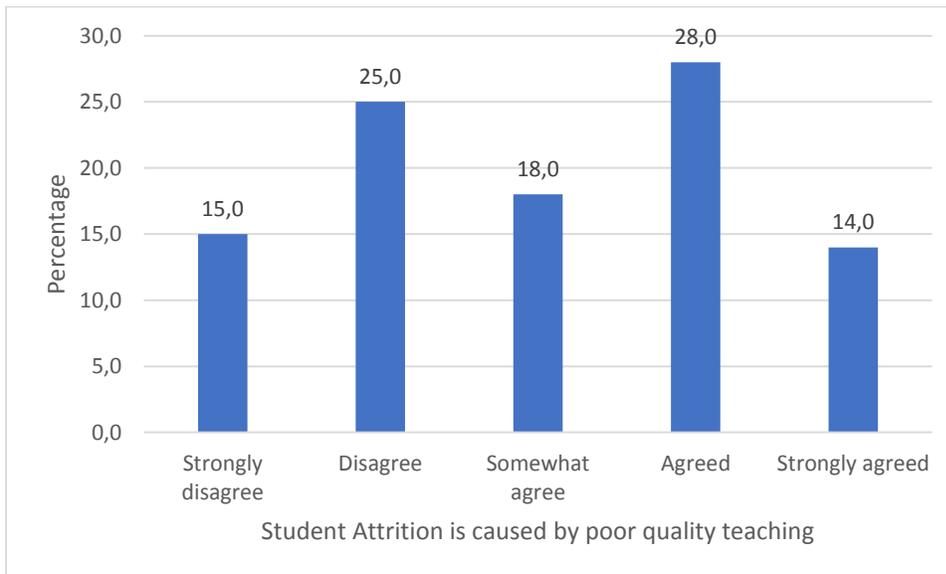


Figure 4.19: Poor quality teaching and learning, and monitoring

Figure 4.19 reveals that an overall, a slight majority of students (60%) somewhat agreed, agreed, strongly agreed that poor quality teaching caused attrition. Some 28% of respondents agreed that poor quality teaching and learning results in student attrition; 18% somewhat agreed and 14% strongly agreed. Those who disagreed comprised 25% of responses. A few respondents strongly disagreed and strongly agreed at 15% and 14% respectively. There is only a small difference between the number of respondents who strongly agreed and those who strongly disagreed, as well as between those who agreed and disagreed. These sentiments were also observed in the interviews, as shown Matrix 4.1:

Matrix 4.1: Summary of research question or theme

Sub theme/sub question	Respondent responses	Source/s
Poor quality of teaching and	<i>Some Lecturers do not know what they are teaching. They come and read from the textbook as it is without explaining the concepts clearly. There are very few lecturers who are dedicated in their job and who are good at it. Some lecturers hardly honour their classes. Others teach for few</i>	STUNDW3

learning, and monitoring	<i>minutes and sit or leave the class unattended. Some do their marking instead of lecturing.</i>	
	<i>Some students are not serious about their studies. They only attend the classes for the sake of getting NSFAS allowances. They neither do their classwork nor participate on the lesson. The majority of students come very late and hardly attend the periods after break.</i>	SLNT4
	<i>Some lecturers teach subjects that they are not qualified to teach when there is a shortage of specialist. The curriculum itself is contribution to poor quality teaching, for an example in Civil Engineering and Building Construction program there is welding and mechanical components and lecturers are unable to grasp that efficiently. In NCV some lecturers resist the class visit the CMT in such a way that they even involve the unions. However the very same lecturers will beg the CMT to come and do the class visit in the NATED afternoon classes solely because their part time claims will not be processed if class visit is not done</i>	CMMP2

Matrix 4.1 presents some of the comments made by different categories of respondents in the TVET College, namely students, senior lecturer and campus manager. They are all leaning in the same direction of saying that there is poor quality teaching and learning in the TVET College and this results in the high student attrition. If TVET colleges really want to be centers of excellence they must ensure quality teaching and learning. The core business of the TVET Colleges is to provide teaching and learning, so they cannot afford to fail at their core function, hence they must ensure quality in it.

Additional analysis was done to determine if the views of the respondents were associated with their department. The results are shown in Table 4.4.

Table 4.4: Department related to poor quality teaching and learning responses

			Poor quality teaching					Total	
			Strongly disagree	Disagree	Somewhat agree	Agreed	Strongly agreed		
Departments	Engineering	Count	0	0	1	2	1	4	
		% within Departments	0,0%	0,0%	25,0%	50,0%	25,0%	100,0%	
	Tourism and Hospitality	Count	8	10	10	11	3	42	
		% within Departments	19,0%	23,8%	23,8%	26,2%	7,1%	100,0%	
	Business Studies	Count	7	13	6	12	10	48	
		% within Departments	14,6%	27,1%	12,5%	25,0%	20,8%	100,0%	
	Student support services	Count	0	2	1	3	0	6	
		% within Departments	0,0%	33,3%	16,7%	50,0%	0,0%	100,0%	
	Total		Count	15	25	18	28	14	100
			% within Departments	15,0%	25,0%	18,0%	28,0%	14,0%	100,0%

Table 4.4 reveals that the highest number of respondents who agreed with the statement were from the business department and tourism department, followed by those who disagreed with the statement at 33% from student support services. The respondents who somewhat agreed and strongly agreed came from tourism (23% and 7%) and business (12% and 20%) with engineering equally representing somewhat agreed and strongly agreed. Only a small percentage of 19% from tourism and hospitality departments strongly disagreed. However, their views were not significantly associated with the department of respondents as shown by the chi-square test ($\chi^2 = 11.076$, $df = 12$, $p = 0.522$). Overall, these results provide an important insight into the departments of participants per campus on the study of student attrition in TVET college. The results reveal that Elangeni TVET College needs to improve on the quality teaching and learning.

4.4.8 Lack or Inadequate Infrastructure

The availability or adequacy of the infrastructure in the TVET college plays a huge role in boosting the morale of students and hence is a factor in their persistence with their studies throughout the academic calendar. The respondents were asked if they felt there was sufficient infrastructure in the TVET college, and their responses are shown in Figure 4.20.

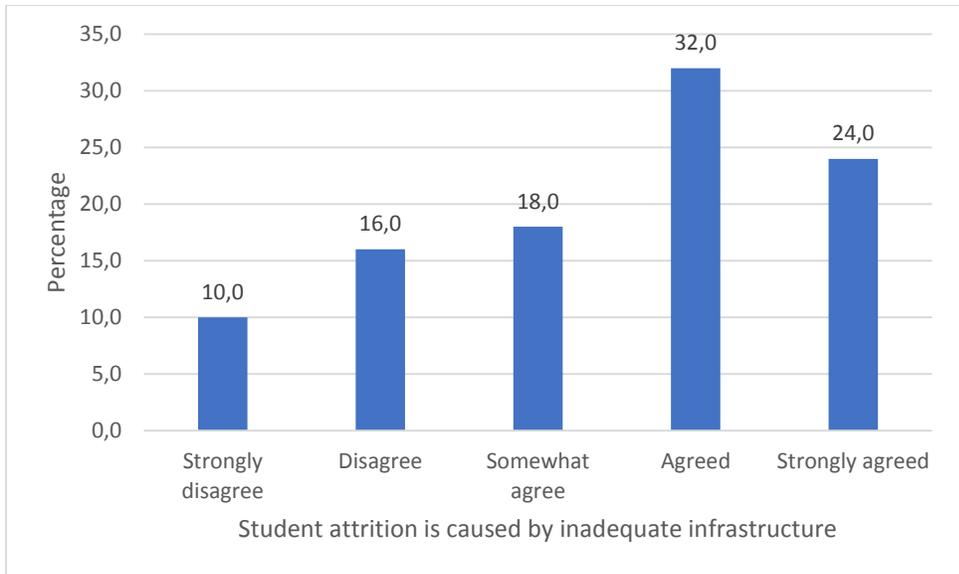


Figure 4.20: Lack or inadequate infrastructure

Figure 4.20 reveals that a majority of 32% of respondents agreed that student attrition is caused by the inadequate infrastructure in the TVET College, followed by the respondents who strongly agreed at 24%. Other respondents who somewhat agreed comprised 18%. Only 16% of respondents disagreed, followed by 10% of respondents who strongly disagreed. Overall, a majority of respondents (74%) agreed to varying degrees with the statement. During one interview the following sentiments were noted as shown in Matrix 4.2:

Matrix 4.2: Summary of the research question or theme

Sub theme/sub question	Respondent responses	Source/s
Lack or inadequate infrastructure	<i>The majority of campuses lack the infrastructure. There is neither libraries nor resource centres. The computer laboratories are very limited and the access afterhours is not permitted, as a result students struggle to do their assignment that requires research and to be typed. Although WIFI is available but it is very problematic in the bigger campuses due to many users. Students resort into using the community libraries, and access is also very limited as bookings need to be done in advance. Computers in the computer laboratories are very old and outdated. At times two students have to share one computer. Computers</i>	STUNDW3

	<i>also contribute in the failure of students as they just freeze during the exam. In most of the campuses there are no workshop/practicum rooms and some are poorly equipped.</i>	
	<i>The classrooms are fully furnished with basic furniture such as chairs desks. The sitting area is available in some campuses though it is not enough, but it is not covered, as a result students uses classrooms to eat during sunny and rainy days, which in return create the uncleanliness in the classrooms.</i>	CMPTN5
	<i>The majority of campuses don't have tuck-shops as a result the students are forced by situation to buy from the community shops outside the campus, which delay them to come for their next classes. The recreational facilities are not available in almost all campuses. Some campuses don't even have a space to build one in future. Nevertheless, the students use the community sports-grounds at their disposal.</i>	SLNT4

Matrix 4.2 gives some of the sentiments from different respondents in the TVET college who are students, a senior lecturer and a campus manager. They are all leaning towards the direction which indicates that there is a lack of or inadequate infrastructure in the TVET college which promotes high student attrition.

Further analysis was done to determine if the views of the respondents were associated with their campus. The results are shown in Table 4.5.

Table 4.5: Campus related to infrastructure responses

			Inadequate infrastructure					
			Strongly disagree	Disagree	Somewhat agree	Agreed	Strongly agreed	Total
Campus	Ndwedwe	Count	2	2	2	10	4	20
		% within Campus	10,0%	10,0%	10,0%	50,0%	20,0%	100,0%
	Pinetown	Count	0	4	3	10	3	20
		% within Campus	0,0%	20,0%	15,0%	50,0%	15,0%	100,0%
	Ntuzuma	Count	4	2	4	5	5	20
		% within Campus	20,0%	10,0%	20,0%	25,0%	25,0%	100,0%
	KwaMashu	Count	3	3	5	3	6	20
		% within Campus	15,0%	15,0%	25,0%	15,0%	30,0%	100,0%
	Mpumalanga	Count	1	5	4	4	6	20
		% within Campus	5,0%	25,0%	20,0%	20,0%	30,0%	100,0%
	Total	Count	10	16	18	32	24	100
		% within Campus	10,0%	16,0%	18,0%	32,0%	24,0%	100,0%

Table 4.5 reveals that the highest proportion of respondents (50%) who agreed with the statement were from Pinetown and Ndwedwe campus. Those who strongly agreed with the statement were KwaMashu and Mpumalanga campuses at 30% each. The highest proportion of respondents who somewhat agreed (25%) were at KwaMashu campus. Most the respondents who disagreed with the statement were from Mpumalanga campus at 25%. The highest proportion of respondents who strongly disagreed were from Ntuzuma campus at 20%. The expressed views were significantly associated with the campus of respondents as shown by the chi-square test ($\chi^2 = 19.732$, $df = 16$, $p = 0.233$). Overall, these results provide an important insight into the views of participants per campus on the study of student attrition in TVET College. The results reveal that the infrastructure in the TVET college needs to be improved for betterment of institution and student retention. A majority of respondents on all campuses agreed to varying degrees with the statement.

4.4.9 Ineffective Teaching and Learning Material

The type of learning material used to teach students may have an impact on their staying or leaving the college. The respondents were asked if they were taught with poor quality teaching material in the TVET College, and their responses are shown in Figure 4.21.

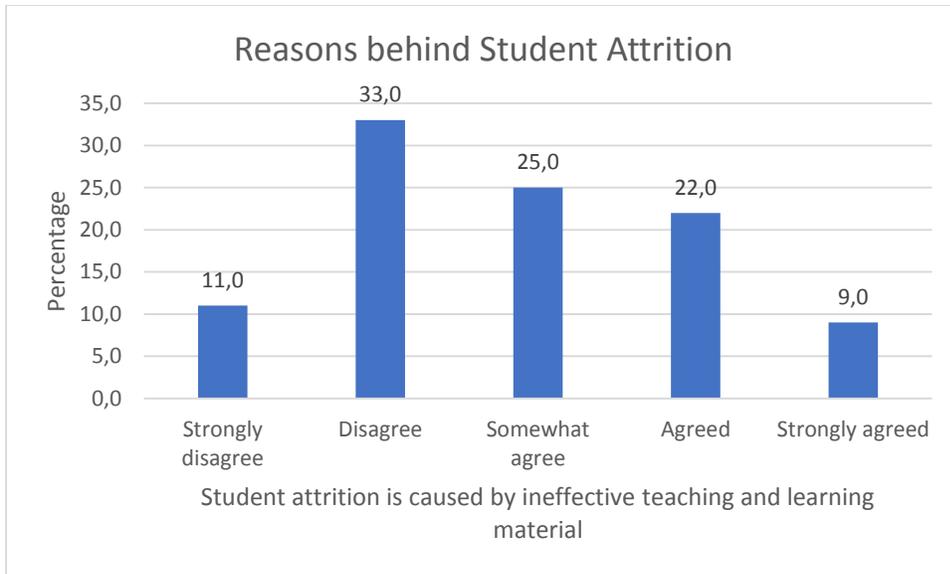


Figure 4.21: Ineffective teaching and learning materials

Figure 4.21 reveals that the majority of respondents, 33%, disagreed that the teaching and learning material was ineffective and leads to student attrition. In terms of agreed and strongly agreed, 31% of respondents answered this way, followed by the respondents who somewhat agreed at 25%. The lesser number of respondents strongly disagreed at 11% followed by those who strongly agreed at 9%. A slight majority (56%) overall agreed that attrition was as a result of ineffective teaching and learning material.

4.4.10 Administration of Internal and External Assessments

The manner in which assessments are conducted may have an impact on student attrition in the TVET college. The respondents were asked if the internal and external assessments were fairly administered in the TVET college, and their responses are shown in Figure 4.22.

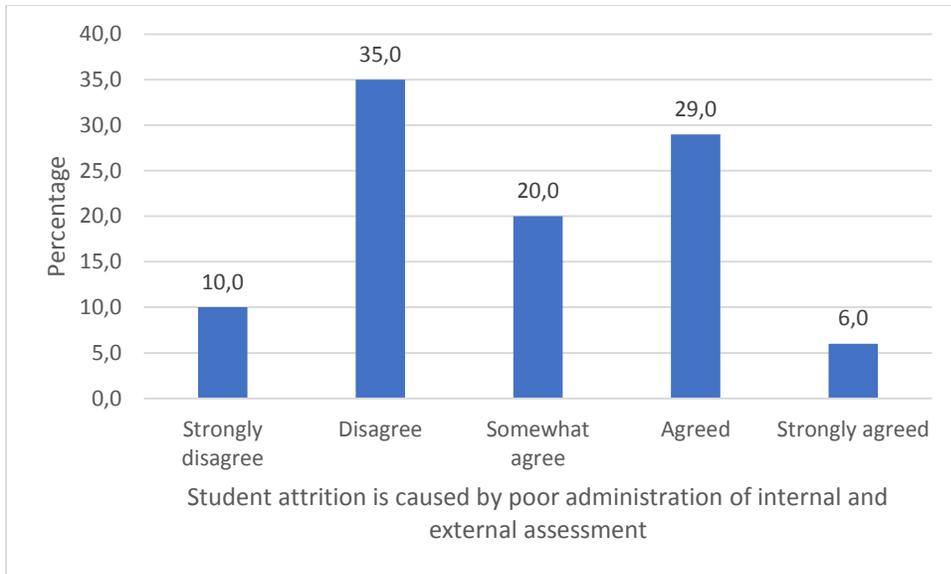


Figure 4.22: Administration of assessments

Figure 4.22 reveals that the majority of respondents, 35%, disagreed that student attrition is caused by the poor administration of internal and external assessment, followed by the respondents who agreed at 29%. Those respondents who somewhat agreed with the statement comprised 20%. The smallest percentage are those respondents who strongly disagreed and strongly agreed at 10% and 6% respectively. Despite the highest single response being to disagree with the statement, an overall slight majority (55%) of respondents collectively agreed with the statement to varying degrees.

4.4.11 Courses Offered on the Campus

The courses offered in the college may determine whether students will stay or drop out from the college. The respondents were asked if the courses offered in the college were effective in the career choices of students in the TVET college, and their responses are shown in Figure 4.23.

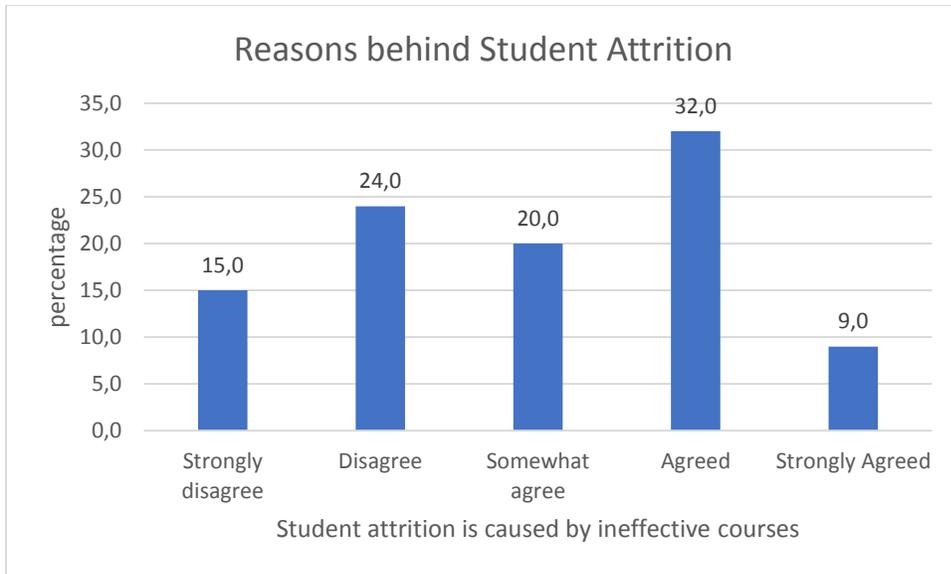


Figure 4.23: Courses offered in the TVET College

Figure 4.23 reveals that 32% of respondents agreed that the courses offered at the TVET College are ineffective and lead to student attrition, followed by the respondents who disagreed at 24%. Other respondents who somewhat agreed to the statement made up 20% of responses. What is striking about these results is that the respondents who strongly disagreed, 15%, are more than those who strongly agreed at 9%. Overall, a majority (61%) agreed to varying degrees that courses offered affected attrition rates.

4.4.12 Provide Clear Instruction

The manner in which lecturers provide instruction during teaching and learning may determine the long stay and early leaving of the students in the TVET college. The respondents were asked if the lecturers were giving clear instructions, and their responses are shown in Figure 4.24.

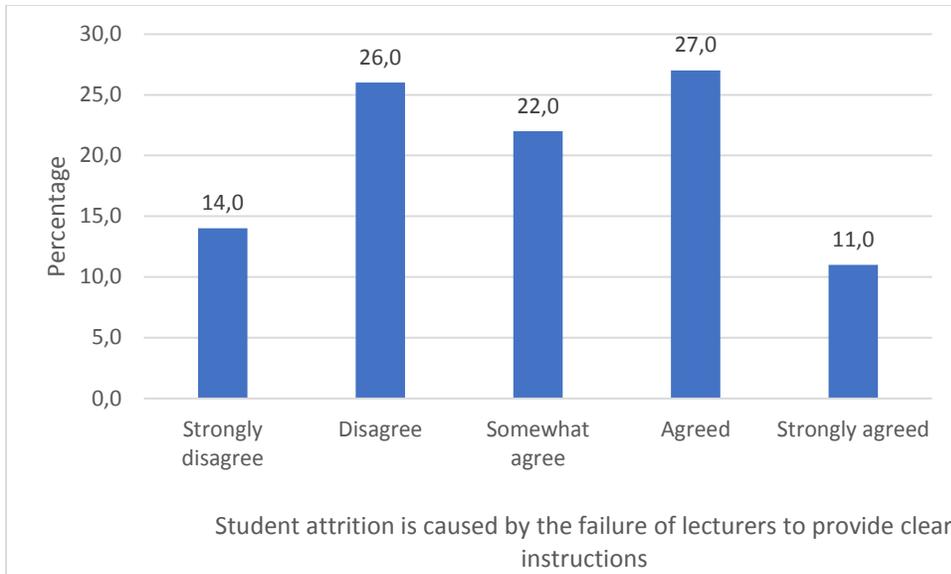


Figure 4. 24: Provide clear instructions

Figure 4.24 reveals that 27% respondents agreed that student attrition is caused by lecturers who fail to provide clear instruction to students, and 26% of respondents disagreed on this. However, only 11% strongly agreed while 14% strongly disagreed. Other respondents who somewhat agreed made up 22%. Overall, a majority of respondents (60%) agreed to varying degrees that poor instructions were a factor in student attrition. It is clear that the TVET college needs to pay attention to how lecturers provide instructions.

4.4.13 Assistance during Registration

The more students are informed about all aspects of college life and assisted during registration the more it is unlikely they will drop out from the TVET college. The respondents were asked if they were assisted adequately during the registration and their responses are shown in Figure 4.25.

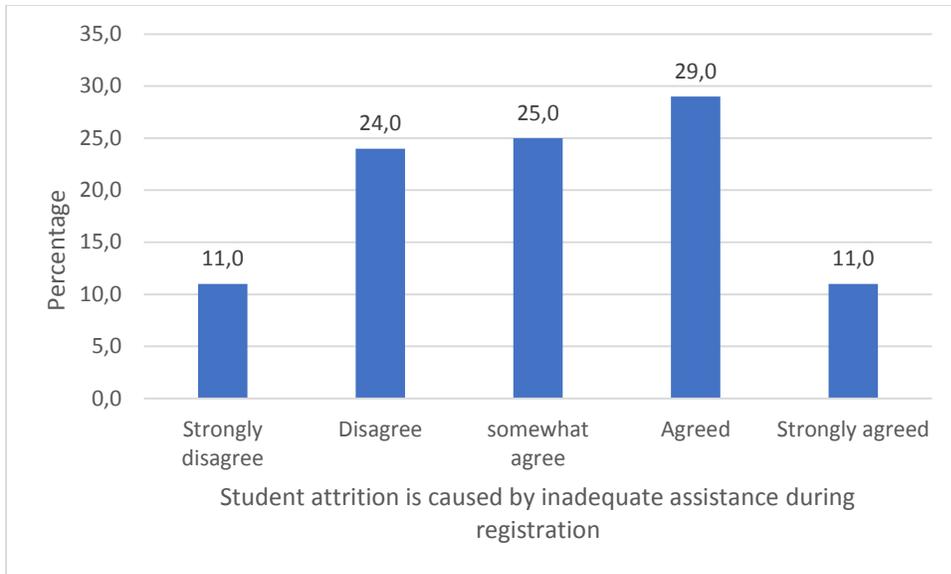


Figure 4. 25: Assistance during registration

Figure 4.25 reveals that overall 64% of respondents agreed to varying degrees (25% somewhat agree, 29% agree, 11% strongly agree) that a lack of assistance affects student attrition. The percentage of those who strongly agreed (11%) is the same as those who strongly disagreed at 11%.

4.4.14 SRC Involvement in Decision Making

When the SRC is fully involved in the college decision making, the students may trust the college decision and become loyal to the college and hence the dropout could be reduced. The respondents were asked if the SRC was fully involved in the college decision making and if this affected attrition rates, and their responses are shown in Figure 4.26.

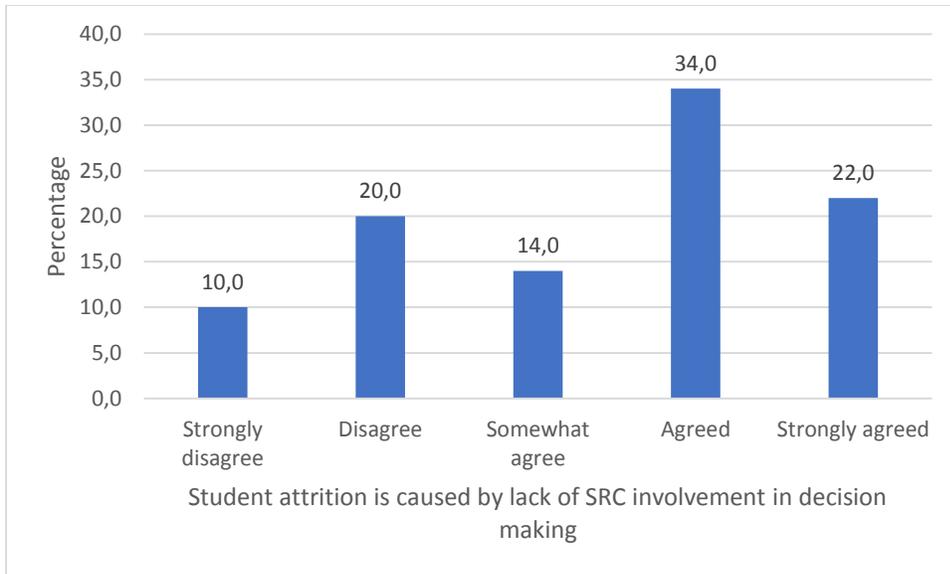


Figure 4. 26: SRC involvement in decision making

Figure 4.26 reveals that 34% of respondents, a large majority, agreed that student attrition is affected by the lack of SRC involvement in the decision making in the TVET college, followed by those who strongly agreed at 22%. Respondents who disagreed to the statement comprised 20% of responses, those who somewhat agreed comprised 14%. Only a small percentage of respondents strongly disagreed with the statement, 10%. Overall a majority of respondents agreed to varying degrees with the statement (70%).

4.4.15 Classroom Discipline

If lecturers maintain classroom discipline the students develop trust for their lecturers and this may reduce student attrition. The respondents were asked if the lecturers were maintaining classroom discipline in the TVET college and if this was a factor in attrition, and their responses are shown in Figure 4.27.

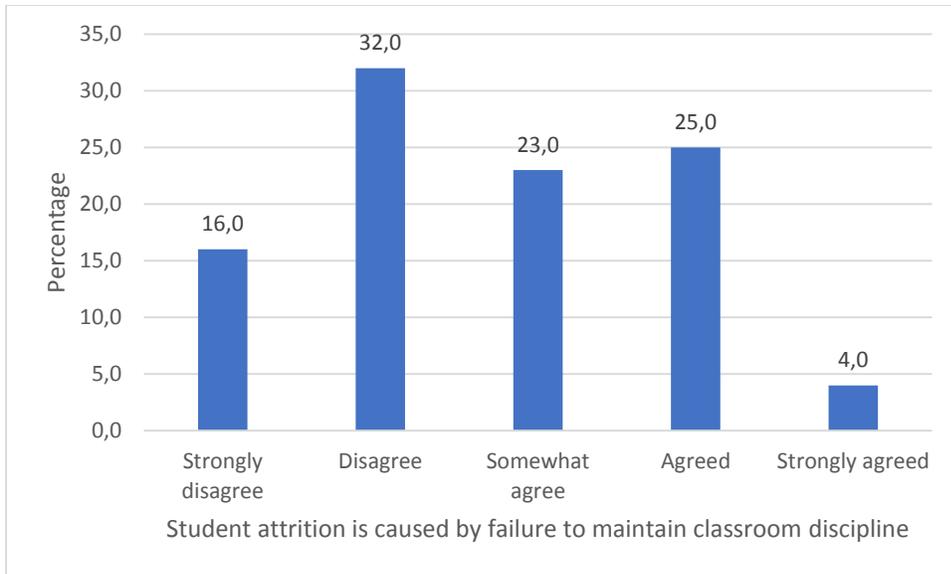


Figure 4. 27: Classroom discipline

Figure 4.27 reveals that the majority of respondents, 32%, answered that they disagreed that student attrition is caused by the failure of lecturers to maintain classroom discipline in the TVET college, followed by respondents who agreed at 25%. Other respondents who somewhat agreed comprised 23% of responses. Those who strongly disagreed formed 16% as opposed to those who strongly agreed at 4%. A slight overall majority agreed to varying degrees with this statement.

4.4.16 Lecturer Punctuality

If lecturers are always punctual to class, the students will begin to take teaching and learning very seriously and that may reduce student attrition. The respondents were asked if the lecturers were always punctual to classes in the TVET college, and their responses are shown in Figure 4.28.

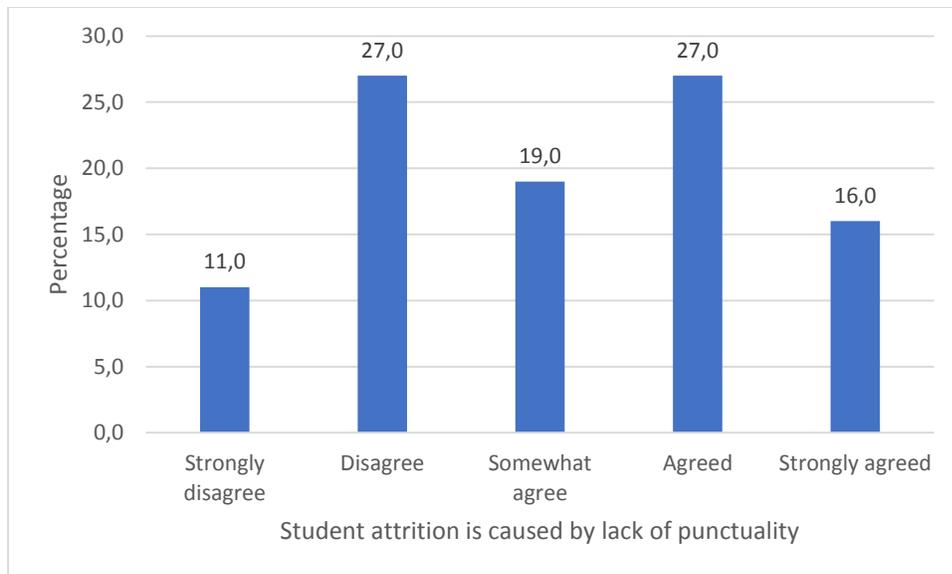


Figure 4. 28: Lecturer punctuality

Figure 4.28 reveals that the highest number of responses was recorded equally in the options of those who both agreed and disagreed at 27% each; that student attrition is caused by lecturers' lack of punctuality in classes, followed by respondents who somewhat agreed at 19%. The lesser number of respondents strongly agreed at 16% followed by those respondents who strongly disagreed at 11%. A majority (62%) of respondents agreed to varying degrees with the statement.

The next section of this dissertation is concerned with the already available mechanisms to deal with attrition in TVET College

4.5 Available Mechanisms to Deal with Attrition in TVET Colleges

In line with the conceptual framework, and the third research question, this study sought to determine the already available mechanisms to deal with attrition in TVET Colleges. There were no sub-themes in this question, and it was an open ended question which solicited the views of staff and students about whether they could identify the already available mechanisms for dealing with student attrition at the TVET College. Staff and students shared the similar sentiments with regards to available mechanisms in the TVET college in an attempt to deal with student attrition.

The list of mechanism is as follows:

- Wi-Fi
- Sanitary pads for females
- Online NSFAS application

- 80% attendance rule
- Athletics
- Music festival
- Soccer
- Volleyball
- Debate
- Book-review
- and poetry.

It is good to note that Elangeni TVET College has some mechanisms in place to try and reduce student attrition. However, a lot obviously still needs to be done to ensure student retention. The next section of this dissertation is concerned with what more could be done to curb the attrition rate in TVET College.

4.6 What More could be Done to Curb the Attrition Rate in the TVET College

In line with the conceptual framework, and the second research question, this study sought to determine what more could be done to curb the attrition rate in TVET colleges. Four sub-themes were identified in this regard, to which the respondents had to react. The four research sub-themes referred to above were (1) the role played by the college and staff to reduce student attrition, (2) the role played by the students to reduce student attrition, (3) the role played by the parents to reduce student attrition, (4) the role played by the other stakeholders to reduce student attrition.

4.6.1 Role Played by the College and Staff to Reduce Student Attrition

In essence the college and staff should play a huge role in curbing student attrition. The respondents were asked what they thought should be done by the college and staff in an attempt to reduce the student attrition in the TVET College, and their responses are reflected in Matrix 4.3

Matrix 4.3: Summary of the main research question or theme

Sub theme/sub question	Respondent responses	Source/s
<i>Role played by the college and</i>	<i>The college must thoroughly check documents for NSFAS application in-order to avoid rejection. The college must fast-track NSFAS allowance</i>	<i>STUKM1</i>

<i>staff to reduce student attrition</i>	<i>payments to students. The college need to provide accommodation/hostels for students who are coming from very far.</i>	
	<i>The college must hold regular meetings to update students about the progress in NSFAS allowances payment. There must be stringent acceptance of students as the high dropout in TVET Colleges are mostly emanating from those students who were once dropout in the high schools. Academic support to be strengthened.</i>	<i>LNDW3</i>
	<i>The college must provide courses which are guaranteed for employment. More resources are needed in the college. Lecturers must give feedback, marks and scripts to students on time. The college must buy Laptops for all students instead of buying textbooks. Computer laboratories must be opened for student use afterhours. The college need to provide food parcels to students during break time while waiting for their allowances.</i>	<i>STUMPU2</i>
	<i>Students get together and fun activities must be arranged. Awards for excelling students need to take place. Lecturers need to honour classes and show interest to their job. Social gatherings between staff and students need to take place once in a while. Often advocacy about critical issues and consequences.</i>	<i>STUNT4</i>
	<i>Peer mentoring is required. Students' advisors, mentors and tutors are required. Continuous career guidance is of necessity. Proper induction, selection and placement are required; teaching and learning need to be enforced.</i>	<i>STUPTN5</i>
	<i>Infrastructure development need urgent attention so students will be proud of their institution. Good services to be rendered to the students. Parents' involvement need to take place. Less strikes and more focus on teaching and learning will help a lot. Extra lessons are needed either in the morning, afternoon or weekends. Extra classes for English for second language speakers and Maths are needed. College need to improve on</i>	<i>LMP2</i>

	<i>Work Integrated Learning (WIL), and excursions. The college need to build sufficient workshops with modern machineries.</i>	
	<i>The college need to employ the experienced lecturers. NSFAS must be paid directly to students and not via college to avoid corruption. The college need to buy well-functioning computers. Ensure clean and conducive environment. Students need moral upliftment. Lecturers need to be patient with students. Textbooks has to arrive on time. Lecturers need to upgrade themselves as some can't even pronounce correctly. Lecturers need to treat all students equally. Tight security is required for the safety of the students and property.</i>	STUNDW3

All the above sentiments are valid and could play a huge role in reducing the student attrition in the TVET college. Largely, the above sentiments lean towards holding the college responsible for reducing the student attrition in the TVET college. While the students mainly blame the college and lecturers in particular, the lecturers are also blaming the college and the students but not themselves. Therefore, nobody amongst the students and the lecturers wants to take the blame.

4.6.2 Role Played by the Students in Reducing Their Attrition

The students themselves should play a huge role is curbing their attrition. The student respondents were asked what they thought should be done by the students in an attempt to reduce their attrition in the TVET College, and their responses are shown in Figure 4.16.

In one of the interviews, a student respondent remarked:

Strong students' structures. Strict adherence to students' code of conduct. Students must organize their own outings with the help of the staff. There must be forum for students to discuss challenges in a relaxed atmosphere not in a meeting. (STUNDW3, STUMP2)

The above perception taps into the need for a strong and accountable student body that takes responsibility for the future of students through education. This could in return assist the TVET College to reduce student attrition.

4.6.3 Role Played by the Parents in Reducing Student Attrition

Parents also have a huge role to play in curbing student attrition. The respondents were asked what they thought should be done by the parents in an attempt to reduce the student attrition in the TVET College. In one of the interviews a student and staff respondent each remarked:

The majority of parents don't even know where their students are studying. They need accompany their students during the registration and also contact the college more often checking the progress of their kids. In that way even the students will take their studies very seriously. (STUNDW3)

Parents need to ensure that their children comply with the college code of conduct. It look like the majority of parents dump their children at the college and don't even care whether they achieve academically. (LPTN5)

The above perspective suggests that the parents need to be active TVET college stakeholders. The parents need to avail themselves in the TVET college by attending the parents' meetings and communicating with the college more often. The college might need to consider opening the parents' whatsapp group in-order to ensure constant communication. This will in return reduce the student retention. Students and staff shared the very same sentiments that parents need to play a role in ensuring that their children take the college very serious, and hence that will reduce the student attrition.

4.6.4 Role Played by Other Stakeholders to Reduce Student Attrition

External stakeholders also play a huge role is curbing student attrition. The respondents were asked what they thought should be done by the external stakeholders in an attempt to reduce the student attrition in the TVET college. In one of the interviews a respondent remarked:

Some students come to the area just because they want to study at the TVET College, but they end up being impregnated by the older community members and they drop off from the college and never go back home where they initially came from. Therefore the community has a role not to lead college girls astray. (STUNDW3)

The local business people who are renting out the students' accommodation need to create stringent rules which will ensure that students are well behaving and are not indulging in alcohol and they don't loiter around with their friends. (LNT4)

The above perspective suggest that the community members need to treat students as their children and not subject them to unbecoming activities that will distract them from attending the TVET college such as selling drugs to students and impregnating them while they are still students. This might in return reduce the student attrition. Staff and students share the same sentiments that the college stakeholders need to play their role by not contributing to student attrition.

4.7 DISCUSSION

This section will focus on discussing the findings of the study. The discussion centres around the four broad research questions and theory deliberated in Chapter 2.

4.7.1 The Nature and Extent of Student Attrition in the TVET College

The first research question sought to verify the nature and extent of student attrition in TVET Colleges. The findings indicate that there is high rate of student attrition in the Elangeni TVET college. Another important finding was that the student attrition is evident across all programs and in levels, and occurs every year in the TVET College. This finding was also reported by Klaus (2016) as well as that there are no differences between the dropout and learner groups on all demographic variables; and there are also no differences between the dropout and the learner groups in online learning experiences; but rather the attitudes of the dropout group were more negative, and they reported a higher level of computer anxiety. This finding also supports previous research findings of Pillay (2010) and Ngcobo (2010) who also argue that issues such as accommodation; shortage of financial assistance on top of the academic demands add difficulties to students' progress to the next level. This finding is also consistent with that of Moodley (2015) who found that of the 120 000 students who registered in the Department of Higher Education and Training in the year 2000, 36 00 or 30% dropped out during their first academic year. Some 24 000 (20%) dropped out during their 2nd and 3rd academic year. Amongst the 60 000 remaining students only 22% graduated within the stipulated 3-year academic calendar in general studies. The TVET colleges might need to strengthen their career guidance and awareness campaigns before registration, and during the course of the academic year from first year to third year level.

These findings are in line with Durkheim's (1961) theory of suicide as applied to attrition as he analogically compares the college and the community in a sense that, when one regards the institutions of higher learning as a social system with their own social structures and values, then attrition is unavoidable. Therefore, the social conditions impacting on attrition in the social system

of the institution of higher learning affect students' decisions to decide to drop out, in the same way resembling those conditions that lead to suicide in society in general.

4.7.2 The Causes or Reasons behind Student Attrition in the TVET College

The objective of the second research question in this study was to discover the causes or reasons behind student attrition in TVET Colleges. The current study found that students are not satisfied with the courses offered in the TVET College, and that the courses offered at the TVET College are ineffective towards achieving career aims. TVET Colleges are supposed to be institutions of choice, however, it appears to be the opposite. This is an indication that TVET colleges need to do a thorough program community needs analysis before they decide on offering a particular program. Students who are not satisfied with what is at their disposal are likely to drop out from the TVET College.

This could also be because of the fact that the majority of courses in the TVET College (especially in NCV) are rated very low in as far as NQF level is concerned; and at times students who have passed grade 12 are placed together with students who have only passed grade 9. Perhaps the TVET College needs to relook at their admission criteria in relation to placement of students into more desirable programs, because when one is placed in the correct program that he had come for he or she is unlikely to drop out from the college. The well informed and correctly placed student is unlikely to drop out from the college. It is a common practice that before the potential students are registered in the TVET colleges they have to undergo career guidance, then write a selection and placement test before they are registered.

The findings also indicate that there is inadequate information about financial support such as NSFAS. The DHET regional offices might need to provide students with necessary information about NSFAS in advance in order to dismantle the confusion regarding NSFAS processes. Another important finding is that there is inadequate assistance during registration, and inadequate student induction. The well informed and correctly placed student is unlikely to drop out from the college. It is a common practice that before the potential students are registered in the TVET college they have to undergo career guidance, then write a selection and placement test before they are registered in TVET colleges. The TVET colleges might need to make use of more SRC assistance during the registration process. For the induction to serve its purpose it needs to happen

prior to registration so that students will make up their own minds in an informed way before committing themselves to be part of the TVET college.

The findings also indicate that there is poor quality teaching and learning in the TVET College, lecturers fail to provide understandable and clear instruction to students, lecturers fail to maintain classroom discipline, but the teaching and learning material and administration of internal and external assessment is effective. The reason for this could be the fact that the CMT is not doing justice in monitoring the teaching and learning in the form of announced and unannounced class visits. This study also finds that the extra mural activities and academic support are insufficient in the TVET college. The most obvious finding to emerge from the analysis is that there is inadequate infrastructure in the TVET college such as the computer rooms, workshops, libraries, sitting areas, tuck-shops, and recreational facilities. The TVET college might need to prioritise the upgrade of the infrastructure. Fundraising for the infrastructure from the private sector might be an option. Partnering with companies to upgrade the infrastructure in exchange for the training of their staff or their staff development might assist. This study also found that there is a lack of SRC involvement in the TVET college decision making. These findings are in tandem with those of Shakizah (2016) and Lola (2014) who identified the main causes such as the lack of proper training facilities, poor classroom conditions which are not comfortable, learning materials learning material are always exhausted, poor and inconvenience timetabling, negative staff attitude towards students, non-conducive class environments, insufficient hostels, lack of extracurricular activities, and lack of financial support. They also found that lecturers do not have proper class and workshop schedules. These findings are also in line with Maslov's (2012) findings which argue that institutions of higher learning need to focus on reducing the high student attrition rate by enhancing the student placement procedure and adopting vigorous strategies to identify and support students experiencing academic difficulties; and that the institutions of higher learning do not regard student retention as a serious matter. His findings further suggest that extra attention should be dedicated to the high dropout rate because it is more expensive to recruit new students than to keep the already existing students.

These findings are also in line with Durkheim's (1961) theory of suicide as applied to attrition in a sense that there is a lack of social integration of students into the life of the TVET college and the likelihood of attrition rising is assured unless remedial action is taken to deal with the factors affecting attrition. According to Durkheim (1961) suicide is more likely to happen when

individuals are inadequately integrated into the fabric of society; especially when the sense of affiliation (sense of belonging) and value integration is lacking.

4.7.3 The Mechanisms Already Available to Deal with Student Attrition in the TVET College

The third research question sought to determine the mechanisms already available to deal with student attrition in the TVET College. The current study found that in spite of many challenges that lead to students' dropping out, the college has tried to put some mechanisms into place such as installing Wi-Fi for all registered students free of charge so that the students will be able to access the internet wherever they are on the premises of the TVET college. The findings also indicated that the college has organized extra mural events for students such as athletics, music festival, soccer, volleyball, debating, book-reviews and poetry. Last but not least the study found that the TVET college has assisted both the existing students and potential students to apply for NSFAS online using the college computer laboratories free of charge. This study also found that the college has put stringent measures in place in an attempt to encourage student attendance in classes by applying the DHET 80% attendance rule. Nevertheless, students revealed that as much as the 80% attendance rule is in place for students, lecturers also miss classes.

These findings are in keeping with Du Plooy's (2014) findings which argue that there is no speedy fix to the high student attrition rate in the institutions of higher learning; nor is there a solitary organizational approach that can be applied across all institutions, as diverse student cohorts require dissimilar kinds of outreach. According to Du Plooy (2014) a justifiable student retention approach can be formulated if institutions know which kinds of students best suit their institutions; if all of the administrative and academic functions essential for a fruitful plan are utilized, and if an approach is based on actionable study, and if individuals are eager to create and support indispensable modifications.

The present findings confirm Durkheim's (1961) theory of suicide as applied to attrition that students can plausibly be integrated into the social sphere of the institution of higher learning and still drop out due to inadequate integration into the academic domain of the college as they are not achieving academically. On the contrary, the student may perform sufficiently in the academic sphere and still drop out due to inadequate integration into the social life of the college. The ideal relationship is one that is reciprocal and useful between the two modes of integration, or else the emphasis on integration in one sphere would probably take away from one's integration into the

other sphere (Durkheim, 1961). In this case, as far as the TVET college is concerned, it has done all in its power to integrate the students into the life of the institution by organizing the aforementioned events, but still the students decide to drop out from the college. Perhaps better academic integration through academic support and financial aid was insufficient. Students also share the same sentiments with this.

4.7.4 What More could be Done to Curb the Student Attrition Rate in TVET Colleges

One interesting finding is that all parties need to play their role in trying to reduce student attrition. The TVET college staff need to play their role by being professional at all times and acting in loco-parentis. Equally, the students themselves also need to play their role by conforming to the college code of conduct at all times. These results further support the idea of Durkheim's (1961) theory of suicide as applied to attrition, that student attrition is chiefly an echo of a students' psychological reply to the atmosphere, and chiefly owing to an individual's personal capability or readiness to stay in the college; and that students' skills and capabilities are imperative in forecasting students' attrition choices, cultural and social capital along with the larger process of social integration is more essential. Student dropout or persistence is chiefly the result of individual students' inner weaknesses or strong points (Durkheim, 1961).

The parents as well also need to play a role in ensuring that their children are attending the college on time and everyday by communicating with the college often. The external stakeholders are not immune as they also need to play their role which is to allow students to attend classes at peace without distracting them with non-academic social activities which take them away from classes. This finding was also reported by Lola (2014) that some students are forced by their parents to study in the institutions of higher learning, and hence cannot wait for graduation and want to get a job quickly. However, there are not many previous studies that have deliberated on this. Parents need to guide their children in the correct manner without forcing them to register at the colleges against their will and suggest a range of alternatives.

A summary of research questions, emergent themes and the literature is presented in Matrix 4.4.

Matrix 4.4: Summary of the research question, emergent themes and the literature

Research question	Emergent theme/s	Interaction with literature	Sources
The nature and extent of students' attrition in TVET Colleges	<ul style="list-style-type: none"> - High rate of student attrition - Student attrition is evident across all programs, all levels, and all years - strengthen the career guidance and awareness campaigns - Guide students before registration, and during the course of the academic year - Guide first year, second and third year level. 	<ul style="list-style-type: none"> - there are no differences between the dropout and learner groups on all demographic variables; - there were also no difference found between the dropout and the learner group in online learning experience; - but rather the attitudes of the dropout group were more negative, and they reported a higher level of computer anxiety - shortage of accommodation - shortage of financial assistance on top of the academic demands add difficulties to students' progress to the next level - Amongst the sixty thousand students only twenty two per cent graduated within the stipulated 3 year academic calendar in general studies. 	<ul style="list-style-type: none"> - Klaus (2016) - Pillay (2010) - Ngcobo (2010) - Durkheim (1961) - Moodley (2015)
The causes or reasons behind students' attrition in TVET Colleges	<ul style="list-style-type: none"> - TVET College need to relook at their admission criteria in relation to placement - Place students in a more appropriate program - Strengthen teaching and learning monitoring - Upgrade infrastructure 	<ul style="list-style-type: none"> - lack of proper training facilities, - poor classroom conditions which are not comfortable, - learning materials are always exhausted, - poor and inconvenient timetabling, - negative staff attitude towards student and do not care about students, - uncondusive class environment, - insufficient hostel accommodation, - lack of extracurricular activities, - lack of financial support, - lecturers do not have proper class and workshop schedules 	<ul style="list-style-type: none"> - Durkheim (1961) - Shakizah (2016) - Lola (2014) - Maslov (2012)

	<ul style="list-style-type: none"> - More communication and feedback on NSFAS - More academic support and extra mural activities - Accessing financial support easily - Strengthen the involvement of the SRC in decision making 	<ul style="list-style-type: none"> - higher learning needs to focus on reducing the student high attrition rate by enhancing the students' placement procedure - have vigorous strategy to identify and support students with academic difficulties; - Institutions of higher learning do not regard student retention as a serious matter. 	
The already available mechanisms to deal with student attrition in TVET Colleges	<ul style="list-style-type: none"> - Relax the limitations on access to Wi-Fi. - Access to computer labs after-hours and on weekends - Students to take advantage of the available local resources 	<ul style="list-style-type: none"> - the ideal relationship is one that is reciprocal and useful amongst the two modes of integration, - or else the excessive emphasis on integration in one sphere would probably take away from one's integration into the other sphere - there is no speedy fix to high student attrition rates in the institutions of higher learning; nor is there a solitary organisational approach that can be applied across all institutions 	<ul style="list-style-type: none"> - Durkheim (1961) - Du Plooy (2014)
What more could be done to curb the attrition rate in TVET Colleges	<ul style="list-style-type: none"> - Parents to communicate with the College more often - Students to take responsibility for their studies - Staff to be professional at all times and act in loco parentis - Community members not to distract students from their studies 	<ul style="list-style-type: none"> - some students are forced by their parents to study in the institutions of higher learning, and hence cannot wait for graduation and want to get job quickly and do not care about the quality of their education?. - Student dropout or persistence is chiefly the result of individual students' inner weaknesses or strengths - a justifiable student retention approach can be formulated if institutions know which kinds of students best suit their institutions 	<ul style="list-style-type: none"> - Lola (2014) - Durkheim (1961) - Du Plooy (2014)

4.8 Summary

The purpose of this chapter was to present and analyze the data and present and discuss the findings of the study. The study has shown that deficiencies within the Elangeni TVET College itself are the main cause behind the student attrition rate more than anything else as shown by in the data. In the main, the TVET college lacks many important things ranging from infrastructure, satisfactory programs, quality teaching and learning, academic support, and NSFAS; and all these result in the high rate of student attrition. Nevertheless, the TVET college is doing well in other areas such as the learning material, induction, placement test, and administration of internal and external assessments.

CHAPTER 5: SUMMARY, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

The chief aim of this study was to explore the reasons behind the high student attrition rate in the (TVET) Technical Vocational Education and Training Colleges in South Africa through a case study of Elangeni TVET in KwaZulu-Natal. The main goal of this chapter is to provide a summary of the study as well as to draw conclusions about the study objectives namely: to measure the nature and extent of attrition in TVET Colleges; to discover the causes or reasons behind attrition in TVET Colleges; to ascertain the already available mechanisms to deal with attrition; to explore the extent in which attrition could be curbed. The chapter further provides recommendations that the study proposes based on its findings and suggests the implications of the study for DHET national and region, TVET College Council and Institutional Management Team (IMT), Academic Board and Campus Management Teams (CMT).

5.2 A Summary of the Study

The study found that there are several reasons for the high student attrition rate, most reasons being to do with the college itself according to student respondents. Finance was a major issue and the respondents were not receiving the financial assistance (NSFAS) on time to pay for transport and accommodation. Although almost all of the respondents eventually received their NSFAS allowances it was too little to satisfy their educational needs. Some did not receive the NSFAS allowances at all. Respondents had the perception that the TVET college was squandering their NSFAS allowances. The findings revealed that over two thirds of the students (78%) were not satisfied with the manner in which NSFAS especially the transport and accommodation, was handled by the TVET college. This poor administration of NSFAS might have a negative bearing on the institution in terms of a high attrition rate.

The study revealed that student respondents believed there was poor quality teaching and learning in the TVET College across all campuses. Some respondents indicated that some lecturers did not deserve to be in TVET college as they could neither use English properly nor pronounce concepts clearly. Further, the study revealed that some lecturers were not honouring their classes at all. Some lecturers were struggling to fill the full duration of a class. Equally, the study revealed that some students were always late and did not submit their projects/assignments on time. This might negatively affect the retention and throughput. The study further revealed that just over half of the respondents were not satisfied with the courses offered at the TVET college. They rather wanted courses that are employment guaranteed and which were effective in promoting the chosen careers of the students.

Although the DHET and NCV policy requires that before a TVET college runs a program it must have all necessary infrastructure and resources; this study revealed that in some campuses there are inadequate practicum rooms such as the workshops, laboratories, kitchens and simulation rooms. In some cases, respondents indicated that two to three students had to share one computer; and the majority of computer labs were full of faulty computers which just freeze in the middle of the exam and students lose all their work. This might have serious implications for the success of the students as well as in the certificate rate thus results in student attrition. Apart from gazetted academic infrastructure, the study also revealed that some campuses look worse than primary schools, and lack important resources such as the libraries, resource centres, sitting areas, cafeterias, tuck-shops, and sports-grounds.

5.3 Conclusions with Regard to the Study's Research Objectives

The results of the study presented in the preceding chapter assisted in providing answers to the research questions of the current study. By reviewing the research questions and objectives of the study, the researcher came to certain conclusions and which informed his recommendations. The major objectives and conclusions are highlighted in the next paragraphs, 5.3.1 to 5.3.4.

5.3.1 Nature and Extent of Attrition

One of the major objectives of the study was to measure the nature and extent of attrition in TVET Colleges. The following conclusions were drawn from the findings:

- a) Almost two thirds of the respondents indicated that student attrition was very high in the TVET College. The conclusion drawn from this was that there were high student expectations that were not being met by the TVET College. This was supported by statistics from the college administration system.
- b) The majority of the respondents indicated that student attrition was evident across all levels, all programs and it happened every year. Based on this, the researcher concluded that there was a system breakdown within the TVET college in terms of operations which needed urgent attention.

5.3.2 Reasons behind Student Attrition

The second objective was to discover the causes or reasons behind student attrition in the TVET college. A number of causes for attrition were identified which support existing literature.

- a) The majority (78%) of the respondents indicated that they were not satisfied with the manner in which NSFAS was administered by the TVET college. It was therefore

concluded that the needy students were deprived of the financial assistance which was at the disposal of the TVET college.

- b) Responses to the questions relating to quality teaching and learning showed that more than half of the respondents indicated that there was very poor-quality teaching and learning. The conclusion was that monitoring and evaluation was not done properly if not done at all.
- c) Most respondents indicated that the TVET college infrastructure was insufficient in all respects. It was therefore concluded that the TVET college was neither well equipped nor ready to produce the desired skilled entrepreneurs and artisans required by the country to deal with unemployment, poverty and crime as per the government mandate.

5.3.3 Available Mechanisms

The third objective was to ascertain the already available mechanisms to deal with student attrition in TVET Colleges.

- a) The majority of student respondents disputed the view that there were already available mechanisms to deal with student attrition in the TVET College. It was therefore concluded that the already available mechanisms were ineffective and insignificant such that they could not even be noticed by the student respondents.
- b) Most staff respondents also shared the very same sentiments with student respondents that the available mechanisms were too little to address the students attrition, hence more mechanisms needed to be sought.

5.3.4 Explore the Extent to which Student Attrition could be Reduced

The final objective of the study was to explore the extent to which student attrition could be reduced in the TVET College.

The findings of the study revealed that most students who dropped out from the TVET college are the ones who were once dropouts from their previous high schools. Some of these students were forced by their former high schools and parents to enrol at the TVET college with the perception that the TVET college was easy. Further, the parents of the most students don't even know what the college looks like. The study therefore concluded that the TVET college was recruiting the wrong potential students who were not eager to learn in the first place.

5.4 Recommendations

The research has revealed that over half of the participants responded in the affirmative that there is high student attrition in the TVET College in in all programs, across all levels and is

evident every year. At a micro level, the TVET college might need to strengthen its career guidance and awareness campaigns in an attempt to educate the potential students about the courses they are offering; at what NQF level; what are the entry requirements for each program; how long the program will take; how are the assessments going to unfold; how to apply for NSFAS; what kind of qualification they will eventually receive; and what are the employment opportunities in line with each program; as well as what are the articulation possibilities to Universities of technology. At a macro level there must be an intergovernmental intervention with the aim of educating communities about what the TVET colleges are about, and what they are not about. For example, the Department of Higher Education and Training (DHET) needs to educate the Department of Basic Education (DBE) about TVET colleges' modus operandi, and therefore in that way the teachers will be able to guide their students before they even come to register at a TVET college. The DHET also needs to work together with Cooperative Governance and Traditional Affairs (COGTA) in an attempt to educate the ward councillors and traditional leaders to guide their communities about what and what not to expect in TVET colleges.

Curbing student attrition requires that all stakeholders play their specific roles efficiently for TVET colleges to deliver on their given mandate in equipping the citizenry with relevant skills in order to curb the shortage of artisans in the country. It has been observed and noted that the TVET colleges are faced with high rates of student attrition. Based on the perceptions of the respondents, some of the challenges revealed by the study include the failure of TVET colleges to provide the quality teaching and learning, monitoring and evaluation; to administer the NSFAS properly in such a way that needy students access funds for transport and accommodation; the ailing and absent infrastructure which is insufficient to equip the desired artisans and entrepreneurs; and finally the failure to recruit the right potential students who are eager to take advantage of education and skills at their disposal.

There are a number of important changes which need to be effected regarding the areas mentioned above. All the managers especially the CMT members, need to be trained on the monitoring and evaluation so that they can monitor teaching and learning with confidence. As part of the on-going training of CMTs, it is recommended that a standing item be included on the agenda of Academic Senate to give a specialist on the topic of the monitoring and evaluation an opportunity to make a comprehensive presentation about one aspect of monitoring and evaluation at a time, until all the aspects have been covered.

The study has also revealed gaps in NSFAS administration. It is therefore recommended that continuous feedback is given to students, as well as training to executive management, bursary committee and officials, on how to administer the NSFAS - for example, by highlighting what to do when there are queries from students about NSFAS and how to communicate with NSFAS national office in an attempt to promptly assist the students; and to train them on what to do when the payment list has not been issued by the national office. DHET Regional office should treat NSFAS as their number one priority. NSFAS needs to establish an office in each region so that the challenges may be sorted easily and locally.

The research has also revealed that over half of the participants responded negatively about the TVET college infrastructure. It is therefore recommended that executive management find ways to source sufficient funds in order to improve the ailing infrastructure; and to make this item a standing item in all executive meetings in order to track the speed of upgrading of infrastructure.

Based on the perceptions of the respondents, the findings further revealed that many students are forced by parents and former high schools to enrol at the college. This might easily lead to early student attrition. It is recommended therefore that the TVET college strengthens the selection process and publicity such that only the best potential students are enrolled in the TVET college.

5.5 Implications of the Study

The findings have important implications for curbing the high student attrition rate in Elangeni TVET College at large. For executive management, the study has the following implications: it may assist them in enforcing quality teaching and learning; NSFAS planning where bursary committee and officials formulate strategies to fast-track the disbursement of funds to needy students; infrastructure policies to be formulated. For policy makers, it might mean that a situational analysis needs to be conducted prior to policy implementation. This may assist departmental officials to better understand the actual needs of TVET colleges at ground level. Another important implication of the study is that for any policy to be implemented effectively, proper training should be provided to policy drivers to guarantee that the process is fully comprehended, thus circumventing the inappropriate implementation of policy.

5.6 Summary

The main aim of the chapter was to provide a summary of the study as well as conclusions about study objectives, recommendations based on the findings of the study and implications of the study for the broader student retention.

The study has shown that monitoring and evaluation have been poorly executed in the TVET College, that teaching, and learning was compromised to a great degree. The study consequently recommends that managers be trained on monitoring and evaluation; and that feedback should be promptly given to students. Finally, the improvement of the college infrastructure should take first priority at the TVET college.

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