STAKEHOLDERS' PERSPECTIVES ON TVET COLLEGES-INDUSTRY PARTNERSHIPS FOR EMPLOYABILITY OF GRADUATES: AN EXPLORATORY STUDY OF TVET COLLEGES IN MPUMALANGA PROVINCE, SOUTH AFRICA

by

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DECLARATION

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Title   : Stakeholders' perspectives on TVET colleges-industry partnerships for employability of graduates: an exploratory study of TVET colleges in Mpumalanga province, South Africa.

I declare that the above thesis is my work and that all the sources that I have used or quoted have been indicated and acknowledged using complete references.

I further declare that I submitted the thesis to originality-checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at UNISA for another qualification or at any other higher education institution.

_____   <u>31 AUGUST 2023</u>

SIGNATURE   DATE

DEDICATION

I dedicate this piece of work to my wife and children around whom my universe seems to revolve. To my children, Michelle Nokuthaba, Melissa Nonhlanhla and Michael Njabulo, please feel motivated by all this and go on to achieve even greater. To my wife, Susan, you have been an inspiration to me. You held me by the hand until now. Thank you and please enjoy reading this.

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ABSTRACT

The purpose of this study was to explore stakeholders' perspectives on TVET college and industry partnerships for the employability of TVET college graduates. The study investigates the nature of current partnerships, the roles partners play, and the challenges currently being faced. The study also proposes a new framework for improving partnerships between TVET colleges and the industry.

The study was conducted in Mpumalanga, a province of South Africa. The ever-increasing number of unemployed youths as noted by StatsSA and many other organisations motivated me to want to find out if better TVET college and industry partnerships could alleviate the problem of unemployability. It was my assumption in this study that better partnerships between these two stakeholders could yield positive results as far as the employability of TVET college graduates was concerned.

I used a qualitative research design to gather in-depth insights from stakeholders as to how current partnerships could be improved. Data were collected using in-depth interviews, focus groups and document analysis. Participants included TVET college students and graduates, an official from DHET, two Deputy Principals: Academic and two Student Support Services officials responsible for student placement into the workplace. I used interpretivism as a research paradigm. This allowed me to interpret a lot of subjective data collected from the participants. This involved processing large amounts of data and ascribing meaning to them.

Data collected revealed that there was a concerted effort from DHET and TVET colleges to engage partners to improve the employability of TVET college graduates. However, the data also revealed several challenges concerning partnerships. The challenges included a lack of planning, leadership, organisation and supervision or control of the whole process. The other challenge was the complete lack of industry placement for NCV students and a few partnerships forged for NATED students.

In addition to properly managing student placement in industry, I also recommended that instead of the five-to-ten-day workplace-based experience (WBE) for NCV, colleges must consider a completely new programme where students are placed for a

whole year in industry, and they are assessed and given marks. I also recommended that these students do a practical project during this placement period so that they gain an even more profound understanding of their vocational programmes. I also recommended that this programme be a compulsory part of the student's studies. I also recommended a regular review of syllabi to ensure currency and relevance.

The study is useful in that it exposes challenges currently being experienced in TVET colleges and industry partnerships and proposes practical ways of improving these. I believe that better-managed partnerships would result in graduates who are employable and future employers who are confident of the capabilities of these graduates. Involving industry in the training of graduates is of paramount importance.

The research was conducted in the Mpumalanga province of South Africa. It would be interesting to carry out similar research in other provinces to get a sense of what is obtained in the rest of South Africa. The data collected in other provinces would give a clearer picture of what is happening and the recommendations thereof would be relevant for the whole of South Africa.

Key terms: Partnerships, stakeholders, employability, Human Capital, Technical and Vocational Education and Training (TVET) colleges, Department of Higher Education and Training (DHET).

LIST OF ACRONYMS AND ABBREVIATIONS

CEIC	Census and Economic Information Centre
CPD	Continuous Professional Development
CTE	Career and Technical Education
DHET	Department of Higher Education and Training
DPA	Deputy Principal: Academic
FET	Further Education and Training
HRDCSA	Human Resource Development Council of South Africa
HSRC	Human Science Research Council
IBEL	Industry-Based Experiential Learning
IMF	International Monetary Fund
ISAT	Integrated Summative Assessment Tasks
ISO	International Organisation of Standardization
MOU	Memorandum of Understanding
NATED	National Accredited Technical Education
NCV	National Certificate (Vocational)
NEDLAC	National Economic Development and Labour Council
NSDP	National Skills Development Plan
NSDS	National Skills Development Strategy
NSFAS	National Student Financial Aid Scheme
NTB	National Training Board
OE	Occupational Education
PE	Professional Education
PSET	Post-School Education and Training
SSACI	Swiss-South African Cooperation Initiative
SAPS	South African Police Services
Stats SA	Statistics South Africa
TAFE	Training and Further Education
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNEVOC	UNESCO Vocational Education
VE	Vocational Education
VET	Vocational Education and Training

VTE	Vocational and Technical Education
VTET	Vocational and Technical Education and Training
WBE	Workplace-Based Experience (Workplace-Based Education)
WIL	Work-Integrated Learning

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ORIENTATION OF THE STUDY

1.1   ORGANISATION OF THE CHAPTER

In this chapter, I gave a detailed orientation of the study. This included stating the problem and then discussing the aim and objectives of the study. The main research question was then stated together with the sub-questions. I discussed the theoretical framework as well as the philosophical perspective and research methodology. I also discussed the research design and issues relating to ethics in research. Finally, I discussed how the data were collected, presented and analysed. I also clarified concepts used in this study, especially those around which this study revolved.

1.2   INTRODUCTION AND BACKGROUND TO THE STUDY

Technical and Vocational Education and Training (TVET) colleges were established following the Further Education and Training (FET) Act 98 of 1998. One of the goals of this Act was to transform and restructure teaching programmes and all these institutions so that they responded better to the socio-economic, developmental and human resources needs of South Africa (Department of Higher Education and Training (DHET), 1998). In other words, the Act has the objective of aligning TVET colleges' programmes and curricula to the needs of the job market. As a result of this Act, fifty (50) TVET colleges were formed when 152 technical colleges were merged. Each of these TVET colleges has various campuses.

The White Paper for Post-School Education and Training (PSET), of which TVET colleges are part, provides for the alignment of education activities to those in the workplace. The White Paper states that *"…emphasis will be given to strengthening partnerships with employers, both at the systems level and that of individual colleges."* (DHET, 2013:05). These partnerships are aimed at affording students and lecturers alike, an opportunity to gain the invaluable workplace exposure whilst providing the

industry with an opportunity to be more active in formulating and implementing worthwhile training programmes at institutions of higher learning.

These partnerships, if well managed, become mutually beneficial to institutions of higher learning and industry. Whilst both students and lecturers gain the much sought-after industry exposure, the assumption is that the industry would also learn more innovative ways of doing business from TVET college academics.

The National Skills Development Plan 2030 (NSDP) has the intention of initiating and sustaining mutually beneficial relationships between post-school education and training (PSET) institutions and industry (DHET, 2019). TVET colleges are the most visible PSET institutions especially when it comes to imparting vocational education and industry-related training.

The National Skills Development Strategy (NSDS) is one other initiative by the government to link training institutions to the workplace (Bizcommunity, 2019). In his opening address at the 2019 Haggai Education and Training Summit, the Deputy Minister of Higher Education and Training, Buti Manamela, observed that the partnership between training institutions and the workplace had increased work readiness for graduates. Manamela also noted that employers were particularly happy dealing with graduates who had had exposure at the workplace in the form of apprenticeships, learnerships and internships (Bizcommunity, 2019).

The above observations attest to the deliberate effort by various government organs to align training programmes to industry expectations by encouraging the establishment of useful partnerships. One of the things I sought to find out in this research was to understand the types of partnerships that are in place between TVET colleges and industry, and how effective these partnerships were especially concerning graduates' employability. I also sought to find out how these partnerships were managed and how they could be improved.

1.3   RATIONALE

Despite a significantly growing Higher Education sector, Paterson, Keevy and Boka (2017) noted, with great concern, the ever-growing number of unemployed graduates in South Africa. They attributed this to a lack of will on the part of both industry and the Higher Education sector to establish and manage worthwhile partnerships. They suggested that Work-Based Experience (WBE) or Work-Integrated Learning (WIL) should be emphasised to help the higher education graduate transition from college to the labour market.

The International Monetary Fund (IMF) predicted that the unemployment rate in South Africa would reach an astounding 35.313% by December 2020 (Census and Economic Information Centre (CEIC), 2019). This percentage was adversely affected by the COVID-19 pandemic and has become everyone's concern. In fact, according to Stats SA (2021), the youth unemployment rate peaked at a staggering 55.75% in the last quarter of 2020. It is the assumption of this study that TVET colleges can play a part in addressing this issue by making sure that training programmes are relevant and aligned with the labour market's expectations. This can be done by forming strategic partnerships with the industry.

If TVET colleges should succeed in their main aim of preparing TVET graduates for the world of work, then making sure that these training programmes are relevant and meet the expectations of the industry should be their number one priority. It is, therefore, only logical to involve these industry players in the training of these students. After surveying the training of artisans in South Africa, the Human Science Research Council in conjunction with the National Training Board (HSRC/NTB, 2010), noted the failure of TVET colleges' curricula and programmes, especially those of the National Certificate Vocational (NCV), to meet the needs of stakeholders, this after receiving a lot of funding from the national government. This attests to the apparent lack of cooperation between TVET colleges and the industry.

In a report by the Human Resource Development Council of South Africa (HRDCSA), it was noted that *"…local partnerships would boost student internship opportunities and labour market entry, and foster appropriate skilling of the workforce, hence anchoring the attractiveness of TVET to both students and employers"* (HRDCSA, 2014:07).

In this study, I sought to find out what types of partnerships already existed if any, and how these were managed. Furthermore, I sought to determine stakeholders' opinions about current and future partnerships to improve such partnerships to enhance TVET college graduates' chances of employability.

In my preliminary reading, I came across a variety of studies that explore higher education institutions and industry partnerships in many countries, but I did not find much literature concerning South Africa. It is therefore my hope that this study will add to already existing knowledge by giving a South African perspective on the issue of partnerships. The study was motivated by the desire to see improved employability of TVET college graduates. The results collected, the conclusions arrived at, and the recommendations of this study will assist in forming meaningful partnerships between TVET colleges and the industry.

1.4   PROBLEM STATEMENT

The ever-increasing youth unemployment rates in South Africa as indicated by Stats SA (2021) and the apparent lack of meaningful partnerships between TVET colleges and industry, led to the realisation of the problem. It is very difficult for TVET colleges as training institutions to guarantee employment of its graduates but TVET colleges can ensure their employability. This can be done in a variety of ways including but not limited to aligning TVET college teaching programmes to industry expectations and forging useful partnerships between TVET colleges and industry.

I assumed that this unemployment was a result of graduates who did not have the requisite skills for them to be employable. These skills are determined by industry players who are the potential employers. Therefore, I assumed that partnerships between TVET colleges and industry would prove useful and result in an employable graduate. That is why in this study I focussed on exploring stakeholders' perspectives on these partnerships as a way to enhance the employability of TVET college graduates.

1.5 PURPOSE OF THE STUDY

The purpose of the study is to find out stakeholders' perspectives on TVET colleges and industry partnerships to improve such partnerships to ensure improved employability of TVET college graduates. The assumption made in this research was that partnerships between TVET colleges and industry might improve TVET college graduates' chances of being employed.

1.5.1 Aim of the study

This research aims to explore stakeholders' perspectives on TVET colleges and industry partnerships to improve TVET college graduates' chances of employability in the Mpumalanga province of South Africa.

1.5.2 Objectives of the study

The objectives of the study are as follows:

- To explore the nature of TVET colleges and industry partnerships currently in place at TVET colleges in Mpumalanga.
- To determine the role of the stakeholders in the TVET colleges and industry partnerships currently in place at TVET colleges in Mpumalanga.
- To establish challenges currently being encountered by stakeholders with the current TVET colleges and industry partnerships.
- To discuss strategies for improving current and other suitable TVET colleges and industry partnerships to enhance the employability of TVET college graduates.

1.6 MAIN RESEARCH QUESTION

The research question can be phrased as follows:

What are the stakeholders' perspectives on TVET colleges and industry partnerships for improving the employability of TVET college graduates in Mpumalanga province?

1.6.1 Sub-questions

The research study leads us to the sub-questions listed below.

- What is the nature of TVET colleges and industry partnerships currently in place at TVET colleges in Mpumalanga?
- What is the role of the stakeholders in the TVET colleges and industry partnerships currently in place at TVET colleges in Mpumalanga?
- What challenges are currently being encountered by stakeholders with the current TVET college and industry partnerships?
- What strategies can be considered to improve current and other suitable TVET colleges and industry partnerships to enhance the employability of TVET college graduates?

1.7 THEORETICAL FRAMEWORK USED

This research study is based on Tomlinson's Graduate Capital model (Tomlinson, 2017). The model describes five capitals that higher education graduates, in this case, TVET college graduates, must acquire to improve their chances of employability. These capitals are interrelated and are of equal importance. Figure 1.1 depicts an adaptation of Tomlinson's Graduate Capital model. I chose this model to be the underpinning theoretical framework because this study sought ways of improving the employability of graduates and the model ideally situates the graduate at the workplace where he/she develops these capitals. This study, like the model, assumed that immersing students in the workplaces during the training periods develops in them the needed workplace-based skills which in turn make them employable.
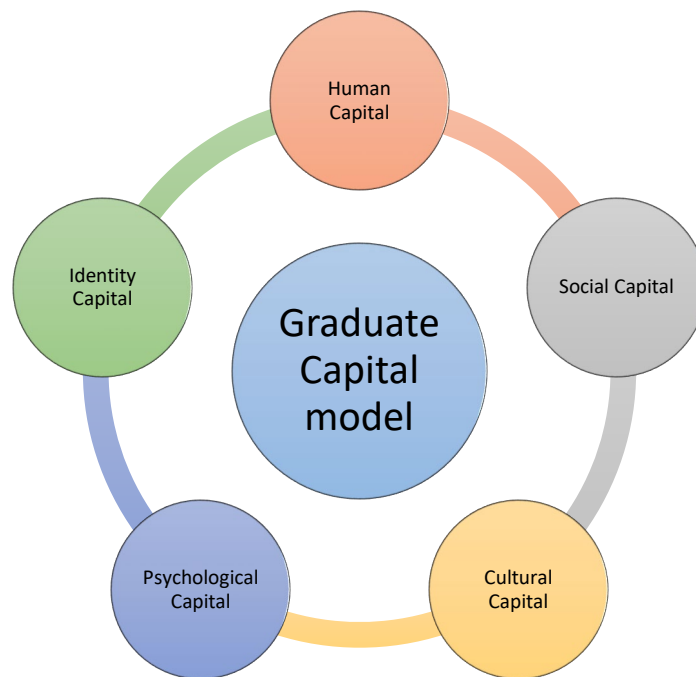
Figure 1.1: Graduate Capital model (Adapted from Tomlinson (2017: 338))

1.7.1 Human Capital

According to Tomlinson (2017), a graduate who exhibits a well-developed Human Capital will demonstrate skills that are relevant and directly transferable to the world of work. The graduate will demonstrate work-related skills and will correctly interpret the job market to search and apply for these opportunities identified in the job market. This graduate seems to have developed an ability to write appropriate application letters and to have developed excellent interview techniques. This graduate has developed a sense of what is expected in the workplace and is better prepared not only to pass the interview but also to be assimilated into the job applied for. For a graduate to exhibit these skills, he/she needs to have been exposed to the world of work before these interviews.

1.7.2 Social Capital

A graduate who has a well-developed Social Capital would exhibit the following characteristics. The graduate would be able to identify what it is that has changed in the world of work with a view of adapting to these changes and taking advantage of new opportunities that present themselves. The graduate will maintain a visible and professional online presence that employers can keep track of and easy access.

1.7.3 Cultural Capital

The graduate has developed essential skills to act in a professionally acceptable manner. This graduate can assess the corporate culture of various industries in his/her identified field of work and can respond appropriately in each case. Graduates without this skill easily become misfits at their new workplaces and this might cost the new employer time and money to orient or induct them.

1.7.4 Psychological Capital

A graduate with a well-developed psychological capital would be able to predict and manage uncertainty at the workplace and be able to take calculated risks. This graduate would be adaptable to the ever-changing world of work and would be able to anticipate and appropriately deal with setbacks, changes and transitions at any workplace. The graduate must be able to develop career contingency plans. Technology is forever changing so this graduate must be able to predict and plan for inevitable changes in careers.

1.7.5 Identity Capital

This graduate would be able to deal with personal attributes and experiences to address personal skills gaps. There is always a gap between what is learnt at institutions of learning and the workplace. A graduate with a well-developed Identity Capital would be able to identify these skills gaps and work towards filling them. This graduate would be able to test his/her ideas at their chosen workplace and adapt these

to what the workplace expects. This graduate would be able to assess their self-concept and settle for appropriate career choices.

Tikly (2013) says that developing graduates who demonstrate similar characteristics as those indicated above is the sole responsibility of training institutions. In this study, I set out to find out whether effective partnerships between TVET colleges and industry would result in graduates who would be ready for the world of work. Although vocational education and training imply courses that are practical by nature, workplace exposure immerses graduates in the actual work environment where they would develop all the graduate capital explained above.

1.8   APPLICATION OF THE THEORETICAL FRAMEWORK TO THE STUDY

In this research, I assumed that TVET college and industry partnerships would result in a TVET college graduate who had developed all the five capitals by Tomlinson as discussed above. These TVET graduates would have acquired skills that would make them ready for the world of work and once at the workplace find it easy to adapt, unlike a graduate that did not have the exposure.

After a careful analysis of the Tomlinson Graduate model, it is apparent that graduates who have had workplace exposure would fare better in job searches, interviews, and workplace adaptation than those who would have had none. In a focus group with graduates, I sought to find out if these graduates felt that their workplace exposure helped them develop any useful skills as far as workplace adaptation was concerned. I also sought to find out from some employers if they thought graduates who would have had workplace exposure, perform better in interviews, and were better adapted to the workplace.

1.9   PHILOSOPHICAL PERSPECTIVE AND RESEARCH PARADIGM

In this study, the research paradigm is interpretivism. According to Rehman and Alharthi (2016), interpretivists believe that reality is socially constructed and that there are therefore multiple realities. The interpretivists believe that reality is a result of our

interpretation of what is going on around us. They also believe that these interpretations might differ although one phenomenon was under study. All the different interpretations are equally important and none of them is more important than the other. Reality is therefore not seen as fixed and ready to be studied but the reality is seen here as people's interpretations of what they are experiencing.

Considering the above, in this research, I sought employers', students' and TVET college management's opinions, perceptions and evaluations as far as TVET colleges and industry partnerships were concerned. I wanted to find out each stakeholder's thoughts about forming partnerships with TVET colleges to develop a graduate that would be ready for work and could easily be assimilated into various work situations.

1.10   RESEARCH DESIGN

According to McCombes (2021), a research design can be viewed as a framework for planning one's research and answering one's research questions. It is the overall strategy and analytical approach chosen by the researcher to ensure that the research questions are thoroughly investigated. It outlines the blueprint for collecting, measuring and interpreting data collected. This means that the researcher must make important decisions regarding the type of data sought, the participants and sources, methods of collecting and analysing data as well as variables and hypotheses projected. In this research, I have chosen the qualitative research approach.

1.11   QUALITATIVE RESEARCH APPROACH

Bhandari (2020) defines qualitative research as that which involves collecting and analysing non-numerical data to comprehend concepts, opinions and people's experiences. Bandari (2020) goes on to say that, this research design is used to gather in-depth insights into how different people understand and respond to the world they live in. This research approach seemed appropriate because in this study I focussed attention on stakeholders' perspectives on partnerships as a means to enhance the employability of graduates from TVET colleges. In this study, I did not concern myself with how many people participated but with in-depth insights by stakeholders sampled.

Aspers and Cortes (2019) say that qualitative research is a multi-method approach that relies more on the interpretation of the collected data. This means that to avoid any sort of bias, the researcher has to make sure that the data collected is accurate and interpreted correctly (Cope, 2014). There are means available to qualitative researchers to make sure that the data collected is correctly interpreted. This would include member checks and triangulation amongst others. In chapter three, I discussed these concepts in greater detail and showed how I made sure data interpretation was devoid of any biases or preconceptions.

Jameel, Shaheen and Majid (2018) say that qualitative research documents the perspectives, experiences, thoughts, and behaviour of participants. Becker (2017) says that the research process is participant-driven and tends to be repetitive or iterative to confirm data. This means that before arriving at a certain conclusion, the researcher must have collected similar information from various sources. Qualitative research hinges upon the correct interpretation of data collected otherwise, the whole research would be flawed.

There are several qualitative research designs. McCombes (2021) says that qualitative research designs tend to be more flexible and inductive, allowing the researcher to adjust their approach based on the research. Qualitative research designs include case studies, ethnography, grounded theory and phenomenology. For this study, I chose a case study.

1.11.1 Case study

McCombes (2020) describes a case study as a detailed study of a specific subject and it is good for describing, comparing, evaluating and understanding different aspects of a research problem. She goes on to say that a case study is appropriate when a researcher wants to gain in-depth insights into a social phenomenon. In this research, I sought to find out the opinions and perceptions of various participants about TVET colleges and industry partnerships.

1.12   POPULATION AND SAMPLING

Kenton and Scott (2020) define a population as the total number or aggregate of subjects who have the same or similar characteristics. They also say that it is from a population that a sample for the study is drawn. Rafeedalie (2016) says that researchers draw samples because it is often not possible to study the whole population. In this study, the population would consist of stakeholders of TVET colleges in Mpumalanga province, the colleges' management and students, DHET staff and industries in Mpumalanga province. It is time-consuming to study the whole population so in this study, I sampled a sizable number of participants from the population.

Barnett, Thorpe and Young (2018) say that when it comes to sampling size in qualitative research, a researcher must take into consideration parameters such as the scope of the research, the nature of the topic, the quality of the data sought, and the study design chosen. In other words, in qualitative research, size does not matter but it is determined by the parameters mentioned above.

Wiley (2014) says that qualitative research participants are chosen primarily because of their personal experiences or knowledge of the topic or phenomenon under study. This means that participants are chosen purposefully because the researcher judges them to be information-rich and feels that their inclusion in the research helped address the research question. It is for this reason that Wiley (2014) concludes that in qualitative research the sample size is typically small to avoid redundancy and information saturation. In qualitative research, information, rather than numbers, is very important.

In this study, I initially intended to sample participants from the three TVET colleges in the Mpumalanga province. However, the principal of one of the Colleges, in this case, College C did not grant permission for research to be conducted at his college. According to the Ethical Clearance Committee of the University of South Africa, consent must first be sought from participants or heads of institutions. If the consent is denied, the researcher must not coerce anyone to be part of the research.

Despite the let-down noted above, I am confident that data collected in the other two colleges, with more than fifteen (15) campuses and skills centres, is sufficient to address the research questions. TVET colleges in South Africa use a centralised system whereby they all teach DHET-approved programmes and they undergo similar compliance monitoring from DHET. The TVET colleges write the same DHET examinations. I am convinced that the data I would have collected from College C would have been very similar to the other two colleges.

In this study, I sampled twenty-one (21) participants. They consisted of two (02) Deputy Principals: Academic (A & B) code named DPAA and DPAB. I sampled two (02) Student Support Services officials (A & B) code named (SSSA and SSSB) from both colleges. I sampled one DHET official responsible for curriculum development and support. The support included liaising with public and private partners so that strategic partnerships are forged with TVET colleges. I also sampled five (05) industry partners who are mostly managers and eleven (11) focus group participants. The focus group participants were current and former TVET college students.

McCombes (2019) says that there are two primary types of sampling methods. These are probability sampling and non-probability sampling. For this research, I chose non-probability sampling and one of the techniques in this sampling type is purposive or judgemental sampling. I discussed this technique in more detail in section 3.6 of this report. Essentially, it means I sampled only those participants whom I felt had the information or experience necessary to address the research problem.

1.13 PERMISSION TO CONDUCT RESEARCH AND INFORMED CONSENT

Permission was sought to conduct research at TVET colleges from DHET. I sought permission from the various companies with whom I intended to do research. I applied for permission and was granted Ethical Clearance from the University of South Africa to conduct the research. I then sent out the form "DHET 004: Appendix 1" to principals of TVET colleges. This form should be filled in by all researchers who intend to do research in public TVET colleges and must be signed by the responsible principal.

Two out of three principals granted permission for the research to be conducted in their colleges.

In a study by the University of Michigan (2018) informed consent implies that human subjects in research are adequately informed about what the research is all about and that the subjects are willing participants. These human subjects can, at any point in the research, decide not to continue with the study. The study also says that the process of seeking consent from human subjects must involve the use of an "Informed Consent" document, which should provide participants with information about the research, and they have to append their signatures to say that they will continue with the study.

In this study, I first sought Ethical Clearance from the University of South Africa. After that, informed consent was sought from all participants and informed consent documents bearing the logo and name of the University of South Africa were given out to participants so that they sign them. Once I got these documents back together with permission to conduct research at TVET colleges and sampled companies I proceeded with the collection of data.

1.14   DATA COLLECTION METHOD AND PROCEDURE

In this study, I administered in-depth interviews with the two Deputy Principals, the two Student Support Services officials, the DHET official and the five managers from sampled companies in Mpumalanga province. In these in-depth interviews, my objective was to find out these sampled individuals' opinions about TVET college and industry partnerships whether they think that these exist, are helpful and how they can be strengthened.

Reddy (2017) defines an in-depth interview as a qualitative research technique whereby intensive individual interviews are conducted preferably with a smaller number of participants to fully explore participants' perspectives. Reddy (2017) thinks of these in-depth interviews as ordinary everyday conversations that are extended and

formalised to explore various perspectives that participants hold about a phenomenon or lived experience.

In this research, I also conducted a focus group interview with eleven (11) sampled students from TVET colleges. In these interviews, my objective was to find out these students' opinions about TVET colleges and industry partnerships. I set out to find out whether they thought these partnerships helped enhance their chances of getting employment at the end of their studies. I also solicited their opinions about how they thought these partnerships could be improved.

Nyumba, Wilson, Derrick and Mukherjee (2018) refer to a focus group interview as a discussion used to gain an in-depth understanding of social issues from a purposely selected small group of participants. They continue and say that the sampled participants do not necessarily form a statistically representative sample of a broader population. In this research, I sampled eleven graduates from these TVET colleges.

In this study, I also carried out document analysis. This document analysis aimed to try to find documented evidence of the existence of TVET colleges and industry partnerships and find out how these partnerships were managed. It included but was not limited to, agreements on partnership formulation and management at TVET colleges. For confidentiality purposes, I did not attach these documents as appendices to this dissertation. Of interest was finding out whether TVET colleges were free to form partnerships with industry or were bound by certain regulations that they must adhere to. In other words, I wanted to find out whether these partnerships were initiated by and centrally managed by DHET or whether individual TVET colleges were free to enter into such partnerships with industry.

Bowen (2017) says that document analysis, which should not be mistaken for literature review, is a qualitative research technique, which comprises a systematic procedure used for reviewing and evaluating documents. These documents would include advertisements, attendance registers, agendas and minutes of meetings, manuals, journals and diaries, letters, memoranda and many other documents that attest to the existence of these partnerships.

Bowen (2021) also says that document analysis is usually done in conjunction with other data collection methods for triangulation purposes. I counted on TVET colleges' staff at various levels to provide such documents so that I could see how these partnerships were managed. I also asked for these documents from industries that I visited during my in-depth interviews.

1.15   DATA ANALYSIS AND INTERPRETATION

In any research, data analysis and interpretation should be done meticulously to arrive at logical and accurate conclusions that derive from the data collected. According to Bhatia (2018), data analysis is a process whereby a researcher derives meaningful insights from a mass of data collected. This means sifting through a lot of data collected and making sense of what it all means. Bhatia (2018) mentions four methods commonly used when analysing qualitative data. These are content analysis, narrative analysis, discourse analysis and grounded theory. In this study, I made use of discourse and narrative data analysis. These analysis techniques are explained in section 3.10.1 of this report.

During data collection, I audio-recorded both the in-depth and focus group interviews so that I could transcribe them later. I decided against video recording these interviews because I thought most participants would not have felt comfortable with being video recorded. In this study, anonymity and confidentiality concerning the participants' responses were taken seriously.

Medelyan (2019) made an observation that often after transcribing data, the researcher ended up with a large amount of free-text data. Medelyan suggests that data should be coded so that related information is grouped and this makes it easier to analyse the data. Coding is explained as a process of labelling and then organising data to identify recurring themes from different participants in an interview (Medelyan, 2019).

Interview schedules were not pre-coded because they consisted of open-ended questions. Coding was only done after data collection. Recording interviews allowed me to use participants' actual words to describe phenomena to avoid bias or

misinterpretations of responses. Arora (2017) says another useful technique to make sure that responses are not misinterpreted is member checking. This means returning to participants and asking them to say whether they think their responses have been correctly captured and interpreted.

1.16   LIMITATIONS AND DELIMITATIONS OF THE STUDY

This research was conducted in the Mpumalanga province of South Africa and data was collected from the two colleges that are there. These colleges fall under the Mpumalanga-North West region. All of these colleges and their various campuses offer different courses. This makes it very difficult to generalise the results to other provinces. Therefore, the data collected is relevant to the colleges under study. Management keeps on changing so it is possible that after collecting the data new management would come and usher in changes in how these colleges manage TVET colleges and industry partnerships.

Related to the point above, da Silva (2017) observed that in qualitative research it is generally difficult to transpose data from one situation to another. This statement agrees with the earlier point that it is difficult to generalise the results of data collected in Mpumalanga province to other provinces. That means that researchers in other provinces should carry out their studies and arrive at conclusions relevant to their provinces. Data collected might also not be generalizable from one college to another in the same province or from different campuses of the same college.

Stakeholders that were sampled in this research are potential employers in the Mpumalanga province. So, whilst the term stakeholder generally refers to all those that have a vested interest in an organisation, in this research the term is mainly limited to these employers, management in TVET colleges and DHET. Experiences and opinions of these stakeholders as far as partnerships are concerned might vary from employers in other provinces.

Finally, in this research, I have chosen to focus on both the National Certificate (Vocational) (NCV) programme and Report 191 commonly referred to as the National Accredited Technical Education Diploma (NATED) programme. Whilst the NATED programme leads to a national diploma and the NCV programme leads to a national certificate, the NCV is a full-time programme and it benefits more from government funding. The NCV programme takes three years to complete which would give it ample time to partner with industry players.

1.17 CLARIFICATION OF CONCEPTS

In this study, there are concepts and terms that I should define from the onset to show how these terms are used throughout this report.

1.17.1 Stakeholder

Chen (2020) simply defines a stakeholder as a person or institution that has a vested interest in another organisation and can either affect or be affected by that organisation. In this research, the term would specifically refer to the management of TVET colleges and that of DHET, TVET college graduates and potential employers. TVET college and DHET management and graduates are internal stakeholders whilst the employers are external stakeholders.

1.17.2 TVET college

Technical and Vocational Education and Training (TVET) colleges are post-school institutions formerly referred to as Further Education and Training (FET) colleges. They were then merged into 50 colleges with each college having a variety of campuses (DHET, 1998). Over the years, these colleges have seen rapid growth with the total head-count enrolments having almost doubled from about 345,000 in 2010 to a staggering 705,397 students in 2016 (DHET, 2018). These colleges offer vocational education and training courses to students who opt to take the vocational education route. The courses offered in these colleges are expected to prepare the students for the world of work as they are practical.

1.17.3   Mpumalanga province

Mpumalanga is one of the provinces of South Africa. The name means "east" or "the place where the sun rises" in the local language. Mpumalanga lies in the eastern part of South Africa, bordering Swaziland and Mozambique. Its main economic activities are farming, mining and tourism (Wikipedia). In this research, one of the things I went out to find out is whether TVET colleges offer a curriculum that prepares graduates to be absorbed into these industries. I was also interested in the type of partnerships that exist between TVET colleges and industry in Mpumalanga.

1.17.4   DHET

The Department of Higher Education and Training (DHET) is the national department that houses all post-school education and training institutions including TVET colleges. The department continues to be known officially as DHET although since 2019 it has been known as the Department of Higher Education, Science and Innovation (DHET, 2019). TVET colleges unlike schools, which are managed provincially, are managed by the national department in Pretoria. This is good because that means the information I got from the staff member in DHET during the in-depth interview included what happens in all the 50 TVET colleges in South Africa.

1.18   ORGANISATION OF THE STUDY

This report comprises five chapters. In **chapter one,** I gave a general orientation of this study. I gave the background of the study and stated the problem. I outlined the purpose of the study, the aims and objectives of the study, the main research question and the theoretical framework underpinning the study. I also discussed the research design, population and sampling, data collection methods and procedures, data analysis and interpretation. I also discussed, in brief, research ethics.

In **chapter two**, which is a literature review, I went on to discuss TVET colleges and industry partnerships in South Africa and other countries. In this chapter, I gave a brief, albeit comprehensive, comparative study of other countries' joys and frustrations

about TVET colleges and industry partnerships. In this chapter, I also presented a detailed discussion of who TVET college stakeholders were and I discussed management tasks and leadership roles that should be carried out and played by DHET and TVET colleges as far as forging these partnerships was concerned.

In **chapter three**, I discussed the research methodology which included the research design, research paradigm and approach. In the chapter, I also discussed the rationale for choosing the qualitative research design. I discussed population and sampling, ethical considerations, instrumentation, data collection methods, data analysis and presentation. Finally, in this chapter, I discussed how I have ensured the trustworthiness of the data in this research study.

In **chapter four**, I gave an overview of the research process, which includes methods I used for data collection and presentation. I discussed the challenges I experienced when I was collecting and analysing the data. I also mentioned the positive experiences. I went ahead to present data in a variety of ways and gave a detailed analysis of these data.

Finally, in **chapter five**, I concluded from the results of the study. I also gave recommendations based on the findings and conclusions of the study.

1.19   CONCLUSION

In this chapter, I gave a detailed orientation of this study. This included stating the problem and then discussing the aim and objectives of the study. The main research question was stated together with the sub-questions. I discussed the research methodology. I discussed the research design and issues relating to ethics in research. Finally, I discussed how the data was collected, analysed and interpreted. I also clarified concepts used in this study, especially those around which this study revolves. In the next chapter, I dealt with the literature review of the study where I explored TVET colleges and industry partnerships in general and then focussed on partnerships in South Africa.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

In the previous chapter, I gave a detailed orientation of the study. The problem together with the aims and objectives of the study were stated. The research question and sub-questions were also mentioned. I also discussed the theoretical framework as well as the philosophical perspective and research paradigm underpinning this study. I discussed the research methodology. I discussed the research design and issues relating to research ethics. Finally, I discussed data collection and analysis. I also defined the terms and concepts used in this research.

In this chapter, I discussed the emergence of Technical and Vocational Education and Training (TVET) colleges internationally and in South Africa. I discussed the concepts of partnerships in detail and discussed the types of partnerships that are there internationally and in South Africa. I went on to discuss stakeholders of TVET colleges and discussed how these stakeholders can collaborate with these TVET colleges in South Africa and Mpumalanga in particular. I discussed possible barriers to successful partnerships between TVET colleges and their stakeholders. Finally, I discussed possible partnerships that could enhance the employability of TVET college graduates, especially in the Mpumalanga province.

In this chapter, I addressed the first sub-question of this study, which is to explore the nature of TVET colleges and industry partnerships currently in place in Mpumalanga. In part, I also addressed the second sub-question of this study, which is to discuss, in general, the role of stakeholders in the TVET colleges and industry partnerships.

2.2 OVERVIEW OF INTERNATIONAL DEVELOPMENT OF TVET

Many terms are used interchangeably worldwide to refer to post-school education, particularly vocational education and training. These terms and their acronyms would include Vocational Education and Training (VET), Vocational and Technical Education (VTE) and Training and Further Education (TAFE) in Australia, Vocational and

Technical Education and Training (VTET) in Southeast Asia, Technical and Vocational Education and Training (TVET), Further Education and Training (FET) in UK and South Africa, Career and Technical Education (CTE) and Occupational Education (OE) in USA, Professional Education (PE) and Vocational Education (VE) (UNESCO-UNEVOC, 2009; Stuber, 2016; Good Education Media, 2021).

Because of the various names and acronyms being used by different countries to refer to similar working post-school institutions, there was a need to come up with one term and acronym that would be used to refer to these institutions. During a World Congress on TVET in 1999 hosted by UNESCO-UNEVOC in Seoul, in the Republic of Korea, the term Technical and Vocational Education and Training was officially adopted (Odendaal, 2015). The attendees of the congress unanimously agreed that the term TVET was broad enough to accommodate all the other terms used right across the world by different countries.

After the congress, UNESCO-UNEVOC established the *International Centre for Technical and Vocational Education and Training* in Bonn, Germany. The main aim of this centre was to help member states to promote and develop their post-school vocational institutions (Odendaal, 2015). Ever since then, member states have adopted the term TVET and have gone on to develop post-school vocational institutions of choice. Whilst some countries have retained their original terms and acronyms, the term TVET is widely acknowledged and often used alongside countries' acronyms and terms.

2.2.1   Three models of TVET systems in Europe and Eurasia Countries

Fawcett, El Sawi and Allison (2014) noted that in the past two decades, economic and political changes have necessitated important reforms to the Europe and Eurasia (E&E) TVET systems. They noted that whilst in many developing countries, the main objectives of TVET colleges are still to prepare youths to enter the job market, the focus has changed in E&E countries. They noted that the ever-changing technological environment and indeed the socioeconomic as well as political situation of each E&E country demanded that TVET colleges be managed in different ways (Fawcett et al.,

2014). Below are three models of TVET systems in the world as discussed by Fawcett et al. (2014).

2.2.1.1 The liberal market economy model

This model is used by the United Kingdom (UK) and was later adopted by Australia, Canada and New Zealand. This model was a response to the policy of massive privatisation of industry in the 1980s. TVET colleges and their graduates should therefore reflect the demands of the private market-led industries and firms. In this model, industries, through their skills councils, determine the occupational skills in which they would like to train the TVET college students.

So private industries and firms volunteer to pay for students' training and apprenticeship and because they pay for training, they mainly determine which skills to train these students. The state creates a conducive environment for these TVET colleges to strive in and ensure that the not-so-privileged learners also access training. The government also sets up skills councils and national qualifications frameworks (Fawcett et al., 2014).

To illustrate this model even more, I will now take a closer look at the UK TVET system. One of the key objectives of the TVET sector in the UK is to design new and better ways for employers and TVET college institutions to collaborate (British Council, 2021). It is very important to note that for the sector to meet its initial objective of providing quality training that meets current and emerging industry skills needs, partnerships between employers and TVET colleges should be prioritised.

It is noteworthy that in the UK, training at TVET colleges is employer-centred. Employers play a key role in the design and delivery of the curriculum and assessment at TVET colleges. They further contribute equipment, expertise, and training venues and manage what is known as the apprenticeship levy. Training outcomes are measured against employment-based outcomes and not just passing examinations (British Council, 2021).

Employers are therefore not just passive consumers of TVET college graduates but are actively involved from the start to the end of the training process. The following table 2.1 details the role played by employers in the training of these graduates.

Table 2.1: Role of employers in UK TVET colleges

Employers		
Designing Training	**Sector capacity building**	**Delivering training**
• Development of apprenticeship frameworks and standards • Supporting the development of qualifications and assessment • Advising on programme development • Providing insights to inform Labour Market Intelligence	• Working through Sector Skills Organisations, Trade Associations and employer representative bodies • Trainer development programmes • College and training provider governance • Partnering with all post-school and TVET colleges	• Participating in Apprenticeship and Traineeship programmes • Hosting work placements for full-time learners • Providing in-house and sector-specific training in collaboration with post-school and TVET colleges

(Adapted from British Council, 2021)

As illustrated above, employers, as interested stakeholders, adopt a more hands-on approach to narrow the gap between training and industry needs. This goes a long way in ensuring that these graduates receive quality and up-to-date training making it easier for these graduates to be absorbed by the industry.

Also worth noting is the insistence on quality trainers. Those who teach in UK TVET institutions are referred to as "dual professionals" meaning that they have up-to-date technical and industry skills whilst also having the ability to use effective teaching methods. Most of the time, these are industry experts who are willing to engage in continuous professional development (CPD) to acquire the relevant pedagogical skills. Besides the employers, the other important stakeholder of the TVET system is the government, which supports TVET colleges through a variety of policies, funding, quality assurance and certification (British Council, 2021).

2.2.1.2 The state-regulated bureaucratic model

This model was used by France and was later adopted by Italy, Sweden and Finland. National education systems define, provide and finance vocational education and training. Public-private partnerships (PPPs) with firms, industries and labour unions happen mainly at a consultative level. One setback of this model is that the TVET sector is regulated by an education system that puts more emphasis on academia rather than vocational skills. Therefore, the curriculum imposed by the national education system does not reflect the local labour demand (Fawcett et al., 2014).

To illustrate further, I will take a closer look at the French TVET system. In France, the state provides and controls education. TVET institutions are funded by the government and graduates receive state-regulated vocational qualifications. The TVET institutions known as the "*lycées professionals*" are the specialist training institutions that provide vocational education and training through apprenticeships and full-time training programmes (Fawcett et al., 2014).

The state ensures that lecturers or trainers in these institutions are appropriately qualified and meet state-regulated vocational qualifications. The TVET policy is the responsibility of the Ministry of Education, and the state determines TVET priorities. The model ensures that graduates of these TVET institutions receive uniform and consistent training and get the same certificate (Fawcett et al., 2014).

This model, although well-funded, tends to divorce training from the expectations of the industry. The system tends to be exam-oriented and the employers still have the burden of on-the-job training after the students graduate. Unless there is strong consultation between the government and industry concerning which vocational skills to impart, there is a possibility that the graduates who come from these institutions would be clueless in the workplace (Fawcett et al., 2014).

The other disadvantage of this system is that it is too rigid and politicised. A simple reform or change to the TVET qualifications framework would require long-winding and time-consuming bureaucratic engagements before approval. This makes this model less adapted to respond timeously to market transformations. Of note, reforms

that were suggested to improve the National Qualifications Framework in 2002 were only approved in 2012 (Fawcett et al., 2014).

2.2.1.3   The dual system model

This model is mostly seen in countries like Germany, Austria, Switzerland, Denmark and Norway. In this model, the design, development and implementation of the TVET system involve a wide range of public and private partnerships. These would include trade unions, state agencies and organisations. This model is dependent on strong public-private collaboration. The private sector funds apprenticeship programmes whilst the public sector finances the TVET institutions (Fawcett et al., 2014).

The model promotes what is commonly known as a corporatist model. Fawcett et al. (2014) describe this as the theory and practice of organising employers and employees into industrial and professional corporate entities that are subordinate to the state. This model was used in Western Europe to address the conflict between business and trade unions and promote economic growth (Fawcett et al., 2014).

To illustrate further, I will look at TVET colleges in Germany. Public-private partnerships are key in Germany. The state provides an enabling environment for learning by funding training institutions. The state supports highly regulated labour markets by paying wages for trainers and providing occupational policies. The private sector partners with TVET institutions to make sure that the TVET graduates are well-trained by funding apprenticeships and on-the-job training (Fawcett et al., 2014).

The disadvantage to this system is that the apprenticeship opportunities are not as many as would be required thereby causing frustration to prospective students. The other disadvantage is that it is costly to enrol into these institutions as government funding is not enough and most students have to self-fund (Fawcett et al., 2014).

2.2.1.4   Remarks on the TVET college systems

The three models above have their advantages and disadvantages as discussed above. However, I think that the dual system model used by Germany is good because it puts a lot of emphasis on public-private partnerships. There are clear-cut roles for public institutions and private institutions as they work together to provide relevant training for students. The government finances the TVET colleges whilst enterprises finance apprenticeship and general skills training. It is my opinion that a model similar to this one would serve the South African environment better than the other two models discussed.

Whilst the liberal system also allows for public-private collaborations, I feel that the model tends to leave all the work to private players who might not be experts in determining national training goals. The state-regulated bureaucratic model tends to put too much control in the hands of the state and industry needs might be overlooked. This system would develop well-trained graduates with good qualifications but graduates who might not have the requisite skills for industry.

So, I would advocate for a balanced or multi-stakeholder approach that involves everyone concerned in the training of the graduates. The dual system model used by the Germans comes very close to what I would recommend. Whilst the state can finance these institutions of post-school training, I feel that the private sector, as consumers of TVET college graduates, need to be involved in the training programmes from start to end.

2.3   OVERVIEW OF THE EMERGENCE OF TVET COLLEGES IN SOUTH AFRICA

2.3.1   The establishment of TVET colleges in South Africa

The acronym TVET was first introduced in South Africa in 2012 by the Department of Higher Education and Training replacing the acronym FET (Further Education and Training) that had been used to describe post-school institutions (Odendaal, 2015). According to the White Paper for Post-School Education and Training, there are currently fifty (50) TVET institutions in South Africa and each of these colleges has

several campuses in the geographic jurisdictions within which they operate (DHET, 2013).

Of note is that these TVET colleges are public institutions mostly funded by the national government through the Department of Higher Education and Training (DHET, 2013). There are also privately run TVET colleges. These private TVET colleges have to register with DHET and they offer DHET-approved programmes and their students sit the same examinations as those from public TVET colleges.

According to the White Paper, the role of the government in these TVET Institutions is to improve their management and governance, develop the quality of teaching and learning, increase their responsiveness to local labour markets, and improve student support services and infrastructural development (DHET, 2013). The government funds public TVET colleges, develops training programmes, and administers centralised examinations and certificates to the students.

The government, through DHET, envisaged emphasizing strengthening partnerships with employers. This is done with the express hope that these partnerships will help TVET colleges place learners and lecturers in workplaces to keep abreast with new trends in the workplace. These partnerships should also allow employers to give advice on curriculum issues and allow industry experts to teach at TVET colleges (DHET, 2013). In this study, I sought to find out if indeed partnerships, especially in the Mpumalanga province, yield the results envisaged by the White Paper DHET.

2.4   CONCEPTUAL FRAMEWORKS

2.4.1   Concept of partnerships

In this study, I sought to find out stakeholders' perspectives on TVET college and industry partnerships. It is important to unpack the term partnership in the context of TVET colleges and industry. In a report by the Human Resources Development Council (HRDC, 2014: 09) the term partnership is defined as *"…a formal relationship with joint rights and responsibilities between two or more parties in cooperation to*

achieve mutual goals." This definition introduces an element of formality, joint obligations, shared risk and purposiveness into the partnership arrangement.

The report further says that the term partnership is also used interchangeably with terms like relationships, linkages, cooperation, networks, association and collaboration. In this study, I used these terms interchangeably to refer to partnerships. Singizi (2011) defines partnerships as linkages. Singizi also says authentic partnerships are those in which the roles and contributions of each partner include shared risk and consider the different agendas of these partners (Singizi, 2011). The possibility of risk is real in partnerships hence the need for proper planning, monitoring and evaluation to put corrective action into place.

Singizi goes further to give definitions of different types of partnerships. A private-public sector partnership is defined as one where the partners undertake a joint business project that is of mutual benefit and constructed around a business plan (Singizi, 2011). What is important in this definition is the fact that in a partnership the parties must see mutual benefit. In other words, if the partnership is not mutually beneficial, then the partner does not envisage any advantages and might not feel like continuing with the partnership or linkage.

A social partnership is defined as one that is constructed around a social agenda with defined benefits and risks and an agreement to work together to solve a problem or render a service (Singizi, 2011). What is important in this definition is that the partners must embrace the possibility of risks in the partnership. The partners should forge ahead despite the risks to work towards maximising benefits.

An education partnership is defined as one that takes place between an educational institution and a prospective employer to establish two-way learning to complement classroom-based learning with work-based learning. This is done to narrow the gap between theory and practice and facilitate the easy transition of students from educational institutions to the world of work. Of note in this definition is that this undertaking facilitates two-way learning meaning that the prospective employer also learns from the educational institution (Singizi, 2011).

Finally, a learning partnership is one whereby partners commit to a learning agenda for personal and professional development (Singizi, 2011). All these definitions show that the term partnership should not be used casually to refer to any type of relationship between TVET colleges and the industry. The definitions above imply a serious linkage that would most probably require a contract or a memorandum of understanding (MOU) detailing the terms of operation with specific timeframes to monitor the progress of the partnership. The definitions also imply an evaluation of the outcome of the partnership to put corrective action into place.

McQuaid (2000) says that there are five dimensions when it comes to partnerships. The first thing that partners should ask themselves is what the purpose of the partnership is and whether the partnership is strategic, or project-driven. This simply means asking whether the partnership serves a long-term or a short-term purpose. The second thing that partners should ask themselves is what the structure of the relationship of partners would be. The third dimension deals with the timing of the partnership. Partners should carefully consider the appropriate time to collaborate.

The fourth dimension addresses the location of this partnership. In the case of TVET-industry partnerships, it means deciding whether this partnership will take place at these TVET colleges or in the industry. Guest lectureship would take place at TVET colleges whilst workplace-based learning would naturally take place in the industry. The fifth dimension deals with the implementation mechanisms. This is the breakdown of partnership activities, duties and responsibilities of partners, timelines, monitoring and evaluation.

In this study, the term "partnership" was used to imply all the aspects covered above. I focused attention on those linkages that are formal and where there is possibly a contract or an MOU. I sought to find out who initiated the partnership and investigated whether the partnership was of mutual benefit to the parties involved. I also analysed the partnerships in Mpumalanga considering the five dimensions mentioned by McQuaid above.

2.4.1.1 Importance of partnerships in TVET

Makgato and Moila (2019) noted that TVET colleges are viewed as important tools with which to address a variety of social challenges such as poverty, youth unemployment and skills shortages. They identify partnerships formed between TVET colleges and industry as being of utmost importance in producing a skilled labour force in any country. Relevant and effective TVET college and industry partnerships are necessary to make TVET colleges responsive to the needs of its graduates and the labour market (Makgato & Moila, 2019).

Makgato and Moila (2019) say that the high rate of unemployment in youth might be attributable to the fact that TVET college graduates do not have adequate exposure to workplace-based training. TVET college graduates find themselves in a completely different situation once they make it to the workplace. They cannot function, as they cannot relate their theory to workplace practices. This causes some discomfort for both employers and graduates as the whole process of retraining these graduates begins. It should be expensive and frustrating for companies to engage supposedly trained graduates in a complete initial training exercise.

Manyonge and Kyalo (2020) noted four important benefits of public-private partnerships (PPPs). The first benefit is that these PPPs enhance employment opportunities for TVET college graduates. They noted that training for high-quality skills required by industry, requires appropriate training equipment and tools, an adequate supply of training materials and practical skills by the learners. This requires partnership with industry because the sophisticated training material, tools and machinery are found in the industry. They also noted that these PPPs could be used to continually upgrade the skills of the workforce in the context of lifelong learning (Manyonge & Kyalo, 2020).

The second benefit they identified was that of financial assistance. They noted that in Kenya, where their study was conducted, inadequate financial and management capacity comes in the government's way when it comes to meeting national educational objectives. The private sector, especially corporates, brings in the much-

needed financial and material resources including the expertise that can expand and improve the quality of training in TVET colleges (Manyonge & Kyalo, 2020).

The third benefit was that these PPPs provide training for skills, job creation and linking TVET institutions to the workplace. They observed that partnerships develop relevant skills and there is a match between training programmes and the needs of the industry. The skills would include technical job skills needed to perform certain tasks in the industry (capacity to show knowledge of operating principles and relate these to practice) but would also include communicative skills, critical thinking and problem-solving skills, teamwork, creativity and entrepreneurship and information and communication technology (ICT) skills. They also say that the world needs a production-oriented TVET, which means a TVET college that incorporates functional skills development and knowledge-driven programmes. All this can be achieved through PPPs (Manyonge & Kyalo, 2020).

The fourth benefit is that PPPs help to revamp TVET colleges and reposition them as vital institutions that develop a skilled workforce which is vital for any economic and technological development in any country. In revamping these TVET colleges, the private sector intervention can include technical support in terms of training and retraining of staff and students, provision of finance and expertise, participation in curriculum development, access to modern production equipment, tools and machines and technical know-how. This can be achieved through internships, apprenticeships, cooperative education and continuing education and training (CET) schemes (Manyonge & Kyalo, 2020).

Singizi (2011) noted a variety of benefits that can be enjoyed by partners. Table 2.2 below is an adapted version of these benefits grouped according to the partners involved.

Table 2.2: Benefits of Public-Private Partnerships

Benefits to industry players	Benefits to employees involved
• Improved company image and positive public relations with the local community • Increased interest in and knowledge of company products and services thereby broadening the client base • Improved business opportunities in such areas as customer service • A better-educated community • A wide reserve of work-ready individuals for recruitment • Participation in and influencing curriculum development • Improvement of company policy especially in recruitment • The improved motivation of employers through staff development • A better understanding of challenges faced by TVET colleges and playing an active role in addressing these • Learners can also highlight and offer solutions to some challenges facing these companies	• Improved personal skills • A better understanding of modern education and training methods • Improved self-esteem, confidence and motivation • A chance to act as role models to students • There are real chances for management development opportunities
Benefits to TVET college learners	**Benefits to lecturers involved**
• A deeper understanding of career and employment opportunities • Development of core skills e.g. problem-solving and decision-making skills etc. • Participation in real-life projects that involve hands-on, critical and analytical thinking • Development of a positive attitude towards work • Better retention rates	• New subject-related knowledge and skills and how this relates to the world beyond the college • Using real work-related contexts for learning • Improved self-esteem, confidence and personal motivations • Gaining insights into the needs of the industry • Interaction with industry experts and professionals

	• Continuous professional development
• Development of a positive self-esteem	• Development of team spirit
	• Access to additional resources
	• Sharing of best practices
Benefits to Participating Colleges • Access to industry-related skills for specific subjects • Improved college image in society • Improved learning and teaching methods • Access to lecturer development programmes • Support for college development plans • Effective utilisation and access to resources • Development of relevant curriculum programmes • Opportunity to engage students in workplace-based learning • Creating real opportunities for students to get employed after college	

Adapted from Singizi (2011: 10).

In the in-depth interviews and focus group interviews that I conducted with a variety of partners, one of the questions dealt with what participants viewed to be the benefits of partnerships. All this was done to address the first objective of this study, which seeks to explore the nature of TVET colleges and industry partnerships.

2.4.1.2   Typology of partnerships in TVET globally

In sub-section 2.2.1, I discussed three partnership models used in Europe and Eurasia TVET colleges. In my reading, I found that the most dominating model in the whole world is the public-private partnerships (PPPs) model (HRDC, 2014). In this section, I looked at how different countries right across the world, chosen randomly, have adapted this model into their TVET colleges.

Kruss et al. (2017: 16) define PPP, in the context of TVET colleges, as

"…*a formal relationship with shared responsibilities between the public and private sector actors in co-operation to achieve mutual goals that may take the form of a joint business venture, a joint education and training agreement, or a social partnership structured around a social agenda.*"

These PPPs are very important in the development of high-quality vocational education and training because they establish regular and useful communication between the TVET college and the private sector. This communication allows TVET colleges to know more about the skills required by the industry and on the other hand allows the industry to know about TVET college programmes and have an input in designing these programmes (UNESCO, 2019a & 2019b). Overall, the industry gets to have a say in the training of their future employees making it easier to absorb these graduates into their workplaces.

UNESCO (2019a) says that important factors to be considered when promoting PPPs in the TVET sector include governance, financing and training. When it comes to governance most countries have appropriate national frameworks involving stakeholders like enterprises, workers, students and civic society. These stakeholders participate in a variety of tasks including but not limited to planning TVET programmes, management, curriculum design and qualifications development and assessment administration (UNESCO, 2019a).

In India, for example, the National Skills Development Cooperation, which is 51% industry-owned, is an important partner of TVET colleges in that country. Therefore, the majority of partners are in the private sector (UNESCO, 2019a). In Malaysia, the Human Resource Development Council, which is made up of employer organisations, government departments and independent members of society, is an important partner of TVET colleges. This body took over the work of the public vocational sector run by the government (Kruss et al., 2017).

In Singapore, the Institute of Technical Education (ITE) was established as the primary provider of career and technical education. It was chaired by a chairman of a private engineering firm and all its board members are from the corporate world. The ITE oversee governance issues to do with policy formulation, curriculum development, student intake, quality assurance and consistency of standards in all colleges (UNESCO, 2019a).

In Korea, the TVET system largely remained in the hands of the government at a national level. However, the National Qualifications Framework was reoriented to

incorporate the private sector at regional and sectorial levels. The private sector has been successfully encouraged to engage in skills training for TVET graduates (Kruss et al., 2017).

In Rwanda, they use a market economy with strong state control. The government ministries run TVET colleges with little or no input from the private sector. Consequently, the training in these TVET colleges tends to be misaligned with the needs of the industry. There is a fear that the curriculum might be irrelevant. Class sizes are too large and the system is largely underfunded because the government alone funds these colleges. There is a general lack of industry exposure thereby rendering these colleges almost irrelevant (Kruss et al., 2017).

UNESCO (2019a) notes that TVET college costs are higher compared to general education offered at school therefore it is important to involve the private sector in financing or funding some programmes. The private sector, as direct beneficiaries of the outcomes of an excellent TVET system, should have an interest in funding these TVET programmes to ensure quality training.

As can be seen from the few examples above, there is a concerted effort by a majority of countries discussed above to involve the private sector in the governance of TVET institutions, their funding and the training of TVET college students. It is important to note that in the examples above, the private sector does not have total control but there is some governmental influence to guide the whole partnership.

2.4.1.3   Typology of partnerships in TVET colleges in South Africa

There are different types of TVET partnerships as already discussed above but the most popular, as seen from preceding discussions, is the PPP model (HRDC, 2014). South Africa also uses this model, however, in South Africa, TVET colleges engage with multiple numbers of partners. Each partner has a specific role to play in the smooth running of these TVET colleges. These partnerships can be short-term or long-term depending on their nature and the objectives they seek to achieve.

In South Africa, a multi-stakeholder partnership approach is used (HRDC, 2014). In this approach, the TVET sector, which falls under the national Department of Higher Education and Training (DHET), collaborates with a wide variety of stakeholders from both the public and the private sectors. The state, through DHET, formulates policy that regulates the work of these TVET colleges whilst the partners quality assures, fund training, support workplace-based learning, and initiate and participate in a variety of programmes be it short-term or long-term (HRDC, 2014; British Council, 2018).

When thinking about the type of partnership that South African TVET colleges have, it is important to start by asking the question of who these partners are and what role they play in TVET colleges. It is important to consider governance issues and levels of partnerships, forms of funding and the forms of education and training promoted (Kruss et al., 2017).

2.4.1.3.1 Types of partners

As already explained, the TVET sector in South Africa enjoys a multi-stakeholder partnership model (HRDC, 2014). According to HRDC (2014), these partners can be put into two groups; public and private entities. Table 2.3 below depicts the various partners and their roles.

Table 2.3: Partners and their roles

	Partner	Role (in brief)
Public organisations	Government (DHET) (National & Regional)	Policy development, regulation funding, monitoring
	Umalusi (more for schools than TVET now)	Quality Assurance
	Quality Council for Trade and Occupations (QCTO)	Quality Assurance and certification
	Sector Education and Training Authority (SETA)	Facilitate partnerships with industry, coordinate PPPs at the sectoral/regional level, fund skills development
	National Skills Fund (NSF)	Promote and fund partnerships
	National Economic Development and Labour Council (NEDLAC)	Promote and facilitate policy-related social dialogue and government accountability

	Inter-Provincial Committee for TVET Colleges	Facilitate partnerships between colleges, occupational/trade organisations and organised business
Private organisations	Employers	Fund skills development, articulate skills need, provide opportunities for workplace-based exposure, career development of lecturers etc.
	Labour (Unions)	Skills development
	Non-governmental organisations	Funding
	Training partners	Skills development
	International organisations	Sharing of best practices

Adapted from Kruss et al. (2017: 21) & HRDC, (2014: 18)

The table above enumerates the types of partners that engage with TVET colleges in South Africa. Immediately, it would seem as if most partnerships were with public institutions but that is not the case. Singizi (2011) discovered that TVET college linkages were mostly with the private sector. 51% of these linkages are with industry and commerce, which is the private sector, 20% with the government, 10% with the SETAs and 9% with other education and training institutions. The remaining 10% was with the development sector. The study also showed that most of these linkages were in the fields of manufacturing, engineering and technology (Singizi, 2011).

There are some other PPP initiatives besides the ones Singizi mentioned in the report. These partnerships are with the private sector and international partners. In June 2020, the minister of Higher Education, Science and Technology, Dr Blade Nzimande, announced that a partnership with Huawei and 33 out of 50 TVET colleges across the country had been established (Mzekandaba, 2020). This partnership is widely viewed as a bridge between TVET colleges and the Huawei academy to develop a more complete graduate with both academic and practical workplace experience. This partnership is geared towards adding value to the TVET colleges' training systems to develop a graduate with technical and practical ICT skills to make these graduates competitive in an ever-changing technological world.

Another partnership that exists between TVET colleges and the industry is the Standard Bank South Africa Value Add Offering (HRDC, 2018). This partnership is aimed at providing on-the-job training for management, lecturers and students, especially in the financial accounting field of study. This is a symbiotic relationship whereby TVET colleges benefit from workplace-based learning whilst the bank also benefits from the academic knowledge of TVET college management and lecturers thereby improving their operations as well.

The Human Resource Development Council (HRDC) also has a programme called "Adopt a TVET college" (HRDC, 2018). In this initiative, industry players are encouraged to forge partnerships with TVET colleges to play an active role in contributing towards what students are taught practically so that the transition from college to the workplace is smooth. This makes TVET colleges' training more relevant and prevents skills mismatch between what TVET colleges are offering and what the industry requires.

In 2011, the British Council, which is the United Kingdom (UK) government's cultural relations organisation, initiated the "International Skills Partnerships" project whose aim was to improve operations in South African TVET colleges after partnering them with British TVET colleges (British Council, 2014). The following Table 2.4 shows which South African TVET college was partnered with which British TVET college.

Table 2.4: SA and UK colleges partnerships

SA college	Province	UK college	Partnership focus
East Cape Midlands	Eastern Cape	Walsall	Bridging programmes and learning companies
Gert Sibande	Mpumalanga	Highbury	Improvements to the quality of learning & teaching through the application of information technology systems and learning companies.
Northlink	Western Cape	Gwent	Developing renewable technology programmes and virtual learning platforms.
Orbit	North West	Harrow	Improvements to the quality of learning & teaching in the automotive sector.

Sedibeng	Gauteng	Harrow	Improvements to the quality of learning & teaching in the automotive sector.

Mostly, the programme was meant to assist selected South African TVET colleges to collaborate with British ones to improve operations in South African TVET colleges and vice-versa. The partnership involved top management of these South African colleges visiting these UK colleges to learn how best to manage their institutions back in South Africa.

2.4.1.3.2 Types of governance and levels of partnerships

Initially, the National FET plan (2008) emphasized the central role of TVET colleges as being responsible for developing, facilitating, and coordinating partnerships but the White Paper (2013) shifted this responsibility to the SETAs and a proposed South African Institute for Vocational and Continuing Education and Training (SAIVCET). However, SAIVCET was not formed meaning that currently, DHET is still responsible for monitoring and evaluating PPPs in TVET colleges. DHET tends to put more emphasis on quantifying these PPPs and does not really check the quality and therefore relevance of these PPPs (Kruss et al., 2017).

2.4.1.3.3 Funding structure and mechanisms

Currently, DHET tends to do most of the funding of TVET colleges through budgetary allocations but because this is not enough, SETAs and other private partners fund TVET colleges (Kruss et al., 2017). The state funds 80% of the costs of college programmes and the students are liable to pay the remaining 20% of costs in terms of tuition fees. However, most of the costs students are liable for are covered by the National Student Financial Aid Scheme (NSFAS) in the form of bursaries and loans to qualifying students (DHET, 2017).

Figure 2.1 below is a diagrammatic representation of the funding model in South Africa according to the Ministerial Committee on the Review of the Funding Framework of TVET Colleges and CET Colleges (DHET, 2017). Although the total budgetary figure has changed over the years, the partners remain pretty much the same contributing similar portions of funding.
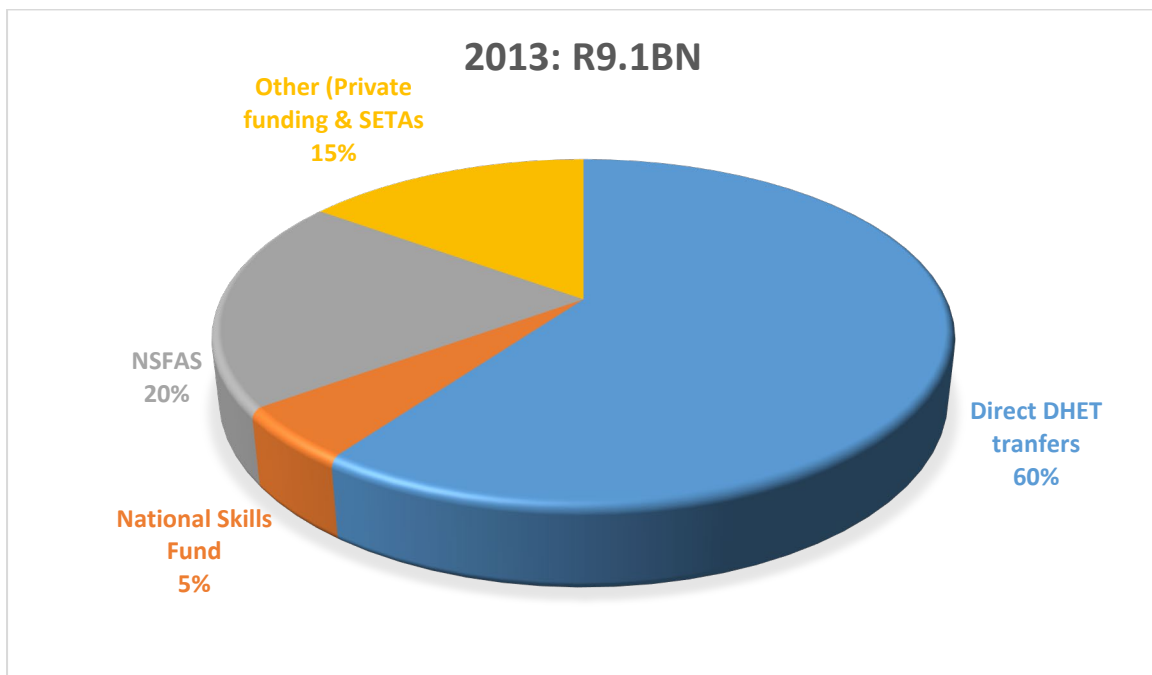
Figure 2.1: Funding Structure as of 2013 (Adapted from DHET, 2017: 23)

As can be seen in Figure 2.1 above, one can see that the government is doing most of the funding (60%) and it is not sustainable. The 15% paid by other partners includes SETAs who receive their funding from the government. The Ministerial Committee on the Review of the Funding Framework of TVET Colleges and CET Colleges (DHET, 2017), proposed other funding models and sources. These sources would include subsidies, vouchers, individual learning accounts and tax instruments (DHET, 2017). However, these remain as proposals and DHET is still the one that is mostly funding the TVET sector.

2.4.1.3.4 Forms of education and training

Kruss et al. (2017) note that there is a variety of forms of education and training that are promoted in PPP initiatives. These include workplace learning (Work Integrated Learning (WIL) or Workplace-Based Experience (WBE), cooperative education, apprenticeships, internships and job placements (Kruss et al. 2017). Workplace learning consists of taking learners and their lecturers to the industry so that they get a feel of how things are done in the industry.

Kruss et al. (2017) define cooperative education as a form of apprenticeship whereby learners work alongside industry experts and these students are paid some salary. Students gain industry experience, and the salary is a motivator to them. Employers get to use extra hands for less. Apprenticeships are long-term training of learners at the workplace whilst internships are short-term and normally a precondition to complete a qualification.

The partnerships mentioned above are, but a few examples of partnerships forged between TVET colleges and the industry. These partnership initiatives are managed centrally by DHET. There are other small partnerships forged by TVET colleges themselves and managed by the TVET college management. In this study, I sought to find out whether these partnerships are working according to plan, whether there are challenges and find ways of bolstering them so that graduates are equipped with the appropriate skills for work.

2.4.1.4   Typology of partnerships in TVET colleges in Mpumalanga

TVET colleges were initially run through provincial education departments until 01 April 2015 when all 50 public TVET colleges migrated to the national department, DHET (Parliamentary Monitoring Group, 2016). This meant that all the differences, in terms of running these colleges, were reduced. All TVET colleges fall under the national department and that means that governance, funding, education and training initiatives are the same right throughout the country. Although this study was carried

out in Mpumalanga province, the TVET colleges in this province are nationally governed.

However, there are notable variations from one province to another. The partnerships will differ depending on the partners found in the province. The Human Resource Development Strategy for South Africa (HRDC, 2014) notes that it is difficult to come up with a generic national strategy for establishing TVET college and industry partnerships because of varying national, historical, political, ideological, cultural and socio-economic contexts within which these colleges exist.

In this study, I focused my attention on TVET colleges and industries in the Mpumalanga Province. In my interviews with sampled industry players in Mpumalanga, I wanted to find out what is currently happening and what these businesses would like to see happen as far as TVET colleges and industry partnerships are concerned. This information went a long way in recommending viable strategies for TVET college and industry partnerships in Mpumalanga.

According to Yiba (2021), TVET colleges exist in a changing policy landscape and therefore must constantly seek to align their responsiveness to skills needs and align themselves closer to their stakeholders. These colleges must develop interactive capabilities to align their training to industry needs. In other words, TVET colleges must be engaged in a process of finding out what it is that the industry needs and they must align their teaching and learning programmes to accommodate these needs. This means that depending on its geographic situation, each TVET college must find out what local industries need, and they should aim to develop graduates who have these skills.

2.4.2   Concept of stakeholders

According to Fernando (2021), a stakeholder is defined as any party that has some sort of interest in a certain organisation because it can either be affected or affect the operations of this organisation. The International Organisation for Standardization

(ISO 26000), (2010), simply defines a stakeholder as an individual or group that would have a vested interest in any decision or activity of a particular organisation.

Industry, in general, is impacted by the decisions taken by TVET colleges as far as the training of students is concerned because these students are being trained for industry. Therefore, industry players have a vested interest in what goes on in training institutions so that in the end they recruit graduates that need little or no training. They would expect graduates who are ready to start working without needing a lot of time doing in-service training.

The International Organisation of Standardization (ISO) is a worldwide federation of national standards member bodies and all organisations that subscribe to ISO through their national standards bodies are expected to adhere to the norms and standards prescribed by ISO. Most TVET colleges subscribe to the norms of standards of ISO through the South African Bureau of Standards (SABS). ISO states that all organisations have a social responsibility that should take into consideration the expectations of stakeholders. In other words, an organisation is duty-bound to factor stakeholder expectations into decisions that it makes.

Considering the above, TVET colleges have a responsibility to engage stakeholders in decisions regarding the training of TVET college graduates so that these graduates meet the expectations of the industry as potential employers. This would mean identifying, primarily, what these expectations are through a consultative process. This might mean engaging the industry in all facets of training including but not exclusive to curriculum designing, workplace exposure, guest lectureship and so on.

ISO 26000 (2010) clause 5.3.2 suggests that an organisation must ask itself a couple of questions to identify who its stakeholders are. I selected a few questions from the list that might be relevant to the TVET sector for which this study is about. An organisation must find out who might be positively or negatively affected by the decisions of the organisation. If TVET colleges took unilateral decisions as far as the training of students including curriculum designing, then the industry will be affected by such decisions, as the industry will have to spend large sums of money re-training these graduates. TVET college graduates might find themselves unemployable soon

after graduation because they might be equipped with irrelevant skills that the industry does not need.

Another question that an organisation can ask itself is who can help the organisation address specific impacts to meet its responsibilities. In this case, this would be the government through the Department of Higher Education and Training and industry in terms of funding and workplace experience. One last question an organisation needs to ask itself is who would be disadvantaged if excluded from engagement. In this case, that would be the students themselves. Students are an important stakeholder in any TVET college. They must have a say in terms of the type of education and training they should receive.

In this study, I have identified the industry as one of the important stakeholders to take into consideration. The industry is a broad term that needs to be explained. TVET colleges offer a wide range of courses, and its graduates would ideally be absorbed by companies that would benefit from the knowledge and skills acquired by these students. By way of example, TVET colleges offer Financial Accounting as a course. Students who do this course would ideally be absorbed in industries that deal with financial accounting. This would include banks, companies with finance departments and financial accounting consulting firms.

In this study, the word industry would refer to all companies, both private and public, that are potential employers of TVET college graduates. This would include government departments, municipalities, state-owned companies and private firms operating in the Mpumalanga Province. All these companies need skilled labour that should be trained in TVET colleges. So, the industry is an important stakeholder of TVET colleges as TVET college graduates need to be given specific skills that would be relevant to the industry. The industry should ideally be involved in the training of these graduates from curriculum development to workplace exposure.

In this study, I went out to find out what industry players feel about collaborating with TVET colleges as far as the training of students is concerned. I sought to find out their opinions and feelings about the calibre of TVET college graduates they have had to work with. I wanted to find out how they think partnerships with TVET colleges can

improve the quality of graduates coming from these institutions. Mostly, I wanted to find out what industry players felt could be done to improve training in TVET colleges. It is also important for TVET college management to understand stakeholders' interests as far as student training is concerned.

As I have already identified TVET college graduates as important stakeholders, in this study I also interviewed students and inquired from them what they thought about the workplace-based experience and internships. In a focus group interview, I sampled those students who had had workplace exposure and found how they thought they benefitted from the workplace experience they had had. I also sampled those who had not had workplace exposure and inquired how confident they felt about starting work.

2.4.2.1   Empirical studies on the benefits of stakeholder partnership

Norton and Norton (2013) note that in some countries technical school managers and lecturers are drawn from industry and business. They note that in these countries there is a continuing personal and professional link between these technical schools and industry. However, they note that in the case of South Africa where TVET college lecturers are trained high school teachers who have no experience in the industry, there is a need for a concerted effort by TVET colleges to forge links with the industry to ensure the relevance of the courses offered (Norton & Norton, 2013). They proposed eleven (11) steps to follow to build lasting and fruitful relationships with the industry. Below are their ideas however, I combined some that seem related.

They suggest that successful TVET graduates should be invited to share their workplace experiences with students currently being trained. This would de-mystify certain things for current students and they construct a realistic view of the workplace. Related to this, they suggest that potential employers could be invited to come and speak to students and share with them what the industry expects of them once they graduate. This could be done during career days, job fairs or any other function whereby industry players can be invited as guest speakers.

TVET colleges could arrange industry visits and organise job training for both students and lecturers. This allows both students and lecturers to gain much-needed workplace exposure. Related to this, TVET college management can identify an effective partnership model used by other colleges and they learn how it is managed to initiate their partnerships. This simply means colleges with functional partnerships with industry can share their experiences with other colleges.

TVET colleges should get feedback from employers on graduates' strengths and weaknesses. From this, colleges can discover shortcomings in their training and work towards aligning training to industry expectations. The industry can also give recommendations on competencies that TVET colleges should work on. Industry leaders can also be invited to be part of TVET college's advisory councils. Industry can also be involved in drafting performance standards and assessments for students.

In their research paper, Towip et al. (2021) found that overall partnerships' performance would be very good if these partnerships were demand-oriented. This means that both the TVET colleges and industry must be willing participants in partnerships for them to yield any fruitful results. Partnerships should not be imposed but should be engaged voluntarily having assessed the benefits thereof. They also note partnerships help meet the changing skills demands of industry and technology.

This means that TVET colleges should constantly assess the needs of the industry and only engage in worthwhile partnerships. For example, there might be no need to continue training boilermakers in large numbers if the labour market demand shifts to nuclear engineering or renewable energy innovations. TVET college curriculum development must factor in changing industry demands so that these colleges offer only what is in demand. In this case, TVET colleges would cease to offer "traditional" but outdated courses that the industry or the country no longer needs.

Towip et al. (2021) noted that good partnerships allow the industry to participate in the development and management of TVET colleges to minimise mismatches in the development of a skilled workforce. They also noted that successful partnerships are those that are supported by regulatory and systematic frameworks. In other words, the

partnership must be binding to the parties involved until the dissolution of the partnership.

Finally, they noted that partnerships should be engaged with a strategic transitional objective. In other words, there must be something that TVET colleges want to change or introduce by engaging in a partnership with the industry. Normally this would be the identification of skills mismatches and integration changes to the curriculum.

2.5   BARRIERS TO TVET COLLEGE-INDUSTRY PARTNERSHIP

In a similar study carried out in the Limpopo province, Makgato and Moila (2019) noted that TVET college and industry partnerships are not effectively promoted. They noted that workplace-integrated learning (WIL) or workplace-based experience (WBE) is not at all compulsory at NC (V) level. This means that there is no sense of obligation on the part of TVET college managers to forge these partnerships. This obvious lack of collaboration between TVET colleges in Limpopo and industry stakeholders culminates in poorly trained graduates that the industry is reluctant to employ (Makgato & Moila, 2019).

They also noted that the lack of partnerships created suspicion on the part of potential employers as far as the quality of TVET college graduates is concerned. They found that most industry players interviewed did not know exactly what was going on in TVET colleges. They found that TVET colleges were seen as inferior institutions that recruit grade nine (9) dropouts who could not cope with school (Makgato & Moila, 2019). This view of TVET colleges by industry players is very damning as TVET colleges' efforts and graduates that come out of these institutions are regarded with contempt.

Makgato and Moila, (2019) finally found that there was no clearly defined regulatory framework that set operational parameters for TVET college and industry partnerships. Students, especially those doing the Nated programmes, took it upon themselves to find internships and little attention was paid to the relevance of the learnership. Students were mostly engaged in unrelated learnerships just so that they complete the requisite eighteen (18) months to graduate and then look for "real" jobs.

2.6 SUITABLE PARTNERSHIPS TO ENHANCE EMPLOYABILITY

In this section, I discuss possible partnerships, that can be entered into by TVET colleges and industry players to enhance the employability of TVET college graduates. I also note some advantages and disadvantages of these partnership models.

2.6.1 Work Integrated Learning

The Swiss-South African Cooperation Initiative (SSACI, 2014) provides TVET college lecturers with an opportunity to develop themselves by acquiring workplace-based experience. This initiative is called Work Integrated Learning (WIL). As part of their continuing professional development (CPD), lecturers are required to spend a certain amount of time in workplaces as full-fledged staff members with a view of acquiring work experience. This is done so that lecturers can infuse their work experience into their teaching.

On their website, SSACI proposes a two-year WIL programme for TVET college lecturers. In year one, the focus is on planning for and engaging in WIL. There is a review period towards the end of the first year whereby lecturers plan how they would integrate their WIL experience into their teaching. Year two focuses on integrating their learning into their teaching. Towards the end of year two, there are best practice workshops with other lecturers who would either have undergone WIL or are yet to undergo it (SSACI, 2014).

Judging only from the above, it is easy to see the immediate advantages of WIL. It is a well-planned programme of workplace immersion. TVET college lecturers are exposed to the workplace so that they transfer these learned skills to their students in class. From the above description of WIL, one might initially be taken aback by the two years. However, of the two years, the actual placement at the workplace would run between March and July of the first year. That means lecturers can do WIL during college holidays.

WIL requires intensive planning by management and good partnerships with the industry which must be willing to accept these lecturers to use their workplaces as

learning areas. WIL also requires close monitoring and supervision for it to be worthwhile otherwise lecturers might find themselves exposed to irrelevant skills. Some lecturers might find it difficult to relate what they experienced with what they must teach. Therefore, feedback must be thorough and best-practice workshops should be taken seriously (SSACI, 2014).

Taylor (2013) lists some advantages of WIL as increased alignment of college programmes with industry. During the period when lecturers come back from WIL and they apply what they would have learnt to their teaching, they discover what is less important and what is very important. They align their teaching programmes to match industry expectations. They begin to understand what the workplace emphasizes. If lecturers are clued up about what the workplace needs, this tends to reflect on the kind of graduates that come from institutions with these kinds of lecturers. Taylor (2013) also says that in the end, it improves the colleges' reputation of providing high-quality training that ultimately leads to employment.

Although I did not sample lecturers in this study, I sampled TVET college management, and I asked them questions about WIL. I was interested to find out if the programme still exists, whether it is mandatory for lecturers and what perceived benefits and shortcomings if any. I also wanted to find out if there were suggestions on how to improve this programme.

Bolnick (2019) defines WIL as a programme to be undertaken by students at a TVET college. He says that WIL provides students with an opportunity to apply what they would have done in class to their chosen field of interest. However, for this study, I reserved the term WIL to refer to a lecturer's programme of workplace exposure. The next section deals with a programme designed for students.

2.6.2   Workplace-Based Learning

Taylor (2013) defines workplace-based experience/learning (WBE) as a student version of WIL described above. She describes it as a shorter period of learning and experience in a "real world" workplace. This is different from simulated work situations, but students go to the workplace and function as fully-fledged employees. The learning

period lasts between five and fifteen days. Students are involved in authentic work and not just observing and taking notes.

As one can see, although the envisaged period of workplace-based learning is short, there are many benefits that students get. Students get to apply knowledge and skills which leads to better career understanding. This, in turn, improves graduates' employability because they have an in-depth understanding of the world of work and work ethics and they have gained soft skills. Finally, students' motivation is enhanced thereby improving throughput and pass rates (Taylor, 2013).

Taylor (2013) says that WBE also has some advantages for the employers as well as the college itself. She says that WBE reduces recruitment costs for employers as graduates have the requisite experience. Employers benefit from "extra hands" during the placement period thereby increasing productivity at no extra cost. Most of these placed students are not paid by the industry but receive a stipend from the various SETAs that are available. WBE improves employers' knowledge of TVET colleges thereby encouraging chances to influence the curriculum. This proximity to the industry might give the college additional training material through donations from the workplace.

Paterson, Keevy and Boka (2017) suggest a WBE that is compulsory and forms part of the training of students. In their model, students are required to apply the college-based theory to practical activities in a real working environment to improve their vocational and occupational skills. WBE becomes part of students' "Integrated Summative Assessment Task" (ISAT) requirements. Students are given sub-tasks right throughout the year and they complete them at different intervals. Typically, to complete these tasks, students have to go to the workplace. No student is allowed to sit the final examination without this ISAT mark (Paterson et al., 2017).

In this study, I sampled some current students and graduates. I asked them whether they had a chance to do WBE and if they did, I asked them about their experiences with it. I wanted to find out if they thought their experiences were worthwhile and how they thought WBE could be improved. I also wanted to find out if this WBE was

compulsory or if students could only do it if they felt like it. I also wanted to find out if there were any incentives for students who do WBE to encourage them.

2.6.3   Internship programmes

Another way of partnering with the industry is by having internship programmes. An internship can be defined as a period of work experience offered by an employer to a student as part of the student's requirement to complete a qualification (allaboutcareers.com). Students become fully-fledged members of staff but have a logbook where they report what they would have done on certain days. Normally these students are supervised and monitored by employers as well as their college lecturers.

An internship programme is typically done after the completion of college-based training, but students need to do an internship to be certificated. This workplace immersion gives the students invaluable experience that they would use when they finally get their permanent jobs. It is important to note that these interns must be placed in their areas of study so that the experience is relevant. For example, a student who specialises in office administration must be placed in working environments that require them to put office administration theory into practice.

Internships are compulsory for students to graduate when they are doing the "National Accredited Technical Education Diploma" popularly known as the NATED courses or Report 191. Although internships are for the NATED programme, it is my opinion that they can also be considered for the NC (V) programme. In my study, I interviewed students who had done and some who were still doing their internships. I wanted to find out what they thought of their workplace exposure and whether they thought this was worthwhile.

2.6.4   Curriculum updating programmes

Industry players can be invited to participate in curriculum updating sessions. It is hoped that these industry players would identify skills gaps and suggest useful content to incorporate into the curriculum. With the fast-changing technology, industry adapts quickly to the changes, and it is hoped they would advise the TVET colleges on more

efficient ways of doing business (UNESCO-UNEVOC, 2020). If the curriculum is relevant, then the graduates that come from these colleges would also be relevant.

2.6.5   Learnership or apprenticeship programmes

The Glassdoor Team (2018) distinguishes between an internship and a leadership or apprenticeship by saying the former is done for a shorter period and the student goes on to look for a job. However, they say that an apprenticeship is done for a longer period, usually spanning years of industry learning and students go on to get highly-paying specialised jobs.

Whilst an intern would initially have a full-time training period at a college and then undergo an internship, an apprentice learns everything at the workplace. By its design, apprenticeships are not really for the National Certificate Vocational (NCV) programmes which are full-time courses. For TVET colleges internship programmes are more relevant.

2.6.6   Industry training for lecturers

Industry training for lecturers is slightly different from WIL. In industry training, a lecturer who is less competent in a certain area is sent to the workplace to learn that skill and then they come back to college to impart the skill to the students (Towip et al., 2021). For example, a lecturer in mechanical engineering who might not quite know how to operate a diagnostic machine might benefit from industry training in one of the major service stations to learn this skill. Technology changes fast and in most instances, industry adapts to these changes faster than training institutions.

2.6.7   Guest lectureships

Sometimes the college can invite industry experts to come and give lectures to students. Students and lecturers alike get to find out what goes on in industry without leaving the college premises. In their paper, Towip et al. (2021) found that guest lectureship accounted for 8% of the total observed partnership cases. One advantage they noted was that it brought the world of work into the classroom.

One disadvantage I see here would be for subjects that rely on big industrial machines. A problem might arise where a TVET college does not have the machine or has old-fashioned machines with which the guest lecturer might not be familiar. Sometimes systems at academic institutions change faster than at the workplace and the guest lecturer might still be stuck on an old way of doing things. This may confuse the students.

2.6.8   Joint research

In their study, Towip et al. (2021) noted that this was one of the most important types of partnerships. Academic college lecturers' experts in a certain field come together with industry experts to research a certain field. This benefits both the industry and the TVET colleges. Experts from both ends of the partnership work together to improve operations and find innovative ways of doing things.

This partnership will not only involve lecturers and industry experts but also students. An example whereby students will be asked to participate would be during science projects where students would be asked to be creative and develop models from various concepts. Alternatively, students can be presented with a problem and they have to find a solution. For example, students can be asked to develop a mini stadium that has a roof that can open and close depending on the weather. This model can be used to design a real stadium that is weather-sensitive.

The obvious advantage here is that students, lecturers and industry experts acquire even more knowledge than would be currently available. Together they become experts who have an in-depth understanding of the field in which they operate. However, one shortcoming I can foresee would be that the TVET education system is examination-oriented. That means a student who engages in this research might not get any credit for it but must just sit the examination and pass it.

2.7   CONCLUSION

In this chapter, I discussed the emergence of Technical and Vocational education and Training (TVET) colleges internationally and in South Africa. I discussed the concepts of partnerships in greater detail and discussed the types of partnerships that are there internationally and also in South Africa. I went on to discuss stakeholders of TVET colleges and discussed how these stakeholders can collaborate with these TVET colleges in South Africa and Mpumalanga in particular. I discussed possible barriers to successful partnerships between TVET colleges and their stakeholders. Finally, I discussed possible partnerships that could enhance the employability of TVET college graduates, especially in the Mpumalanga province.

The next chapter deals with research methodology. I discussed the research design and explained the rationale for choosing it. I enumerated the research questions and sub-questions. I also discussed the aims and objectives of the research. I discussed the population of this research and how I sampled participants in this research. I discussed issues around research ethics and how I ensured trustworthiness. I discussed instrumentation, data collection procedures and data analysis and presentation.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1   INTRODUCTION

In the previous chapter, I discussed the emergence of Technical and Vocational Education and Training (TVET) colleges globally and then focussed attention on South Africa. I discussed the concepts of partnerships in detail and discussed the types of TVET partnerships engaged internationally and in South Africa. I then discussed stakeholders of TVET colleges and discussed how these stakeholders can collaborate with these TVET colleges in South Africa and Mpumalanga in particular. I discussed the benefits and possible barriers to successful partnerships between TVET colleges and their stakeholders. Finally, I discussed possible partnerships that could enhance the employability of TVET college graduates, especially in the Mpumalanga province.

In this chapter, I focused attention on the research methodology used in this study. I discussed the philosophical foundations of the study, the philosophical paradigm, and the research design, explaining the rationale for choosing it. I described the population of this research and explained how I sampled participants in this research. I discussed issues around research ethics and how I ensured trustworthiness. I also discussed instrumentation, data collection procedures and data analysis and presentation.

3.2   PHILOSOPHICAL FOUNDATIONS OF THE STUDY

All researchers employing either quantitative or qualitative research still must understand and explain the research paradigm within which their study falls. They should be able to explain the philosophical underpinnings of their study. Salvador (2016) says that each paradigm has three important assumptions or questions which are ontology, epistemology and methodology.

3.2.1 Ontology

Ontology deals with the study of the nature of reality. In quantitative research, ontology is discussed in terms of the belief in some universal truth and objectivity (Spenser, Pryce & Walsh, 2014). This belief about truth would necessitate appropriate methods of collecting data and understanding reality. In qualitative research, the belief is that there is no universal reality, but that reality is subjective and contextual. Reality should always be understood in the contexts within which it exists (ibid, 2014; Hays & Singh, 2012).

In this research, I used the qualitative research approach, and my worldview is that it is possible to have multiple realities and that the truth is socially constructed. In this research, I wanted to explore various stakeholders' views on TVET college-industry partnerships. I wanted to find out how these stakeholders experience these partnerships. It is possible to have excellent policy documents and multiple partnerships but if stakeholders do not feel that these are beneficial to them then these partnerships might as well not be feasible. I wanted to find out how these stakeholders thought these partnerships could be improved.

3.2.2 Epistemology

Epistemology is the study of the process of knowing. It is concerned with how we gain knowledge of what exists and the interface between the researcher and the participant (Guba & Lincoln, 2008). In quantitative research, the researcher and the participant are considered independent of each other. This allows the researcher to use rigorous and systematic means to study participants objectively without any bias (Spenser, Pryce & Walsh, 2014).

On the other side of the spectrum, qualitative research emphasises the understanding that both the researcher and the participant actively construct knowledge. The two exert equal influence on each other (Rehman & Alharth, 2016). This dynamic interaction between researcher and participant is viewed as key to capturing the inherently contextualised experiences of the participant. The idea is not to remove

researcher bias but to improve the trustworthiness of the findings (Spenser, Pryce & Walsh, 2014).

In this research, I was an interested party in the research being a TVET college lecturer who would like to see more TVET college-industry partnerships. However, as explained in section 3.10 below, I made sure that only the views of the participants were captured. Some degree of impartiality was maintained. In in-depth and focus group interviews, I played the role of a moderator only making sure that issues about the scope of the research were discussed but I did not try to manipulate or alter the opinions of the participants.

3.2.3 Methodology

The methodology is thought of as a sort of blueprint of how to carry out research within the confines of a particular paradigm. It is the action plan, which determines the kinds of research methods to be used in research. Singh (2019) says that after deciding which ontological and epistemological perspectives a researcher will use, only then can he or she decide on the appropriate methodology.

3.3   RESEARCH PARADIGM

In this research, I chose the interpretivist paradigm. The paradigm assumes that knowledge related to human and social sciences is subjective as humans interpret reality and react to it in that way (Pham, 2018). That means that the more people there are the more interpretations there are and this makes it difficult to have the same unit of measurement. Each in-depth interview and focus group yielded different interpretations of reality, but it was my job as the researcher to process these and attach meanings to them. It was also my job to make sure that the interpretations were captured accurately and see how these influenced their perceptions of partnerships.

With this said, in this study, I realised that the findings of this research could be very different if the same study was carried out in another province. The reality that obtains in Mpumalanga province may be very different from realities in other provinces. I did

not seek to generalise the findings but to present an in-depth study of the reality in the Mpumalanga province.

Interpreting means to derive meaning out of something and draw inferences or make judgements. The interpretivist paradigm is concerned with understanding the world from the subjective experiences of participants (Antwi & Hamza, 2015). Unlike the positivist paradigm, there are no variables in the interpretivist paradigm. All that matters is to better understand the world through first-hand experience and truthful data presentation using participants' actual words (Merriam, 1998).

The ontological view of the interpretivist paradigm is relativism, which surmises that reality is subjective. The main reason is to understand the subjective world of human experience (Kivunja & Kuyini, 2017). The epistemology of the interpretivist paradigm is transactional and subjectivist because the researcher and the subjects are thought to be linked interactively and findings are generated as the investigation unfolds (Singh, 2019).

In this research, I interacted with participants discussing issues of mutual interest. The issue of student employability is everyone's concern, and it is the assumption of this study that improved TVET colleges and industry partnerships would enhance graduates' employability. However, an effort was made to make sure that the views of the participants were captured accurately. I just guided the data collection process so that only those issues that addressed research questions were discussed.

3.4   RESEARCH DESIGN

3.4.1   Introduction

A research design is defined as *"…a plan or strategy that moves from the underlying philosophical assumptions to specifying the selection of participants, the data-gathering methods to be used and the data analysis to be done"* (Niewenhuis in Maree, 2016:72). A research design can be viewed as a detailed explanation why and how research is going to be conducted in a certain way.

Cohen, Manion and Morrison (2011) say that the choice of a research paradigm is dependent on what the researcher wants to achieve. In other words, the research design must be appropriate for the research. Jilcha (2019) says that the main purpose of a research design is to provide an appropriate framework for addressing the research questions. McCombes (2021) goes on to say that it is the type of data sought, the participants and sources of information, and the methods used in collecting and analysing this data that determine one's choice of research design.

In this study, the data I used was qualitative. Busetto, Wick and Guminger (2020) define qualitative research as the study of the nature of phenomena and that includes their quality, their different manifestations, the context in which they appear and perspectives from which they can be perceived. In this study, I wanted to find out what type of TVET college and industry partnerships exist in Mpumalanga province. Linking this to the definition above, I explored the quality of these partnerships, their different forms and how beneficial they are to all stakeholders involved.

As can be seen above, this type of research would require methods that would solicit participants' perceptions, evaluations and judgements about the phenomenon under study, public-private partnerships. Bhandari (2020b) says that qualitative research is conducted not to collect numerical data but to gain in-depth insights into participants' understanding of concepts, opinions, and experiences.

3.4.2 The research paradigm and research approach

A research paradigm is defined as *"…a set of assumptions or beliefs about fundamental aspects of reality which gives rise to a particular worldview"* (Maree, 2016: 52). Qualitative researchers tend to assume that reality is socially perceived and constructed by people. In qualitative research, the researcher seeks to get close to participants to gain in-depth insights into the subjective dimensions of the phenomenon they study. The qualitative researcher will ask questions, collect data, analyse it and then make logical interpretations thereof (Antwi & Hamza, 2015).

The research paradigm that I chose for this research is interpretivism. Interpretivism which is also called 'anti-positivism' or 'naturalistic inquiry', is viewed as a more subjective way in which to interpret data. There are therefore no precise, systematic and theoretical answers to complex human problems. Every cultural and historical phenomenon should be understood to be different and unique and requires careful analysis of the uniquely defined and peculiar social contexts in which it exists (Nel, 2019).

The research approach I chose for this study is qualitative. Qualitative research is mostly concerned with understanding human behaviour from the research participant's perspective and the assumption made here is that reality is dynamic and negotiated. Data are usually collected through observation and interviews with the research participants (Palagans et al., 2017). In this study, I made use of in-depth interviews and a focus group with sampled participants to address the research question and sub-questions. I also made use of document analysis. These research instruments and sampling methods are discussed later in this chapter.

Busetto et al. (2020) say that qualitative research tends to be flexible, open and very responsive to context. This means that the data that were collected in this research, were to be context-based. It brought to light the situation experienced by participants in Mpumalanga province. No attempt was made to try to generalise the findings of this research to other contexts that I did not investigate.

3.4.3 The rationale for selecting the qualitative research design

Gaille (2017) identified a variety of advantages and disadvantages of using the qualitative research design. Of the advantages, she said that subject materials were evaluated in greater detail and that research frameworks could be fluid and based on available data. Data were based on human experiences and observations and the research could create industry-specific insights. She also noted that qualitative research allowed for smaller sample sizes which, in turn, saved on costs. She said that with qualitative research it was possible to note and explain an attitude which was difficult with quantitative research (Gaille, 2017).

Gaille, however, cautioned that qualitative data could be overly subjective as the researcher's influence could not be ruled out. Data collection could be time-consuming as it involved observations, in-depth interviews, and focus group interviews. She also noted that whilst the data collected were valuable, data presentation could be very difficult. The data collected cannot be generalised and may not be accepted in some circles. She also noted that researchers needed to have a certain level of industry-related expertise on the topic being investigated (Gaille, 2017).

In this study, I made sure that I maintained absolute objectivity although, being a TVET college lecturer, the subject being investigated was of importance to me. In sub-sections 3.10.2 and 3.10.3, I discussed my role and competency as a researcher and how I maintained objectivity throughout the study. I collected the data but to be sure that I correctly interpreted what the participants would have said, I went back to them to check whether what I had captured represented their personal views as much as possible. I made sure that the data collected were corroborated by data collected elsewhere.

3.5   RESEARCH METHOD

The interpretivist paradigm uses methodologies like a case study, phenomenology, hermeneutics, ethnography and so on (Haradhan, 2018; Singh, 2019). There is a difference between a methodology and a method. Antwi and Hamza (2015) say that the methods used to collect qualitative data would include semi-structured in-depth interviews, observation, focus groups and document analysis amongst others. Research methods are discussed in sub-section 3.8, which discusses instruments of research. In this study, I used a case study. Below is a discussion of the case study.

3.5.1   Case study

A case study is an in-depth study of one person, group or event. Case studies are subjective by nature and the results cannot be generalised to a larger population (Cherry, 2021). A case study allows the researcher to explore a phenomenon within a

specific context through various data collection methods to reveal the multifaceted nature of the phenomenon (Rashid, Rashid, Warraich, Sabir & Waseem, 2019).

A case study is good when the researcher wants to describe, compare, evaluate and understand different aspects of a research problem. It allows the researcher to gain concrete, contextual, in-depth knowledge about a specific real-world problem. It allows for a deep exploration of key characteristics, meanings, and implications of the case under study (McCombes, 2020).

In this study, I explored the phenomenon of partnerships in the context of TVET college and industry in Mpumalanga. I made use of semi-structured in-depth interviews, a focus group and document analysis. With this, I hoped to explore the attitudes, opinions, views and perceptions of various participants to address the research questions. In this research, I sought to find out what participants think of the current partnerships, whether they think these are beneficial and how they think these could be bolstered to make them more effective.

3.6   POPULATION AND SAMPLING

Bhandari (2020b) defines a population as the entire group from which conclusions will be drawn. So, this is a group that exhibits elements or characteristics that a researcher wants to study. In this study, the population would be all TVET college staff and students in Mpumalanga, Mpumalanga TVET college management, managers in public and private enterprises in the Mpumalanga province and DHET officials.

Bhandari (2020b) says that a sample is a specific group from which data is going to be collected. This group is usually smaller than the population unless a census is conducted. Turner (2020) says that there are two types of sampling namely probability and non-probability. Turner goes on to say that non-probability sampling is associated with case studies. Under non-probability sampling, I chose the judgemental sampling technique. Obilor (2023) defines judgemental sampling as choosing participants because they possess qualities that the researcher deems necessary to address

research questions. These participants are better placed to provide worthwhile information.

In this study, I sampled a total of twenty-one (21) participants. I sampled two Deputy Principals responsible for academics (DPA). That means I sampled one from each of the two colleges in Mpumalanga. I also sampled two Student Support Services officers in the two colleges, and I sampled one official from DHET directly responsible for curriculum development and support.

I also sampled five managers from sampled workplaces in Mpumalanga. I tried to sample workplaces that offer similar workplace skills as college courses offered. Finally, I sampled eleven students. The number seems to be large, but I wanted to sample students from all the colleges in the province so that I get an idea of how they experienced workplace exposure. Therefore, I made a deliberate effort to sample students who have also had experience in WBE or any other workplace exposure during their study at the colleges. As can be seen, I purposely sampled the participants because I felt they possessed worthwhile information.

Vasileiou, Barnett, Thorpe and Young (2018) say that the issue of sample size in qualitative research is contentious. They note that, in qualitative research, sample sizes are usually small to allow for depth in case-oriented analyses. They also note that these samples are normally purposive. Participants are selected by their ability to provide profound information relevant to the phenomenon under study.

In this study, I did not pay too much attention to the sample size. I, however, made sure that the sampled participants could provide the relevant data that would help in addressing the research questions. In this study, the views of all stakeholders, that is, TVET college management, students and industry players were very important.

3.7   ETHICAL CONSIDERATIONS

Head (2018) noted that of late educational research and qualitative research in general, has seen an increasing insistence on research ethics. Studies have been subjected to ethical review boards since the 1990s. Universities have responded by

setting up ethics review committees or boards to make sure that research is done in adherence to strict ethical procedures (Head, 2018).

Before data were collected, I sought ethical clearance from the University of South Africa. In the application, I detailed how I would ensure that participants were not compelled to participate but would willingly consent to participate. I also explained how I would maintain anonymity, privacy and confidentiality. The following sub-sections deal with these concepts in more detail.

I wrote an e-mail requesting the three college principals to allow me to conduct a study at their colleges. In this e-mail, I introduced myself and explained the purpose of the study. I assured the college principals that sampled participants' informed consent would be sought before the research could be carried out. I also assured them that the data collected would be kept confidential and the identities of the colleges and participants would not be exposed. The Department of Higher Education and Training has a special form to ask for permission and this is DHET 004: Appendix 1. I completed the form and attached it to the e-mail sent to the college principals.

3.7.1 Informed consent

Xu, Baysari, Stocker, Leow, Day and Carland (2020) consider informed consent to be the cornerstone of research ethics. They define informed consent as a voluntary choice by a research participant to be part of the study. The participant should be given sufficient information about the research and must have an adequate understanding of both the proposed research and the implications of participating in it (Xu et al., 2020).

Nusbaum, Douglas and Damus (2012) say that informed consent requires robust communication by the researcher of all the risks and benefits of participating in the research so that the participant makes an informed decision on whether to take part. They say that it is ethically inappropriate not to fully inform the participant of certain discomforts of participating in the research.

In this study, I asked for consent from the participants. In the letter of consent, I introduced myself and then briefly explained the scope of my research. I informed the participants that they would be required to participate in a focus group or in-depth interview. In the letter, I estimated the duration of the interviews and pointed out that these interviews would be audio-recorded to aid transcription of the interviews later. I also pointed out that the interviews would be conducted in a safe environment and that the identities of the participants and the information gathered would be handled with the utmost confidentiality.

I wrote a letter seeking consent from sampled managers in different companies requesting their permission to conduct research in their organisations. In the letter, I introduced myself and explained the purpose of my study. I explained to the managers that informed consent would be sought from the participants. I also assured the managers that the data collected would be handled with the utmost confidentiality. I, however, said that the results and recommendations of the study would be available should the managers require these to enhance their engagement with colleges.

3.7.2 Anonymity and confidentiality

Allen (2017) says that anonymity and confidentiality are ethical practices that are designed to protect the privacy of human subjects during data collection, analysis, and presentation. In any research, the researcher must hide or modify any information that is personal and could identify a participant. Allen goes on to say that anonymity is used in quantitative research whilst confidentiality is used in qualitative research (Allen, 2021).

In this study, I assured all the participants that the information that they provided would be kept in confidence. In this report, I made sure not to mention participants' names, TVET colleges' names or company names. I did this to protect the dignity of persons and their institutions. In considering confidentiality, I have noted that absolute confidentiality in this research is not possible. I realised that mentioning the position of a participant at the college means that a person who wants to know can find out who

the office bearer is. For example, each college has one Deputy Principal: Academic Services (DPA) and they are known by name by everyone.

Given the above challenge, I made sure that I did not associate utterances with any specific individual. So, whilst one can find out who the participants from the TVET colleges were, I made sure that I did not reveal what each participant said. No names of individuals and establishments were mentioned in this study. In this study, information is more important than the sources. All participants and institutions were assigned code names which were used instead of actual names.

Maintaining confidentiality for focus groups presents distinct challenges from those experienced in one-on-one interviews (Sim & Waterfield, 2019). The researcher cannot guarantee complete confidentiality because other participants may subsequently communicate after the interview. Sim & Waterfield suggest that the consent-seeking process must outline this risk and let the participants willingly consent to the interview with full knowledge of the facts. They also say that during the focus group, the moderator must be sensitive and avoid topics that encourage over-disclosure.

In this research, I approached the focus group participants and explained to them the nature of the research. I assured them that the study does not require their personal information but just their opinions about partnerships and how these could be improved. I also assured them that their opinions would be treated with utmost confidentiality but I also told them that whilst all efforts were going to be taken to ensure that their opinions remained anonymous, there was a possibility that fellow participants could communicate their contributions outside the focus group context. This is why I assigned code names to each of them and during the focus group they were introduced to one another using these code names and not their actual names.

3.8   INSTRUMENTATION

In qualitative research, history or life stories, discussion groups, in-depth interviews, case studies and focus groups, are used (Trigueros, 2017). In this study, I selected in-depth and focus group interviews. I also chose to use document analysis. These research instruments are discussed below.

3.8.1   Semi-structured in-depth interviews

An in-depth interview is defined as a qualitative research data collection method whereby the researcher collects data directly from the respondent during a question-and-answer session. Normally the questions are unstructured and the participant is given ample time to explain and say opinions, experiences and values (Showcat, 2017).

I decided to use semi-structured in-depth interviews. This usually consists of a dialogue or conversation between the researcher and participant guided by a very flexible interview schedule, which allows for probes, follow-up questions and comments. It allows the researcher to collect open-ended information to explore participants' thoughts, feelings and beliefs about a particular subject (Dejonckheere & Vaughn, 2018).

Adams (2015) gives a few hints on how to conduct these interviews. He reckons that the first thing to be done is to establish rapport and make the participant feel comfortable. This can be achieved by engaging in general conversation so that the participant feels at ease. He says that question drafting and the development of the interview guide should be done as meticulously as possible. The interview guide must have all the relevant questions that would address the research questions. Of course, these questions are usually followed up with probes to gain clarity. The researcher must also be sensitive as concerns the dress code. If participants from poor communities are being interviewed, the researcher can dress casually otherwise the researcher should be formal to look professional (Adams, 2015).

In this study, I conducted semi-structured in-depth interviews with an official from DHET, two DPAs, two SSS officials and five managers of private enterprises. The purpose of these interviews was to find out their opinions about TVET college and industry partnerships. I wanted to find out if there are any partnerships between TVET colleges and industry and whether they thought these partnerships were worthwhile. I also wanted to find out how these participants thought these partnerships could be improved. It is important to note that in these interviews, some questions were asked but were not on the schedule. This was normally in the form of follow-up questions to seek clarity on issues.

3.8.2 Focus group interviews

Mishra (2016) defines a focus group interview as a form of group interview in which a small group of participants is led by a moderator in a semi-structured way discussing various issues of mutual interest. Mishra notes that the group size is about six to twelve group members, and the composition of the group is very important as it influences the data collected. Therefore, every researcher must pay particular attention to the group mix (Mishra, 2016).

Nyumba, Wilson, Derrick and Mukherjee (2018) say that a focus group interview is a qualitative data collection method used to gain in-depth insights from participants about a variety of social issues. They say that the group is mostly selected purposely and is not necessarily a statistically representative sample.

In this research, I purposefully sampled a total of eleven TVET college graduates. I made sure that I sampled those students who had industry exposure during their training and those who had none. I also sampled students from both sampled colleges in Mpumalanga province. A variety of issues around the subject of TVET college-industry partnerships were discussed. The focus group interview schedule attached as Appendix F has questions that address the main issues but during the interviews, there were follow-up questions. The interview took the shape of a conversation.

Miller (2020) lists the advantages and disadvantages of a focus group. Focus group interviews provide a wide range of responses and they serve to confirm insights obtained from other methodologies. A focus group is cost-effective and time-saving and it provides anonymity for the participants. Responses are not attributed to individuals but to the group (Miller, 2020). However, in this study, responses were attributed to individual labels and not the names of participants. I labelled the participants FG1 up to FG11.

The disadvantages of focus groups include that some group members can be too domineering such that the views of the less vocal members are ignored. There is generally less speaking time for each respondent compared to an in-depth interview. It may be difficult to prevent bias from the moderator especially if the moderator is also affected by the issue under discussion. This requires a concerted effort by the moderator to remain objective. One way of achieving this is to speak less and listen more (Miller, 2020).

In this study, I allowed the participants to speak more with no interruption. I encouraged the less vocal members to air their opinions as well. I explained to them that all responses were important and that having different points of view was acceptable. The point of a moderator in a focus group is to guide the discussion so that it remains focused on issues under investigation.

3.8.3   Document analysis

Frey (2018) defines document analysis as a form of qualitative research that analyses documentary evidence to answer specific research questions. This is not a random exercise, but it is systematic and it requires repeated review, examination and examination of the data collected. It is usually used in conjunction with other qualitative methods for triangulation purposes (Frey, 2018). To be systematic, I developed an instrument that guided me in selecting the documents and the type of information sought. This instrument is attached as Appendix G.

In this research, I collected data using document analysis. This included policies that govern public-private partnerships, partnership agreements, e-mail, memoranda

confirming the existence of partnerships and many other documentary proofs that may help in addressing the research questions. I found these documents from the student support offices of the sampled colleges. I also collected documents from DHET to find out if there are any known partnerships in Mpumalanga between TVET colleges and the industry. This served the purpose of corroborating or refuting data collected using other methodologies.

3.9   DATA COLLECTION PROCEDURES

I collected data from the official from the DHET official. I did this so that I get DHET's position on TVET colleges and industry partnerships. I wanted to find out whether there were any policies or regulations that had to be adhered to before TVET colleges could enter into partnerships with industry. I wanted to find out the role played by DHET in facilitating these partnerships and what were the areas of partnership. I analysed documents that attested to the existence of partnerships at DHET level. These documents included correspondences between DHET, TVET colleges and various partners. Sometimes it would be invitations to syllabi reviews or other operational items.

I then collected data from college management. I wanted to find out how TVET colleges managed partnerships. I wanted to find out whether there were partnerships and which areas of cooperation they covered. I wanted to find out how these partnerships benefited the TVET college students. I also wanted to find out the roles that TVET colleges and industry played in these partnerships, especially about the placement of students in industry. To corroborate what the officials said, I collected and analysed documents that attest to these partnerships. These documents included memoranda of agreement (MOAs), correspondences, lists of partners from TVET colleges and so on.

Next, I collected data from industry partners. I wanted to verify whether or not they had partnerships with TVET colleges and whether these partnerships were formal or informal and what the areas of cooperation were. I wanted them to evaluate these

partnerships as a way to empower the students and solicit their recommendations for improved partnerships.

Finally, I carried out the focus group interview with the students. I wanted them to describe their experiences of the industrial attachment and evaluate its worth. I also wanted to find out from these students their opinions about how these partnerships could be improved. I did document analysis where I checked their logbooks. I wanted to see what monitoring or supervisory plans were in place. I compared the information I gathered from logbooks with what the students and managers said.

3.10 DATA ANALYSIS AND PRESENTATION

Ngulube (2015) notes that the process of data analysis and presentation in qualitative research is a very important step but he notes that the process is labour-intensive and time-consuming. Qualitative research tends to yield a lot of data that needs to be sifted through and made sense of (Ngulube, 2015). In the next sections, I explained how I handled data analysis and data presentation.

3.10.1 Data analysis

Ngulube (2015) defines data analysis in qualitative research as a process of creating meaning and making sense of a myriad of data collected using various methodologies. To successfully analyse the data, a researcher needs to do three things namely organising data, coding and presenting the data in a variety of forms (Ngulube, 2015). This means putting data that is similar together and allocating an identifying code for easy identification.

In this study, I audio-recorded the interviews and later transcribed the information. During the interviews, I sought clarity from the participants if the responses sounded vague to me. During transcription, I did member checks to be sure that what I thought I had transcribed was a correct representation of what the respondent had said. After transcribing all the interviews, I grouped similar responses and these became emerging themes and sub-themes from the data collected. I had to interpret some of the responses and make sense of them. Sometimes I had to interpret laughter and some other non-verbal cues from the participants.

As far as document analysis was concerned, I requested pertinent documents that attest to the existence of partnerships or gave any other information about these partnerships. I then scrutinised the documents from various sources and I used the information for triangulation purposes. The documents served the purpose of confirming data collected using other instruments. Sometimes lack of certain documents was also meaningful. For example, there were instances where there were no memoranda of understanding (MOU) between TVET colleges and industry partners.

Streefkerk, R (2019) says that inductive rather than deductive data analysis is common in qualitative research. Whilst deductive data analysis aims at testing an existing theory, inductive data analysis tends to develop a theory (Streefkerk, 2019). In this study, I used inductive data analysis. This means that I collected data first and only during data analysis did themes emerge from the data. In other words, I realised patterns in collected data during the analysis phase.

In this study, I made use of both discourse and analysis. Luo (2023) defines discourse analysis as a qualitative and interpretive method of analysing written and spoken language taking into consideration the details and the context within which the words were spoken. In this study, I interpreted participants' responses paying particular attention to the context in which the responses were given. I did not take words in isolation but considered the whole context.

Kaluza (2023) says that narrative analysis is a data analysis method associated with qualitative studies. It focuses on interpreting the core first-person narratives but also paying attention to a variety of non-verbal cues that go with words. In this research, I had to interpret non-verbal cues such as gestures, facial expressions, and sound signals like laughter, hesitations and so on. In cases where I was not sure, I asked the participant to explain for example why they laughed.

3.10.2 Data presentation

In this study, data are presented in tables, pie charts, graphs and figures. This is so that I give a visual impression of the findings. It is easier to interpret the data once it is organised and presented in this way. Qualitative research yields a lot of data which when not organised might be very difficult to comprehend. It is not all data that were relevant so I was also engaged in the process of editing and discarding data that I deemed not useful.

3.11 TRUSTWORTHINESS OF THE RESEARCH

In this section and the sub-sections that follow, I discuss how I made sure that I maintained trustworthiness in this study. Connelly (2016) defines trustworthiness as the rigour of the study that refers to the degree of confidence in data, interpretation and the methods used to ensure that the study can be considered worthy of consideration by readers.

Korstjens and Moser (2018) define trustworthiness as a quality assurance measure for qualitative research. They list reflexivity, triangulation and member checks as some of the strategies used to ensure trustworthiness in qualitative research. They also mention credibility, transferability, dependability and confirmability as important criteria used in qualitative research to ensure trustworthiness. I discussed these concepts below and other trustworthiness strategies I used in this study.

3.11.1 Researcher role and competency

The role of a researcher in qualitative research is to attempt to access the thoughts and feelings of participants in a study. The researcher must make an effort that the data collected is correctly interpreted to present the views of the participants honestly (Davis, 2021).

In this study, I made sure that I collected the data by paying attention to ethical considerations. I also made sure that the views of the participants were handled with the utmost confidentiality. The data collected were interpreted most thoroughly so that in the end the data is representative of the opinions of the participants.

3.11.2 Maintaining objectivity

Zahle (2020) urges qualitative researchers not to give up on the concept of objectivity. Qualitative researchers deal with opinions and perceptions that are hardly generalizable. This makes it appear difficult to maintain objectivity. However, Zahle says it is possible to be objective in qualitative research by using credible and appropriate data collection instruments. The process of data analysis and interpretation should be free from the researcher's personal views and convictions. In other words, interpretations and conclusions should be derived from the data collected (Zahle, 2020).

In the in-depth and focus group interviews, participants were given the platform to speak without being interrupted or whipped in a certain direction. The views of the researcher were not important. I made sure that the views of the participants were presented in a way that was free of any type of bias.

3.11.3 Reflexivity

Alvarez-Hermandez (2021) defines reflexivity as the researcher's ability to be able to self-consciously refer to oneself concerning the production of knowledge about research topics. A researcher is a person with an identity and contextual positionality. The researcher is part of the world that he/she is studying, and this might influence the direction the research will take (Alvarez-Hermandez, 2021).

I am a TVET college lecturer and the subject under study is of interest to me as a TVET college lecturer who wishes to see more TVET college graduates transitioning to workplaces. I have my own opinions about the issue of public-private partnerships. I, however, did not let this influence my study in any way. I went out to find out what

stakeholders thought about these partnerships in Mpumalanga province. In this study, I was self-conscious of my position, but I did not let this influence the research.

3.11.4 Triangulation

The concept of triangulation has been mentioned above. Data triangulation is when a researcher uses two or more methods to verify the findings and results. It is done to make sure that the research is affluent, robust, comprehensive and well-developed. In other words, it enhances the credibility of the findings (Naeem, 2019).

In this study, I made use of in-depth interviews with the management of TVET colleges and industry and to confirm the data collected in these interviews, I also did document analysis. In other words, the data collected in in-depth interviews were confirmed by the documentary evidence collected. The focus group also served a triangulation purpose. The graduates confirmed whether or not there were any partnerships between TVET colleges and the industry.

3.11.5 Member checking

Birt, Scott, Cavers, Campbell and Walter (2016) say that member checking which is also referred to as participant or respondent validation is a technique for ensuring the credibility and trustworthiness of data. They say the collected data is returned to the respondent so that they say whether their thoughts and opinions were captured as accurately as possible. In instances where I went back to the respondents to check with them, I discovered that I had indeed captured the utterances of the participant correctly.

After transcribing the in-depth focus group interviews, there were instances where I went back to some participants to find out if I captured their opinions correctly. In cases where I could not physically go back to the participant, I called them. That way, I made sure that the data and the interpretation thereof were accurate.

3.11.6 Credibility

Korstjens and Moser (2018) say that credibility concerns itself with the truth value of the research findings. In other words, the researcher must demonstrate that the findings represent truthful information derived from the original data collected from the participants. The data should also be correctly interpreted to represent participants' views and not that of the researcher.

In this study, I ensured credibility through long engagements with participants, triangulation and member checking. Interviews were long enough giving participants ample time to express their views with little or no interruption from me. I am confident that the data collected is a true representation of the independent views of the participants. Triangulation and member checks have already been explained above.

3.11.7 Transferability

Consultores (2020) views transferability as synonymous with generalizability or external validity in quantitative research. It means that the data collected in one context can be used in another similar context. Although it is not always easy to generalise qualitative data, the context or situation in which data was collected can make it quasi-possible to generalise the data to other contexts.

In this study, I collected data from participants from TVET colleges and form industries in the Mpumalanga province. Whilst it can be argued that this data is only relevant to the colleges and stakeholders sampled, it is important to note that TVET colleges are all managed centrally through DHET. All fifty TVET colleges in South Africa are managed centrally meaning that what obtains in one college is expected in another. All TVET colleges in South Africa have to comply with the same standards set by DHET and students write the same examination papers nationwide.

Although partners were different from one college to another, TVET colleges forged partnerships with industry primarily for placing their students. The benefits and challenges that emanated from these partnerships would be similar. During data collection, industry placement for NCV students and lecturers was suspended due to

the COVID-19 pandemic. I am sure this was true for most TVET colleges. I also know that industry placement was compulsory only for NATED programmes and this would be true for all other TVET colleges.

3.11.8 Dependability

Korstjens and Moser (2018) say that dependability is all about consistency. One needs to ascertain that the data analysis process is in line with the set standards for a particular chosen design. This ensures that the evaluation of the findings, interpretation thereof and recommendations emanate from the data collected.

In this study, I used verbatim quotes from the participants so that the interpretations, conclusions and recommendations are in line with the data collected and not my viewpoint.

3.11.9 Confirmability

The concept of confirmability is closely linked to that of dependability. This concept has to do with neutrality in data analysis. Korstjens and Moser (2018) say that it is the extent to which the findings could be confirmed by other researchers given similar research circumstances. The findings can be verifiable and satisfy other researchers that they derive from the data collected rather than the figment of this researcher's imagination or viewpoint.

Consultores (2020) says that the best strategy to ensure dependability and confirmability is an audit trail. This simply means clearly outlining the research steps from the start of the study, data collection and the reporting of the findings. In this study, I have collected data in audio format. I have transcribed the data and where I was not sure, I did member checking, a concept discussed above. Consistent with the dictates of confidentiality, I have stored the transcripts safely where any other researcher, with due authority, can access them for research.

3.12 CONCLUSION

In this chapter, I focused attention on the research methodology used in this research. I discussed my research design, explaining the rationale for choosing it. I stated the research questions and sub-questions. I also discussed the aims and objectives of the research. I described the population of this research and explained how I sampled participants in this research. I discussed issues around research ethics and how I ensured trustworthiness. I discussed instrumentation, data collection procedures and data analysis and presentation.

In the next chapter, I presented the results of the study in a variety of forms. I systematically analysed the data drawing logical conclusions. I divided the chapter into three parts where I analysed the data from document analysis, data from in-depth interviews and then finally data from the focus group interview. The data were correctly interpreted and I finally put forward the recommendations.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

4.1 INTRODUCTION

In the previous chapter, I focused attention on the research methodology used in the study. I discussed the research design and explained the rationale for choosing it. I stated the research questions as well as the sub-questions. I also discussed the aims and objectives of the research. I described the population of this research and explained how I sampled participants in this research. I discussed issues around research ethics and how I ensured trustworthiness. I discussed instrumentation, data collection procedures and data analysis and presentation.

In this chapter, I presented the results of the study in a variety of forms. I analysed, interpreted and discussed the data presented. The data were collected from in-depth interviews, focus groups and document analysis. It is worth noting that I had initially sampled participants from the three colleges in the Mpumalanga province but one college principal did not agree to the request to have research conducted at his college. Whilst the principal is well within his right to decide to participate or not in any research, it is my opinion that research like this one serves the purpose of identifying challenges and suggesting ways of improving operations in public institutions.

4.2 PARTICIPANTS' BIOGRAPHIC DATA

In the following sections, I presented some biographical information about the sampled participants for the in-depth interviews. These interviews included one official from the Department of Higher Education and Training (DHET), two Deputy Principals: Academic, two officials who work at the Student Support Services (SSS), five managers from organisations around the Mpumalanga province and eleven focus group participants. The data concerning work experience was calculated and is correct as of the year 2022 when the data were collected.

4.2.1 In-depth interview participants' job descriptions and institution

Table 4.1 below gives a general overview of the in-depth interview participants and the institutions from where they were sampled.

Table 4.1: In-depth interview participants' research names and type of institution

Institution	Description of participants	Research name
College A	Deputy Principal Academic	DPAA
	Student Support Services	SSSA
College B	Deputy Principal Academic	DPAB
	Student Support Services	SSSB
DHET	Director: Curriculum Development and Support (TVET colleges)	DHET official
Private entity	Regional Manager	MA
Public institution	General Manager	MB
Public institution	Human Resources Practitioner	MC
Public institution	Supply Chain Manager	MD
Public institution	Deputy Principal	ME

As can be seen in above table 4.1, I made an effort to sample participants who would be rich with information for this research. These were participants who were responsible for forging partnerships between TVET colleges and the industry. They were also responsible for placing and hosting participants in various workplaces. I was very confident that these participants would give information that would adequately address the research question and sub-questions. Right throughout this report, I will use the code names above to ensure confidentiality and anonymity. Under no circumstances will the identities of these participants be revealed.

A quick glimpse of the information in Table 4.1 above would reveal that most partnerships were with public institutions. The reason for this was most probably because being public institutions, it was easier for these TVET colleges to forge partnerships with public entities. There are partnerships forged with private entities, but these are few.

4.2.2 In-depth interview participants' work experience

Table 4.2: In-depth interview participants' work experience

Code	Actual title	Experience
DHET official	Director for TVET Curriculum Development and Support	Three years
DPAA	Deputy Principal: Academic Services	One year
DPAB	Acting Deputy Principal: Academic Services	Three months
SSSA	Assistant Director: Job Placement Manager	Eleven years
SSSB	Job Placement Coordinator	Four years
MA	Regional Bank Manager	Nine years
MB	General Manager	Five years
MC	Human Resource Development Practitioner	Nine years
MD	Provincial Supply Chain Manager	Thirty-two years
ME	Deputy Principal	Nine years

At the time data were collected, DPAB had three months of experience and was on the job in an acting capacity. However, he went on to give valuable information because he had been a curriculum manager at the college. He was dealing with academic issues including the management of placing participants at workplaces even as a curriculum manager. Curriculum managers plan, implement and monitor academic programs but they report to the Deputy Principal Academic.

DPAA also had a one-year experience when data were collected. However, this was no deterrent as he had a lot of experience in Student Support Services where his duties and responsibilities included amongst others the placing of students in the workplace. I still consider him information-rich because of his experience with the Student Support Services.

The other participants had sufficient work experience and they talked from positions of authority. They gave very valuable information that was presented in the following sub-sections. All the participants were very frank in the interviews, and I got the sense that they felt the information they were giving me was going to be of help in improving TVET college and industry partnerships.

4.2.3 Focus group participants' information

Table 4.3: Biographic information for focus group participants

Code name	Programme	Course	Status	Industry placement
FG1	NCV	Electrical Engineering	Current Student	No
FG2	NCV	Electrical Engineering	Current Student	No
FG3	NCV	Civil Engineering	Current Student	No
FG4	NCV	Civil Engineering	Current Student	No
FG5	NCV	Finance	Former Student	Yes
FG6	NATED	Office Administration	Former Student	Yes
FG7	NATED	Business management	Former Student	Yes
FG8	NATED	Management Assistant	Current Student	Yes
FG9	NCV	Electrical Engineering	Current Student	No
FG10	NCV	Electrical Engineering	Current Student	No
FG11	NATED	Office Administration	Former Student	Yes

As can be seen in Table 4.3 above, five of the eleven participants had industry experience and these were mostly participants enrolled in the NATED programme. Colleges have two programmes, the National Certificate (Vocational) known as NCV and the National Accredited Technical Education Diploma known as NATED or Report 191. Sometimes it is simply referred to as the "N" courses. In the NCV, industry placement is not compulsory, but it is a requirement for the NATED programmes for the students to qualify for the National Diploma.

In the table above, one can see that all but one participant in the NCV programme did not have any industry experience. This was caused by the fact that industry placement for NCV had been halted during the research period because of the Corova Virus Disease pandemic discovered in 2019 (COVID-19). The one participant who had industry experience had it before COVID-19. However, it is worth noting that the

participants doing the NATED program were former NCV participants who also had industry exposure in terms of Workplace-Based Experiential learning (WBE) and were currently doing their internships for eighteen months. A deliberate effort was also put into sampling participants from both Engineering and Business Studies.

Throughout the report, I used the code names assigned to the participants to maintain anonymity and confidentiality. The participants spoke freely and as a moderator, I explained that I was not looking for specific answers but their honest views on the subject matter. I also made sure that the discussion was not dominated by one or a few participants. I tried to involve all the participants as much as possible. In some instances, participants posed questions to one another if they did not understand what the speaker meant.

4.2.4   All participants' gender
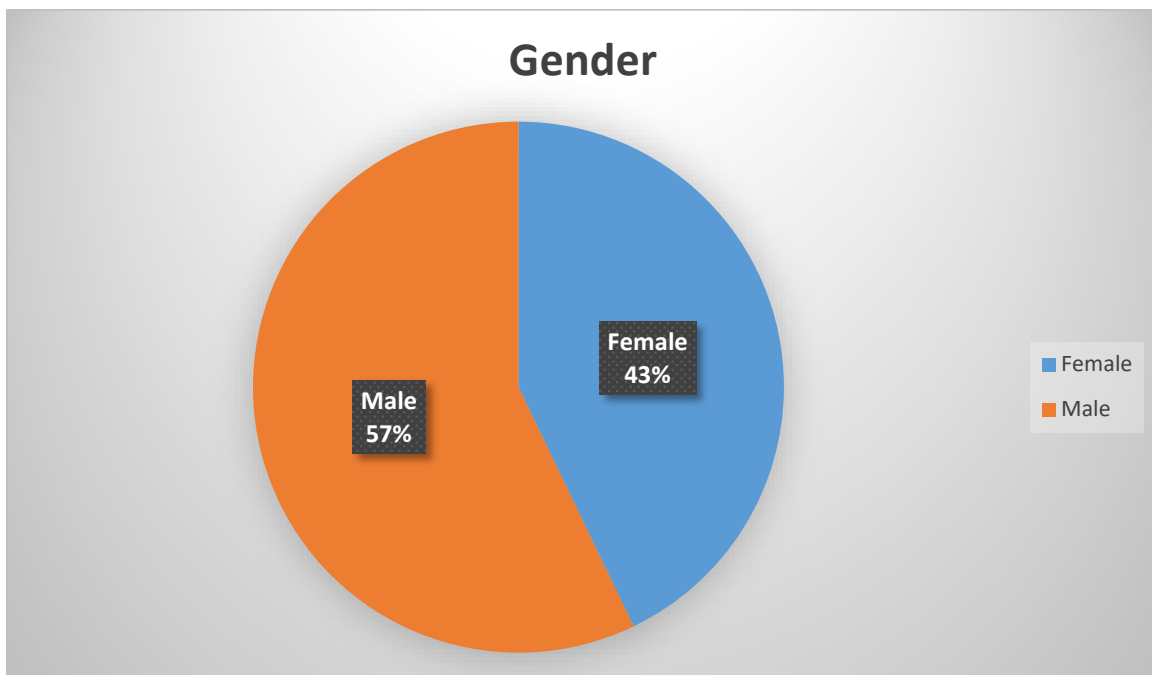
Figure 4.1: Gender

Figure 4.1 above depicts the gender of the participants in a pie chart format. Out of 21 participants, twelve were male (57%) and nine were female (43%). I believe that a gender-balanced sample would yield findings that are devoid of any suspicion of gender bias. The views of both male and female participants were captured and often these views intersected thereby discounting gender as a possible factor that could have altered the findings.

4.3 DATA PRESENTATION AND ANALYSIS

As already discussed in sub-sections 3.9.1 and 3.9.2, I audio-recorded the interviews and then transcribed them. I went on to analyse the data by coding participants' responses. After coding the data, some themes emerged from participants. I grouped these themes and sub-themes.

In the sub-sections below, I presented the data in the form of tables, pie charts and verbatim quotations from the participants. I then went on to interpret the data explaining what the participants were saying and how this addresses the sub-questions of the research. In the sub-sections below, I presented the data, which I had grouped into themes and sub-themes. I discussed these themes according to the research sub-questions.

4.4 DISCUSSION OF GENERATED THEMES

The main aim of this study was to address the main research question, which is phrased as follows: "What are the stakeholders' perspectives on TVET colleges and industry partnerships for improving the employability of TVET college graduates in Mpumalanga province?" From the main research question, I then came up with four sub-questions, which the study also sought to address.

In this section, I discussed generated themes and sub-themes that derive from the data collected. Table 4.4 below depicts the research sub-questions, generated themes in each case and sub-themes to give the reader a summarised visual impression of the findings.

Table 4.4: Generated themes and sub-themes

Research sub-questions	Generated themes	Generated sub-themes
What is the nature of TVET colleges and industry partnerships currently in place at TVET colleges in Mpumalanga?	4.4.1 Pedagogical importance of partnerships	4.4.1.1 Partnerships to complement academic work at colleges 4.4.1.2 Partnerships as requisites for certain programmes 4.4.1.3 Partnerships as a source of resources 4.4.1.4 Partnerships as a career development tool
	4.4.2 Diversity of Partnerships	4.4.2.1 Formal partnerships 4.4.2.2 Mutual benefit 4.4.2.3 Clear operating guidelines
	4.4.3 Partnerships for Public Relations	4.4.3.1 Partnerships for building good corporate image 4.4.3.2 Partnerships for paying back to communities
What is the role of stakeholders in the TVET colleges and industry partnerships currently in place at TVET colleges in Mpumalanga?	4.4.4 Managing partnerships	4.4.4.1 Planning 4.4.4.2 Organising 4.4.4.3 Leading 4.4.4.4 Controlling
	4.4.5 Funding and funding models	4.4.5.1 Role of DHET 4.4.5.2 Role of SETAs 4.4.5.3 Role of some companies
What challenges are currently being encountered by stakeholders with the current TVET colleges and industry partnerships?	4.4.6 Diversity and flexibility of TVET colleges teaching programmes	4.4.6.1 Ministerial programmes 4.4.6.2 Insufficient stakeholder involvement in curriculum designing 4.4.6.3 Outdated syllabi 4.4.6.4 Examination-oriented system
	4.4.7 Placement challenges	4.4.7.1 Mismatched Industry Placements 4.4.7.2 Synchrony of TVET colleges and industry programmes

		4.4.7.3 Lack of Sustained Feedback Sessions 4.4.7.4 Unwillingness to take students for placement 4.4.7.5 Very short industrial attachment
What strategies can be considered to improve current and other suitable TVET colleges and industry partnerships to enhance the employability of TVET college graduates?	4.4.8 Compulsory partnerships for all programmes	4.4.8.1 Mandatory industry placement for all students 4.4.8.2 Policies mandating public companies to take in students

In the sub-sections below, I discussed in detail the generated themes according to the data collected.

Sub-question 1: "What is the nature of TVET colleges and industry partnerships currently in place at TVET colleges in Mpumalanga?"

During data collection, I noted that TVET colleges engaged in a variety of partnerships. Consistent with the literature review presented in sub-section 2.4.1, I noted that these partnerships were forged to achieve some mutually beneficial objectives. Some of these partnerships were formal with written down agreements but others had verbal agreements.

Table 4.5: Types of partnerships in TVET colleges and DHET

ENTITY	TYPES OF PARTNERSHIPS
TVET colleges	1. Workplace-Based Learning (WBE) 2. Internship 3. Work Integrated Learning (WIL) 4. Learnership 5. International training programme 6. International exchange programmes 7. Skills programmes

DHET	1. Curriculum revision 2. Teaching and learning resource development 3. Staff developmental programmes

Table 4.5 lists the types of partnerships that TVET colleges and DHET engage in with their partners. The table, however, does not show the frequency of these partnerships. This will be depicted in Figure 4.2 in sub-section 4.4.2. From the table, one gets the impression that there are many partnerships and that these partnerships serve different purposes. Below is a discussion of these partnerships and their functions.

4.4.1   Generated theme: Pedagogical importance of partnerships

During data collection and data analysis, I realised that partnerships had pedagogical importance. Pedagogically, partnerships were necessary to complement theory learnt at the college with practical work in workplaces. The assumption is that students who have both theory and practice stand a better chance of employment than those with just theory.

Bharat (2021) listed reasons why practical knowledge is important in any learning experience. He said that it encourages self-learning, familiarises students with tools and equipment that will be required to use, makes participants more independent and increases their confidence. The following sub-themes illustrate the pedagogical importance of these partnerships.

4.4.1.1   Sub-theme: Partnerships to complement academic work at the college

Data collected showed that TVET colleges and industry partnerships served the purpose of giving a practical aspect to the theory the students would have learned at college. During the interview, SSSB said, "…*when they are in the workplaces, they are exposed to various things that they now do physically*…" This means that the students get to put the theory they would have learned in class into practice.

DPAA and DPAB both emphasised the role these partnerships played in developing an employable graduate. DPAB said these partnerships are done in order, *"…to expose these students to the real world of work…"* DPAA also said that industrial placements help in, *"…addressing the issue of employability [of students]…"* Both DPAs agree that these partnerships are a necessary pedagogical tool that complements what colleges do by providing practical skills to students. Once the students have been exposed to the workplace, they become even more employable than students with just theory.

In their separate interviews, SSSA and SSSB echoed the sentiments of the DPAs. They defined their role as that of placing students in the workplace so that they gain industrial experience. SSSB said they place students so that, *"…they can be exposed to the workplaces outside there, to see what is done in those workplaces with the programme they enrolled for."* She gave an example of a student who does Motor Mechanics as a subject. She says that this student would learn more at the workplace than the theory in class because at the workplace the student would do things practically. She concluded that in the workplace students, *"…learn about new ways that are being now practised in the workplaces."*

Given the above observations by SSSB, these partnerships serve the purpose of bridging the gap between theory and practice. Sometimes there could be a rift between what the students are taught in class and how things are done in the industry. Students end up appreciating that although in class this is how the material was presented, in industry things are done slightly differently.

Focus group interviewees seemed to appreciate their time at the workplace. They felt that the experience was worthwhile. FG11 also said that she had gained vast experience and all of it was relevant to the course that she had done at college. FG6 said, *"…when you come back from WBE, you are more focused and motivated."* However, FG5 felt that her experience was inadequate. She said, *"…it was just observing how they work…"* In her case, she felt that she did not benefit much as she did not get to do anything but observe as the workers went about their daily duties. I, however, think that a student still gains something at the workplace whether they do the work or observe.

In the focus group, some participants did not have industrial experience. After hearing testimonies from those who had had WBE, they all felt they should also do it. FG2, an Electrical Engineering student, said he thought, *"…it gives you experience…if I went to ESKOM to do WBE, I would gain experience."* FG10 said that if the opportunity presented itself he would also grab it so that he compares what he is doing at college with what happens at the workplace.

4.4.1.2   Sub-theme: Partnerships as a requisite for certain programmes

Documents consulted showed that there were partnerships that were a requirement to complete the course. I noted that the NCV programme did not require students to do any workplace attachment, but this was a prerequisite for the NATED programme. At the time of collecting data, (WBE) for the NCV programme had been suspended due to the COVID-19 pandemic but the eighteen-month internship programme for the NATED programme was still ongoing. In the focus group, five out of eleven participants were doing their internships. They had also done WBE because they did this before the pandemic. I collected data about WBE and internships from these participants.

SSSA explained why industrial attachment is not compulsory for the NCV programme. He said, "…*whenever they finish, they are ready for employment opportunities…*" On further probing, he said that by its design, the NCV programme incorporates theory and practical learning making industrial attachment not compulsory. This sentiment was shared by SSSB and DPAA.

The NCV programme comprises theory and practical assessments. These practical assessments culminate in what is commonly referred to as the Integrated Summative Assessment Tasks (ISAT). For example, students who do Civil Engineering would practically go through all the steps of designing, constructing, roofing and tiling a building. After that, they must demonstrate their knowledge of safely demolishing that structure. It is this practical component that made those who designed the programme think that industrial exposure was not necessary.

Documents that I analysed showed that, by design, the NATED programme comprises eighteen months of theory learning at college followed by a mandatory eighteen months of internship done at the workplace. I also realised that this internship is managed by the Sector Education and Training Authority (SETA) organisations. They mostly place students, supervise them and pay their stipends. Students are placed in relevant economic sectors according to their courses of study. Sometimes they are placed by colleges but usually on behalf of the SETAs. Students do not have the luxury of placing themselves lest they place themselves wrongly.

4.4.1.3   Sub-theme: Partnerships as a source of resources

In the interview with the DHET official, he said that sometimes the department forges partnerships to get resources from partners. He said, *"…and in some instances, it's for external partners that provide maybe equipment and so on to colleges."* He went on to cite an example of an Information Technology (IT) company that donates IT-related machinery to colleges, helps the department with the review of IT-related curriculum, staff development of lecturers and the development of teaching materials. He added, *"…so, we don't pay them anything."* During the interview with the DHET official, I got the impression that most of the partnerships with industry yield material gain for the department and the TVET colleges concerned.

DPAA said that partnerships could also be viewed as a source of financial resources. He said that they engage with SETAs, private companies and international partners who fund various projects at the college. He said, *"…partnerships [are] very key and crucial including the funding part…"* He explained that the SETAs pay students' stipends, a certain mine they have a partnership with pays students' fees and an international partner trains South African students in that foreign country. He also said that the SETAs also provide human resources because they supervise the students on internship.

In his interview, DPAB said that they have a partnership with a mine that sometimes donates equipment and funds some students who would not have satisfied the criteria for the National Student Financial Aid Scheme (NSFAS) bursaries. He said, *"…they've*

*contributed [by] giving us equipment and infrastructure for teaching and learning…
even sponsoring some of the students for teaching and learning…"* This is a welcome
development as these partners share with DHET the burden of funding post-school
education.

In documents that I analysed from the two colleges, I noticed that there were partners
who donated equipment or teaching materials for colleges. These partnerships are
mostly short-term and not necessarily bound by any agreement. Publishing companies
sometimes donate e-learning material and charts while some companies also donate
to programmes or subjects in their areas of specialisation.

4.4.1.4   Sub-theme: Partnerships as a career development tool

Most participants agreed that partnerships, especially placing students and lecturers
in the workplace are an indispensable tool for career development. In his interview,
DPAA noted that industrial attachment for lecturers was also a key tool for their
professional development. He said that partnerships, *"…assist the lecturers because
most of them are directly from the academic line and this will be assisting them to deal
with these vocational subjects."* Therefore, industrial attachment develops lecturers
and makes them well suited for their chosen career as TVET college lecturers who
should have both theoretical and practical skills.

In the focus group interview, participants generally agreed that their industrial
attachments made them appreciate the courses they were doing at college and set
them on a straight career path. Besides putting theory into practice at the workplace,
participants of the focus group mentioned other skills that they developed. They
mentioned networking with people in the industry, communication, professionalism like
punctuality and learning the corporate culture of the organisations.

FG6 said, *"…they gave us their work, what they were doing. We were taught. It was
very effective…"* The students appreciated that they were given the chance to work
like all other employees and this made them appreciate their careers even more. FG11

said, *"…you get to conduct yourself in the workplace…"* At the workplace, they get the opportunity to function like real workers.

In his interview, the DPAA also referred to this as "*…the culture of industry vis-à-vis the culture of the classroom."* Industrial attachment serves the purpose of developing in students the capacity to appreciate their chosen careers. Students seem to be developed wholly not just academically. Students get to appreciate new trends in their chosen careers, and they learn to anticipate and deal with challenges. They are professionally trained.

4.4.2   Generated theme: Diversity of partnerships

I also realised the diversity of the partnerships that TVET colleges have with the industry. In document analysis, I got hold of a report by the Student Support Services of one college where they gave a depiction of partnerships they had had for the academic year of 2022. The figure below is a summary of the partnerships that were formed in that year. The category marked "other" includes international cooperation, work-integrated learning, syllabus reviews and so on.
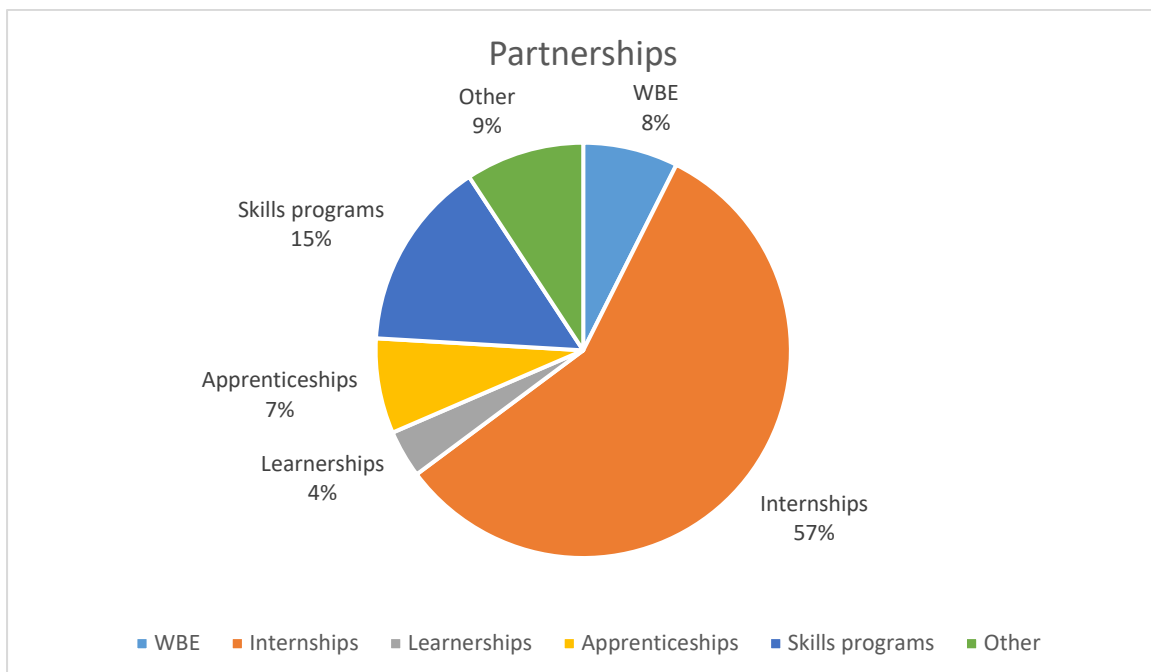
Figure 4.2: Types of partnerships

As can be observed in Figure 4.2 above, colleges are mainly involved in placing students in the industry for internships, skills programmes, WBE, apprenticeships and learnerships. WBE was not a major activity because it had been stopped in compliance with the COVID-19 regulations. There were still placements for WBE in college A because this college has its business units in which it places students.

There are many other partnerships that TVET colleges can engage in as discussed in my literature review in section 2.6 of this report. However, it seems partnerships are mainly for placing students in the industry. Whilst it is important to expose the students to industry, I feel like other partnerships can be considered like guest lecturing, work-integrated learning (WIL) for lecturers, joint research and syllabus review committees. From the data collected, these other forms of partnerships were not emphasised.

4.4.2.1   Sub-theme: Formal partnerships

From the data collected, I noticed that some partnerships are guided by formal memoranda of understanding (MOUs) or memoranda of agreement (MOAs). DPAB said, *"…my role in this matter is to scout and source partnerships in terms of signing MOUs and MOAs or even service level agreements (SLAs)…"* SSSA and SSSB also confirmed that some of these partnerships are guided by these formal agreements.

DPAA noted that these partnerships were mainly with large companies that would agree to long-term partnerships for placing students and lecturers at their workplaces. According to him, these companies, although large, are few and too often, stakeholder fatigue sets in. With time, they get tired and restrict the number of students placed. DPAA said, *"…we are targeting most of the well-known industries [but] there are these emerging companies that need to be recognised…"* He meant that TVET colleges should also forge formal partnerships with smaller organisations.

SSSA and SSSB echoed the sentiments of DPAA. They said there were not many companies with whom their respective colleges had formal partnerships. SSSB said, *"…we are using the very same companies or the very same stakeholders that we are having longstanding MOUs with."* The same partners are used to place different

students right throughout. SSSA also bemoaned the fact that his college is in a semi-rural region. He said, *"…our region, you can see, it's dry. We do not have many companies and our towns are very small."* This, therefore, causes the colleges to rely only on a few, mostly large companies for partnerships to place students and lecturers.

Consistent with the above, in the interviews with company managers, I realised that none of them had a formal agreement with the colleges concerned. ME, whose organisation takes in students doing internships and also hosts skills development students, said, *"…no there is no documented agreement…we still need to sit down with the TVET head office to have the MOA so that it becomes formal…"* A formal written agreement would be preferable to be able to outline the roles of partners and be able to control the operations of the partnership. Verbal agreements tend to be loose-ended and leave many things unaddressed.

The managers I interviewed head relatively large organisations and have been taking in students from the two sampled colleges for a long time now, but they all still do not have any formal agreement with the colleges. MC said that although no formal agreement exists between her organisation and the colleges, managing, monitoring and coordinating students on industrial attachment is part of the duties that she must perform as her key performance area.

The DHET official also said that the department does not initiate partnerships with private entities and because of that, there were no formal agreements. He said it is mostly private companies that approach the department with a partnership plan and the department assesses the plan and decides whether they want to partner or not. He said this was so because *"…we wouldn't want to go and start creating an advantage for other private enterprises in the teaching and learning market."* The department is careful not to formalise some partnerships because these partnerships would be viewed as giving an unfair advantage to some entities over others. For example, a formal agreement with one publisher might be viewed as unfair and therefore illegal by other publishing houses.

4.4.2.2 Sub-theme: Mutual benefit

In the interview with the DHET official, I got the impression that the department and TVET colleges benefitted more than their partners did. He said that they evaluated the partnerships and only accented to those partners, *"…who want to provide something that benefits the department broadly, without the department having to incur financial responsibilities and things like that…"* However, responding to a direct question on the mutual benefits of partnerships, he said that he thought all partnerships are mutually beneficial to all parties involved. He gave an example of a partnership with a certain organisation where the department provides training for their staff and in turn, the organisation helps in curriculum designing in that specific field of study.

DPAA talked about a partnership whereby the company would take students from the college, train them and afterwards offer them employment. The college recommended best performing engineering students. The college or the department benefitted in that it did not need to pay for specialised training, students were guaranteed employment after the training and the company got academically sharp employees.

DPAB also referred to a company with which his college collaborated. The college got the opportunity to place its students for WBE or internships whilst the company sent its employees to the college for formal training. The company also donates machinery to the college so that the training of their employees and subsequently college students is facilitated. MA said that they prefer to take in students from TVET colleges because, *"…it is easy for them to do Word, to do Excel, unlike someone who is just a grade 12…"* In her company, they take students and train them, and they find it easier to train students from TVET colleges thereby saving them a lot of money on their training budget.

One other benefit was that whilst colleges get to place their students in workplaces, workplaces also benefitted from unpaid labour from these students. MD said, *"…with me, they helped a lot. I might be busy with something else and I ask them to do some filing for me…they lessen my work."* This sentiment was echoed by other managers who felt that the students were welcome and surely gave much-needed relief in terms of workload on employees. ME added, *"…they make the administration work to be*

easy and simple." Whilst the students gained the much-needed workplace experience, the companies also benefitted from unpaid labour.

4.4.2.3   Sub-theme: Clear operation guidelines

MOUs and MOAs help in that they clearly outline what DPAB refers to as "Service Level Agreements" (SLAs). SSSA talked about "key deliverables" or "areas of cooperation" in each MOU or MOA that they signed. This simply means that the MOU or MOA clearly defines the roles of each partner and gives a clear-cut definition of what is expected. Among other things, an MOU would include the terms of operation of each partnership, the parties involved, financial implications and the duration of the partnership.

This is very important as each partner's role is laid out and there is no confusion as to what should and should not be done. It also serves as an evaluation tool to see if all the targets have been met. The operating guidelines prevent partners from acting randomly at the expense of the partnership. The DHET official also said that written agreements prevented partners from doing as they wished. He said, *"…sometimes a partner wants to go beyond what the boundaries are because they want to push beyond the agreement…so you have to manage those."* Whilst he did not give any specific example, I understood this to mean that some partners may want to exploit the partnership to their advantage but if there are clear operating guidelines this can be avoided.

DPAA gave an example of an international partnership his college had. There were laid down duties and responsibilities for each partner. The college identified best best-performing engineering studies students, paid for them to learn the language of that country in South Africa for one year and paid the students' stipends and accommodation fees. After passing the language module, the students would be flown to the host country where they would be trained, accommodated, given stipends and given certificates by that country.

However, as already pointed out, not all partnerships are bound by formal agreements. In these instances, there would be no clear operating guidelines. This point will be discussed in detail when I talk about the management of partnerships. If there are no agreed-upon operation guidelines, partners are confused and this works against the partnership.

4.4.3 Generated theme: Partnerships for public relations

Throughout the research, I found that sometimes companies engage in partnerships for public relations purposes. This means that they do not gain anything materially, but they want to be seen to be part of a good cause, which is to take part in training students. The two sub-themes below further clarify what partnerships for public relations mean.

4.4.3.1 Sub-theme: Partnerships for building good corporate image

In his interview, the DHET official mentioned an IT or ICT company that collaborates with the department and all colleges offering IT-related subjects. They donate equipment, review IT-related curricula and get involved in the capacity development of IT lecturers. The company does this without any payment from the department or the colleges concerned. However, the company is building a strong corporate name for itself in the community. Their brand name is associated with training IT specialists in South African post-school institutions. They become a name to reckon with when it comes to IT and this bolsters their business image. They do this for publicity.

DPAA mentioned that an integrated energy and chemical company also takes in their best engineering students and offers them learnerships. The company does not do this for any payment or benefit but the company does this to bolster its corporate image as being involved in the mission and vision of the department of producing artisans. The company's name is amongst those that contributed to the decade of the artisan that runs from 2020 to 2030.

4.4.3.2   Sub-theme: Partnerships for paying back to communities

DPAA mentioned a mining company with which the college collaborates. The mining company recruited students from the surrounding communities in which it operated. The mine would then send the recruits to the college to be trained in a variety of skills like bricklaying, carpentry and roof work, welding, plumbing and many more. The mine paid the college to provide this training to the recruits. The college provided the training and the certification. The DPAA referred to this as a "*plough back*" by the mine to the communities in which it operated. After the training, the community members would be expected to go back to their communities to use the skills for self-employment or employment if they are lucky to be employed.

DPAB also described a similar partnership with an engineering company in its vicinity. The company took some of its unqualified employees and sent them to the college's skills development centre. The company would pay for their tuition until they were artisans. The company did not stop with its employees but sponsored college students as well most of whom they would also employ at the end of training. The company also donated equipment and developed infrastructure at the college as a payback for the partnership that they enjoyed.

Sub-question 2: "What is the role of stakeholders in the TVET colleges and industry partnerships currently in place at TVET colleges in Mpumalanga?"

4.4.4   Generated theme: Managing partnerships

TVET colleges, DHET and their various partners play different roles depending on the partnership embarked on. In instances whereby there is an MOU the roles of each partner are laid out. The MOU would be used to guide the functionality of the partnership arrangement and alter the terms if that is perceived to result in the improvement of the partnership. However, even in less formal partnerships where there is no MOU, the TVET college or DHET who are mostly the initiators of these partnerships, should take centre stage and manage the partnerships.

Boogaard (2022) explains management as a process that involves four basic functions, which are planning, organising, leading and controlling. What is important to note is that these functions continue as a cycle. That means that after going through the functions, one needs to evaluate and start the whole process again taking into consideration the challenges noted. Fig 4.3 is a depiction of these functions:
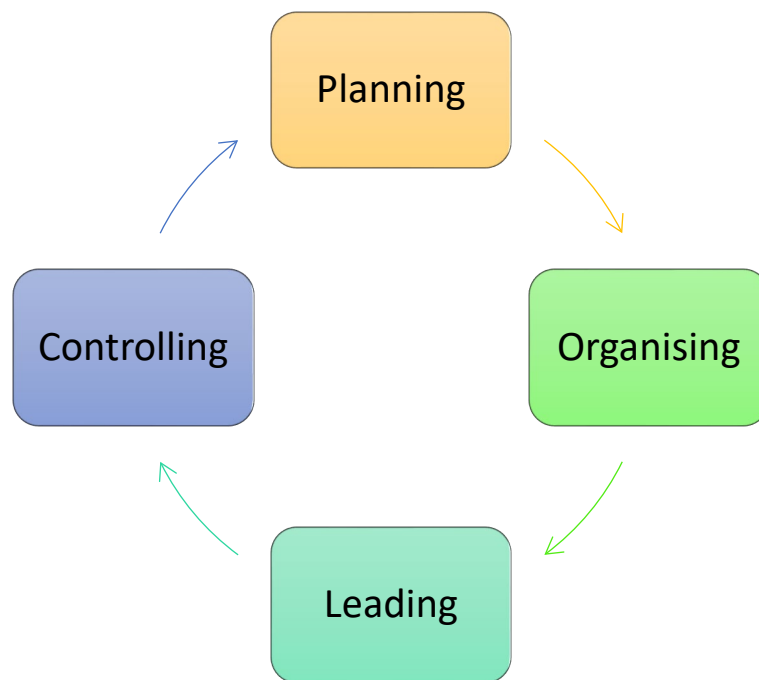
Figure 4.3: Management functions

In sub-section 2.4.1, I stated that a successful partnership would involve planning, monitoring and evaluation to institute corrective measures where goals are not met (Singizi, 2011). Partnerships are not engaged randomly but require the four management functions above. As I analysed the data collected, I tried to link these four functions of management to the actual management of partnerships in the sampled TVET colleges. In the sub-sections below, I discuss these concepts about the data collected and the sub-question at hand.

4.4.4.1   Sub-theme: Planning

Coppola (2022), defines planning as a phase in management that would include setting goals, deciding on the most efficient way of achieving those goals and resource

allocation. Resource allocation includes financial, material and human resource allocation. It involves deciding what to do and allocating roles to different partners.

This function would include planning how many students would be placed, in which host employers and when this placement would take place. Students would be briefed as to what they are expected to do at the workplace and how to complete the logbooks. Students would be asked to complete contracts to be sent to the SETAs or any other funding authority. A briefing session with company supervisors would also be arranged. Colleges would then draw up a monitoring or supervision plan to be shared with the college supervisors and the workplace supervisors. Monitoring plans would then be sent out so that host employers also do their planning in anticipation of these students.

In his interview, DPAB said that at the beginning of each academic year, they have a preparatory meeting with all academic sections of the college. In that meeting, the issue of placing students would be discussed and different individuals would then be assigned different roles. I, however, noted that industry partners were not present in such planning meetings. Documents sourced and analysed showed that before students are deployed to various workplaces, some sort of briefing would be held with these host employers to detail to them what they are expected to do. Students go to these workplaces with logbooks that host employers should use to supervise the students.

The meeting with sampled employer participants revealed something a bit different from what I found in documents and what the SSSA and SSSB reported. They all decried the fact that there was often no briefing from the colleges, they just saw the students coming for industrial attachment. ME said that sometimes students came with old logbooks and when these have been completed, the students would be told to fill in new ones. This scenario showed that the college, the students and the host employers did not have planning sessions together. Otherwise, the issue of outdated logbooks would not have happened.

MC said, *"…for the past two years we haven't engaged with them…"* This means that in those two years, there were no joint planning sessions and partners did as they saw fit. MC continued and said, *"…they just throw them [students] under the bus and we see what we do with them…"* MD also said, *"…it's the first time I am being asked questions about this programme. We only see students and they go back to college. We have never seen anyone from the college coming to monitor the students. We just fill in the logbooks…"*

This lack of cooperation between the college and its partners demonstrates that planning was not done. MB said that she had asked why students were not supervised and the response was that the colleges did not have the manpower, so they relied on companies to do all the supervision.

In the focus group, students were also disappointed that they did not get any supervision from the college. They generally agreed that this lack of supervision on the part of the college and the host employers rendered their work experience useless. It also opened avenues to dishonest conduct by host employers. Students would be given menial and unrelated tasks during their industrial attachment. FG7 said, *"…they type the report but they don't say you were making coffee. They say that you were filing, photocopying and so on."* Most of the participants agreed with this observation.

4.4.4.2   Sub-theme: Organising

Coppola (2022) goes on to describe organising as the act of deploying people and assigning responsibilities to them. Ideally, this function would require colleges together with host employers to decide which staff members would be assigned to mentor and monitor the students on industrial attachment. According to documents accessed at the two colleges, the role of placing students is given to the personnel that works in the student support services (SSS). From the interviews, SSSA and SSSB confirmed that responsibility lies with them. The SSS has only one placement officer and this official would be expected to supervise about a thousand students on each campus.

This lack of organising on the part of the college leads to many problems chief among which is lack of supervision. Given the number of students that must go on industrial attachment every year, it is not possible to expect only SSS to do all the supervision. A new strategy should be employed whereby lecturers supervise students from their subject areas. A good manager would instruct lecturers to do supervisory visits to students as part of their normal duties and responsibilities. The function of organising cannot be left unattended if the placement of students should be worthwhile.

However, the focus group and interviews with company managers showed that there was always someone assigned to mentor and supervise the students. M3 said they even have a supervision policy at her workplace. She said, *"…our rule is three to one, which means one mentor with three students."* This proves that some companies organised to the minute details.

4.4.4.3   Sub-theme: Leading

The leading function deals with how management motivates, inspires, encourages and incentivises workers to do their jobs diligently (Coppola, 2022). Managers should follow up with workers to see whether they are carrying out their duties. This aspect seemed to be missing from the colleges' side. SSS was left to do as it saw fit and no manager followed up to see whether the placement of students yielded any positive results. Lecturers were not involved in any activity to do with the placement of students in the workplace. I did not get any indication of whether lecturers were given any type of incentive to go and monitor students on an industrial placement. This incentive need not be monetary, but it could be through praise or recognition.

4.4.4.4   Sub-theme: Controlling

This is the most important function. In this function, managers go back to set standards and compare these to what happened. The manager would then note the difference between the planned objective and the actual outcome so that corrective measures can be instituted (Coppola, 2022).

In this study, I noted that rarely did colleges and their stakeholders have feedback sessions. At regular intervals, partners should come together to evaluate the partnership and decide on corrective measures where things are not going right. Communication channels should be opened to bolster these partnerships. DPAB said, *"…to improve these partnerships is to have a sort of college-industry indaba…"* This means that DPAB appreciated the fact that there should be some feedback session where parties would raise issues with a view to improving these partnerships.

4.4.5 Generated theme: Funding and funding models

Figure 2.1 depicted in sub-section 2.4.1.3.3 of this report, depicts funding structures and mechanisms as of 2017. Whilst the actual figures could have changed, the funding structure remains pretty much the same. Below I discuss the role played by identified stakeholders as far as funding is concerned.

4.4.5.1 Sub-theme: Role of DHET

Data collected from documents sourced from the department show that DHET does most of the funding of activities at TVET colleges through direct transfers. The funds are used for paying TVET colleges' staff and funding all teaching and learning activities. Colleges are allocated funds by DHET to run college affairs. Colleges use this money to pay stipends to lecturers on WIL, students on WBE and some interns attached at these colleges. From the focus group participants, I gathered that colleges paid students R100 per day for five days to attend WBE. I also gathered that interns paid by the college received R3700 per month. I also learnt that the colleges pay R500 per day for a maximum of five days for lecturers to attend WIL.

4.4.5.2 Sub-theme: Role of SETA organisations

SETAs also get their funding from DHET, and they use this money for paying stipends to students doing internships. They also fund the professional development of TVET college lecturers. They complement the work done by DHET and colleges in making sure that both students and lecturers have much-needed industrial exposure.

Their role at TVET colleges is to facilitate partnerships with industry and coordinate these partnerships. They place students at workplaces so that they meet the requirements of their courses. They monitor the whole process and pay supervisory visits to students on industrial attachment.

4.4.5.3 Sub-theme: Role of some companies

As was seen in the case of the IT Company that funds colleges doing IT-related subjects and a variety of other private sector partners, colleges enjoy extra funding from these organisations. Colleges benefit a lot from these partnerships as they have their staff members trained, students hosted in these organisations, some students given bursaries or recruited to learnership programmes, the development of learning material and donation of equipment and infrastructure. All this is done without the colleges incurring any expenditure.

Sub-question 3: "What challenges are currently being encountered by stakeholders with the current TVET colleges and industry partnerships?"

4.4.6 Generated theme: Diversity and flexibility of TVET colleges' teaching programmes

The issue of the diversity and flexibility of colleges' teaching programmes is of great interest as it determines the effectiveness of TVET colleges and industry partnerships. In the sub-themes that emerged, I discuss the issue of the diversity and flexibility of TVET colleges' programmes and analyse how these affected the partnerships.

4.4.6.1 Sub-theme: Ministerial programmes

SSSA complained that there is not so much diversity and flexibility as far as teaching programmes are concerned because these are designed and imposed on TVET colleges by the department. He said, *"…unfortunately we are offering ministerial programmes."* He considered this unfortunate because TVET colleges cannot change

teaching programmes without the consent of the department. Even though colleges and companies can see a need to change the programmes, they must wait for the department to change these.

He went on to say that he thought the programme mix should be re-evaluated but until the department, so it fit to do that, the colleges are stuck with old programmes that the industry no longer needs. He gave an example of the Office Administration course that attracts a lot of students because of its low entry requirements. He felt that the course should be scrapped because thousands of students graduate but there is no employment for them. He felt that ministerial programmes do not respond to the dynamic environment of the job market.

DPAA also expressed some frustration as far as these ministerial programmes are concerned. He said that they had a programme with an international partner whereby students are partly trained in South Africa and complete their studies overseas. The problem arose when it came to certification. Neither DHET nor the SETAs could certify the students. An arrangement had to be agreed upon so that these students could be awarded international certificates. This in turn causes problems for the students later on as these students must get their foreign qualifications evaluated by the South African Qualifications Authority (SAQA).

TVET colleges do not have the luxury or authority to be responsive to industry needs because the education system is centralised. TVET colleges cannot quickly react to changes in the job market but must wait for a long winding bureaucratic process of curriculum review. The changes arrive late when something else new has been discovered in the workplace. This way, the TVET colleges' teaching programmes would remain behind. This could be changed if TVET colleges were allowed to run their curricula which they would adapt quickly to industry needs.

MC also bemoaned the fact that the college is sending students with the same qualifications and yet her organisation has a lot to offer in terms of student placements. She said, *"…I think more courses are supposed to be introduced cause I feel it's just the same thing. One course…"* This means TVET colleges are stuck on the same courses repeatedly until the department decides to discontinue old programmes and

introduce new ones. MD also concurred with this view as he noted that at his workplace, he only gets students who have done Office Administration.

MB also felt like the colleges could do better by changing programmes to respond better to industry and community needs. She said, *"…they must look at other programmes which are a demand in the society or in the community where the college is."* She made an example of the Management Assistant course, which she felt had oversupplied graduates to a point of saturation.

Focus group participants also seemed to air the same sentiments. FG6 observed that there is Marketing in NCV but it has since been discontinued in NATED. Students are stuck because they have to choose another unrelated subject to continue their studies. FG6 concluded by saying, *"…I think the college needs to improve in terms of checking what is being offered. I am talking about the syllabus especially in Engineering to check for currency. (…) They must check with the industry to see whether what they are offering is still relevant or whether [it is still] there."*

The general feeling of participants was that the teaching programmes at TVET colleges were not diverse and flexible enough to develop graduates who were in demand in the industry. Students find themselves confronted with a different reality at the workplace than what they would have been taught. Sometimes, this leads to students graduating with outdated qualifications. At the time of collecting data, I checked the Office Practice subject guidelines and I noticed that the section on filing does not include e-filing. Even when everyone has moved on technologically, TVET colleges are stuck with outdated ministerial programmes.

4.4.6.2   Sub-theme: Insufficient stakeholder involvement in curriculum designing

In his interview, the DHET official said that during syllabus reviews, his office creates curriculum support teams, which comprise mostly lecturers who teach the subject. He went on to say, *"…and in some instances, those curriculum support teams will include maybe some industry experts or somebody like that…"* The comment by the DHET official showed that the involvement of stakeholders especially industry experts was

not viewed as a priority. It seems as if they are consulted and not engaged from the start to the end of the curriculum design process.

He said when it comes to changing the curriculum for NATED programmes, the department makes use of the Quality Council for Trades and Occupations (QCTO). This organisation was established in 2010 in terms of the Skills Development Act (Act 97 of 1998) as amended in 2008. One of this organisation's responsibilities is to develop and maintain occupational qualifications (QCTO, 2022). To a large extent, NATED courses are viewed as occupational. Even though QCTO has experts in various fields, this model still lacks input from industry experts and lecturers on the subject.

The DHET official mentioned another model whereby curriculum development was led by an industry partner like the IT Company referred to above. This model tended to exclude academic input from lecturers and other stakeholder experts. The last model he referred to was whereby curriculum development was led by a university. He gave a specific example where a university in South Africa was developing subject and assessment guidelines for robotics. The curriculum that would result from this model, risks being too academic and might lack the vocational aspect expected of TVET college programmes.

The models above have their advantages but also glaring disadvantages. An ideal model would be one whereby each curriculum support team must comprise industry experts (for noting current trends), current lecturers (for pedagogic advice), QCTO (for quality assurance), universities (for academic advice) and DHET (for guidance and funding). A curriculum programme that is drawn up by such a curriculum support team would be complete.

4.4.6.3   Sub-theme: Outdated syllabi

In his interview, the DHET official admitted that the syllabus review had not been done in a long time. This was consistent with my findings in document analysis. I found that some syllabi, especially in the NATED programme had not been reviewed since the

inception of the programme. However, the DHET official said that the syllabus review was stepped up in 2018.

In her interview, SSSB said, *"…some industries have moved, dramatically so, in terms of technology [whilst] our students are still doing theory of things that were done ten years ago…"* DPAB agreed with this point and gave an example, *"… [in] motor trade theory, they are still teaching about carburettors…[but] new cars are using fuel injectors…"* MB also said something in agreement, *"…we feel that maybe in terms of the programmes that the college is offering, they need to also look at what is the demand of the community…"* SSSB also said, *"…we [need] to align our curriculum with the needs of the market…so that our students are employable."*

The outdated syllabi created a rift between what the TVET colleges offered and what the industry expected. Students learnt outdated information, which they could not use in real life. I also checked the subject guidelines of Advertising and Promotion and noted that at the time of collecting data, students were not exposed to modern ways of advertising like social media. A student who graduated with flying colours in this course would have to be re-taught everything in the workplace because most companies advertise on social media and the Internet.

4.4.6.4   Sub-theme: Examination-oriented system

Taking the above concerns in sub-section 4.4.6.3, one might think it is easy to remedy the situation. One would assume that students learn what is current in the industry and ignore outdated information at college. This might sound logical, but the major obstacle is that the TVET college system is examination-oriented. The examinations are centralised, meaning that all fifty colleges and their campuses write the same examination at the end of an academic year.

A centralised examination-oriented system has its advantages like ensuring and maintaining the same standards across all colleges but in a situation whereby the curriculum is outdated, students receive meaningless certificates. Whilst students

might be exposed to new trends in the industry, they still have to contend with an examination based on an outdated syllabus.

4.4.7   Generated theme: Placement challenges

Right throughout data collection, the issue of managing partnerships kept on popping up in various forms. In sub-sections 4.4.4.1-4.4.4.4, I discussed the four functions of management and how they affect the role definition of partners. In this section, I took a broader look at the concept of management but this time I looked at management issues that created a variety of challenges when placing students at workplaces.

4.4.7.1   Sub-theme: Mismatched industry placements

The focus group interview revealed a lot in this regard. Mismatched industry placements were mostly caused by the fact that students placed themselves in industry. The problem was compounded by the fact that colleges did not follow students at workplaces for supervision. Some students colluded with host employers to fill in the logbooks and pretend as if they had done the WBE. FG9, an Electrical Engineering student, placed himself in the industry and was a radio presenter for some sports shows. This work experience was neither sanctioned by the college nor relevant to the course of study that he was doing. That is why in table 4.3, I wrote that he had no industrial experience.

FG11 noted that students who do Financial Accounting got a raw deal during WBE because they never really got the opportunity to do what was related to what they had learned. This point was echoed by MA who said, *"…we [are] working with money you know…we cannot trust anyone with money except permanent [staff]."* MD also said something similar, *"…the finance office is a very sensitive office because they deal with money there."* Finance students ended up doing unrelated things because finance is a sensitive area.

Sometimes students placed themselves in mismatched industries because of the stipend that was paid out to those who did WBE. Participants said that students

claimed a total of R100 per day for a maximum period of five days. For the students, it ceased to be a learning experience but a money-making scheme. DPAB also said that sometimes students refuse to go on WBE if the issue of stipends is not addressed. He said, *"…it's a society of freebies."* This issue of money sometimes also leads to completely dishonest behaviour. FG8 said, *"…students don't even pitch [for WBE]…they submit the report and claim the money."*

From the focus group interview, I got the sense that the college encourages students to place themselves. This might have been caused by the fact that the SSS office is way too understaffed to deal with all the students on each campus. FG11 said, *"…they first ask those who have found their places so that they can place them first."* If students go out to find their places, there is a higher chance that these students will be placed wrongly especially considering that the main motivating factor for most of them is the stipend. In response to whether this practice was good FG6 said, *"…it's all the same. The college still places us in the wrong places."* This also showed that students feel that they are sometimes placed wrongly by the colleges.

Mismatched placements seem to happen when students place themselves, or when the college places them wrongly or when they are placed right but at the workplaces, they do not allow them to do what they have to do especially Finance students. However, this issue of mismatched placements in the industry seemed to have happened mostly with WBE, which was five days and was not even compulsory. This WBE also seemed not very well supervised. However, the participants noted that it was different with NATED courses whereby the internship is compulsory and very well supervised.

4.4.7.2 Sub-theme: Synchronisation of TVET colleges' and industry programmes

SSSB noted that some skills gaps existed between what the students were taught at college and what they experienced in the industry. She referred to the drastic changes in the industry and that TVET colleges should do a lot to catch up or else they will remain irrelevant. She also noted that the students lacked professionalism which is

required in the workplace. She said, *"…sometimes they'll go to these workplaces and still behave like students…"*

This point was also raised by MA who noticed that college students generally lacked work ethics and she wished there could be a preparatory course before placing students in workplaces. She noted the behaviour, the dress code and how presentable they are as a major concern. She said, *"…on our disciplinary matrix, bad client service is a final written warning. The next offence is a dismissal."* ME also noted the same problem to do with the dress code of these students. He wished something could be done so that these students fit into the workplace.

With all this, one can see that whilst the colleges concentrate on academic issues, workplaces value other things like work ethics. It is, therefore, of great importance that college teaching programmes include these issues that workplaces regard as of importance. TVET college training programmes should be in synchrony with the expectations of the industry.

4.4.7.3   Sub-theme: Lack of sustained feedback sessions

From the data collected, it seemed as if the colleges used to have feedback sessions but somehow these stopped. I assume that this was caused by the advent of COVID-19 and its restrictions. However, I feel that this feedback need not have been physical. Online meetings could have been organised to gather necessary feedback to improve workplace learning. M4 said, *"…a feedback session is desirable so that we say what we think should be changed…"*

In his interview, the DHET official said, *"…I wouldn't think there is anything we would want to improve…there haven't been any challenges that might prompt for any improvement so far…"* In his opinion, he thought that everything was going well but that seemed not to be the feeling of the host employers and the students themselves. FG6 felt that the logbook as a source of feedback was not enough. He said, *"…but there should be one, even verbally, to be presented by the student to say what they think of the experience and how it can be improved."* The student felt that a verbal

feedback session should be organised to share experiences to improve the workplace-based experience.

Even when feedback was given by host employers, MC said that there seemed not to be any change in the way the college operated. She said, *"…I haven't seen any [improvements] as yet. I haven't seen anything materialise."* DPAB said that for the college to have a better idea of what the industry needs, they were planning to have the first-ever TVET college month in the industry. This means that instead of just celebrating the TVET college month on their own, they were planning to go to the industry so that the industry could say what they could add to the college curriculum.

4.4.7.4   Sub-theme: Unwillingness to take in students for placement

I discovered from the company managers interviewed that sometimes they did not take students in certain programmes like Finance because finances are sensitive. This point has been discussed in the sections above. The DHET official said that it would be a welcome development if companies could, *"…expand the spaces that they can accommodate students."* This means that there were many students and if companies could increase their intake of students then all students would be accommodated.

SSAA said that in some areas the college tended to rely too much on the same but few companies for the placement of students. He said that this led to some resistance to taking the students as some companies saw the whole exercise as an extra responsibility. This point was agreed upon by DPAB who said, *"…they see this as a backdrop in terms of production because the person who was supposed to be working would now be supervising the students."* I understood the expression "backdrop" used by the participant to mean "drawback."

DPAB also went ahead to mention COVID-19 as one of the reasons why companies were reluctant to take in students even those on the mandatory internship programme. He also said, *"…other institutions are sceptical in terms of allowing our students to come to them…"* This meant that companies did not trust that the students would do a good job in their companies. This could also mean that some of these companies

were not sure of what happens in these TVET colleges. A briefing session between TVET colleges and these companies could alleviate this problem.

DPAB also talked about another dilemma that made companies not take the students. He said he had observed that some engineering companies were still using old machinery that even colleges were no longer using. The machines were still giving them excellent productivity therefore, *"…such industries might not welcome us when we come with your NCV with innovations."* He pointed out that the opposite was also true. Most of the time, technology evolves faster in the industry than at TVET colleges. He said, *"…they are still reluctant to absorb us because we are still coming with the old ways and they are now using the new ways."*

Given the above, companies were not taking enough students, and sometimes not at all. The reasons varied but either way, students were denied the opportunity to get to experience workplaces. These reasons should be explored by TVET colleges, and they should work together with these industry players and work on partnerships to the benefit of the students.

4.4.7.5   Sub-theme: Very short industrial attachment

One theme that resonated with all participants was the length of WBE. The eighteen-month internship programme had no problem but the five-day WBE was seen as insufficient. MD said, *"…I think the time you give students for experiential learning is too short. Before we teach them anything, they are back at college and we receive another group."* The students do not benefit much after only five days. FG5 said that she spent both WBE experiences observing what happens at the workplace because sometimes that is all that can be done in that short space of time.

Focus group participants who had had WBE agreed that the time spent at the workplaces was too short to learn much. FG11 said she went around the problem by going for WBE every school holiday. FG7 said that he agreed that the period was short but he said he understood why. He said, *"…it wasn't enough…there are many students so we have to take turns…"* Companies would host different groups of students in five-day intervals. That way most students were placed in the industry. As for how much

they learned, depended on the company and the commitment of the concerned student.

Sub-question 4: "What strategies can be considered to improve current and other suitable TVET colleges and industry partnerships to enhance the employability of TVET college graduates?"

4.4.8   Generated theme: Compulsory partnerships for all programmes

Since some companies did not want to host students, some participants felt that colleges should be compelled to have multiple partnerships to place students. FG11 felt it was not fair that the college had a partnership with a certain company that only took a few students per year but in the Engineering field only. She felt that similar partnerships should be forged with companies for other programmes, especially Finance and Marketing. The sub-points below further illustrate the point of making partnerships compulsory.

4.4.8.1   Sub-theme: Mandatory industry placement

During data collection, I realised that WBE was not compulsory even before it was paused in 2020. DPAA and DPAB in their interviews underscored the importance of WBE. In his words, DPAA said partnerships, *"…are addressing the issue of employability after the student has been trained."* DPAB said, *"…TVET colleges without industry [are] white elephants…"* Therefore, students who complete their training without any industry experience lack an essential part.

4.4.8.2   Sub-theme: Policies mandating public companies to take in students

MB said that maybe colleges and the department should consider coming up with some policy to compel companies to take in students. She said, *"…we have a lot of companies who can offer experiential learning to these students but they are not playing their part. If there is something that forces them, it will happen."* It was

frustrating to everyone that companies that could host students simply chose not to because nothing was compelling them to.

4.5 DATA COLLECTED CONCERNING THE THEORETICAL FRAMEWORK

The theoretical framework I used in this research is based on the work of Tomlinson (2017) and this framework was discussed in detail in sub-section 1.7 of this report. Suffice it to mention though that the Graduate Capital model consists of five capitals which are Human Capital, Social Capital, Cultural Capital, Psychological Capital and Identity Capital. The assumption I made was that graduates who gain workplace exposure develop these five Graduate Capitals by Tomlinson (Tomlinson, 2017). In this sub-section, I will not discuss the five Graduate Capitals all over again but I will deduce from the data collected, especially in the focus group, whether students acquired any of the Graduate Capitals.

I noticed that students placed at various workplaces were accessed on duties and responsibilities that they carry out at the workplaces. By way of an example, I analysed the logbook used by "Management Assistant" students. The logbook lists duties like typing various documents like faxes, memoranda, correspondences, reports, e-mails, meeting documentation and so on. The student is assessed on his/her ability to put what they would have learnt at college into practice. All programmes have logbooks that would have a specific subject and students would be expected to perform the tasks as listed.

However, the five Capitals mentioned by Tomlinson are general and not subject-specific. These are skills supposedly developed by students on their own as they are at the workplace. These five Capitals seem to be higher-order skills, which require the student to develop superior job-hunting skills, excellent interview skills, ability to identify, predict and adapt to the ever-changing work environment.

I noted that the logbooks, on which students are assessed, do not incorporate any of the Graduate Capitals skills. It is difficult to say, in definitive terms, whether the students developed these skills or not. One can only deduce from the focus group if

students did develop these skills on their own. In the subsequent paragraphs, I analysed the data collected to decide whether the students had somewhat developed all or some of the Graduate Capitals.

4.5.1   Human Capital

According to SSSA, students at his college are assisted by Life Orientation (LO) lecturers to somewhat develop this capital. He said, *"…we work hand-in-hand with the LO lecturers to make sure that they are assisting our students with CV writing or job preparedness skills…"* This is done as part of the course of LO and English as fundamental subjects done by all students in the NCV programme. Students who do the NATED programmes do not do fundamental subjects but most of them are NCV graduates who would have done the fundamental subjects and learnt CV and application letter writing and practised interview skills.

The Huma Capital goes beyond letter writing and superior interview skills. Graduates must develop work-related skills and will correctly interpret the job market. The logbooks that the students carry list work-related duties that students are expected to perform. They are assessed on these duties and if one does not perform to satisfaction, this will be noted, and the student will be mentored so that they improve. Ordinarily, all students who pass their WBE or internships would have demonstrated that they could perform these work-related duties.

FG11, FG7 and FG6 said they were satisfied with their work experience. In her words, FG11 said, *"…they teach you how to do filing mostly, office work…Yes, I can say it was effective…"* FG11 was doing her WBE in the subject of Office Administration. She felt that her experience was worthwhile and she acquired the necessary work-related skills. FG7 also said her experience was relevant. She said, *"…everything we did there was relevant because we were taught how to photocopy, how to do filing and computer work since we also did ICT."*

FG4 raised a point that all participants agreed with. He said, *"…some components that we have in the Engineering course are not relevant compared to what is in industry…our components are outdated compared to what is in the industry"* FG1 also said, *"…[At ESKOM] it was not the same because there they deal with high voltage electricity generation and distribution whilst here it's low voltage electricity generation, wiring, circuit boards and so on."* I think that even though there was a difference between what the students had learnt at college and what they experienced at their respective workplaces, they gained valuable work experience because what matters, in the end, is what happens at the workplace. They had to adjust to what they would be expected to do at the workplace.

FG5 also complained that in all her two WBE experiences, she only had to observe. Whilst she did not get to practice anything, the observation experience should have taught her how things are done at the workplace compared to how things happen in the classroom. She would have learnt a lot in terms of work ethics and professionalism.

4.5.2   Social Capital

This capital deals with adaptation to the workplace and establishing a visible professional presence so that employers can access the graduate for purposes of future employment. FG11 said, *"…I got to hang around with a lot of people and you are also able to do some networking which provides you the opportunity to meet people around your environment…"* It is this networking with relevant industry players that helps graduates maintain some presence online or otherwise so that employers easily contact the graduate for purposes of employment later.

MB and MC said that sometimes they get students who excel so much that their respective companies benefit something from the students. MB said, "*…we got very good students who came here and changed this organisation. We could see our organisation going forward…"* MC said that they are so impressed with the students that sometimes they offer permanent employment to these graduates depending on their performance.

4.5.3   Cultural Capital

The Social and Cultural Capitals intersect in some way. Most of the students noted some differences between what they had learned at college and the actual operations at the workplace. Although some said that there were no major skills gaps, some focus group participants noted the differences. This, however, did not throw them off but they could quickly adapt to what the workplaces demanded of them. Most of the managers interviewed noted that the students performed as expected at the workplace.

4.5.4   Psychological Capital

This capital also deals with adaptation in the workplace but goes on to develop in students the capability to anticipate and appropriately deal with inadvertent changes in the work environment. The student must demonstrate the skill of putting in place contingency plans in cases of drastic career changes. In the focus group, students noted that the Marketing course is still being offered in the NCV programme but has been phased out in the NATED programme. This was because the colleges discovered that the job market had been saturated with these graduates and there were no more jobs. Therefore, the student who would have done Marketing in NCV and would like to continue with their studies would have to make important career decisions and choose a different course of study to remain employable.

4.5.5   Identity Capital

Participants of the focus group also seemed to have developed this capital. This capital deals with the graduates' ability to identify skills gaps and work towards addressing them. As already mentioned above, students are confronted with a new reality at the workplace and they realise that there are skills that they need to develop. Participants of the focus group said that they had to adapt to the workplace and part of this adaptation consisted of developing new skills at the workplace.

In his interview, DPAA said that the partnership that the college had with one of its partners, required students to develop completely new skills. The graduates were recruited by the company to do a learnership in new fields different from what they would have done at college. The students need to adapt to the new work demands and make sure that they fit into their new reality. Another partnership that the college had was an international one. Graduates have to first learn the language of that country and then adapt to a completely new education system and foreign industry. The graduates who come out of this partnership would have demonstrated superior adaptation skills such that they can work anywhere else.

In conclusion, I deduced that the industrial attachment of students did, to a great extent, develop in students the five Graduate Capitals. The students who were doing their internships cherished their experiences because theirs was an eighteen-month workplace experience. It is my opinion that in eighteen months, one acquires a wealth of experience and prepares the graduate for the actual realities of the workplace.

The students who were exposed to the five-day non-compulsory WBE had few opportunities to develop all five Graduate Capitals. The five-day period was too short for any learning to have taken place. The fact that WBE was not compulsory made students not take it seriously and too often was done for ulterior motives, namely the stipend. This was also compounded by the fact that WBE was generally not well supervised.

4.6   SUMMARY OF THE CHAPTER

In this chapter, I presented the findings of this study. I presented the data in tables, figures and verbatim quotations from the participants. I presented the biographic information of the participants and then presented the data. I discussed generated themes and sub-themes that emerged from the data collected. These generated themes were discussed concerning the sub-questions of the research. Eight themes were discussed and a variety of sub-themes for each theme.

In the next chapter, I presented a summary of the findings of this study. I went on to conclude the findings and gave logical recommendations that addressed the findings. I outlined the contribution of this study to knowledge. I also outlined the limitations of this study and gave suggestions for further study.

CHAPTER FIVE

SUMMARY OF THE STUDY, FINDINGS AND RECOMMENDATIONS

5.1   INTRODUCTION

In the previous chapter, I presented the findings of this study. I presented the data in tables, figures and verbatim quotations from the participants. I presented the biographic information of the participants and then presented the data. I discussed generated themes and sub-themes that emerged from the data collected. These generated themes were discussed about the sub-questions of the research.

In this chapter, I presented a summary of the study. I then outlined the findings of the study and then drew logical conclusions. I outlined the contribution of this study to existing knowledge. After that, I put forward certain recommendations based on the findings of the study. Finally, I outlined the limitations of this study and gave suggestions for further study.

5.2   SUMMARY OF THE CHAPTERS

The purpose of this study was to explore stakeholders' perspectives on TVET colleges and industry partnerships for the employability of TVET college graduates. The study sought to explore the nature of the partnerships that were there, to analyse the roles partners played in these partnerships, to discuss challenges that were faced by these partners and finally propose a new framework for improving partnerships between TVET colleges and industry. In the following sub-sections, I give a chapter-by-chapter analysis of the study.

5.2.1   Chapter one

In this chapter, I gave a detailed orientation of this study. I stated the problem and then discussed the aim and the objectives of the study. The main research question was stated together with the sub-questions. I discussed the theoretical framework as well as the research methodology. I briefly discussed the research design and issues

relating to ethics in research. Finally, I discussed how data were collected, analysed and interpreted.

5.2.2   Chapter two

In this chapter, I reviewed the literature to do with partnerships internationally and in South Africa in general. I explored the emergence of TVET colleges and their place in the development of skilled labour in South Africa and Mpumalanga in particular. I discussed the typology of partnerships in TVET colleges internationally and in South Africa. Finally, I discussed barriers to effective partnerships.

5.2.3   Chapter three

In this chapter, I took a closer look at the research methodology used in this chapter. I discussed the philosophical foundations of the study, the philosophical paradigm and the research design. I described the population of this research and explained how I sampled participants. I discussed issues around research ethics and how I ensured trustworthiness. I also discussed instrumentation, data collection procedures, data analysis and presentation.

Twenty-one participants were sampled from the two colleges. In-depth participants consisted of two deputy principals, two student support services officials, one DHET official and five company managers from the Mpumalanga province. The focus group consisted of eleven participants all of whom were students. Data was also collected through document analysis.

Before data collection, I applied for and was granted ethical clearance from the Ethics Committee of the University of South Africa. I sought and was granted permission from the principals to conduct research in their colleges. I sought permission from participants before they were included in the study. I audio-recorded the interviews and these were transcribed.

5.2.4   Chapter four

In chapter four, I presented the data in a variety of forms. I presented and analysed data. After coding the data, some themes and sub-themes emerged. I discussed this in line with the sub-questions of the study. Throughout the chapter, I used verbatim utterances of the participants and triangulated using document analysis. The instrument for document analysis is attached as Appendix G. I also discussed the findings and showed how these related to the theoretical framework that guided the research. I also presented the data and showed how it related to the literature reviewed.

5.2.5   Chapter five

In chapter five, I presented a summary of the findings of the study. I went on to conclude the findings and gave logical recommendations that address these findings. I outlined the contribution of this study to existing knowledge. I also outlined the limitations of this study and gave suggestions for further study. I finally gave concluding remarks.

5.3   FINDINGS OF THE STUDY

In chapter four, many findings were presented by way of themes and sub-themes. Below is a brief discussion of these findings.

5.3.1   Pedagogical importance of partnerships

I found that these partnerships had pedagogical importance. Partnerships were forged in partial fulfilment of the requirements of certain programmes, especially the National Accredited Technical Education Diploma (NATED) programme. Under this theme, I discussed four sub-themes. The following was what I found.

5.3.1.1 Partnerships to complement academic work at colleges

Partnerships complement academic work done at TVET colleges. Partners allow students and lecturers to put into practice the theory they learn or teach at these colleges. They learn to appreciate how things are done in industry and are exposed to new ways of doing things. Students learn to adapt to workplaces and lecturers become better facilitators who are aware of the reality in workplaces.

5.3.1.2 Partnerships as requisite for certain programmes

I also discovered that the NATED programme consists of eighteen months of theory learning at the TVET colleges followed by a mandatory eighteen months of internship at the workplace. Without the internship, the students would not be awarded the National Diploma. However, in the National Certificate Vocational (NCV) programme, industrial attachment is not compulsory as the programme combines both theory and practice.

5.3.1.3 Partnerships as a source of resources

I found that TVET colleges engage in partnerships to benefit from resources supplied by a variety of their partners. These resources would include donated equipment or machinery, infrastructure and teaching resources. Students on attachment also get to use machinery that they would ordinarily have access to at college because the colleges would not have these.

5.3.1.4 Partnerships as a career development tool

Industrial attachments make students and lecturers appreciate more their chosen careers. I noted that most lecturers have academic qualifications with little or no industrial experience. Workplace-integrated learning (WIL) puts everything in perspective for them and they develop professionally. They become aware of the realities in industry and they focus their teaching to emphasise the most important

aspects. Students also get to appreciate their chosen careers as they observe industry staff going about their daily duties.

5.3.2   Diversity of partnerships

I found that although there were a variety of partnerships, TVET colleges forged partnerships for placing students. This type of partnership was most prevalent.

5.3.2.1   Formal partnerships

I found that formal partnerships with written agreements were few. Mostly, partnerships for placing students were not bound by any agreement. I found that out of all the managers interviewed, none of them had any partnership agreement with the TVET colleges from where the students came from.

5.3.2.2   Mutual benefit

Data collected revealed that in most cases partnerships are of mutual benefit to the partners. Whilst TVET colleges got spaces to place their students for WBE or internships, the companies enjoyed the benefits of extra hands for no extra expense. The students were paid stipends by the SETAs, DHET or the colleges concerned. In some cases, the industry also benefitted from innovations by college students. The college also benefitted from donations of machinery or equipment and infrastructural development.

5.3.2.3   Clear operating guidelines

Data also revealed that, although TVET colleges occasionally ignored their partnership obligations, there were clear guidelines as to what each partner had to do. In cases where there were written agreements, this was made easy as the agreement would contain a section detailing the duties and responsibilities of each partner. Although partnerships for industrial placement of students had no formal agreements, students

had a logbook that workplace supervisors had to complete. This also served to give clear guidelines as to what to do.

5.3.3   Partnerships for public relations

Data collected also revealed another reason why the industry wanted to collaborate with TVET colleges. Industry sometimes forged partnerships with TVET colleges for public relations purposes. There seemed to be no material gain for them but these partnerships served as publicity for the concerned industries. The sub-section below sheds more light.

5.3.3.1   Partnerships for building good corporate image

Industry players sometimes enter into partnerships to build for themselves a good corporate image. They wanted to be associated with the training and development of a skilled workforce. They wanted their brands to be associated with post-school institutions to contribute to the government's mission of skilling the nation.

5.3.3.2   Partnerships for paying back to communities

Industries operate in communities and sometimes they exploit the natural resources of these communities. These companies feel the urge to develop these communities as a way of paying back. One of the ways they did this was to recruit youth from these communities and send them to TVET colleges and they pay the fees. Partnerships are forged with TVET colleges to provide specific skills to these recruits. The companies would pay full tuition fees whilst the college would design the courses and find facilitators.

5.3.4   Managing partnerships

The main role of TVET colleges is to manage these partnerships, as they are often the ones that initiate them I found that colleges have many management challenges, which I discussed in the sub-sections below.

5.3.4.1 Planning

I found that planning is insufficient as it excludes important stakeholders including the students, lecturers and host employers. This leads to a myriad of problems in the planning stages. No one was appropriately briefed as to what they were expected to do.

5.3.4.2 Organising

This management function was also not taken care of, as there was no definition of the roles of partners. TVET colleges did not assign anyone to help the Student Support Services officials supervise the students. This led to a situation whereby students on WBE or internships were either insufficiently supervised or not at all. However, I found that the issue of student supervision was better handled by the industry.

5.3.4.3 Leading

There was no indication as to whether the staff members who would avail themselves to supervise students on WBE or internships were ever incentivised. In the end, most staff members stayed away and did not bother to go visit the students on industrial attachment.

5.3.4.4 Controlling

There were a few feedback sessions and in most cases, the issues that were raised by industry partners were not addressed. That means that the operations of these partnerships remained the same with no improvements.

5.3.5 Funding and funding models

I found that most of the funding for TVET colleges was from DHET through direct transfers. I, however, found that other players funded TVET colleges.

5.3.5.1   Roles of partners

The SETAs placed NATED students in the industry for internships. They paid their stipends and performed supervisory visits. They also were involved in the continuous professional development of college lecturers. Some companies funded TVET colleges through the donation of equipment and machinery, infrastructural development and sponsoring certain students. These partnerships had financial benefits for the colleges.

5.3.6   Diversity and flexibility of TVET colleges' teaching programmes

Data revealed that TVET colleges' teaching programmes were neither diverse nor flexible. This was due to many reasons discussed below.

5.3.6.1   Ministerial programmes

TVET colleges delivered ministerial programmes. The colleges had no authority to divert from these or alter them in any way. TVET colleges had to wait for the department to revise these. The process of revising programmes was too slow.

5.3.6.2   Insufficient stakeholder involvement in curriculum designing

I found that there was insufficient stakeholder involvement in curriculum design. This observation was a cause for concern as syllabi that result from such processes risk ignoring important stakeholder inputs.

5.3.6.3   Outdated syllabi

I found that most syllabi were outdated albeit the process of revising these had started in 2020. To date, a significant amount of these have been revised. The revision intervals were not specified meaning that one would not know when these would be revised again.

5.3.6.4 Examination oriented system

I found that the TVET college system was examination-oriented. The examinations were centralised meaning that all colleges offering the same subject would write the same examination. That means that despite innovations and changes in the industry, students would have to write examinations on outdated information. The colleges had no authority to adapt lessons, let alone examinations, to current situations.

5.3.7 Placement challenges

I also noted many challenges around the placement of students. I discussed these in the sub-sections that follow.

5.3.7.1 Mismatched industry placements

I noted that with WBE there were many mismatched placements in the industry. In those cases, students would be involved in things that were not related to their courses of study. I, however, found that there was no mismatched placement with NATED studies most probably because the programme was better supervised. A supervisor from a SETA would dispute why a student in one programme was placed in another programme.

5.3.7.2 Synchronisation of TVET colleges and industry programmes

I found that there were skills gaps noted because TVET college's programmes were a bit outdated. Even when syllabus review was done, it was always behind because trends change very quickly in the industry.

5.3.7.3 Lack of sustained feedback sessions

I noted that there were feedback sessions some time back but the TVET colleges failed to sustain these. Host employers wished these feedback sessions could continue as new challenges emerged.

5.3.7.4 Unwillingness to take students for placement

Data collected revealed that some companies categorically refused to take students for industrial attachment. There were various reasons for this but scepticism on the part of the companies was a major one. Companies did not know what to expect of these TVET college graduates most probably because they did not know anything about these institutions. I felt that these companies regarded TVET colleges as inferior institutions.

5.3.7.5 Very short industrial attachment

Besides the eighteen-month internship programme, the WBE provided students with very short industrial attachments. Students did not benefit much from this experience.

5.3.8 Compulsory partnerships for all programmes

Participants felt that TVET colleges should forge partnerships for all programmes. I found that some subjects were not accommodated especially Financial Studies as companies regarded this area as being very sensitive.

5.3.8.1 Mandatory industrial placement for all students

Participants felt WBE should also be made mandatory. They felt industrial attachment is better than practical work done at college. Students needed industrial experience.

5.3.8.2 Policies mandating public companies to take in students

Some participants felt that the department should draw up policies compelling companies to take in students. Many companies could take in students but they simply refused for whatever reasons.

5.4   CONCLUSIONS

From the summary of the findings discussed above, I drew a few conclusions about TVET colleges and industry partnerships in the Mpumalanga province. These conclusions are discussed below in different sub-sections.

5.4.1   Centralised education system

From the data presented, I concluded that the centralisation of the education system in TVET colleges made the curriculum rather inflexible and not diverse. This made it difficult for TVET colleges to quickly react to local industry needs and prepare students for the job market. This caused a lot of skills gaps and rendered the qualifications of students worthless after graduation.

The irregular revision of TVET colleges' syllabi also compounded the problem. The curriculum was outdated and when the changes were finally ushered in, they were too late because new things were in the offering. Important stakeholders were not always involved further creating the rift between what TVET colleges offered and what the industry expected of the graduates. I further concluded that this exclusion of important stakeholders in important things like curriculum design made these stakeholders sceptical of the operations of TVET colleges. This would explain why certain companies wanted nothing to do with TVET colleges and their graduates.

5.4.2   Management of partnerships

From the data collected, I concluded that most of the challenges in TVET colleges and industry partnerships emanated from the mismanagement of these partnerships. I concluded that TVET colleges as the initiators of most of these partnerships failed to plan, organise, lead and control these partnerships. This inevitably leads to unclear allocation of roles to partners. The following sub-points further illustrate my conclusions on the management of partnerships.

5.4.2.1 Unrealistic Expectations for SSS

From the data collected, I concluded that TVET colleges had unrealistic expectations about the role of the Student Support Services (SSS) as far as partnerships were concerned. SSS is expected to approach companies to place all students. SSS should visit all these workplaces to supervise each one of these students and complete the voluminous logbooks for each student. All this knowing that each campus has only one placement officer.

The SSS staff is understaffed and overworked. This would inevitably lead to ignoring certain important functions like properly planning the placement of students. Some students ended up placing themselves, and too often, wrongly. Despite their good intentions, I concluded that the SSS was too understaffed to properly conduct their duties. I also concluded that there was no proper delegation of duties especially to do with supervising students on industrial attachment.

5.4.2.2 Partnerships not taken seriously

I also concluded that partnerships at TVET colleges were not taken as seriously as they should have been by stakeholders. NCV students did not take their WBE seriously because it was not compulsory. The academic staff did not involve itself in supervising students because even if students did not attend WBE, they would still graduate.

Some companies also did not take these partnerships seriously, as they tended to engage students in unrelated duties. This was maybe because they also realised that both colleges and students did not take these placements seriously. In the case of WBE, the five days also made it difficult for companies to engage students in useful activities, as there was no time.

The other reason I felt that these partnerships were not taken seriously was the fact that most of them had no formal written agreement. These loose-ended partnerships are difficult to manage, as there is no sense of obligation on partners. There would be

no set performance standards making the controlling function virtually impossible to perform.

5.4.3   Types of partnerships

I concluded that TVET colleges mostly forged partnerships to place students in the industry for WBE, internships and learnerships. The level of engagement of TVET colleges and industry was limited to placing students. There were some other forms of partnerships but they were not many.

5.5   CONTRIBUTION TO THE BODY OF KNOWLEDGE

During data collection, I noted that there was no WBE for the NCV students because the programme had been suspended due to the COVID-19 pandemic. However, from the literature reviewed and interviews conducted, I learned that the WBE only lasted about five days. In the focus group, I interviewed students who had done this WBE and were not entirely satisfied with it.

WBE, as it was, was insufficient and not well planned, not well monitored and amounted to nothing as it was not even compulsory. More often than not, students placed themselves giving rise to dishonest behaviour whereby students completed the logbook themselves and just got a stamp from the host employer. They went through the trouble of WBE not to gain industrial experience but just so that they could claim the stipend.

Although the situation was a bit better with NATED internships, I believe that TVET colleges can do with a new partnership framework. I, hereby, propose a new TVET college model that will be acceptable to both the students and employers. This model is a combination of TVET college models that I discussed in sub-section 2.2.1 of this report. The model would be centrally managed through DHET to ensure quality and uniformity in TVET colleges in South Africa. The model is dependent on a wide range of public and private partnership involvement. This model is presented in Fig 5.1:
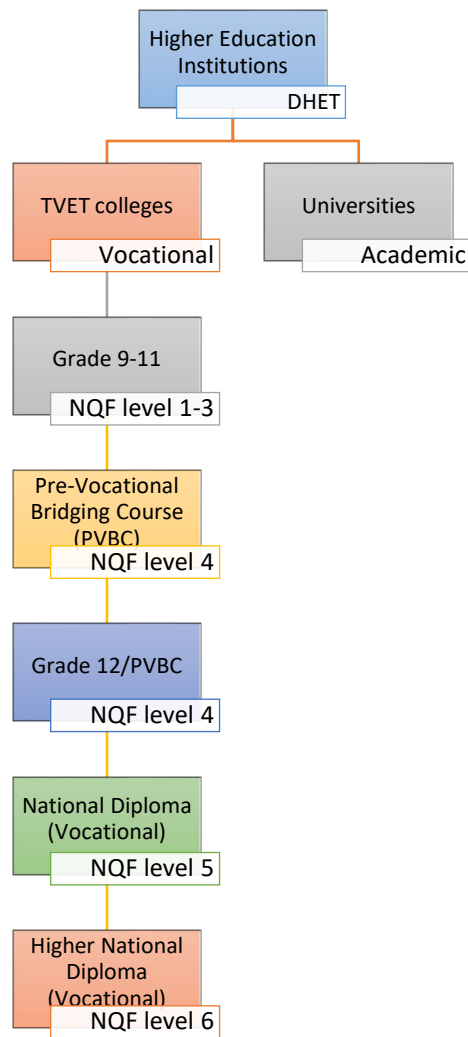
Figure 5.1: Proposed progression model for TVET colleges

The figure above gives a visual representation of the proposed model and the progression thereof. The subsections below explain in detail how the model will work including the specific roles of stakeholders.

5.5.1   Entry requirements

The model is intended for high school graduates who have minimum qualifications from grade nine up to grade twelve. The students who have passed grade nine up to grade eleven are considered to have acquired levels 1-3 according to the National Qualifications Framework (NQF). These students will be enrolled at the TVET colleges for a Pre-Vocational Bridging Course (PVBC). This is a bridging course not for certification purposes but should be examined and marked at the colleges concerned.

The duration of this course should be one year whereby students do a bridging course for the intended course of study.

It is expected here that students be introduced to vocational programmes and as suggested in section 2.6.7, there be guest lecturers from the workplace to properly orient the students as to what goes on in the workplace. The involvement of guest lecturers will be informed by the chosen course of study by the students. By the end of the PBVC programme, it is expected that the students will have acquired basic skills in their fields of study and most of all they are expected to be motivated to pursue their studies. Industry players should be involved right throughout the PVBC stage including curriculum design.

Students with a matric certificate or who have completed the PVBC programme will be considered to have acquired NQF level 4. These students will be able to enrol for the National Diploma (Vocational) (ND (V)) course that I am proposing. I believe that students who would have acquired the NQF level 4 can easily go through the ND (V).

5.5.2   Course structure

The course will have a duration of four years. The first two years will be dedicated to theory studies at the college. There would still be practical assessments in laboratories, workshops and practicum rooms. The first two years prepare the students for the third year whereby they will be on industrial attachment, which I will refer to here as Industry-Based Experiential Learning (IBEL).

5.5.3   Industrial-Based Experiential Learning

The Student Support Services (SSS), through the Student Liaison Officer: Job Placement will be expected to liaise with industry partners to place students for IBEL. SSS will be expected to brief these industry players on what they are expected to do. Industry players will be expected to monitor and supervise the students. They will be given logbooks and newly developed assessment tools with which to supervise the

students. Host employers should also be advised on how to support the students and how to deal with issues of misconduct by some students.

Once SSS has completed the placement of students, a list of placed students and their programmes is sent to heads of departments (HODs) in each campus so that they deploy lecturers to go and supervise the students. I propose that the workplace conducts two assessments and the college conducts one supervisory visit per quarter. These supervisory visits must be followed with a feedback session so that the student is made aware of areas of improvement. A copy signed by the supervisor and the student must be kept in the student's portfolio of evidence (POE) whilst the original copy is taken back to the campus to record the mark. The marks must be averaged and a student would require a minimum of 50% to pass IBEL.

During IBEL, students will be expected to complete a subject-related project. Supervisors will be allocated to monitor the progress of the project. At the end of year three, students would have completed their IBEL and the project. The student will have a mark for IBEL and another for the project, which will replace the current Integrated Summative Assessment Tasks (ISAT) mark. In the fourth year, the students complete their course of study. The transcript would also reflect the IBEL and the project marks.

5.5.4   Stakeholder involvement

Various stakeholders will be involved. Firstly, public and private entities would be asked to host students on their IBEL. They will be expected to supervise these students. These entities would also be expected to be part of various subject committees so that they make sure that the syllabi and programmes offered by TVET colleges are relevant and current. They could also donate some equipment to TVET colleges offering subjects in their economic sectors. Other areas of cooperation could be guest lectureship and lecturer workplace experience.

There are various Sector Education and Training Authorities (SETAs). These SETAs would be involved in syllabus review and ensure that the syllabi meet expected quality standards. They would also be involved in funding training for lecturers and also

funding IBEL for students by paying out stipends. They could also be asked to supervise students on IBEL.

DHET would continue to fund the TVET sector and pay the lecturers. It would organise staff development programmes, coordinate syllabus review sessions and liaise with strategic partners for a variety of projects that are intended to improve teaching and learning. DHET would coordinate the functioning of subject committees making sure that the syllabi produced pass all quality checks.

5.6 RECOMMENDATIONS

The following recommendations derive from the findings of the study. Whilst, TVET colleges are run similarly, the findings are unique to the context of the TVET colleges sampled. The findings point to the management of partnerships in the sampled colleges and other colleges in other provinces might be managing partnerships differently. The recommendations directly address the fourth objective of the study, which seeks to improve partnerships to improve the employability of TVET college graduates.

5.6.1 Improved management of partnerships

I recommend that partnerships be better managed by TVET colleges. Having noted that managing the placement of students was overwhelming for short-staffed SSS, I recommend that this function be shared between SSS and the Curriculum units of the colleges. Lecturers must be involved actively in the placement and supervision of their students at the workplace. This should be one of the duties and responsibilities of lecturers and not an extra task that would need extra remuneration.

With extra manpower would come decisive management of these industrial placements. Lecturers would be deployed to monitor students and duly complete the logbooks. Students and host employers would take these placements seriously if the colleges demonstrated that they were taking them seriously.

5.6.2   Regular review of TVET college curricula

I recommend that there be regular syllabus reviews. One of the challenges stakeholders noted was that the syllabi were outdated. In document analysis, I noted that there were still syllabi, which had not been reviewed from the time the NATED programme was introduced in 1994. Bearing this in mind, the teaching programmes are sometimes outdated because the industry has developed or has adopted new ways of operating. Technology changes very fast and so should the teaching programmes at TVET colleges. There should not be a difference between what is taught and examined at colleges and what is happening in the workplace.

I recommend that the syllabi have expiry dates. This recommendation comes after checking various syllabi from both NCV and NATED programmes. Most are old with outdated information and those that have since been revised do not have expiry dates on them. A syllabus should have a lifespan of three years after which it must be reviewed. I recommend that there be subject committees set up to develop, revise and implement new syllabi. These subject committees will be expected to report to the DHET directorate responsible for curriculum. I believe this will reduce the syllabus review backlog at DHET and ensure the quality of teaching programmes.

The DHET directorate should, from time to time, invite relevant stakeholders to decide which programmes to phase out and which ones to phase in depending on observed industry needs. There is no need to keep on offering some programmes that do not lead to employment. Programme changes have implications for the continuous professional development of staff. Staff should be identified and trained in advance before a new programme is introduced. Staff training should be aligned with the strategic goals of DHET and the individual colleges as far as chosen programme mixes are concerned.

5.6.2.1   Involvement of all stakeholders

In the study, I found that DHET did liaise with stakeholders to revise various syllabi. Important stakeholders were industry experts, subject specialists in colleges and

universities, the South African Public Colleges Organisation (SAPCO), the South African College Principals' Organisation (SACPO), SETAs and the Quality Council for Trades and Occupations (QCTO) amongst others.

I recommend that TVET colleges, through DHET, involve stakeholders in planning programmes. This is different from reviewing a syllabus of an existing teaching programme. This means stakeholders should be involved in deciding which programmes should be offered, which ones should be phased out and which ones should be introduced depending on industry needs. This will ensure that TVET colleges offer relevant programmes that are in demand instead of producing graduates with the same qualifications every year.

This was observed by SSSA when he bemoaned the problem of running certain programmes *ad infinitum* thereby flooding the market with similarly skilled graduates. Partnership with relevant stakeholders to decide on skills on demand is very important. This would make TVET colleges even more relevant as they would be able to offer diverse and current teaching programmes. At the time of collecting data, none of the sampled colleges offered current programmes like robotics, drone technology, renewable energy or aquaculture to name but just a few.

5.6.2.2   Establishment of CTTs for all subjects

To ensure regular review of college syllabi, I recommend that Curriculum Task Teams (CTTs) be established for every subject. These CTTs should be properly constituted to include all stakeholders so that the resultant syllabi are appropriate and respond to the needs of the industry.

5.6.3   Mandatory industrial attachment

I noted that the NCV programme did not have any compulsory industrial attachment programme. I also noted that work-integrated learning (WIL) for lecturers was also not compulsory. In the sub-sections below, I discussed how industrial attachment can be made compulsory for both students and lecturers.

5.6.3.1 Students

I found that students doing the NATED programme have to have industrial attachment as a partial fulfilment of the requirements of their studies to qualify for the national diploma. However, I found that NCV students do not have to have any industrial experience. This is because the NCV course is designed to incorporate both the theory and the practical components. The practical component is done at college where students are expected to do practical assignments and Integrated Summative Assessment Tasks (ISAT).

It is my opinion that the workplace experience goes beyond just acquiring and perfecting job skills like wiring a house for Electrical Engineering students. There are other skills covered by the Graduate Capital Theory. At the workplace, students tend to acquire other skills like how to interact with colleagues, professionalism, appreciating and adapting to the corporate culture of the organisation and gaining a profound understanding of the economic sector under which the course of study falls.

Given the above observation, I recommend that NCV students undergo a mandatory and assessed industrial attachment period. I have already referred to this industrial attachment in sub-section 5.5. IBEL will be done for one year during the third year of study. During this period, students will also be expected to complete a project in their field of study. In one year, students could gain valuable experience compared to the current five days, which is not even compulsory.

For both the internship programmes for NATED students and the proposed IBEL, I recommend that an assessment tool be developed. This way, students would take the workplace attachment seriously if they knew they would be assessed and given marks. The assessment tool would include criteria like job-specific skills, professionalism and innovation. Professionalism would include punctuality, dress code, interaction with colleagues and language. After spending some time at a workplace students are expected not only to adapt to the way things are done at a workplace but also to devise new ways of going about their daily tasks.

5.6.3.2   Lecturers

Currently, at College A, lecturers are expected to do Work Integrated Learning (WIL) for five days in two years. This WIL is not compulsory but highly recommended. During data collection, this programme had been suspended due to COVID-19. Now that the COVID-19 restrictions have been lifted, I recommend that lecturers be placed in workplaces for five days every year. This should be made compulsory and be done during the college holidays so as not to disrupt teaching. A logbook should be completed and a copy of which must be filed in the lecturers' file as evidence.

5.6.4   Expand partnerships

I believe that many other types of partnerships would serve a variety of purposes in TVET colleges. I recommend that TVET colleges forge other partnerships and not only concentrate on the placement of students and lecturers. These partnerships should be governed by formal written agreements. Many areas of cooperation can be explored. TVET colleges can collaborate with the industry to do joint research, usher in solutions to energy challenges and come up with sustainable sources of alternative energy.

5.6.5   College-run business units to place students

During document analysis, I noted that College A had established business units with the express aim of placing their students in these businesses. I noted that they have "Bed and Breakfast" establishments for their Hotel and Catering students. The college also has a farm for its students studying agriculture or farming. There is a tyre fitment centre, a very big Internet café, and tissue tissue-making factory and during data collection, there were advanced plans to open a tailoring shop to make Personal Protective Equipment (PPE) for Engineering students.

There are never enough industries to place all TVET college students. That is why colleges have to be innovative and open their business units, which should be run professionally but also be able to accommodate students during their time at college.

Classes will be conducted in real workplace environments much to the benefit of both students and lecturers.

Given the above, I strongly recommend that all TVET colleges start business units related to the programmes that they offer so that students can learn and practise at the same time. However, these business units must be set up following the laws of the Republic of South Africa. The Continuous Education and Training (CET) Act No. 16 0f 2016 Section 9(6) says, *"The council may not establish or create any juristic person in terms of any legislation or common law."* This means that the college council of any TVET college cannot, by law set up and register any businesses.

However, the CET Act no. 16 of 2016, section 2(1) (b) (i) says that the purpose of the Act is to *"…provide students with the necessary attributes required for employment and (ii) entry to a particular vocation, occupation or trade…"* If these business units can be viewed as centres that provide students with work-related skills, then an argument should be advanced to have them. Whilst public institutions cannot register companies, I think these business units can be viewed as non-profit academic businesses. Further consultation with legal counsel is also advised.

5.6.6   Entrepreneurship as a course for all students

In the study, I noted that few workplaces avail themselves for students to gain work experience. Although I realised that the situation got worse during the COVID-19 pandemic, there has always been a shortage of workplaces that are willing to take in students. The situation becomes worse when these students graduate and look for jobs. There are not too many employment opportunities compared to the number of graduates exiting the TVET colleges every year.

After noting the problem above, I recommend that there be a complete paradigm shift as far as the employment of TVET college graduates is concerned. I recommend that students do "Entrepreneurship" as a course in their final year. This course could replace or be incorporated into the "Life Orientation" programme so that students are equipped with skills to use their subject skills to start up their business ventures. When

students graduate, they should be supported with capital and supervision to start up their businesses. The Department of Small Business Development could be involved to help these students set up Small, Micro and Medium Enterprises (SMMEs). These new entrepreneurs will in turn employ other graduates.

5.7   LIMITATIONS OF THE STUDY

This study was conducted in TVET colleges in the Mpumalanga Province of South Africa. Whilst I got an in-depth view of what is obtained in Mpumalanga, the findings cannot be generalised to other provinces. The data is only indicative of what was happening in this province and nowhere else in the country. Partnerships may be handled differently in other TVET colleges in other provinces.

The study focussed on two public TVET colleges and no data was collected from private TVET colleges. The results of this study cannot be generalised to privately run TVET colleges because they possibly manage partnerships differently. However, I know that DHET monitors the teaching and learning programmes even in private TVET colleges. They use DHET-approved syllabi and their students write the same examinations as public TVET colleges' students.

TVET colleges were not comfortable giving the names and contact details of their partners citing confidentiality issues. This made it difficult for me to locate and collect data from relevant stakeholders. Although from data collected from document analysis, I could tell the number of partners colleges had, I did not get their names or contact details. It was after the focus group that I got an idea of which industries to approach as they hosted the participants of the focus group.

5.8   SUGGESTIONS FOR FURTHER RESEARCH

Given the above limitations, I recommend a study of this nature in other provinces to get an idea of what is happening with partnerships right across the country. It is my opinion that a nationwide study would yield recommendations that could be

implemented to improve partnerships in South Africa thereby improving the employability of TVET college graduates.

5.9 CONCLUDING REMARKS

In this study, I explored the nature of TVET Colleges and industry partnerships currently in place at TVET colleges in South Africa. The data collected showed that TVET colleges partner with industry mainly to place their students so that they gain industrial experience. The data also revealed that there were other partnerships where industry players were involved in syllabus review, development of teaching materials and donation of teaching materials. I concluded that TVET colleges ignored other forms of partnerships that could enhance graduates' employability like apprenticeships, joint research, guest lectureships, exchange programmes with international training institutions and many other partnerships.

I discovered that TVET colleges trained students and placed them in industry. TVET colleges' role was to supervise these students whilst they were on industrial attachment. The SETAs' role was to pay out stipends to these students doing their internships whilst the host employers monitored the students on industrial attachment. The data collected showed that, all too often, TVET colleges did not supervise the students and sometimes industry players were reluctant to take students as they considered this an unnecessary distraction.

The study also revealed challenges being encountered by stakeholders as far as TVET college and industry partnerships are concerned. The biggest challenge was the issue of rather outdated programmes offered by TVET colleges. The TVET college system is examination-oriented, therefore, even if students acquired new knowledge and skills from their industrial experience, they still had to contend with an examination based on outdated information.

Given the observed challenges, I proposed several recommendations that I believe if implemented, can vastly improve partnerships thereby bolstering the employability of TVET college graduates. Because the NCV program has an inadequate programme

to expose its graduates to the industry, I proposed a new framework to improve the current programme.

I hope that TVET colleges, DHET and industry players get hold of this report and consider the recommendations put forward to improve partnerships. This report will be available at the University of South Africa's repository and hard copies will be given to participating TVET colleges and DHET for perusal with the hope that they might find something worth implementing.

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APPENDIX A: DHET 004: APPENDIX 1

higher education & training
Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

DHET 004: APPENDIX 1:

APPLICATION FORM FOR STUDENTS TO CONDUCT RESEARCH IN PUBLIC COLLEGES

1. APPLICANT INFORMATION

1.1.	Title (Dr /Mr /Mrs /Ms)	MR	
1.2	Name and surname	NHLANHLA NDLOVU	
1.3	Postal address	PRIVATE BAG X9048 ERMELO 2350	
1.4	Contact details	Tel	017 811 5824
		Cell	074 244 8503
		Fax	N/A
		Email	nhlanhla_ndlovu @ yahoo.co.uk
1.5	Name of institution where enrolled	UNISA	
1.6	Field of study	PhD EDUCATIONAL MANAGEMENT	
1.7	Qualification registered for	*Please tick relevant option:*	
		Doctoral Degree (PhD)	X
		Master's Degree	
		Other (please specify)	

2. DETAILS OF THE STUDY

2.1	Title of the study
	STAKEHOLDERS' PESPECTIVES ON TVET COLLEGES – INDUSTRY PARTNERSHIPS FOR EMPLOYABILITY OF GRADUATES: AN EXPLORATORY STUDY OF TVET COLLEGES IN MPUMALANGA PROVINCE, SOUTH AFRICA.

2.2	Purpose of the study
	TO EXPLORE AND RECOMMEND EFFECTIVE WAYS FOR TVET COLLEGES TO PARTNER WITH INDUSTRY SO AS TO ENHANCE THE EMPLOYABILITY OF TVET COLLEGE GRADUATES.

3. PARTCIPANTS AND TYPE/S OF ACTIVITIES TO BE UNDERTAKEN IN THE COLLEGE

Please indicate the types of research activities you are planning to undertake in the College, as well as the categories of persons who are expected to participate in your study (for example, lecturers, students, College Principals, Deputy Principals, Campus Heads, Support Staff, Heads of Departments), including the number of participants for each activity.

		Expected participants (e.g. students, lecturers, College Principal)	Number of participants
3.1	Complete questionnaires	a) N/A	N/A
		b) N/A	N/A
		c) N/A	N/A
		d) N/A	N/A
		e) N/A	N/A
		Expected participants	**Number of participants**
3.2	Participate in individual interviews	a) DP- ACADEMIC SERVICES	01
		b) DP- STUDENT SUPPORT SERVICES	01
		c)	
		d)	
		e)	
		Expected participants	**Number of participants**
3.3	Participate in focus group discussions/ workshops	a) STUDENTS	03
		b) N/A	N/A
		c) N/A	N/A
		d) N/A	N/A
		e) N/A	N/A
		Expected participants	**Number of participants**
3.4	Complete standardised tests (e.g. Psychometric Tests)	a) N/A	N/A
		b) N/A	N/A
		c) N/A	N/A
		d) N/A	N/A
		e) N/A	N/A
3.5	Undertake observations *Please specify*	N/A	N/A
3.6	Other *Please specify*	N/A	

4. SUPPORT NEEDED FROM THE COLLEGE

Please indicate the type of support required from the College (Please tick relevant option/s)			
Type of support		**Yes**	**No**
4.1	The College will be required to identify participants and provide their contact details to the researcher.		X
4.2	The College will be required to distribute questionnaires/instruments to participants on behalf of the researcher.		X
4.3	The College will be required to provide official documents. *Please specify the documents required below*	X	
	ANY OFFICIAL DOCUMENTS ATTESTING TO FORMER, CURRENT AND FUTURE PARTNERSHIP WITH INDUSTRY. THESE COULD BE AGREEMENTS, MEMORANDA, E-MAILS, WBE DOCUMENTATION ETC.		
4.4	The College will be required to provide data *(only if this data is not available from the DHET).* *Please specify the data fields required, below*	X	
	WBE STATISTICS WIL (FOR LECTURERS) STATISTICS		
4.5	**Other, please specify below**		X
	N/A		

5. DOCUMENTS TO BE ATTACHED TO THE APPLICATION

The following 2 (two) documents must be attached as a prerequisite for approval to undertake research in the College	
5.1	Ethics Clearance Certificate issued by a University Ethics Committee
5.2	Research proposal approved by a University

6. DECLARATION BY THE APPLICANT

I undertake to use the information that I acquire through my research, in a balanced and a responsible manner. I furthermore take note of, and agree to adhere to the following conditions:

a) I will schedule my research activities in consultation with the said College/s and participants in order not to interrupt the programme of the said College/s.

b) I agree that involvement by participants in my research study is voluntary, and that participants have a right to decline to participate in my research study.

c) I will obtain signed consent forms from participants prior to any engagement with them.

d) I will obtain written parental consent of students under 18 years of age, if they are expected to participate in my research.

e) I will inform participants about the use of recording devices such as tape-recorders and cameras, and participants will be free to reject them if they wish.

f) I will honour the right of participants to privacy, anonymity, confidentiality and respect for human dignity at all times. Participants will not be identifiable in any way from the results of my research, unless written consent is obtained otherwise.

g) I will not include the names of the said College/s or research participants in my research report, without the written consent of each of the said individuals and/or College/s.

h) I will send the draft research report to research participants before finalisation, in order to validate the accuracy of the information in the report.

i) I will not use the resources of the said College/s in which I am conducting research (such as stationery, photocopies, faxes, and telephones), for my research study.

j) Should I require data for this study, I will first request data directly from the Department of Higher Education and Training. I will request data from the College/s only if the DHET does not have the required data.

k) I will include a disclaimer in any report, publication or presentation arising from my research, that the findings and recommendations of the study do not represent the views of the said College/s or the Department of Higher Education and Training.

l) I will provide a summary of my research report to the Head of the College/s in which I undertook my research, for information purposes.

I declare that all statements made in this application are true and accurate. I accept the conditions associated with the granting of approval to conduct research and undertake to abide by them.

SIGNATURE	
DATE	20 OCTOBER 2021

DHET 004: APPENDIX 1: APPLICATION FORM FOR STUDENTS TO CONDUCT RESEARCH IN PUBLIC COLLEGES

FOR OFFICIAL USE

DECISION BY HEAD OF COLLEGE

Please tick relevant decision and provide conditions/reasons where applicable		
Decision		**Please tick relevant option below**
1	Application approved	
2	Application approved subject to certain conditions. *Specify conditions below*	
3	Application not approved. *Provide reasons for non-approval below*	
NAME OF COLLEGE		
NAME AND SURNAME OF HEAD OF COLLEGE		
SIGNATURE		
DATE		

UNISA | college of education

Date: 01 March 2022

Title:

STAKEHOLDERS' PERSPECTIVES ON TVET COLLEGES-INDUSTRY PARTNERSHIPS FOR EMPLOYABILITY OF GRADUATES: AN EXPLORATORY STUDY OF TVET COLLEGES IN MPUMALANGA PROVINCE, SOUTH AFRICA.

DEAR PROSPECTIVE PARTICIPANT

My name is Mr. N. NDLOVU. I am doing research under the supervision of S.P. Mokoena, a Professor in the Department of Educational Management and Leadership towards a Doctor of Philosophy (Ph.D) at the University of South Africa. We are inviting you to participate in a study with the abovementioned title.

WHAT IS THE PURPOSE OF THE STUDY?

This study is expected to collect important information that could help TVET colleges in the Mpumalanga province to forge partnerships with industry in an effort to improve the employability of TVET college graduates.

WHY AM I BEING INVITED TO PARTICIPATE?

You are invited because we feel that you an important stakeholder and your opinions and expert advice will go a long way in improving the situation at our TVET colleges. I obtained your contact details from your website. I sampled you because I feel like your position makes you well suited to answer questions and give expert advice on

matters concerning TVET college and industry partnership. Indicate the approximate number of participants. You one of 23 participants sampled in this study.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves an interview which will be audio recorded only to assist the researcher with data analysis. You will be involved in a semi-structured interview. You will be asked open-ended questions soliciting your opinions and views on TVET college-industry partnerships in Mpumalanga. The interview will not last more than 15 minutes.

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The aim of this study is to gather a variety of views and suggestions on how to improve TVET college-industry partnerships for the employability of TVET college graduates. Participants get a chance to contribute towards the improvement of operations at TVET colleges and industry partners in order to help graduates transition into the world of work.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

The only inconvenience that we foresee in this study is that of time. You will be required to set aside everything you are doing and participate in a study which has no remuneration. However, there are no foreseeable risks of physical harm or side-

effects. There are no foreseeable risks that may come from others after identifying your participation in this study. In any case, the results of this research will be kept and dealt with in utmost confidentiality.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

In order to ensure confidentiality, you have the right to insist that your name will not be recorded anywhere and that no one, apart from the researcher and identified members of the research team, will know about your involvement in this research. Your answers will be given a code number or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings. For anonymity, your name will not be recorded anywhere and no one will be able to connect you to the answers you give.

The data collected will be accessed by the researcher, the supervisor and the transcriber. The transcriber will sign a confidentiality agreement. Your answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber, external coder, and members of the Research Ethics Review Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records. However, the anonymous data collected in this research may be used for other academic purposes such as writing a research report, journal articles and/or conference proceedings. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

While every effort will be made by the researcher to ensure that you will not be connected to the information that you share during the focus group, I cannot guarantee that other participants in the focus group will treat information confidentially. I shall, however, encourage all participants to do so. For this reason I advise you not to disclose personally sensitive information in the focus group.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet at my office in Ermelo for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Hard copies will be shredded and/or electronic copies will be permanently deleted from the hard drive of the computer through the use of a relevant software programme.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

There is no payment associated with participating in this research. Participants will be interviewed in the comfort of their offices and there are no expected costs.

HAS THE STUDY RECEIVED ETHICS APPROVAL?

This study has received written approval from the Research Ethics Review Committee of the College of Education, UNISA. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings or require further information, please contact Mr. Nhlanhla NDLOVU on 0742448503 or email nhlanhla_ndlovu@yahoo.co.uk. The findings are accessible for a period of five years after data collection.

Should you have concerns about the way in which the research has been conducted, you may contact Professor S.P. Mokoena on 0826756155 or mokoesp@unisa.ac.za.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

MR. NHLANHLA NDLOVU

APPENDIX C: CONSENT TO PARTICIPATE IN THE STUDY

UNISA | college of education

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read and understood the study as explained in the information sheet. I have had sufficient opportunities to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the in-depth or focus group interview. I have received a signed copy of the informed consent agreement.

Participant Name & Surname (please print)   _____

_____   _____

Participant Signature   Date

Researcher's Name & Surname (please print)   MR. NHLANHLA NDLOVU

_____   _____

Researcher's signature   Date

APPENDIX D: IN-DEPTH INTERVIEW SCHEDULE (DHET OFFICIAL)

Title of the study

STAKEHOLDERS' PERSPECTIVES ON TVET COLLEGES-INDUSTRY PARTNERSHIPS FOR EMPLOYABILITY OF GRADUATES: AN EXPLORATORY STUDY OF TVET COLLEGES IN MPUMALANGA PROVINCE, SOUTH AFRICA.

Introduction to the research

- *Greet the participant observing all corvid-19 protocols and make him/her feel relaxed by smiling and exchanging pleasantries.*
- *Introduce yourself and the study briefly*

I am carrying out a research study where I am exploring stakeholders' perspectives on TVET colleges-industry partnerships for the employability of TVET college graduates. As part of the research, I am conducting face-to-face interviews with sampled senior management staff of the college and managers of private and public enterprises. The information I will gather here will be used to write the research report which will be used solely for academic purposes. Please be assured that the college and industry participants in this study will not be named in this report and nothing will be linked back either to the college or sampled industries. Therefore, everything discussed will be treated with the utmost confidentiality. Please note that you are free to withdraw from the interview at any point if you so wish. This interview will last for approximately 30 minutes and to help me with my notes, please note that the interview will be recorded.

Questions

- *Ask the questions in the same wording given in the schedule.*

- *Probe the respondent if you feel more can be said.*

- *The questions in italics are possible probes.*

1. What is your position and how long have you held it?

2. Do your duties and responsibilities include partnerships between TVET colleges/institutions of higher learning and industry?

   2.1 *If this is not your responsibility, who would you suggest deals with these partnerships?*

3. What are your opinions about TVET College-Industry partnerships as a way of improving the employability of TVET College graduates?

4. Are you aware of DHET-initiated TVET College partnerships with industry or any other partners?

   4.1 *Does DHET initiate these partnerships or they are initiated by Industry/stakeholders?*

   4.2 *Are these partnerships formal with MOUs or they are just informal?*

   4.3 *Are they open-ended or do they have a certain period of operation and they cease?*

   4.4 *Are they long- or short-term partnerships?*

   4.5 *During and at the end of the partnership, do you hold evaluative meetings with a view of improving these partnerships?*

   (Inform the participant that they can answer the above sub-questions with examples from the partnerships they have)

5. Briefly describe the nature of these partnerships e.g. are they internships, apprenticeships, curriculum updating programmes, training, guest lectureship, joint research, international exchange programmes etc.

   5.1 *Are these partnerships aimed at students, lecturers or management? (you can give specific examples to illustrate)*

6   What role does DHET play in these partnerships e.g. identifying suitable candidates, identifying the correct service provider, funding, payment of stipends

7   What can you say are the benefits of these partnerships?

> *7.1 Do you think these partnerships are mutually beneficial or do they tend to benefit one party? Explain.*

8   What challenges have you encountered concerning DHET/TVET College-industry partnerships? *(you can give specific examples of challenges experienced)*

9   How do you think these partnerships can be bolstered/improved?

10 Is there anything else you would like to add about DHET/TVET College-industry partnerships?

Conclusion – Thank the participant for taking the time to be interviewed. State that the recording will only be used for research purposes and will be handled with the utmost confidentiality.

Title of the study

STAKEHOLDERS' PERSPECTIVES ON TVET COLLEGES-INDUSTRY PARTNERSHIPS FOR EMPLOYABILITY OF GRADUATES: AN EXPLORATORY STUDY OF TVET COLLEGES IN MPUMALANGA PROVINCE, SOUTH AFRICA.

Introduction to the research

- *Greet the participant observing all corvid-19 protocols and make him/her feel relaxed by smiling and exchanging pleasantries.*
- *Introduce yourself and the study briefly*

I am carrying out a research study where I am exploring stakeholders' perspectives on TVET colleges-industry partnerships for the employability of TVET college graduates. As part of the research, I am conducting face-to-face interviews with sampled senior management staff of the college and managers of private and public enterprises. The information I will gather here will be used to write the research report which will be used solely for academic purposes. Please be assured that the college and industry participants in this study will not be named in this report and nothing will be linked back either to the college or sampled industries. Therefore, everything discussed will be treated with utmost confidentiality. Please note that you are free to withdraw from the interview at any point if you so wish. This interview will last for approximately 30 minutes and to help me with my notes, please note that the interview will be recorded.

Questions

- *Ask the questions in the same wording given in the schedule.*

- *Probe the respondent if you feel more can be said.*

- *The questions in italics are possible probes.*

1. What is your position and how long have you held it?

2. Do your duties and responsibilities involve forging partnerships between TVET colleges and the industry?

    2.1 In your opinion whose responsibility do you think this is?

3. What are your opinions about TVET College and Industry partnerships as a way of improving the employability of TVET college graduates?

4. Are you aware of any existing partnerships between your organisation and a TVET college in Mpumalanga? *(For companies)*. Are you aware of any existing partnerships between your college and governmental or non-governmental entities? *(For colleges)*.

    4.1 Was this partnership initiated by your organisation or by the college? (Alter the question depending on whether you are asking a company exec or college management).

5. Are you aware of any existing partnerships between your college and the industry? *(for TVET college)*

    5.1 Who initiated this/these partnership (s)?

6. Describe the nature of the partnership (s) that you have.

    a. With SETAs, governmental departments, the private sector, and international partners.

    b. Nature of partnership? (Funding, workplace exposure, exchange programmes, apprenticeships, learnerships etc.)

    c. Are students and students expected to have workplace exposure or this is on a willing basis?

7. What role do these partnerships play in your organisation?

8. What benefits do you see as far as TVET college partnerships are concerned?

9. What challenges have you encountered concerning TVET college-industry partnerships?

10 Is this partnership governed by some policy document that stipulates the terms of operation?

11 Are the partnerships short- or long-term?

12 How do you think TVET college-industry partnerships can be improved?

13 *What advice would you give for the establishment of mutually beneficial TVET college-industry partnerships?*

14 Is there anything else you would like to add about TVET college-industry partnerships?

Conclusion

- *Stand up to signal that the interview is over and shake the hand of the participant.*

Thank you very much for participating in this study. The responses that you gave are of great value to the researcher and study at hand. Once the report has been written, the college will receive a copy for its own perusal.

- *Record any last minute comments by the participant because these could be of importance.*

Title of the study

STAKEHOLDERS' PERSPECTIVES ON TVET COLLEGES-INDUSTRY PARTNERSHIPS FOR EMPLOYABILITY OF GRADUATES: AN EXPLORATORY STUDY OF TVET COLLEGES IN MPUMALANGA PROVINCE, SOUTH AFRICA.

Introduction to the research

- *Greet the participants observing all COVID-19 protocols and make them feel relaxed by smiling and exchanging pleasantries.*
- *Introduce yourself and the study briefly*

I am carrying out a research study where I am exploring stakeholders' perspectives on TVET colleges-industry partnerships for the employability of TVET college graduates. As part of the research, I am conducting a focus group interview with TVET college's current and former students. The information I will gather here will be used to write the research report, which will be used solely for academic purposes. Please be assured that your confidentiality is of utmost importance. You will not be identified by name and nothing you say here will be associated with you. Therefore, everything discussed will be treated with confidentiality. Please note that you are free to withdraw from the interview at any point if you so wish. This interview will last for approximately 30 minutes and to help me with my notes, please note that the interview will be recorded.

Questions

- *Ask the questions in the same wording given in the schedule.*

- *Probe the respondent if you feel more can be said.*

- *The questions in italics are possible probes.*

1. Are you a current or former student of the college?
2. What programme are you or were you enrolled to do?
3. Have you ever had workplace exposure?

    3.1 Describe your work experience for me.

    3.2 Were you doing an internship or WBE?

    3.3 How long was your work experience?

4. Was your work experience college- or self-initiated?
5. How relevant was your work experience?

    5.1 Do you think the period during which you were on industrial attachment was worthwhile?

    5.2 Was the work experience compulsory or optional?

    5.3 What motivated you to do it?

6. What benefits did you gain from the industrial experience?

    6.1 Is there anything else you benefitted from your workplace exposure besides work-related skills?

    6.2 Do you think you can pass a practical examination in any company in your field of study? Explain.

    6.3 Are you still happy about your career choice after your workplace exposure?

    6.4 Do you feel like your workplace exposure adequately prepared you for the world of work? Explain.

7. Was there a gap between what you learnt at college and what you experienced at the workplace?
8. Was there any supervision when you were out there?

    8.1 Who supervised you?

    8.2 Was the supervision adequate?

    8.3 Were there feedback sessions when you went back to college?

9. What challenges did you encounter at the workplace?

  9.1 How did you overcome these challenges?

10. How would you improve workplace exposure for TVET college students?

  10.1 How would you improve WBE?

  10.2 How would you improve the current internships for the NATED programme?

  10.3 How would you improve any other type of workplace exposure for students?

11. Is there anything else that you would like to add?

Conclusion

- *Stand up to signal that the interview is over and shake the hand of the participant.*

Thank you very much for participating in this study. The responses that you gave are of great value to the researcher and study at hand.

- *Record any last-minute comments by the participant because these could be of importance.*

APPENDIX G: DOCUMENT ANALYSIS INSTRUMENT

TYPE OF DOCUMENT SELECTED	DATA ANALYSED
Memoranda of Agreement (MoA) between TVET colleges and industry partnerships	• Scope of partnerships • Duration of partnerships • Operational considerations (duties and responsibilities of partners) • Funding framework • Benefit to students
Students' logbooks for internships or Workplace-Based Experiential learning (WBE)	• Duration of industry attachment • Supervision and monitoring (frequency) • Supervision criteria • Duties and responsibilities of partners in monitoring students • Relevance of industry attachment
Lecturer logbooks for Work Integrated Learning	• Duration of industry learning • Supervision and monitoring (frequency) • Supervision criteria • Role of industry • Relevance of industry experience
Policy Framework for Internationalisation of Higher Education in South Africa	• Policy framework • Relevance to TVET colleges • Partnership framework • Quality assurance (curriculum development)
Lists of partners (from TVET colleges) presented to the College council	• MoA or not • Areas of cooperation • Roles of partners • Funding • Benefit to students • Duration of partnership
Correspondences between TVET colleges and industry partners • Faxes, e-mails, letters etc.	• Evidence of existence of partnerships • Role of partners • Scope of partnership • Formal of informal partnership • Benefit to students

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by

NHLANHLA NDLOVU

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<u>by</u>

<u>NHLANHLA NDLOVU</u>

<u>in the subject</u>

<u>EDUCATION MANAGEMENT</u>

<u>at the</u>

<u>UNIVERSITY OF SOUTH AFRICA</u>

_____

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