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Dissertation

ACADEMIC PORTABILITY AND PARITY WITHIN THE TVET AND HIGHER
EDUCATION INSTITUTIONS IN WESTERN CAPE

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Abstract

After 1994, in South Africa the key education policy focus was how to reconfigure and transform the education system to create meaningful pathways and supports for school leavers to navigate sustainable incomes and life trajectories. Given the legacies of inequality and historical neglect, an abiding focus was on how better to connect education and work for the majority of South African school leavers. One of the identified pathways was to encourage the pursuit of skills in the occupational and vocational arenas amongst learners and school leavers.

A significant challenge for the reconfiguration of the education system was how to give learners access to different kinds of education and training, not only at the school level but also at the Further Education and Training (FET) level and at university level, and to ensure that pathways were available for learners to easily move between the different levels. This required a new system and a National Qualifications Framework (NQF) that allowed levels of parity and portability across a basic education and training band, a further education and training band, and a higher education band, which were intended to better connect learners, education service providers, and industries throughout.

This study explores the level of parity and portability within the education system developed after 1994, concentrating on the connections created between the further education and training band and the higher education band. The study more specifically examines levels of parity and portability between the National Accredited Technical Education Diploma (NATED) qualification offered at TVET colleges (at the FET band level) and those respectively offered via university of technology (higher education or HE band level) qualifications. It illustrates this by focusing on the NATED Report 191, which has an artisanal focus, to show how education-industry links operate differently in the TVET sector as opposed to the Higher Education and Training (HET) sector, and how this influences how portability and parity occur across the two sectors. Business Studies is used as a case study to demonstrate the unique relationships that exist between companies, education service providers, and learners, and to show how these tiers differ between the TVET and HET sectors.

Using purposive sampling, the qualitative study conducted a variety of semi-structured interviews with provincial education officials and institutional education practitioners within the Western Cape, the purpose of which was to get insight into their understanding of the different programmes at the various band levels, and their connections. The overall goal was

to better understand whether learners were being properly prepared - with a good balance of theory and practice, and appropriate courses at different band levels - to achieve a consistent, quality, and sound educational base on which to develop their further development (DoE, 1998). The study provides a variety of insights into why there is currently little or inadequate articulation or portability between TVET college business studies programmes and related university of technology programmes, and the role of the NATED Report 191 in perpetuating this.

The study offers important concerns at a time where the South African state is urging post-secondary school learners to enrol in the TVET sector, claiming that this will provide equal possibilities to those who wish to pursue further education in university settings.

Key words: Technical and Vocational Education and Training, Systemic Articulation, NATED Report 191, issues of systemic portability,

Dedication

I dedicate this thesis to my beloved husband, my three loved daughters, Soso, Bobo, and Maara. I sincerely appreciate your unquestioning support, understanding, and tolerance.

Acknowledgement

To God be the glory, great things He has done. I am forever thankful to God the Father, who gave me the strength and wisdom to complete this study. Indeed, His love for me is excessive. I'd also like to thank the Ansens for their kindness and tolerance. That carried me through. My appreciation goes to my supervisor for his dedication and wisdom in guiding me to produce this thesis, not forgetting Helga for her advice and coaching. Finally, I'd like to thank everyone who made themselves available to cry with me. Your encouragement carried me through. Thank you all for the various roles that you played.

List of acronyms and meaning

Acronym	Full meaning
ACET	Adult and Community Education and Training
ANC	African National Congress
CAT	Credit Accumulation and Transfer
CHE	The Council on Higher Education
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
DoE	Department of Education
DoL	Department of Labour
ECSA	Engineering Council of South Africa
FET	Further Education and Training
GET	General Education and Training
GFETQSF	General and Further Education and Training Qualifications Sub-framework
GIZ	<i>Gesellschaft für Internationale Zusammenarbeit</i> (In English: German Agency for International Cooperation)
HE	Higher Education
HEI	Higher Education Institution
HEQF	Higher Education Qualification Framework
HEQSF	Higher Education Qualifications Sub-framework
HET	Higher Education and Training
HRDC	Human Resource Development Council
ISCED	Standard Classification of Education Definition
M&E	Monitoring and Evaluation
NATED	National Accredited Technical Education Diploma
NCV	National Certificate Vocational
NQF	National Qualifications Framework
NSA	National Skills Authority
NSD	National Skills Development
NSDA	National Skills Development Act
NSDS	National Skills Development Strategy
OC	Occupational Certificates

OECD	The Organization for Economic Cooperation and Development
PSET	Post-School Education and Training
QCTO	Quality Council for Trade and Occupations
RPL	Recognition of prior learning
RSA	Republic of South Africa
SA	South Africa
SABPP	South African Board for People Practices
SAQA	South African Qualifications Authority
SDA	Skills Development Act
SETA	Sector Education and Training Authority
TVET	Technical and Vocational Education and Training
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization.
UoT	University of Technology
VET	Vocational Education and Training
WIL	Work Integrated Learning

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CHAPTER 1

1.1 Introduction

After 1994 numerous adjustments were made to South Africa's post-school education and training system to address the legacies of inequality left behind by apartheid; one of which was to address the distorted relationship between education and employment (Orkin, 1995). Providing learners with access to education and training, not only at the school level but also at the further education and training (FET) level and at university level, was the foremost challenge firmly taken on from 1994. This research study focuses on the (lack of) transferability of TVET college students to higher education after 1994, with a particular emphasis on the academic parity between the National Accredited Technical Education Diploma (NATED) (N) certification provided at TVET Colleges and technical/vocational curricula at a university of technology (UoT). The study focuses on understanding viewpoints about a public TVET college in the Western Cape and a university of technology. The study's goals were to understand the overlaps and gaps between what is provided in the two systems, with the flows initially suggesting that qualifications obtained by TVET students do not adequately prepare them for study at other higher education facilities.

1.2. Towards a policy switch

Given the socio-economic and educational challenges leading up to political change in the 1990s, this decade was characterised by processes of significant policy transition and redress. And at the core of the election of the first democratic government in 1994 and the development of far-reaching social and educational policy changes, lay a vision of an envisaged equitable society.

Policy changes in the period after the first democratic elections in 1994 thus had a particular transformational thrust geared towards ushering in an education and training landscape that would transform the opportunities and experiences of the majority of South Africa's learners. The focus of much of the changes was also to better connect these educational experiences to better opportunities in the labour market for learners that had historically and traditionally been excluded therefrom (Orkin, 1995). This meant that alongside educational policy changes in the post-school sector, landmark changes were also attempted at the employment-level side where the new South African state sought to develop a skills development environment that better connected education and training to the workplace.

The speed at which the policies around further education and training initiatives were developed in the 1990s was quite breath-taking. The *FET Colleges Act* was promulgated in 1998, followed by the *Skills Development Act of 1998* (Department of Labour, 1998), and the *Skills Development Levies Act of 1999* (Department of Labour, 1999). This meant that in a period of less than 2 years, momentous policy changes were put in place that sought to codify what was needed within the education and work landscape and completely transform the education and training provisions that were previously on offer. The above policies were followed in 2001 by the *National Skills Development Strategy*.

Importantly, these policies were not simply developed within and for South African conditions. Rather, policy makers had set off on international policy tours and investigations to draw on lessons that could properly inform what was needed at that time. They examined, interviewed, and critically analysed what was possible and viable for the South African context moving into the 21st century, and sought to enact these lessons in ways that meaningfully engaged with the long-term needs of the South African economy. The adopted processes were also supported by international partners like the German government through GTZ-implemented programmes at the local level, where GTZ sought to share their expertise and expert consultants to help put the chosen policies in place (Badroodien & McGrath, 2005).

1.3. Connecting education to work

For the new South African state after 1994, the passing of the *Further Education and Training (FET) Act of 1998* (South Africa, 1998) was the first education and training policy initiative that connected education and employment, with its main goal being to embed chosen orientations towards parity and portability within post-school education and training in South Africa. This called for greater articulation between the General Education and Training (GET) band, the FET band, and the Higher Education and Training (HET) band, but also needed a National Qualifications Framework (NQF) to be put in place that would formalise and confirm this. This latter process had been initiated by the *South African Qualifications Authority Act 58 of 1995* (and was repealed and replaced by the *National Qualifications Framework NQF Act No 67 in 2008*).

The above policy processes played out in particular ways. At the education level, institutional transformation across the country meant that 240 vocational sites that included technical colleges, colleges of education, manpower centres and skills centres were amalgamated to establish 50 FET Colleges (Badroodien, 2003: 69).

At the skills training level, policy infrastructures were set up to connect the needs of learners, the newly formed education service providers, and national industries. This was initiated through the Skills Development Act of 1998 and the Skills Levies Act of 1999, leading to the establishment of NEDLAC and the introduction of *Sector Education and Training Authorities* (SETAs) to oversee the better articulation between education providers and industries, and the formalisation of a system with skills training at the heart of it.

And within the FET College system, there was a recognition that key deficiencies and impediments needed to be addressed at the local college level and at the college curriculum level (DoE, 1998:24-27). It was acknowledged that FET qualifications and courses at college level did not adequately prepare college learners for the workplace, and that the gaps between theory/information and practical needed to be better addressed. It was argued that FET courses and programmes had to be reconfigured and changed to ensure consistency, quality, and results and that a reformed educational curriculum process had to be implemented (DoE, 1998).

1.4. The TVET policy landscape

Up until the policy changes of the 1990s the technical college sector had mainly utilised the *National Accredited Technical Education Diploma* (NATED) qualification to organise and confirm the learning of college students and artisans. The NATED system comprised of N1-N6 courses whereby students would complete one level, find employment in the workplace for 6 months, and then return to colleges for the next level. For formal artisanal trades, the artisan qualification was confirmed at the national level by a trades test that became the final summative assessment that confirmed individuals had completed their artisan qualification for a listed trade.

With the restructuring of the FET College sector in the early 2000s it was intended that the NATED programme would be gradually phased out over 3 years to make way for National Certificate Vocational (NCV) programmes. The goal for the new TVET policy landscape was to develop new models and standards for offering programmes, alongside new ways of expert training assessment and testing capability. This goal was formally proclaimed in state legislation in 2008 (Government Gazette, number 31711) when the first phase of the elimination of national N-level certificates (N4-N6) was declared, followed by the introduction of the new qualification NCV NQF level 2-4 (DoE, 2009: 3-4) in 2009. The Quality Council for Trade and Occupations

(QCTO) was created in 2011 to establish a brand-new sub-system built around the new NCV qualification and the removal of all NATED courses from college offerings.

In 2023, the NATED programme at the college level is very much still in operation.

1.5. Rebranding towards equitable and broader access: FET becomes TVET.

The FET College Framework was put in place in 1998 with the intention to connect education and work, and formal industries, in more meaningful ways. By 2010, however, it was found that learners were generally still not applying or planning for careers in FET Colleges. On critical examination it was argued that the FET landscape did not seem to align appropriately with the overall literature on technical and vocational education and training worldwide. It was also felt that a new landscape was needed that levelled and gave parity to institutions that operated in the post-school sector.

The publication of the White Paper on Post-School Education and Training in 2013 (DHET, 2013: 11-12) sought to establish a reconfigured system where learners could choose between going to university or college once they exited schooling. But to reinforce the knowledge component of this new landscape it was decided to draw on the historical ties and partnerships between vocational training, on-the-job training, apprenticeship training, and practical education, and re-name the colleges and the system, Technical and Vocational Education and Training TVET. This latter move was also done to seemingly address some of the social inequities and biases that had become pervasive in the South African education and training system post-1996 (DHET, 2013:12 – 4).

The emphasis of South Africa's post-school education and training (PSET) sector post-2013 thereafter became focused on portability and parity across the sectors that comprised the post-school landscape. It sought to confirm and emphasize the need for greater ties and collaboration between TVET Colleges and Sector Education and Training Authorities (SETAs), the resurgence of craft education, the-tightening of ties between the TVET sector and the Higher Education (HE) sector, and the re-establishment of earlier connections between technical and vocational education and industries and employers (DHET, 2013: xii).

The goal was also to improve and expand public TVET institutions so they can attract a more-sizeable share of school-leavers, and by focusing in on greater articulation between colleges and

universities, it was felt that management capabilities would improve, access would improve, and throughput rates would be raised. In encouraging these the TVET College sector would come to be viewed as a legitimate and important alternative to university enrolment, especially if students thought that going to college initially could also lead to attending universities thereafter.

The main challenge was to ensure that vocational programmes offered at TVET Colleges provided the content and policy intention to allow students to find employment equivalent to students that attended other kinds of institutions, or to seek further studies at higher education institutions. Tamrat (2019: 1) notes that this was perhaps the greatest test for the PSET system post 2013, namely connect the skills system across sectors in ways that facilitate the development of national vocational skills at all levels.

For the project, the aim was thus to explore where the new PSET band met the demands of students as intended, with a specific focus on issues of systemic portability and educational parity between TVET and Higher Education and Training (HET). In doing so, the research focused on the NATED Report 191 programme that had an artisanal orientation to find out how the TVET and HET sectors' education-industry ties function. In choosing Business Studies as a case study the goal was to find out more about the relationships between companies, educators, students, and service providers at the different TVET and HET sector levels.

That said, the aim was not to examine portability and parity concerns at the curriculum level or specifically examine how the system is organised according to NQF levels. Rather, the project focused on how portability and parity is implemented in systemic and practical ways within TVET colleges and higher education institutional infrastructures.

The study examined this using a qualitative interpretive paradigm.

1.6. Rationale

Within the umbrella of the post-school education and training sector the DHET oversees both universities and TVET colleges. As far as policy is concerns students that enrol at TVET colleges should have similar opportunities as those that attend universities, and within the overall NQF systemic structure be able to continue their education in the same way as any university student (DHE, 2013).

However, as an educator that taught a NATED Report 191 Business Studies course at a TVET College for 7 years, my experience was that there was little articulation between courses at TVET Colleges and universities, and that most students invariably could not further their studies at the university level. In exploring this question, I uncovered much research on TVET education, skills development, the economy, and connections to the workforce, but very little on the links between TVET and universities or issues of portability to higher education in South Africa.

My concern was that while the South African government is advising post-secondary students to enrol in TVET, arguing that doing so will give equitable opportunities to those that want to continue further education in university settings, my experience of NATED Report 191 did not suggest the kind of articulation and curricular coordination required for such opportunities. Examining this challenge, I felt, would allow greater insights into why this seems so.

1.7. Research area

The goal of the research project was thus to identify some of the policy and curriculum barriers to portability from a TVET NATED Diploma to higher education certification. The aim was to focus on structural challenges that hinder policy implementations within two settings, a TVET college and a higher education institution (University of Technology). Given the limitation of the study, the focus was confined to the Western Cape, South Africa.

1.8. Research questions and objectives

1.8.1. Main research question:

How do systemic issues and educational legacies in the TVET sector influence the portability of TVET business studies students to comparable programmes in South African higher education institutions?

1.8.2. Research sub-questions:

The following sub-questions were used as the vehicles by which to collect the data:

1. What do policy practitioners identify as some of the structural and policy obstacles to TVET business studies students pursuing further studies in higher education?
2. What are some of the historical and pedagogical processes within the TVET sector that shape how the business studies curriculum is structured, and which limit its articulation to other settings?

3. Where are the overlaps or gaps between the business studies curricula, educational procedures, and system mechanisms of TVET business studies programmes and those in business studies programmes with a vocational focus in higher education institutions?

1.8.3. Objectives of the research

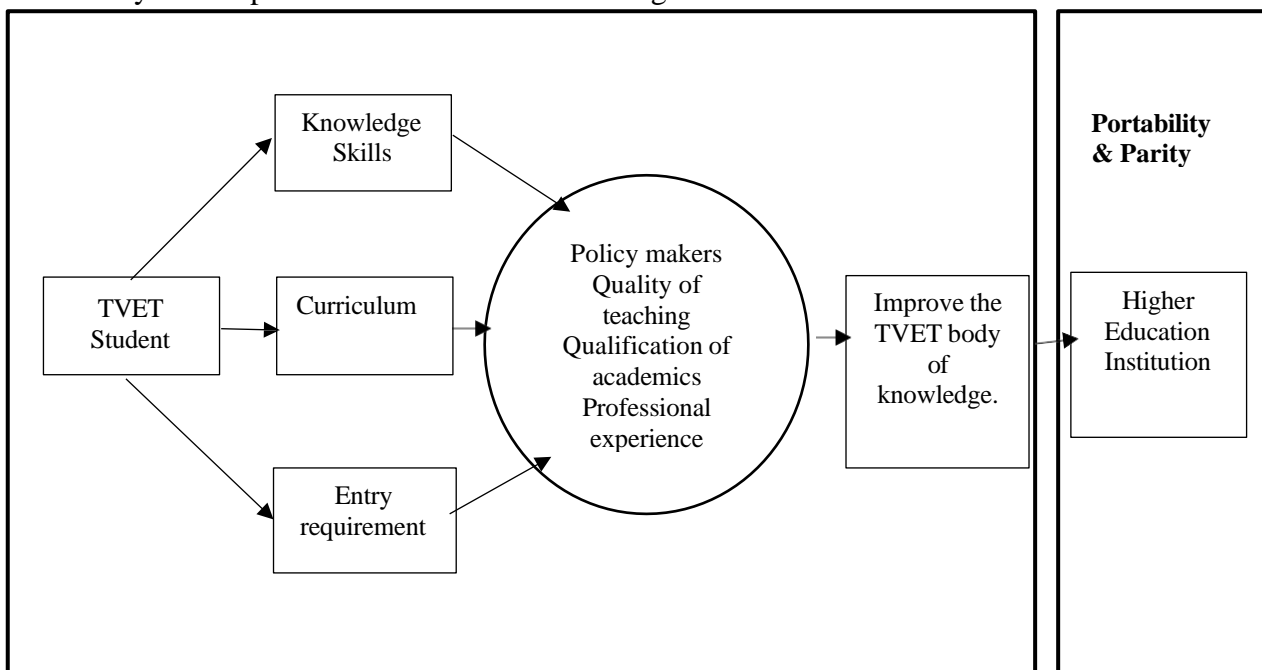
The objective of the study was to use NATED Report 191 business studies courses as a case study to examine how curricula are articulated and coordinated across the TVET and HE sectors, and to examine systemic portability and issues of educational parity between the two sectors in South Africa. The goal was to:

- Establish the key systematic elements that go into the planning of TVET college curricula with the idea of students progressing to higher education.
- Identity what different stakeholders think are the key knowledge forms that are produced at the TVET college level.
- Question whether the admission requirements into vocationally based higher education institutions are aligned with the knowledge provision generated within TVET College qualifications.
- Examine whether there is sufficient portability and parity between TVET and HET sectors to allow students to move from one to the other.

1.9. Conceptual framework

The study used a number of concepts that, when taken together, could enable the examination of what practitioners and policymakers said about portability, and whether it permitted educational articulation and equity in the TVET and HET sectors in South Africa.

The study's conceptual framework is shown in Figure 1 below:



Knowledge production in the TVET sector is inextricably linked to the evolution of the main curriculum used. Figure 1 suggests that a clear understanding of the TVET curriculum is necessary to address issues of systemic parity and portability in the TVET and HET sectors; a TVET curriculum that is well-structured and yields a unique knowledge form (Gamble, 2006: 87-96).

According to Gamble (2006:87-96), the NATED curriculum generally incorporates both context-independent and context-dependent knowledge, namely it addresses both abstract learning (specifically in the N4-N6 curricula) and work experiential learning. However, in its practice within TVET settings this inevitably collapses most learning into forms of rote learning where students focus on understandings that allow them to pass semester exams without comprehension.

The key challenge for NATED courses is that while on-the-job training, which lies at the heart of the programme, does increase student skills, the development of a strong knowledge and conceptual base for curricula is often the main sacrifice in such processes.

1.10. Portability and parity

SAQA (2014:74) defines portability as the capacity to transfer knowledge across contexts. Given that there is little literature that addresses portability, the study focuses on the concept of articulation as a way of examining this concept.

Articulation as a concept was a critical issue within policy reforms post-1994, with the development of qualifications connected to learning routes that did not previously enjoy “parity of esteem” (Blom 2016: 3). At first, embedding these routes in the early 2000s was quite difficult, with the National Articulation Baseline Report (2017: 1) noting that, in the context of the NQF, significant progress was only really made after 2013 in terms of systemic redress, access, progression, quality, and transparency.

It is something that lies at the heart of the White Paper for PSET (DHET, 2013), where systemic articulation – the degree to which students can move into and through institutions to work – is regarded as a key priority.

The concept of articulation can also be traced back to the means by which social justice is achieved in the education sector, where measures of parity and portability give an insight into the extent to which social justice is achieved.

Using a framework posited by Nancy Fraser (Dahl., Stoltz., and Willig. 2004), while social justice is about acknowledgment, redistribution, and equal representation, the vehicle of parity captures the extent to which there is acknowledgment and equitable representation, while portability is the vehicle by which to measure the level of redistribution across the system. Within these the quality of teaching, the form of knowledge being shared, and the quality of teaching (expertise of lecturers), appropriate qualifications and professional expertise, as well as industry connections, are crucial.

1.11. Research design, methodology and data collection

The study pursued a qualitative research approach. Qualitative research was helpful because it allowed interpretation of the viewpoints of policymakers and practitioners regarding portability and parity in the post-school sector. To collect the necessary data:

1. A thorough examination was conducted of the NQF, the SAQA, the NATED Report 191 Act and related policies, TVET policies, frameworks, and reformulations, the Higher Education Act and related policies, business studies programme outlines and curricula, TVET, and other official policy documents and legislation, and vocationally based higher education institution admission policies, and international literature on policy development.
2. Policymakers and policy practitioners were interviewed, such as curriculum officers at DHET and TVET institutions and a higher education institution.

The main research question and the sub-questions were utilised using these two methodologies. The interview questions included both open-ended and closed-ended inquiries. The result aided in the generation and analysis of qualitative data.

1.12. Study site and research population

The research was carried out in the Western Cape, South Africa, with a focus on TVET colleges and one university. The project explored the views of one policy practitioner from DHET (to establish the association between TVET and HET curriculum), five curriculum developers from two separate colleges in the Cape Town region, and three curriculum officers from a higher education institution. To ensure that interviewees were chosen with correct information and job participation connected to public TVET issues, a directed sampling was employed to identify respondents (Cohen, Manion and Morrison, 2007: 115).

1.13. Data analysis

A thematic analysis was used to examine the qualitative data collected. The study's analysis was based on a classification strategy that categorised the gaps that distinguished TVET and Higher Education. As a result, the study was divided into these two categories and coded for easier analysis and interpretation.

1.14. Ethics

The scope of the study was quite wide and under-researched. While the main focus was on policy statements, legislation and associated documents, studies of this nature always require ethical clearance from the student's host institution (which was done). This is to ensure that students are aware of the ethical responsibilities when interviewing respondents and when analysing what they say in relation to policy documents. For the study, one DHET policy practitioner, two TVET college curriculum developers, one curriculum officer, and one business studies programme head of department (at a higher education institution) were interviewed. Respondents gave their full approval to partake in interviews, and signed consent forms for their views to be used and analysed in the study.

Confidentiality and anonymity were assured by omitting the names of the interviewees from the final product (their inputs were captured as respondents A-I). Interviewees were assured that their participation would be treated with complete confidentiality and anonymity, and reminded that they could withdraw their involvement in the study at any time during the process, without consequence.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

The focus of this study was on whether NATED Report 191 business studies educational courses in the TVET sector provide for transferable access to the HET sector in South Africa. Understanding the history of the issues related to the research is crucial because the study has its roots in the TVET education in South Africa. To broaden the scope of the discussion, I describe available literature and papers on the TVET sector from Germany and the United Kingdom (UK). Considering that the world of work is always changing and that our knowledge of the world of work must therefore be adjusted, I also demonstrate how the concept of skills development is tied to discussions about education and the economy in both the TVET and HET sectors. This is especially true for how to correctly connect systems for skill development and vocational education delivery at the institutional level. By examining the distinctions between the National Certificate and Vocational (NCV) stream and the NATED stream within TVET and examining whether there is meaningful articulation between TVET and the knowledge forms that exist within universities, I also engage with the confusion surrounding portability at the TVET sector level in the literature.

2.2. The evolution of the TVET education system in South Africa

In South Africa before 1994, there were 152 technical colleges spread out over the country with 240 delivery sites (160 main campuses and 80 satellite sites), with towns serving as the hubs for many facilities (Powell & Hall, 2000:19). When the newly elected democratic government assumed power in 1994, “education and training was split into the ministry of basic education, which is responsible for schools and the ministry of education responsible for adult education, colleges, university as well as the ministry of labour for skills development” (Allais, 2011: 3).

After 1994, most of the 152 technical college sites and other centres were incorporated into 50 merged FET Colleges. However, some sites such as teacher training colleges and nursing colleges were absorbed into the public university system to form part of the 24 public universities (at the time) in South Africa. At a systemic level, this meant that the transfer of sites occurred at two sectoral levels, namely at the Department of Higher Education (responsible for universities) then at the Department of Basic Education (responsible for the 50 new FET Colleges) (Powell and Hall, 2000:19-23; DHET, 2014:2).

The promulgation of the FET Act of 1998 sought to organise educational reform in ways that created a strong PSET system in South Africa. Its goals included bringing capability and portability to the FET band, the GET band, and the HET band across the NQF and making sure that:

“All learning and training programmes, leading to qualifications from levels 2 to 4 of the National Qualifications Framework, as contemplated in the South African Qualifications Authority Act (Act No. 58 of 1995), were levels that are above general education but below higher education” (RSA, 1998:4).

The FET band accessible at FET Colleges after the year 2000 was meant to include both a career-learning post-school education and a senior secondary module of schooling within colleges. The national plan for FET colleges was to provide “vocational education and training as part of general education” as well as information and abilities for a variety of jobs in all economic sectors, alongside the study of technologically related sciences. As such, the FET band “levels consisted of an academic path, a vocational-oriented path and an occupation specific path, and were pitched at the general education level, above the general education level, but also below the higher education level” (DHET, 2013: xvii, 3-18,).

Linked to these developments within FET, the Department of Labour (DoL) was tasked after 1994 with the development of a skilled development strategy and promulgated legislation that would support the strategy in ways that connected education provision to work. The FET Act of 1998 was thus complemented by the National Skills Development Act (NSDA) in 1998, the Skills Development Levies Act of 1999, the National Skills Authority (NSA) of 1999, the National Skills Fund of 1999, and the National Skills Development Strategy (NSDS) of 2001 that established SETAs to serve as the main systemic link between vocational education and skills development providers, employers, and labour union representatives (as key stakeholders).

Regarding the SETAs after the first African National Congress (ANC)-led government was democratically elected in 1994, skills training policies sought to create a South African institutional framework and structure, which increased investment in, and focused on education and training (Badroodien, 2005:90; Kraak, 2005:429). This required the development of a complex collection of structures and processes in South Africa that organized education and training, something that the Department of Labour described as a system within the framework of a single national regulatory framework, of intermediary institutions and regulatory

mechanisms that connected training efforts at the sectoral level with those at the company level (Badroodien, 2005:95).

Once the Skills Development Act (SDA) of 1998 was promulgated, a national regulatory framework was developed to consist of a National Skills Authority (NSA) (Kraak, 2005:434). The SDA coordinated skills development at the national level, and 25 Sector Education and Training Authority (SETAs) that oversaw coordination at the sectoral level (Badroodien, 2005:90-91). According to Badroodien (2005:91), the SDA (1998) was supported by the skills Development Levies Act of 1999 that further provided a financial structure that incentivized, coordinated, and obliged employer investment in skills training in the following two ways:

- The imposition on all employers of a skills acquisition levy of 1% of overall payroll costs; and
- A national grant facility that allowed employers to recoup all expenses made on skills training in their business from SETA training funds.

The levy-grant scheme was set up to partially reimburse employers from the levies on payroll that they paid for the approved SETA training they offered to their employees. Thus, the levy-grant system sought to develop partnerships between employers, providers of education and training and government agencies in ways that enabled individual employers to enhance the integration of all types of training, thereby increasing investment in skills training (Badroodien, 2005:93).

The NSDS of 2001 then offered the overarching conceptual framework for connecting and operationalizing the relevant structures (Badroodien, 2005:93). It sought to provide better coordination and planning and greater consensus among education and training stakeholders at sectoral and national levels, and to improve financing that allowed the government and SETAs to take advantage of different training initiatives (Kraak, 2004:116; Badroodien, 2005:93-94). In that regard, the period between 1996 and 2001 was spent setting up a new education and training infrastructure and reorganising the institutional landscape that would be able to provide provisional skills at the various service provider levels. By 2009, however, it was recognised that education and training initiatives were not getting traction due to the split in responsibility between the DoE and the DoL. At that point it was decided to establish a DHET to “administer and manage post–school education and training in South Africa” (DHET, 2014-2017: 2), and to situate PSET in one ministry that would cover both on-the-job training and institutions with a variety of specialties that were supported by levy financing (Allais, 2011: 5). This further meant

that the new DHET would include higher education and further education and training within its *post-school* definition.

DHET (2013:5-6) describes how the “new formation of the Department of Higher Education and Training permitted incredible options for collaboration from industries and shared sustenance among post-school institutions as a whole to benefit students in particular”. Businesses began to follow the department’s goals by collaborating with HEIs, particularly UoTs and TVET colleges.

This renewed focus on TVET, compared to general education, also had a strong international influence. TVET is described by UNESCO (1997) International Standard Classification of Education Definition (ISCED) as “education, which is mainly designed to lead participants to acquire practical skills, know-how and understanding all necessary for employment in a particular occupation or trade or a class of occupations or trade”. To close the skills development gap between occupational and technical trades, UNESCO (1997) positioned TVET with an emphasis on "the acquisition of skills" developed for the labour force. According to the ISCED definition, students are supposed to acquire practical skills and knowledge around carefully participating with the necessary provision inside a certain trade, business, or occupation- The successful completion of a TVET programme is thus meant to direct students to the labour market with a relevant professional and occupational certification that has been approved by the nation's regulatory authorities.

As a result, TVET education is a type of education that strives to enhance South Africa's skills development to encourage civic engagement. TVET colleges were established to satisfy the requirements and desires of South African industry, according to Qonde (2014), Director-General of Education and Training at the time.

This is accomplished in South Africa through two kinds of programmes or streams within TVET colleges, namely: NCV and NATED Report 191. On the one hand, the NCV is “a certificate awarded as the final exit qualification (Vocational) to the candidate who has complied with the exit-level outcomes stipulated in the National Education Policy of the NCV (Level 4), a qualification at Level 4 of the NQF” (RSA, 2013:6). On the other hand, a post-matriculation National Diploma qualification is NATED Report 191 and focuses on “programme requirements for current technical college education in the Republic of South Africa” that speak to occupation and trades (DoL National Education Policy, 2001:4). Powell and McGrath (2013:6,8) describes NATED programmes as post-grade 12-level offerings that are NQF level 6 certified – under the category of higher education, meaning “learning programmes leading to a qualification that

meets the requirements of the Higher Education Qualification Framework (HEQF)” (RSA, 1997:5).

In that regard, the NQF, as a “comprehensive system approved by the minister for classification, registration, publication and articulation to quality-assured national qualification” (RSA, 2008b), serves to provide clear bridges and articulation between the NATED Report 191 programmes and higher education institutional programmes.

NATED Report 191 offers both technical and professional courses, with credit values attached to each instructional offering and provided via semester or trimester programmes (RSA, 2001a:10). Professional courses like business studies (N4 to N6) are semester programmes in the NATED Report 191 programmes, while technical trade courses like engineering programmes (N1 to N6) operate as trimester programmes.

It is the later N4 - N6 NATED Report 191 courses leading to NQF level 6 that are meant to offer access to a higher education qualification. For this study, given that this is not always necessarily the case, one subject area – business studies – was chosen to examine the systemic articulations and portability between NATED programmes and higher education offerings. While systemic articulation is not easily discernible, the kinds of curricula provided within NATED report 191 programmes are examined to identify where such bridging is planned for.

It is this (dis)articulation that the study explores, examining the systemic obstacles, issues of parity and elements related to the evolution of the TVET system in South Africa that prevent students who enrol in professional programmes described in NATED Report 191 at TVET colleges from continuing their education in HEIs.

2.3. South African TVET through the lens of German and United Kingdom vocational education

To broaden the context, I decided to look at the components of TVET in Germany as well as in the UK compared with South Africa. TVET in these nations has many similarities with TVET advancement in South Africa. In this way, the significance of the study is enhanced by comparison with these nations.

The South African TVET model was inherited from colonial heritage dating back to the 1800s. The ANC government inherited this system, which may or may not have been aligned with their social and economic redress project. When it was discovered that the UK model was not working,

the focus was turned to a different model, the German model. The provision of TVET occurs quite differently in different countries. TVET is provided at the post-secondary level in countries such as Germany and Australia, with clear bridging and access to higher education. In Europe, "two-thirds of the youth often prefer the dual system of a vocational pathway" (Gewe & Ankooboi, 2013). This means that a "dual system of vocational training in Germany, for example, allows learners to participate in a vocational and training manner," giving students access to further education (African Union, 2007:31).

South Africa has traditionally followed the UK model with a low skill focus, where students are trained in colleges and then linked to apprenticeships tied to the workshop (DHET, 2013:12). Students in Germany are also connected to companies. This kind of system is not pursued in South Africa.

Badroodien (2002:4) traces the beginnings of South Africa's vocational education as far back as the 1800s. In the late 1800s, the interest aimed at vocational instruction was a result of the need for mechanical improvement. It was connected to mining and the advancement of railroads and harbours. The current environment and shift of the newly formed TVET colleges are central to understanding the beginning of these schools.

The extension and development of the railroads and improvement of the mining industry made an interest in railway experts with suitable vocational abilities, while in the mining sector engineers were in tremendous demand (Badroodien, 2003:73). Therefore, technical training applied to a kind of guidance referring to assembly, fitting and turning and logical principles.

The goal of DHET's creation of TVET was to have TVET colleges become the "institution of choice for young school leavers," according to the Human Resource Development Council (HRDC, 2014:6). Universities should be informed by the principle that programmes such as NATED Report 191 students, including business studies students, who chose the TVET route could subsequently continue their education at an HEI. According to UNESCO (2012:16), TVET education and programmes should be available to everyone, inclusive of all learners, and consider their needs. Additionally, according to Webster & Sausner (2017:454), students who had enrolled in the TVET programme were seen to be too old and unfit for the traditional classroom. Students who enrol in the National Diploma programmes at the TVET are average school-going ages.

Nevertheless, the landscape and impression of TVET in the nation have changed as a result of the reintroduction of NATED programmes in South Africa.

In Germany and to a lesser degree in UK, vocation education and training systems form a focal segment. Due to the labour market and economic shifts, a drop in apprenticeships has been witnessed in the UK in the first decade of the 21st century (Brockmann, Clarke, & Winch; 2010:119 - 120). In the UK, government participation in vocational education and training institutions is very high, and minimum state industry regulations regulate learning in the workplace. Learning in Germany is well regarded, and apprentices are remunerated citizens. Unlike in the UK, the German system encourages young people to follow specific vocational trajectories rather than make career decisions at a young age.

Most skills developed for the high end of the British economy are focused on worldwide markets, while those developed for local labour markets are primarily low skills. Low skills are important for those who work within the UK, but they have an articulation problem as a result.

2.4. SAQA and NQF

The South African Qualifications Authority (SAQA) Act in 1995 implemented the NQF as a means of resolving learning differences among different racial groups in society (Chisholm, 2007:297). The supervision of development and the application of the NQF is the primary responsibility of SAQA. The NQF's remit includes the description and dissemination of policies and rules for the creation of accountable bodies for the formation and establishment of national standards. The NQF was legally established in the 1995 SAQA Act. The first national capacity system for teaching and learning was introduced in 1994, with the aim of developing an integrated national structure for the achievement of learning. It was intended to promote pathway and portability and movement through the means of training, preparation, and professional development (RSA, 1995; Chisholm, 2007:297-298).

The 1995 NQF envisaged the coordination of a single structure consisting of three classes and eight levels, the entire training system. One adverse influence of the 1998 National Qualification Framework on the TVET colleges section was the similar band they shared with secondary schools, causing major chaos between the sectors (RSA, 1995). As of the division of the DHET and the DBE, formerly two sections of the national department of education, the proclamation of the new NQF No 67 of 2008b came about. While the DBE focuses on school

level learning, the DHET oversees PSET and planning. The new (NQF, 2008b) encompasses all capabilities and consists of 10 ladders, thus NQF 1 to 10. Level 1 of the NQF corresponds to the GET band that corresponds with Grades 8-9, whereas level 2-4 of the NQF corresponds with Grades 10 to 12 band of the FET. NQF levels 5 to 10 describe qualifications that are highly recognised, namely diplomas, first degrees, and honours, masters, and doctoral degrees on the Higher Education and Training band. The key improvements are the extension of levels of the Occupational Certificates (OCs), corresponding to grades 10 to 12. Level 5 was also included from N4 to N6, although OCs were introduced as levels 5 to 8. Currently, levels 9 to 10 are for masters and doctoral degrees.

The system has extended capabilities and unit values as per the DHET (2012:15-16), but there has been no comparative multiplication of learning or instructive structure. A key protection for institutions such as the NQF in other countries as indicated by DHET, is that NQF is intended to create comparability as a guide to credit recognition and student articulation. NATED Report 191's N1 to N3 capabilities are currently assured by Umalusi, N4 to N6 as are the National N qualification. N-confirmation is not the same as N4 to N6 but rather N1 to N3, which is largely unchanged because of its frequently outdated educational plans. It is not fair to have different components of a skill with different quality chambers, especially because the Quality Council for Trade and Occupations (QCTO) is re-developing N4 and N6 into work-related competences.

In South Africa, TVET has dealt with the development of skills and expertise to boost the South African economy. Kraak (2004:46-49) states that TVET deals with finding a gap in skills and creating methods to close the gap. In this context, the wider TVET education strategy is underpinned by skills growth.

2.5. National Certificate and Vocation

In 2007, National Certificate and Vocation (NCV) was introduced to public colleges aimed at rapidly providing school dropouts with skills to combat poverty (HRDC, 2014:7). At least 20 programmes at NQF levels 2, 3, and 4 are included in NCV, the entry prerequisite being grade 9 from the Basic Education band.

The perception of the essence of programme portability in TVET colleges was discredited by the weak accreditation and qualification of the NCV programmes during the previous years. Regarding the 2008 amendment of the General and FET Quality Assurance Act, (RSA, 2001b) Act No. 58 of 2001, and further clarified in Council Policy, the duties of Umalusi are specified

as the creation and management of the qualifications sub-framework, the certification, accreditation, and quality control of private qualification assessments (internal and external) (RSA, 2013:8).

This created various difficulties, such as the lack of industry assistance for the carrying out of the student work environment, and the unwillingness of higher education institutions to enrol NCV level 4 students. The NCV Level 2 was first made accessible at FET colleges in January 2007; and the NQF Level 4 NCV replaced the FET College programmes as of January 2009.

The Minister of Basic Education, Motshekga (2019) officially declared grade nine an exit level within the basic education sector by giving pupils opportunity to exit in grade nine to access TVET institutions for artisan and occupational trade qualification. The certificate received at NCV level 4 equates to a matriculation qualification, which permits easy articulation to higher education (HRDC, 2014:34). The focus of higher education is to attract students from the traditional school route and not from TVET, making it equally impossible for NCV to articulate to higher education. This issue of NCV being unable to articulate is a challenge to the sector as it affects the NATED stream as well.

2.6. NATED Report 191 programmes and articulation to the higher education curriculum

The NATED Report 191 N1 to N6 included programmes in engineering, business, utility studies, hospitality studies, and general studies. NATED used to be known as "technical college instructional programmes" (RSA, Report 191, 2001a/08/4). NATED programmes offered technical and theoretical instruction, which have been in effect since the mid-1980s and were planned to be phased out starting in January 2009 and ending in 2011 (DoE, 2008:3-4). The discontinuation of the NATED programme was in favour of the NCV qualifications (RSA, 2008:2). Colleges continue to provide these out-of-date theoretical courses in a range of sectors including management assistance, hospitality, financial management, business management, and human resource management.

The post-school sector was limited in responding to student requirements. The DHET, which was limited to NCV support, released TVET funding norms and standard strategies in 2010. Hence it offered a variety of funded qualifications envisioned by the education ministry (White Paper 4, 1998). Later, the phasing out of N course certificates and its National Diploma in business studies and utility studies created a void that impacted post-school students (DHET 2013: 14-15). Kraak et al. (2016:32-33) mentioned that regulations on TVET previously

described the implementation of NCV level 2 to 4 to resolve the substandard and low-quality educational programmes issues. Such laws did not fulfil the criteria of TVET programmes and were not sponsored by artisanal skills industries. In the event of reversing the phasing out strategy, the minister of higher education approved the offering of university programmes for NATED Report 191. Like programmes for HR and Management Studies (RSA, 2010:3-4), they were to be offered in subjects such as business administration, HR, and finance.

Even though the FET Act 2006 (DoE, 2006:50-52) instructs colleges to enrol students in work-related courses, SETAs holds the monetary power. TVET programmes are likely to ease the problem of joblessness in the country and to improve the economy, which will be advantageous to the industries. In 2009, the state decided to create one umbrella to accommodate the post-school sectors (universities and colleges and SETAs) to enhance the possible flow of money to the post-school sectors (DHET, 2012).

The way toward restoring the N certificates and qualification through an obsolete educational substance and configuration are continuing. The approach proposed in (White paper 4, 1998) to generalise the improvement of educational programmes in TVET colleges shows insufficient evidence of progress against the targets set.

Students who were denied entrance to universities were directed to the NATED N4 to N6 programmes because of the high pass rate provided by the 2010 matriculation results. The 2010 pass rate caused the decision to contemplate eliminating the N programmes. Therefore, students could enrol in the general studies and business studies programmes described in the NATED Report 191. In 2013, there were 639 618 students registered in TVET, and it was predicted that there would be one million students by 2015 and 2.5 million by 2030 (DHET, 2013:13).

According to HRDC (2014:11), the flexibility of the NATED programme has allowed certain universities to use it to boost student enrolment. From N4 to N6, the NATED business and general studies programme offers 18 months of academic instruction, followed by 18 months of practical training. Many students like this option because they believe it will allow them to enter the workforce and continue their education more quickly.

It is important to remember that the move from FET to TVET was made to harmonize all post-school education and facilitate mobility throughout the higher education sector. It is evident from DHET (2013:10–11) that there was little disparity between HE and TVET and yet there was no synchronisation between HE and TVET.

The general studies and business studies N4–N6 programmes must be in line with NQF qualifications to make it simple for graduates to transfer to higher education. The NQF programme articulation allows for potential continuity between TVET and higher education (Powell & Hall, 2000:29). TVET expertise must be ingrained in the level of its curriculum innovations to accomplish this. Concerns concerning curriculum should be positioned in the TVET sector as a concern about the flow of knowledge between pedagogy, knowledge, and the workplace.

The first national curriculum programme was initiated by the National Education and Training Forum (1995) but was limited to the cleansing of obsolete elements of the last apartheid curriculum. In the first years of the democratic regime, it became the de facto curriculum for both the GET and the FET bands (Muller and Hoadley, 2019:10).

According to Allais (2012: 336), the design of a curriculum should be based on the selection of relevant content. Based on the intended learning outcomes, a specific curriculum was chosen for use in universities. The NQF saw a significant adjustment in 2009 when the outcome-based curriculum changed. Fourie, (1999:20) envisaged the higher education in South Africa moving in the direction of unwanted standardization and practical training. The labour movement was the genesis of the new NQF. The new NQF was intended to provide new opportunities, especially for individuals who had previously been unable to obtain training and education. The NQF's rigidity might have had a negative impact on programmes in higher education.

The NATED Report 191 curriculum is outdated, and the sector is now facing new difficulties as a result. Knowledge and job experience make up the two components of the NATED business studies. The requirement that students complete 18 months of classroom instruction (N4 to N6) and 18 months of work experience with an employer has been ignored as an essential component. Without completing the work experience, students earn the N6 certificate rather than the national diploma (RSA, 2001a: 136–159).

RSA Parliamentary Monitoring Group (2018:2–3) mentioned that some elements of the curriculum, including bookkeeping, are being examined as part of the endeavour to reconstitute the N4-N6 programmes. Since only one of the many subjects was the focus of this study, the remainder of the subjects are left unexplored.

To articulate TVET-NATED business studies to higher education, a "strong curriculum based on well-defined areas of knowledge" (Allais 2011:2) that aligns with higher education

programmes is needed. To improve relationships between educational institutions, the TVET sector needs to provide a very demanding and effective curriculum that is synchronized with higher education (Gamble, 2014:189–191). The redesign of the engineering programmes N4–N6, into some well-remodelled qualifications, is expected to articulate with the qualifications on the Higher Education Qualifications Sub-framework (HEQSF). HRDC (2014: 24) made it look possible as "TVET Colleges were once able to articulate with universities of technology with primary progression being from the N4-6 programmes".

When examining South Africa's history, universities were deemed historically advantaged institutions whereas technical vocational schools and colleges were considered historically disadvantaged institutions that commonly applied to the different racial categories. Even though the "Minister of Higher Education and Training" tried to bring them together, this division has proven difficult (DHET, 2013:11-12). Legislation granting the technikons a status that allowed them to modify the instruction they provided was enacted in 1983. Additionally, the Technikons Act 125 (1993) gave the technikons more discretion and raised the position of government to promulgate the legislative statute to link the technikons with the universities. However, a lack of communication and cooperation led to the collapse of the system. The historical disparity between technikon and the universities grew worse, and TVET colleges and the universities began to suffer from the same reputation. The new DHET collaboration between TVET and universities is exhibiting the tendency that previously existed between universities and technikons.

HRDC (2014:34) mentions that "TVET colleges were once able to articulate with technikons, with primary progression being from the N4-6 programmes". However, Needham (2019:126) contends that due to a lack of articulation between TVET and higher education, TVET graduates will struggle to transition to higher education. The TVET curriculum is outdated and does not correlate with those of higher education institutions. NATED Report 191 students studying business studies and human resource management students are being taught a curriculum created in 1995 (Fourie, 1999:14).

The current absence of qualifications for the new HEQSF systemic articulation from TVET to universities has probably reduced access to this historical route. According to Fourie (1999:17), the higher education industry is distinguished by a cogent distinctiveness in its qualifications. The NATED segment of TVET education lacks this distinctive quality. Fourie (1999:17) asserts that NATED makes no attempt to define qualifying at its level. If a sector qualification is not

clearly specified, this becomes a problem. None of the RSA Report 191 (2001a:4-159) policies defines NATED qualification.

According to the Minister of Higher Education in his 2017 budget address, the Engineering Council of South Africa (ECSA) was to assist in the re-curriculum of the NATED engineering programmes to increase parity in the curriculum and easier articulation to higher institutions. No plan was made for the business studies programmes at universities of technology.

NQF level 5 was designated as the prerequisite for admittance into higher education under the higher education qualification system. According to the statement of work experience logbook designed for business studies internship programmes by DHET (Department of Higher Education and Training – Doc Curriculum Documents-(dhet.gov.za)), NATED Report 191 is on NQF level 6 with 360 credits. The RSA (2001a/2:23-67) establishes the NATED business studies qualification as a national diploma at NQF level 6 following an internship. According to the higher education qualification act, a diploma qualifies as an entry-level advanced diploma (CHE, 2013:29-30). The perception that TVET education does not equip students for higher education articulation and employability should be reconsidered, argue Ismail & Mohammed (2015:74). HRDC (2014:40) suggests that the NQF-5 and 6 qualifications should not only allow students to articulate to higher qualifications but should also be recognised by industries. Matriculants perceive technical education as a potential alternative to going to university (Webster & Sausner, 2017:451). TVET NATED Report 191 should have been the higher-level structure that would have allowed access to the higher education and training sector.

2.7. Lack of articulation

The DHET (2012:13-14) has shown that in South Africa, the post-secondary education system does not function as an organized single structural entity. According to RSA (2013:324), the organization of post-school training by advanced education, TVET and other providers is fragmented. Likewise, the NQF has ten levels, ranging from one to ten. According to Section 4 of the NQF Act, 2008b (Act No. 67 of 2008), which consists of three coordinated qualifications sub-frameworks (for General and Further Education and Training, Higher Education, and Trades and Occupations), the policy for SAQA Articulation and Credit Transfer (2017:2) was intended to fit within the context of the NQF as a single integrated system of learning achievement. The national articulation baseline report (SAQA, 2017:1) explains that the South African NQF was the method adopted to integrate the education and training system. The aim of the NQF is to

improve access and quality, and redress prior unfair discrimination in educational, training, and employment opportunities. While the SAQA is tasked with supervising the NQF's implementation and further development, it also undertakes research to support this work, building up its capability through long-term research collaborations with public HEIs. According to the National Articulation Baseline Report (SAQA, 2017:1), learners encounter known transitional difficulties.

For graduates of TVET colleges, integrating occupational and vocational programmes into higher education programmes is a significant barrier (DHET, 2013:15) Today, admission to higher education programmes is generally refused to most college graduates.

Universities and UoTs are reluctant to register NATED graduates for level 6 courses due to apparent gaps between output competencies targeted by the NATED and entry requirements for university level courses (Duncan, 2009:27). Given the difficult issues, it is understandable why institutions are hesitant to recognize college graduates of Report 191 curricula as having earned their diploma Moodie (2008:138) argues that the relationships between an education system's institutions and structures are what matter most. One technique to observe a system's internal dynamics is the articulation of students between TVET and higher education. Student transfer captures the essence of a tertiary education system and can be a key sign of its effectiveness.

2.8. Conclusion of chapter 2

The second chapter reviewed the literature on TVET colleges and its effectiveness in terms of portability and parity with higher education institutions. The chapter began with a background of the TVET college, its origins, and the vision that guided its development. It also compared the South African TVET model to those in the United Kingdom and Germany to illustrate the evolution of TVET and its model origins.

The chapter also looked at the SAQA and NQF Acts and how they promote articulation. The Skills Development Act and how it relates to the TVET sector in terms of TVET being the backbone of the economy in terms of skills training were also discussed in this chapter. The NCV programme was compared to the NATED programme to gain a better picture of where the problems in the sector lay.

CHAPTER 3

CONCEPTUAL FRAMEWORK

3.1. Introduction

The chapter delves into various fundamental concepts that when combined, helped me assess whether portability offers equal quality opportunities in education by examining what policymakers and practitioners have to say about it. To go deeper into the research findings, this chapter describes and conceptualizes basic ideas in relation to the studies. The cornerstones of technical and vocational education are education and training, as discussed in this chapter. The issues of curriculum, portability, and parity are all discussed.

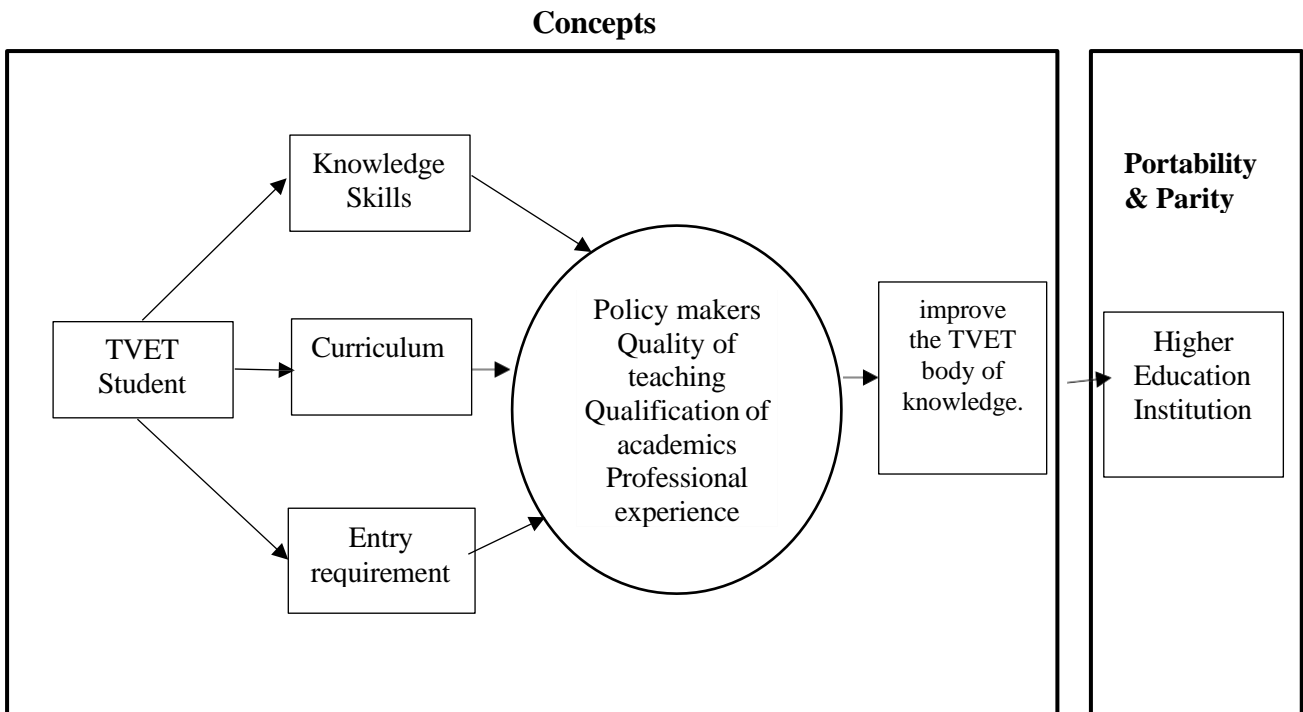


Figure 1b: *the conceptual diagram*

3.2. Technical Vocation Education and Training as a concept

While industrial education stressed the teaching of handcraft skills as well as the instillation of discipline, loyalty and consistent work habits, vocational education is a type of education that is considered compulsory and is distinguished by its realistic purpose. According to Clarke and Winch (2007:9-10), vocational education is restricted to training both youngsters and adults for job readiness. This method of vocational education combines both civic and academic components of education. Civic education produces a workforce comprising active and useful citizens.

Vocational education is viewed as the production and use of skills, understanding, and knowledge for working-class citizens' employments that people need on a regular basis (Moodie, 2008: 172). A long and influential tradition has held that vocational education is as much about personal liberation as it is about personal and economic development.

VET is defined as all forms of coordinated initial, continuing, or further vocational education and training, regardless of the participant place, age, or level of qualification (Descy and Tessaring, 2000:18-21). Vocational education is mostly linked to industry whereas higher education is linked to academic disciplines. Vocational education (VET) aims to prepare students for a particular career or work, and it may also include a portion of general education, such as the acquisition of fundamental skills. VET is defined because it is situated at the verge of working and learning, both of which are considered fundamental elements of human life. The goal of vocational education and training is to increase society's industrial potential, based on the premise that the more effort and expenditure put into it, the more active and efficient the workforce becomes (Clark and Winch, 2007:6). Experts and policymakers recognize that, to achieve industrialisation, highly skilled experts needed to be replaced. Vocational Education and Training was planned to skill the youth in the rural areas with suitable skills, and later extended to the urban areas. Most VET students, especially in the informal sector, are from poor families and poverty is a major factor in their lives (McGrath et al., 2020:468, 474 - 476).

Technical and vocational education and training is one of the sectors in South Africa for skills acquisition to provide a labour force for the economy. While VET is defined in terms of its economic nature and colonialism (McGrath et al., 2020:467), in sub-Saharan Africa it means socio-economic development. UNESCO (2012:5) defines TVET as a sector that focuses on the attainment of skills and knowledge for the labour market. A TVET Strategy (UNESCO, 2016-2021) was formulated by UNESCO to improve member states' TVET frameworks and advance youth jobs, decent work, entrepreneurship, and lifelong learning opportunities in relevant national contexts. The strategy is in line with Sustainable Development Goal 4 and the Education 2030 Framework for Action (UNESCO, 2015).

Vocational education training in South Africa clearly differentiates the purpose of general post-school vocational education. It focuses on school leavers to provide occupational skills which happens in the work environment (Moll, Steinberg and Broekmann, 2005:21-22). Allais (2011:35) argues it is time for Africa to rethink a new approach to TVET.

Vocational education has been endorsed primarily as a means of easing the transition from school to work. However, in South Africa, the TVET sector is inadequately equipped to meet the goals set out in the DHET's White Paper on Post-School Education and Training DHET (White Paper, 2013:12). The fastest-growing types of post-secondary education are non-university technical programmes. The Department of Basic Education's plans to reintroduce technical and vocational streams in basic education necessitate the provision of technology and vocational teachers (Blom, 2016: 1-3). Blom (2016: 4-6) further argues that practical problem-solving in real-world scenarios is a popular method of teaching vocational education and training.

3.3. Knowledge skills as concept

Education has historically seen itself as an essential tool for giving citizens knowledge and skills and assisting the social change process. Giroux (1992: 4) draws attention from a rather distinct perspective to the fact that education, according to the strategy, representation, and legitimization of a particular form of knowledge and power, should be interpreted as developing identities. Additionally, by establishing and tolerating human inclinations, (Brundrett, and Hammersley-Fletcher. 2008: 12), learning needs to be investigated. Training is regarded by many as an agent of every society's human growth, social mobility, and socioeconomic development. It is also regarded as the acquisition of new skills. Education is a training process designed to provide information, improve abilities and skills that could contribute to the development of mental alertness and the right lifestyle attitude (Zite and Deebom, 2017:2).

Education builds a profound knowledge, understanding, and insight into subject matter and pre-professional instruction which familiarizes learners with tasks that set them up for professional or specialized instruction. Thus "technical or skilled" teaching ultimately produces rational aptitudes, knowledge and understanding of the students needed to work in a particular calling (UNESCO 1997: 57-90). The general point of instruction is to assemble a just society along these lines, while professional training plans to showcase exploitative information.

It is necessary to have a well-structured TVET curriculum that develops a different knowledge form, as suggested by Gamble (2006:87-96). The progress of the TVET sector curriculum is intrinsically tied to the state of knowledge production. The NATED curriculum, according to Gamble, produced both context-independent and context-dependent knowledge. A context-independent knowledge form is linked to abstract learning of information. As a result, the N4–N6 curriculum is based on this form of knowledge, which stresses rote learning, or learning without comprehension. Context-dependent knowledge is "knowledge derived from a real

experience that occurs at a specific moment" and is "based on one's experience as information derived from a real experience that occurs at a specific time" (Gamble 2006:87-96).

3.4. Curriculum as a concept

As Du Toit (2011:59-60) has suggested, there is no standard comprehension about curriculum involvement. A consensus is common in various ways among scholars in the advanced education sector within a similar field. For example, Barnett and Coate (2005:5) depict educational curricula as a sorted arrangement of instructive experiences and instructional method as a demonstration of instruction. An 'educational curriculum' is a dynamic and challenging plan with different and challenging ideas. Koen (2011:26) alludes to an educational curriculum as a method to carry out training exercises. characters Multifaceted processes, collaboration, elements, go hand in hand with the fields of organization and learning (Jansson, 2011:6-9).

An educational curriculum is a programme of exercises structured with the goal that students will achieve instructive finishes or targets beyond what many would consider possible. Techniques for educating or learning cannot be uniform because students are not the same. Wertsch recommends that an educational curriculum should be dynamic and responsive to react to this variety (Wertsch, 2007:316-). Pinar (2003:14) argues that an educational plan concerns considerations and hypotheses as the focal point of all instruction. Accordingly, Zais (1976:4-5) characterizes educational curriculum to demonstrate an instruction arrangement for students, recognizing the interest in the study.

An educational programme should have four interconnected sections: basic educational plan objectives, knowledge, learning experiences, and educational plan evaluation. According to Grumet (1981:19-20), an educational curriculum should include four measurements: points of destination, substance and subject, strategies and methodology, and evaluation. An educational plan is a structure of the parts and components of an educational curriculum (Zais, 1976:10). The components for an educational plan are points, goals, topic, or substance, learning exercises and assessment. These elements are united as an instructional plan placed together to create the framework of the programme. Different sources have been demonstrated to affect educational curriculum structure. For example, theory, human science, history, branches of knowledge, brain research, and innovation as sources that may impact the procedure of an educational programme plan. A UNESCO (2008:1) report highlights the significance of innovation and data innovation as a power that impacts an education programme. Any curriculum that leads to a vocational or

professional qualification is distinguished by the fact that it "turns its face both ways" - for knowledge to support both knowledge and vocational growth, it must include a mix of different types of information gathered from both non-empirical (conceptual) and empirical (real-world) domains.

3.5. Portability and articulation as concept

Blom, and Authority, (2005:11) defines portability as the capacity for students to transfer credits from one educational institution and/or employer to another. In other terms, it could refer to students' capacity to participate in or apply learning in a range of contexts, allowing them to move from one institution to the next for further education. It is also considered as the transfer of information or the ability to access learning in a variety of ways in specific situations. Blom characterized portability as "the broad transferability of learning results, such as a certificate from one institution to another" (Blom, and Authority, 2005: 9), with the transfer of certificates from the TVET NATED programme to higher education institutions, with progressive learning being the focus of the study.

Portability is aligned with articulation in the post school sector. According to (SAQA, 2017), articulation is the process of creating correlations within qualifications and/or part-qualifications to enable learners to pass vertically, laterally, and diagonally across the standard systemic education and training system and its connections to the workplace. The (DHET, 2021:2) also defines articulation as the process of creating systemic and individual connections between qualifications and/or part-qualifications to enable learners to move horizontally, laterally, vertically, or diagonally through the formal education and training system and its connections to the workplace.

The term 'articulation' can have a variety of connotations. Having a defined educational path that includes credit acquisition and qualifying development; articulation as learning in and out of practice; and/or articulation and learning pathways inherent in subject formation. Articulation is not just an automated process of formalizing qualifications or prior learning proficiencies, as important as they are. According to OECD (1998: 51), it is also a learning notion, emphasizing complementarity, continual upgrading or development of competencies, achievement, and progression along a personally meaningful and socially recognized and status-enhancing pathway.

The NQF addresses credit portability from one institution to another or from a workplace to an institution. Articulation on the other hand allows learners to seamlessly transition from one education and training background to another; and an integrated approach, a unified approach to education and training (Blom and Authority, 2005:10). Articulation can be believed as 'systemic' or a 'joined up' scheme that includes credentials, professional designations, regulations, and other official elements that are consistent with and inclusive of learning and job pathways (SAQA Policy, 2017:1). Legislation and the state's steering processes, such as planning and financing in the education and training system, are used to create systemic articulation (QCTO, 2020:3). Articulation can also be described as the structure or alignment of qualifications to allow practice progression, with or without intra- or inter-institutional agreements like memorandums of understanding, Credit Accumulation and Transfer (CAT), and other mechanisms (SAQA Articulation Policy, 2017:1). Specific articulation is focused on formal and informal agreements made within the education and training framework – between organizations – governed by regulations, accreditation principles, and processes (SAQA, 2017:2)

Articulation may refer to how individuals are assisted in their learning and work by institutions with flexible enrolment, instruction, learning and teaching, and learner support systems. As a result, articulation includes aspects such as consistency of qualifications and learning, as well as career development programmes (SAQA, 2017:1). As individuals experience boundary zones between the various elements of learning, they are encouraged to make contact with these zones and cross them in their transition along their learning pathways (SAQA, 2017:2). Assuring that there is easy articulation between various parts of the system is an important part of creating a cohesive and integrated post-school system. This includes, for example, ensuring that curricula are structured to allow for articulation between levels of the NQF where possible (White Paper for PSET, 2013:6).

South Africa's first democratically elected government found it necessary to establish icons of a new order (Blom and Authority, 2005:10). The first ten years of policy making in South Africa hinged mainly on the rhetoric rather than the substance of change (Jansen, 2001:50). South Africa is to create a structure that allows students to switch between streams and levels both vertically and horizontally (White Paper for PSET, 2013:6)

3.6. Parity as concept

The NQF promotes the integration of education and training. Apart from the practical reasons for incorporating training and education in South Africa, there appears to be a global trend toward a means of expressing society at large, workplaces, and, most importantly, specific student aspirations. One aspect of such a push is to establish parity of esteem among the system's participants.

Demands for stronger relationships between education and training, parity between different components of education and training, different sites of learning, institutional and workplace, greater access, and meaningful learning paths are all part of the current debate in South Africa's post-school sector (Blom, and Authority, 2006:2).

Governments have mostly ignored and mismanaged vocational education. Curriculum revisions were often undertaken by national governmental offices, even though technical schools were regulated by provinces. The curriculum for professional occupations has not been altered in decades, and academic education has largely been ignored (Field et al., 2014:43-45). This is particularly important in South Africa because it relates to issues of social justice as well as educational and training standards. At this moment, standards are not comparable; parity of esteem is not yet a reality (Blom and Authority, 2006:3). Their effectiveness requires complete parity between all institutions in the methods and levels at which quality criteria are applied across the whole sector and for all comparable qualifications issued by the sector (CHE, 2013:5)

3.7. Conclusion of chapter 3

The third chapter examined the conceptual framework by delving into the study's primary concepts. Technical vocational education and training, knowledge, curriculum, portability, and parity were carefully examined.

CHAPTER 4.

RESEARCH METHODOLOGY

4.1. Introduction

Chapter four describes the methodology and research design used in the study. As Mouton (2001:56) agrees, a research design directs a study to answer the major research question and related questions by defining the methods and processes for gathering and analysing the data (Zikmund, 2003:65). The chapter gives a discourse on qualitative research features and the explanations for using the qualitative method. The chapter also outlines the sampling and participants and their importance in the data collection, the instrument used in data collection, the method used to analyse the data and the ethical consideration for validity.

Interviews and a review of statutory documents were used to gather information. Ethical consent and principles were followed to ensure the study's credibility.

For better data collection, the main research question was posed, and sub-questions that helped contribute to the main research questions were asked.

4.2. The main research question.

How do systemic issues and educational legacies in the TVET sector influence the portability of TVET business studies students to comparable programmes in South African higher education institutions?

Sub-questions:

1. What do policy practitioners identify as some of the structural and policy obstacles to TVET business studies students pursuing further studies in higher education?
2. What are some of the historical and pedagogical processes within the TVET sector that shape how the business studies curriculum is structured, and which limit its articulation to other settings?
3. Where are the overlaps or gaps between the business studies curricula, educational procedures, and system mechanisms of TVET business studies programmes and those in business studies programmes with a vocational focus in higher education institutions?

4.3. Objectives

To reiterate, the study's objectives were to:

- Establish the thinking and planning between TVET college curricula.
- Identify what different stakeholders think are the key knowledge forms that are produced at the TVET college level.
- Question whether the admission requirements into vocationally based higher education institutions are aligned with the knowledge provision generated within TVET College qualifications.
- Examine whether there is sufficient portability and parity between TVET and HET sectors to allow students to move from one to the other.

4.4. Research design and methodology

The study's goals and objectives were achieved using a qualitative research methodology. As Mouton (2001:65) notes, to identify, document, and confirm unknown aspects of people's lives or behaviour, qualitative data approaches are required. According to Wiersma & Jurs (2005:78), education understanding, particularly, must be strongly connected with the norms, habits, and views of ethnic cultures (TVET personnel and higher education personnel) and suitable for determining the subjective meanings of people participating in each scenario or circumstance. The qualitative research method used aided the understanding of what practitioners and policymakers are talking about regarding parity and portability in the post-school sector. Brinkmann, Jacobson, and Kristiansen (2014:20-22) argue that qualitative research aids in understanding the interpretations that already exist in people's lives, both individually and collectively. The qualitative method considers the context as well as the complexities of human nature and behaviour. The approach was chosen because it supports a heuristic interpretation and elucidation of the topic.

4.5. Sampling

The participants in this study have one thing in common: they are all participating in the TVET curriculum at various levels. This offered a stable foundation from which a sample could be carefully selected (Mouton, 1998:134). The study sample for the research was from the Western Cape TVET college sector, and a higher institution in the Western Cape as well as the DHET national head office. The focus was on two colleges in the Western Cape.

Participants were chosen using the purposeful sampling approach to ensure the quality and integrity of the data. Purposeful sampling was utilized to identify competent personnel with the necessary expertise and experience (Cohen et al., 2007:115) in TVET college. The purposeful sampling employed means that participants were chosen based on some distinguishing features that qualified them as data holders for the study. Academic managers, such as deputy principal, curriculum planners (in both TVET and HEI), head of department, campus manager, senior lecturer, quality assurance manager in higher education, were among the research participants in this study's participation sample. Based on their TVET college work experience, abilities, and knowledge, the researcher guaranteed that the selected sample of respondents possessed a wide range of criteria that might provide useful information. The inclusion of more experienced participants produced rich data that reflects work-related experience throughout TVET colleges and higher education.

4.6. Data collection

To gather the information required, the following steps were taken.

A thorough examination of the National Qualifications Framework, the South African Qualifications Act, the NATED Report 191 Act and related policies, TVET policies, frameworks, and reformulations, the Higher Education Act and related policies, business studies programme outlines and curricula, TVET, higher education institution admission policies, admission policy at a UoT, and other official policy documents and legislation.

Interviews were conducted and participants' original voices were recorded to emphasize the personal aspect of their opinions, experiences, and interpretations. The research project's data analysis strategy was in line with the research questions, general methodology, and philosophical underpinnings.

Interviews with policy practitioners and decision-makers, such as a TVET college's curriculum officer, and a University of Technology were conducted. During the interview sessions, I provided a comfortable atmosphere via the Zoom platform, ensuring that there was privacy and no interruptions. Furthermore, I set the tone for the interview by saying that the goal was to learn about their perspectives and impressions on the research topic, of which they were the knowledge and experience custodians. The participants were not treated as non-knowledgeable, but as study fellows, thanks to the upfront structuring of the situation. Furthermore, I asked predefined questions of the participants in a logical and well-structured order.

To answer the research question, an in-depth semi-structured interview of approximately 1 hour using the Zoom platform was conducted with each of the five policy professionals from the public South African TVET college sector and three from the university of technology, all located in the Western Cape. In terms of personnel or institutional form, the study did not seek to achieve representativeness. Relatively, it drew on a cross-section of policy practitioners from two higher education sectors. The study interviewed one policy practitioner: a curriculum officer at the Department of Higher Education and Training head office, who gave a DHET curriculum orientated perspective for the NATED programme; one Head of NATED business studies at a TVET college who gave a general perspective of the business studies programme at the college; one deputy principal academic for a college with a general TVET perspective; one campus manager for a college who focused on the NATED programme at large; one deputy campus manager academic for a college; one senior lecturer and a textbook writer at a TVET college with the perspective of interpretation of the curriculum.. The study also interviewed one quality manager who oversees the quality and transfer of the old NQF to the new HEQSF alignment in a university of technology; one academic planning head and head of department responsible for curriculum designed at of a university of technology; and one Head of Department for a business studies programme at a university of technology.

The methods used assisted in answering the primary and supplementary research questions. Both open-ended and closed-ended questions were included in the interviews. I recorded and transcribed the interview sections from audio to text after each interview section. The outcome assisted in generating qualitative data. Qualitative data allows for a more in-depth investigation of a phenomenon.

4.7. Data analysis

The NQF, the SAQA, the TVET policies, the Higher Education Act, and related policies, the NATED Report 191 Act and related policies, and business studies programme descriptions and curriculum were all used to generate data for the study. This aided in the development of question items in the empirical section of the study by providing insight, interpretation, and application of diverse writers' ideas on TVET and its parity with higher education that allow portability.

The qualitative data gathered was analysed thematically. According to Henning et al. (2004:104), the analyst uses open coding to study the full text to gain a global sense of the content, which will reveal emergent themes even before the coding process begins. The study's analysis was based on a classification technique that helped to classify the gaps that were noted as being

distinct from TVET and higher education. The relevant codes were gathered and suitably categorized once the transcriptions were completed, and codes were assigned to different segments or units of meaning. A category was created to represent the themes that were created from the data, which was then used in the investigation's discussion.

Moreover, after conducting an overview and considering as much contextual data as possible, the themes were chosen based on what the data meant to me. Before any formal meaning was ascribed to a single unit, all relevant transcriptions were read numerous times.

In this study, the qualitative analysis technique entailed identifying and grouping together concepts and clusters of concepts to aid the theming process. Data was themed according to categories and a grouping method was established. To arrive at research conclusions and consequences, comparisons were made across the themes.

4.8. Validity

The credibility of this study was established using the lens of Polit & Hungler (1996:312) by improving the validity and reliability metrics of the data. In the study, measures to improve trustworthiness were used. Measures like the accuracy of the description of the occurrence under inquiry guaranteed that the right questions were asked, and the right answers were recorded. By comparing the interview audio recordings with the interview transcripts and cross-checking whether respondents' perspectives were appropriately reflected in the data interpretations, the data's credibility was increased. In addition, to represent the widest range of potential replies on the questionnaire, a cross-comparison of the primary responses from the interviews was conducted to uncover similarities and discrepancies.

Because I had been previously employed by DHET, I acknowledged all of my own probable biases and assumptions. I had seven years of experience working in the TVET college sector, which adds to the study's credibility. The fact that I was closely associated with a TVET institution in my work and professional environment added to the study's validity. As a result of my proximity to the data, TVET college teaching staff, and the evolving backdrop of TVET policies and associated legislation, I was able to validate the findings. Contextual problems such as TVET college documents, rules, and curriculum influenced the development of appropriate instrumentation, such as the interview schedule.

4.9. Ethics

The topic area of study is large and understudied. Within the study's ethical limits, I examined legislation papers related to TVET and higher education. I received permission to interview one

DHET policy practitioner, five TVET college practitioners, and three officials at a higher education institution. As a result, I obtained ethical approval from my university first, followed by consent letters from the interviewees.

I also maintained confidentiality and anonymity by ensuring that the interviewees' identities did not appear in the work. When conducting the interview, I guaranteed the respondents complete confidentiality and anonymity, as well as their ability to withdraw from the study at any time without prejudice.

4.10. Conclusion of chapter 4

This chapter covered the research technique and design. The research was conducted utilizing an interview design, which was found to be the most appropriate for this topic. A purposive sampling technique was used to sample the population of TVET colleges and a higher education institution in the Western Cape, and great care was taken in selecting participants based on predetermined criteria to assure high quality data. Using appropriate qualitative measures, qualitative data was collected and analysed.

The findings, discussion, and synthesis of empirical data related to themes are reported in Chapter 5.

CHAPTER 5

RESEARCH FINDINGS

5.1. Introduction

The NATED programme can be traced back almost 50 years to associated links between education and work in the late 1970s-early 1980s. As such, the knowledge base of this programme is tied to the logic of knowledge development within the vocational education and training sector in that period. The NATED programme in that period was also mainly tied to technical colleges and artisan trades, with business studies established as one of the first courses that had a curriculum with a legitimate disciplinary background. The programme was quite explicit about what needed to be taught and how to teach it, with a clear idea of what industry required. While there was a clear distinction between that taught at the university level at that time, the level of the knowledge base and disciplinary background suggested that portability would be easier to attain with the university sector post-1994.

Being attached to an older version of the college sector landscape, the NATED programme, it was envisaged, would allow colleges to articulate its knowledge focus to that of universities of technology quite easily (not so with that of traditional universities). But in reality, the old TVET college qualification framework consisted of a few higher certificate qualifications that allowed for integration between TVET colleges and universities of technology.

The study explored the NATED programme and its business studies qualification to find out the extent or level of portability to higher education, with the aim being to identify the systemic challenges and the system's faults that hinder such transitions.

In this chapter, I tease this out by using three research sub-questions. The first sub-question engages with what the systemic challenges are, but also the opportunities for the building of programmes and what they are trying to achieve. The second one is what the statistical process is that allows this to happen. And the third one is to understand how the logic of this fits into the need for portability. The chapter then uses these three key sub-questions to tell the story of what is happening in business studies at TVET colleges, and then asks the questions about whether portability can take place.

The chapter discusses the research findings from the 9 interviews with public TVET college managers, policy makers, senior lecturers and policy implementers at a university of technology in the Western Cape and a curriculum officer from DHET national office. The idea was to get a variety of views that would allow me to come to understand the questions that I was asking. The

research revealed fifteen concerns, and the information gathered is presented and examined below.

5.2. Systemic issues and educational legacies in the TVET sector and their influence on the portability of TVET business studies to higher education

The challenge of portability is tied to history on TVET and NATED and the challenge of portability in space. TVET colleges were established as a category in the 1999 FET colleges legislation, building on what had been in place since the 1980s.

NATED was a system of education that included a wide range of qualifications. Previously, universities of technology were known as technikons. The many types of higher education institutions in the new democratic South Africa merged and united to form the original 23 universities of technology (UoTs), comprehensive universities, and traditional universities, which are the three types of universities. In higher education, most of the attention was on universities, both comprehensive and traditional (Respondent F). Universities of technology were rearticulated¹ and realigned, and subsequently the higher education framework of 2007 was altered. UoTs award three-year diplomas, degrees, master's degrees, and doctoral degrees, while FET sector was renamed Technical Vocational Education Training (TVET), but its services and qualifications remained the same (Respondent F). The Higher Education Sub-Framework Act (2013) was primarily focused on the higher education sector, with no mention of TVET or FET (interview G).

An interviewee expressed surprise at the higher education minister's declaration, which was published in the Government Gazette on the 14th of December 2009, that instead of phasing out the N-qualifications as a national diploma, as was announced in 2007, it was decided to keep these qualifications (interview G). The N1-N3 programme was supposed to have been phased out by 2006, but that never happened. The TVET college structure was fully utilized, and N programmes were returned. By 2020, these courses were still available at TVET colleges (interview B).

NATED Report 191 N4 to N6 programmes in TVET colleges are National Diploma qualifications that are offered to students in engineering, business studies, utility, agricultural, and hospitality (interview I). It is a programme for students who have completed matriculation

¹ Rearticulation is the introduction of a new educational curriculum and qualification with significantly altered purposes, fields of study, objectives, and modes of delivery. It is the realignment of qualifications to the new Higher Education Qualifications Sub-Framework (HEQSF) to conform to changes in the higher education landscape.

as well as those who have not. The NATED Report 191 was a tool used by the National Institute of Technical Education to provide guidance to technical colleges. The N1 to N3 NATED programme was about students who were unable to complete matriculation but are interested in an artisanal occupation. With the advancement of technology, the sector decided to introduce N4 to N6 Business studies and Utilities.

After technical colleges were abolished, TVET institutions arose to provide those subjects in conjunction with NCV. The NATED curriculum is made up of two courses: Engineering NATED (trimester programmes) and Business studies (semester programme). Matriculation is not required for enrolment into Engineering trimester programmes; however, it is required for business studies. These programmes cater to two distinct market niches (Respondent B). In the 1950s, 1960s and 1970s, engineering projects were a driving force behind South Africa's industrialization. The problem emerged that people could not find jobs, and the N1, N2, and N3 were required to be completed in sequence over a year. This meant that all of the practical components of the learning programme were removed, leaving people with the N3 ill-prepared to enter the workforce (Respondent B). Respondent G confirmed this in saying that employers do not feel that students are adequately prepared.

The NATED Business studies programme is geared for post-matriculation students who desire to begin a vocational career. TVET programmes are designed to be practical, vocational, and technical in nature, which improves students' employability (interview C and D). Respondent I disclosed that due to the vocational orientation of the TVET programmes, some employers would prefer to hire a TVET student over a university student; unlike university students, who must complete practical training before joining the company, TVET students already have a practical understanding of what the company does (Respondent I). It is known that N1 through N3 engineering offers employment opportunities that allow students to enter the workforce as soon as they complete N3, which is approximately nine months of study. Some firms will allow students to continue their studies in the afternoon and will pay for the student's tuition (Respondent B). As a result, the engineering NATED occupational studies is considerably more organized, and TVET colleges are focusing on that area more than the other NATED programmes. "It is not very clear, the department rather wants to go into the more occupational programmes and the sponsors are more willing to give also to occupational and engineering programmes" (Respondent E). The NATED programme was designed to place matriculants in a qualifying programme that would focus on a certain field while also providing additional

practical experience. Because NATED only accepts students who have finished grade 12, they are more mature and have a clearer idea of their goals. Respondent C indicated that:

“NATED Report 191 is quite a fantastic programme. Because it is similar to what is done at the universities, which brings a sort of confidence and structure to the student. Students can see their progress on a semester basis because it is a semester programme. Students use the NATED programme as a steppingstone to apply at CPUT or UWC” (Respondent C).

Respondent A and Respondent B agree that the NATED is a good programme because it gives students the opportunity to have double periods for better learning and portability. Part of the problem with portability stems from the fact that the history of the TVET has made it difficult for students to emerge in a way that allows them to complete these programmes and then move on.

5.3. The perception of TVET and lower entry requirement for NATED programmes

NATED Report 191 business studies faces systemic challenge, according to interviewees. While the NATED programme is regarded as the best educational system, the TVET sector is seen as a second-rate institution. The system's conception of TVET as an institution for marginalized and academically challenged individuals undermines portability. (Respondent C) mentioned that,

“South Africa's Technical and Vocational Education and Training (TVET) is perceived to be a dumping place for students who have been rejected by schools and universities. It is not an institution of choice and students come to TVET as the last [resort]”.

Respondent E also noted that *“the sector is perceived as second best and not good enough”*.

“There's a crisis of identity in TVET that has to be dealt with and there's a lack of acceptance, a sovereign identity within the sector” (Respondent H). The TVET sector refuses to acknowledge its position, and as a result, it faces difficulties. Coming from a TVET, students believe they are not good enough. Many of them desire to continue their education after completing the NATED programme, but they believe they have a certificate that is not accepted by universities (Respondent E). Students do not think much of TVET colleges because that is where they go when they cannot get admission at the universities. In the eyes of the public, TVET colleges are viewed as the last resort (Respondent G). A respondent mention that

“There is a common misconception that if someone works with their hands, they can go to college. But it is the brain that tells the hands what to do; you can't just smack your hands around and wait for anything to happen. Universities uses more brains and fewer hands (Respondent B)

The rate of learners qualifying for entry into higher education institutions has risen from 60% to 80% (Respondent D). At the same time, several higher education institutions have not been expanding their capacity. The pass rate of those matriculants exceeds both the capacity for progression and the capacity of the universities. Those who have been identified as previously disadvantaged are assigned to NATED 191 programmes at TVET. The political and socioeconomic legacy, as well as the legacies of inequality and social injustice, impact business studies programmes at TVET colleges (Respondent D).

Many students attend TVET because they do not meet the minimal entry requirements for higher education (Respondent F). In a degree like HR at a UoT, a student will need to pass other business disciplines, such as economics or accounting in addition to their Grade 12 English and Mathematics marks. Students who do not meet the minimal entrance requirements or the Academic Point Scoring system (APS scores) are encouraged to apply for a TVET institution because their Grade 12 results are insufficient (Respondent F). If a candidate matriculates with an 80 percent or 70 percent pass rate, they are at a pass percentile in terms of symbol classification (Respondent D). Many of them fall between the levels of a higher certificate and a diploma. However, because they do not meet the entrance requirements, the next best option is a college, and they attend that institution (Respondent D). Universities' entry-level criteria are more likely to favour bachelor's pass. Candidates who have matriculated and are eligible to enter these institutions but are unable to do so may end up pursuing NATED Report 191 business studies (Respondent D). According to a respondent,

In human resource management at a UoT, an applicant's APS must be between 26 and 28. They should have a 4 in English, with a 4 equalling 50% if they only have mathematics skills. Applicant must have business studies, economics, or accounting, with a grade of 3 or 4. As a result, all of the good grade 12 students who go to school every day should be able to reach this Achievement (Respondent F).

(Respondent F) further alludes that the pass mark of some of the matriculants is insufficient to gain admission to a UoT, and that the students' only option is to enrol in a TVET.

Respondent A confirms that there are no severe admission requirements for students wishing to enrol in the NATED programme. Students who do not meet the minimum entry requirements at a university might use TVET to improve their knowledge and skills to study at a higher education institution. Such applicants are then advised to go to a TVET institution.

“The transition from high school to TVET is difficult. A student who studied Life Sciences and History in high school can aspire to work as a financial management or accountant. Because the entry requirements are not stringent, you'll discover that they end up doing so, and as a result, they fail” (Respondent A).

5.4. The educational processes within the TVET portray TVET operations as a school.

The educational and historical processes within the TVET sector, which influence how business studies are arranged and make TVET look and operate like a school, are one of the barriers to portability. The TVET challenge is more of a downward than an upward one. It is pessimistic because it focuses too much on the school aspect of its service and not enough on how it ties to higher education. Respondent B mentioned that the management of the TVET college is similar to that of a large school in terms of how operations and teaching and learning are carried out. Students are educated in a classroom setting and are treated as learners. TVET students are treated as though they are school children (Respondent H).

5.5. Lack of resources

The NATED Report 191 programmes were designed over 50 years ago making portability between the TVET and higher education sectors difficult. Some subjects do not have textbooks, while others do. In some disciplines, finding a textbook is difficult, thus lecturers must rely on their own experience to teach (Respondent A).—Because most NATED subjects are poorly documented, several colleges rely on copies of manuscripts to provide information to students, and copies deteriorate over time (Respondent A). Some of the NATED business studies textbooks are not approved by the Council on Higher Education, and the publishers are not reputable higher education academic publishers, according to Respondent F. Any lecturer can make their notes public.

Moreover, to give an example, students of clothing and textile technology at universities should be able to enter a factory anywhere in the globe and function well since they have been trained

using industrial sewing machines (Respondent G). Students studying clothing and textiles at universities are prepared for the industry in the sense that they use very expensive, in many cases cutting-edge, equipment that is in South Africa. A student enrolling in a TVET college for an N4 to N6 clothing production qualification must learn to sew on a domestic sewing machine (Respondent G). In the TVET sector, there are issues with infrastructural development (Respondent H). It is a problem for those who are not provided with machines to work on (Respondent A). Respondent C alludes to the fact that the pupils come from a background where they have never been exposed to computers. The only thing *“that comes to mind as a potential stumbling block is that your campus's resources may not always be sufficient to expose students to what is going on in the workplace”* (Respondent E). As a result, the pupils do not gain sufficient experience while working on the theory.

5.6. The disconnection of the NATED Report 191 business studies programmes' curriculum and vocationally based business studies programmes in HEI

Furthermore, the curriculum design and content of the NATED Report 191 programme is a significant hurdle to portability. The framework of NATED's curriculum differs from that of the university. The content criteria do not tie in with those of universities in order to improve portability for future study.

The TVET curriculum, according to Respondent D, is lean in terms of theory. The qualification varies whether it is in business, finance, or consumer and related sciences. It has no more than four subjects and the structure is progressively articulated. The four subjects in NATED are arranged in such a way that the students grasp the theoretical knowledge or theoretical conceptions of a subject, particularly the basic ones. Those subjects are only taught for 18 months, after which students must do practice or internships. Because of the progressive articulation, people assume that a subject at the N6 level is equivalent to a subject at the third-year level of a University of Technology (Respondent D).

Legacy programmes have not kept up with the latest modernisation of learning programmes to a considerable extent. Since TVET is entirely sponsored by the government, it is only permitted to offer government-approved programmes. Even though the curriculum unit of DHET began a review of the curricula for Report 191 subjects to match the employers' current expectations at the beginning of 2019, some of the curricula were last revised in 1980. The practical portion of the programme is not included in the curriculum. Much of the technology discussed in that

NATED programme is absolutely obsolete (Respondent B). Students' knowledge of a certain subject is irrelevant in the corporate world, and that creates a problem. Respondent A painted a clear picture of the outdated curriculum:

“The information students receive from a certain curriculum is not relevant in the working environment. For example, the computer practice N4, N5, and N6 subject curriculum still refers to discs rather than laptops” (Respondent A).

-NCV programmes receive a lot of money and effort from the department, while the NATED programme does not. The NATED business studies curriculum is a legacy curriculum that existed long before TVET colleges were ever called that (Respondent D). A university of technology attempted to establish a memorandum of understanding to introduce TVET into universities of technology, but TVET was unwilling to invest time and energy in revising the curriculum (Respondent G). The curricula of TVET colleges were inherited from the earlier technical colleges according to Respondent E. Some TVET subjects have syllabuses dating back to 1995, whereas, at a university, the subject syllabus is prepared by the subject lecturer (Respondent F).

The subject English Communication at a UoT is about academic writing, higher education communication discourse, and how to communicate in the job (Respondent F). It is a different form of communication and level than what NATED provides.

“I remember I had looked at the CPUT communication syllabus. They called it English in the business studies programme. And I looked at communication, and it was a vast difference between the two. Universities are more concentrated on, and they are more inclined to go that way. Whereas the NATED programme aims at getting a person within employment” (Respondent E).

How can one compare a six-month N4 communication course, which is tied to the grade 12 curriculum and is NQF level 4, to the communication offered at UoTs, which is a full year with a different focus on business? N4 communication, according to Respondent E, is identical to the English subject in grade 12. In 2018, there was a minor change in the communication and management communication curriculum due to the fact that most curricula were not altered (Respondent E). “The syllabus that we have in NATED HR is the same curriculum that has never altered since 1995,” said Respondent C.

Also, the N4 Computer Practice, according to Respondent F, is just learning how to turn on the computer and what the computer apparatus is. The end-user computing subject at a UoT goes further into Microsoft programmes, email, and Excel.

While higher education develops and improves its curricula, the TVET sector lacks a competent agency for curriculum creation. This is one of the things that makes portability difficult. The NATED was created in collaboration with industry and the Department of Higher Education and Training, which is in charge of curriculum development (Respondent A). According to Respondent B, The NATED programme was created by white people who have since passed away. The development of the programmes is aided by the head office. A college head office conducts a study in each location to determine which programmes are required in accordance with Report 191. Respondent E stated that curriculum development of NATED has no agent to assigned to.

“Currently, it is not coming from DHET. Who? I won't be able to tell who they are in person. I won't be able to tell who developed NATED. For the few subjects that underwent curriculum review, DHET sends approved syllabus to lecturers for comments and even produces books” (Respondent E).

Respondent D mentioned that the TVET sector lacks a curriculum specialist. However, Respondent I stated that the development of programmes falls squarely on the shoulders of the Department of Higher Education and Training's Curriculum and Support Directorate. *“According to the TVET lecturers I spoke with, they are given a set curriculum to teach”* (Respondent F). The fact that even TVET lecturers may not have the opportunity to update, upgrade, or refresh the curriculum is most likely why the curriculum is so old. Respondent D further highlighted that:

“Curriculum design is informed by multiple stakeholders. So, there is a stakeholder when curriculum design was taking place, that did not do the thinking they were supposed to think. What could have then been done was to say, even in the TVET sector, your curriculum design must articulate your entrance freely to universities” (Respondent D).

The NATED curriculum, for example, had a consistent structure that reflected a lot of theory, a lot of practice, and a lot of work integrated learning or practice applied to learning, but the proportions of those three elements varied greatly between the qualification's gaps. However, the underlying logistical and educational barriers such as delivery time and skills prevent articulation from TVET to universities on the new NQF (Respondent H). The alignment is determined by what the colleges have to offer. Most of the subjects that colleges offer are based on what the private sector or job sector in the region is seeking, for example marine biology, or anything else that has to do with marine life if the college is in a predominantly coastal location.

Agriculture, business studies, and other related fields will be found further inland (Respondent I).

“Students who take part in a TVET programme need to have the right skills and knowledge to be able to join the first year of our diploma qualification. Current rules say that if we do have a partnership with TVET colleges, the students have to get about 60% in the highest certificate (Respondent H).

The interventions in NATED 191 business studies programmes are insufficiently organized and articulated to assist students to transition between the TVET sector and the university sector (Respondent D). The NATED curriculum is not created in such a way that students can readily articulate their qualifications to a university after completing the NATED programme.

“If I claim to know any curriculum and content in these programmes that correlate with those in higher education, I will be making a huge error. There is no such thing as alignment” (Respondent A).

The NATED diploma is an NQF level 6 qualification. Currently, there are no structures or processes in place to link business studies programmes in TVET colleges with those in higher education. According to Respondent I, Umalusi and the Council on Higher Education oversee the alignment process. Those two must ensure that the curricula on both sides are equivalent or similar, and that they provide for the student's access.

The difficulty is that there is a separation between the two sectors, and parity does not exist, as seen by the interview responses. What TVET claims to teach the final N6 students is what universities claim to offer first-year students in their first term. The two sectors' programmes are similar, but not identical. What university students are studying is not collected in the methodical way that one would like each of them to meet (Respondent D).

According to (Respondent D), the TVET curriculum speaks about Porter's five forces model, while universities refer to their Porter's seven forces model. Porter has a total of seven of these items that can be dealt with in different ways by different levels of the university, and TVET deals with just five of them (Respondent D). Respondent D further elaborated that:

“HR programme at universities still talking about a calculation or putting normative scores on people when they are job performance, task enlargement, and designing of CVs. This is very much part of their job training today. Why is it that the tourism done at the university is different from the tourism of the college yet both students are going to be tour guards in the same red bus of Cape Town?” (Respondent D)

5.7. The knowledge form of the college does not correspond with the admission requirement for vocationally based higher education institutions.

A further challenge with portability is that universities of technologies are increasingly orienting themselves toward traditional universities. As a result, the admission requirements are less aligned with what the colleges are offering.

Students with poor grade 12 results are usually advised by UoTs to do one year of TVET, N4 and N5, and then obtain the minimum entry criteria with a diploma in HR. Two factors are considered: the external subject recognition, as well as grade 12 marks with N4 and N5. Students can also take the subject test on basic business computing applications in addition to the TVET examination and 18 months' experience. *“We combine TVET with general management concepts and business studies, combining two or three TVET subjects to provide external subject recognition for the UoT business studies diploma”* (Respondent F). Another possibility is for a student with low grade 12 results as well as N4, N5, and N6 as well as the 18 months of job experience to get the support from the company he or she is working for to indicate the student is still with the company. Indicating that they have HR experience, they can apply through the Recognition of Prior Learning (RPL) system.

UoTs also have a bridging programme called the extended curriculum programme (ECP). It, however, starts at year zero. The first year, which consists of six subjects, is split into two years, with three subjects in year zero and three subjects in year one, and then students' progress to the mainstream, which consists of four sessions per subject each week. The ECP will consist of six subjects per week, or six periods per subject (Respondent F). There is no chance that a TVET student with N6 and 18 months working internship could articulate to a third or fourth year in the university.

” The ECP, on the other hand, grants students who do not meet the APS requirements entrance criteria worth one or two points. So, in pure math or math lit, an APS score of 24 to 25 is required for ECP, and a score of 26 to 28 is required for mainstream. So, it all relies on the TVET scores. I wish to give external subject recognition, if a student received 40% for a subject, they may have passed it, but I will only consider students who received 50% or above” (Respondent F).

NATED is a vocational qualification with three levels of qualification - N4, N5 and N6, and 18 months' work experience. The time allotted for the theory component at TVET NATED is insufficient. The foundation theory that would carry a student from matriculation or, in that case,

the standard nine qualifications through to university is too short. It is also the skills they lack, the higher education type of learning skills (Respondent H). Respondent H further explained that a national diploma shouldn't be obtained after 18 months of work experience. UoTs do not compare one and a half years to a three-year National Diploma offered by a UoT or university. Work-integrated learning, also known as workplace-based learning in some programmes, is also available at UoTs. The work-based component of the new diploma is linked to 30 SAQA credits, and the student is placed with an employer for three months (Respondent F). A TVET student's 18 months of work experience in the workplace is not assessed, and the student is awarded a national vocational diploma that is comparable to three years at UoT and 360 SAQA credits. Beside the many subjects at UoTs, the student must also complete and pass a Portfolio of Evidence (POE), according to Respondent F.

Students at a UoT must complete a portfolio of evidence that includes a variety of evaluations related to the Final Exit level subject. For example, in HR, there are: HR 3, Human Resource Development (HRD) 3, Labour Relations 2, HR 6, Governance, as well as Business studies 3 and HR Practices. In workplace-based learning, the portfolio of evidence is a separate subject. It has a subject-related system that students must be able to pass. The portfolio of evidence that a UoT student has created in the organization is used to grade him or her. At the TVET college, this does not happen. When students complete the N6 certificate and the 18-month work placement, they must submit a portfolio to the DHET before they can graduate with a national diploma, which is equivalent of one and a half years in university (Respondent B). While universities focus on theory, TVET focuses on practical experience. As a result, the entire business studies programme based on the functions of a business. TVET students, on the other hand, struggle in business subjects, which are 50% theory based. Because businesses prefer people with experience, theory-based business studies programmes face a lot of competition (Respondent C).

A UoT has the right to define its own admission standards, which must be linked with the HEQSF minimum admission criteria.

“TVET students wanted to come directly into the BTech. Now in the diploma, for example in HR management, they do Human Resource Management (HRM) 1, 2, and 3. If the students in TVET haven't done 1,2 & 3 in the years that we have prepared the students, how are they going to pass? Human Resource Management (HRM), Human Resource Development (HRD), Business studies (as a subject) 1, 2 & 3; Labour Relations 1; then Labour Relations 2; Human Resource (HR) Practice and Governance. All of these are

prerequisites to go into the new Advanced Diploma or the previous BTech. Don't you think we have a conscience responsibility to ensure that the students that we include or accept into the qualification by the admission criteria must be able to finish the course? How are they going to pass the BTech or the advanced diploma if they haven't done 1,2 & 3 in the years that we have prepared them?" (Respondent F).

It is not merely a question of how TVET students transferred and carried their grades over to UoT. It is also about to what extent the UoT is setting up the TVET students for failure because TVET NATED students with a diploma do not meet the minimum admission criteria for a BTech or advanced diploma at a UoT.

"The UoT receives funding from DHET. The DHET subsidy is only available if the student passes and graduates. If the student does not pass or is not capable of completing the course, the UoT will not have a graduate, and they will not be able to claim the subsidy" (Respondent F).

A student who walks in to apply for a diploma programme at a UoT may not be well-equipped to handle the diploma programme. Respondent G agrees: *"This is somebody's future we are looking at here. What do we do with these individuals who we cannot send them really with a clear conscience to a TVET college knowing that they are going to be well equipped at the TVET college if I consider that this qualification seems to be outdated" (Respondent G).*

5.8. Lack of key mechanisms that shape NATED Report 191 business studies programmes with the idea of students progressing to higher education: The Quality Assurance Council issues.

The fact that quality councils operate differently and have different requirements for TVET college programmes than they do for university programmes is a systematic problem that will continue to prevent portability. Unlike universities, which can self-moderate and accredit programmes (Respondent B), TVET programmes are managed by either Umalusi or the Quality Council for Trades and Occupations (QCTO).

NATED programmes are being transferred from the DHET to the Quality Council on Trades and Occupations (QCTO), but little progress has been made in developing new programmes. The NATED programmes were taken over by QCTO, but there has been little progress in that area (Respondent B).

The NATED programme was developed by an unnamed agency, according to the interviews. Respondent C states that DHET and SETAs created NATED.

The QCTO is working on a new set of programmes to become a credit-bearing organization, but finance is a problem. The funds are held by the DHET rather than the QCTO (Respondent B, who further elaborated that the QCTO is trying to become more accountable and transparent.

The new curriculum for the QCTO programme will include an occupational component supported by SETA and NSFAS (Respondent A). NATED qualifications were designed with artisans in mind, and as a result, this is the appropriate next step for them.

There is no clear direction among TVET colleges stakeholders of who quality assures the NATED programme. Umalusi just looks at portfolios to determine if the syllabus has been covered and does not examine if the programme content is on par with higher education. The government has not invested money or time in improving TVET.

“QCTO is the Department of Higher Education's quality assurance provider, while Umalusi is responsible for ensuring the general quality of qualifications in both higher and basic education. QCTO, on the other hand, collaborates with Umalusi, which is a governing body for higher education”, (Respondent I). Which I disagree with respondent I.

There is no parity between NATED 191 programmes in TVET colleges and programmes in the HE sectors. The disparity is due to the fact that the two sectors have distinct quality assurance councils.

5.9. Lack of stakeholders, like the professional bodies' involvement and recognition of the knowledge forms that are produced at the TVET college level.

Furthermore, the associations of professionals do not give recognition to the NATED qualifications and has contributed to the lack of alignment between the two sectors. While UoTs align their qualifications with the requirements of the professional bodies (Respondent F) in order to achieve accreditation, the TVET sector on the other hand, is not accredited by professional bodies.

The misalignment of qualifications and disciplines is the source of the problem. The South African Board for People Practices (SABPP) is an HR professional body. It is aware of the national HR diploma in the TVET sector and the university sector as a regulatory authority

(Respondent D). Respondent D mentioned that “*these degrees have the same name and are part of the SABPP service field*”. Yet, there is a disparity.

5.10. Lecturer qualifications are subminimal (underqualified lecturers)

The qualifications and experiences of academic staff (lecturers) at the TVET colleges were also brought to light by interviewees as a problem for articulation. Lecturer qualifications are a systemic problem in which lecturers in colleges pitch their knowledge at a specific level that does not always align with the level at which lecturers at universities of technology pitch their teaching. Underqualified employees are a problem, according to one interviewee. The interview stated that,

“The TVET. sector employs many technicians, many of whom have no previous teaching qualifications. For example, a plumber who has worked for 15 years and completed NCV may decide he or she is bored of plumbing. Now that he wants to be a lecturer, he joins the TVET sector without any teaching qualifications - and he enters the college without the finesse of building knowledge” (Respondent B).

Respondent C also mentioned that TVET colleges still may have lecturers who are unable to provide the level of service that one would expect from a lecturer. TVET college lecturers are extremely devoted individuals who strictly adhere to NATED 191 requirements (Respondent G). And, because these programmes' curricula are out of date, they pass on an out-of-date curriculum to the students, which is extremely problematic (Respondent G). Respondent E echoes that:

“When you start as a lecturer, you just accept the syllabus as it is, and it is only when you work for a few semesters through with that, you see, but it doesn't touch anymore”.

According to Respondent D

“There is a principle that says one cannot teach a programme or lecture a programme in which you are not 2 NQF levels higher. So, you'd have an NQF level 7 degree, allowing you to teach up until matric. The diploma qualification is already at NQF level 6, so if you do the N4-N6 programme, it gives you a certificate at NQF level 5. If you do your 18-month internship, you are credited with a technical diploma at the end of NQF level six. Anyone who is teaching under the guise of teaching someone who will exit with their certificate and NQF level 5, needs a B.Ed. degree” (Respondent D).

5.11. The NQF level of the NATED business studies diploma qualification is not on the same NQF level of the business studies diploma qualification in higher education.

A lack of coherence between and within the NQF sub-frameworks is a contributing factor to portability blockage. As previously mentioned, universities of technology are progressively orienting themselves toward traditional universities. They are re-curriculating to align with the Higher Education Quality Sub-Framework, and the National Qualification Framework has been restructured for the university of technologies. A further problem is that the NQF level for the NATED National Diploma qualification is significantly lower than that of the UoTs. According to (Respondent F), the NQF band for these two sectors is not aligned.

Students who have planned to study for a university qualification might be due to obstacles end up in the TVET sector as a student. They might register for a qualification of similar duration to what they might have done at a university or university of technology, but the result will be a lower NQF level.

“A NATED student must complete three years of TVET, just as it would take three years to complete a diploma at UoT. The biggest issue is that TVET is still an NQF level lower. It means there is a gap in articulation between the curriculum and the field itself”
(Respondent D).

The opinion expressed by Respondent A is that the national diploma received by NATED students after completing the 18-month internship is equivalent to a university degree. But according to Respondent F, the TVET qualification is not pitched at the correct NQF level descriptor. According to the DHET website, this N-diploma from TVET is equivalent to NQF level 6 and 360 SAQA credits, while UoT claims it is not. Furthermore, because the curricula or syllabi for TVET disciplines are so rudimentary, they do not carry the requisite SAQA credits. When some technikons were amalgamated as UoTs in 2004, 2005, and 2008, the institutions underwent a period of subject harmonization. Then there were the HEQSF alignment legislation implementations which required another upgrade to the new diploma from BTech to Advanced Diploma. Higher education is constantly upgrading and refining its curriculum to meet the demands of the labour market (Respondent F). Because UoT departments have advisory boards, the advisory boards also advise on the type of graduate needed in the marketplace (Respondent F). All of these have an impact on the curriculum design at the UoTs.

Respondent G stated that it was a complicated situation because of the way South Africa's national policy framework operates. Respondent G further explained that issues that came apart

from the NQF as one unified framework in the early 2000s were just transplanted to the sub-frameworks.

“The issues of articulation between vocational, professional, and traditional qualifications. They're all real in the higher education Qualifications Framework. And so, you can look at the three pathways that exist in the HEQSF. That's part of the tension within the sub-framework. Tension exists in the relationship between the Qualifications Framework, which now applies to occupations and trades, and the HEQSF. To this day, I still don't have a clear image in my mind as to exactly how that framework works, and how the qualifications that are currently being offered fit into that frame” (Respondent G).

Academics at the UoTs are unaware of where TVET college qualifications fall on the NQF (Respondent G). According to Respondent I, once a student completes the TVET diploma, he receives an NQF 6 level qualification, which is equivalent to any national diploma from any university. How does one achieve equivalence between TVET college qualifications and NQF level 6 and 7 on the HEQSF alignment? According to Respondent I, once a student completes the TVET diploma, they receive a National QF level qualification, which is equivalent to any national diploma from any university. In terms of credit, they are on par. Disparities exist in terms of content; they vary depending on the content programmes and qualifications mix. As mentioned by Respondent H, the only way they can be aligned is to obtain the highest certificate. The highest certificate does not aim to improve higher education's theoretical component. There is supposed to be alignment according to the NQF structure; nevertheless, the problems arise in the delivery of the qualification. TVET college lecturers must go through a lot of training to understand why teaching was not to teach students the skills they needed. Respondent H believes that accepting and recognizing what exists and how they fit in is a developmental issue for lecturers, students, the curriculum, and the emerging industry. The issue is that SAQA and QCTO reviewed the N4 to N6 qualifications and placed the NATED Diploma on NQF level 6. These TVET qualifications are not recognized by the UoTs (Respondent G). For this reason, TVET students are admitted to UoTs as first year students.

5.12. Portability (articulation) between TVET and HET: Does NATED align with the new HEQSF?

The NATED qualifications do not give access to higher education. There is scarce information on articulation and articulation pathways. The NATED was supposed to provide a pathway for articulation, however it does not align with the new HEQSF (there is no suitable alignment to help portability). The NATED Report 191 business studies, according to Respondent I, plays a role in providing students with a pathway to a national diploma. Students complete their theory in 18 months, divided into three semesters, and then complete in-service training, also known as internship or work-integrated learning. There is relatively little collaboration between TVET colleges and universities of technology. The only way they might have been linked was if they had a higher qualification (Respondent H). However, they still had to complete the prerequisites for admission to UoTs (Respondent H)- The fact that TVET has slightly lower admission criteria than higher education immediately shifts the scale. That includes the National Qualifications Framework. The qualifications for the QCTO and the HEQSF are different. Respondent H explains that:

“There was also a national project to try and link and start getting things changing, but it became almost impossible due to government interference. TVET [have no] ability to do things because they continually must ask permission” (Respondent H).

Respondent I indicated that now the alignment is blurry; the DHET is busy communicating with curricular units, community colleges, and the universities. Students pursuing a national diploma in financial management, for example, should be on the same credit point as students pursuing an outcomes credit degree. According to Respondent I, there are gaps that need to be bridged.

5.13. No mechanism in place to ensure parity between TVET and HET

A further significant issue is that there is no mechanism in place to ensure that the two sectors are equal. There is no link between university lecturers and TVET lecturers, therefore they cannot collaborate to improve the DHET courses. It is terrible for the students when they realize that their diploma means nothing (Respondent E). Most of the time, the lecturer tries to contact the University of Technology. The top management is uninterested in furthering students' education; it is as if they're stuck within the programmes that are their primary business, and they must just get the student through. However, there is no curriculum developer in a college. Nothing can be

done by TVET lecturers to raise standards; it will take a long time and will most likely have to be done in stages through N4, N5, and N6 so that they can progress. It is also doubtful whether the colleges will have the resources to accomplish it at all as it has financial impact. Academic departments are attempting to address concerns that should have been addressed by national legislation. TVET colleges need to be on par with a university of technology in terms of lecturer qualifications. "I don't believe there are sufficient measures in place," to ensure this, as Respondent G notes, as it creates an unnecessary strain on staff.-The articulation process is not effectively facilitated by national legislation, and the qualifying structure is not set up in this manner.

5.14. In both sectors, there is a lack of proper mechanisms: even Recognition of Prior Learning (RPL) is not regarded as a tool to aid articulation.

RPL may have been a good way to help with articulation from TVET NATED diploma qualifications to higher education. But RPL is not recognised as a tool for portability. N4 – N6 equals NQF level 5, which is the first-year level at a university, according to SAQA (Respondent F).

“A TVET with an N diploma enters the first year of the UoT national diploma and is eligible to apply for external subject recognition. With one TVET business studies, we take two or three of the TVET, the general business management principles or general management, and put them together” (Respondent F).

Many students enter higher education via the RPL route, according to Respondent G. The RPL method, on the other hand, places a significant strain on students. N4 to N6 qualifications are no longer valid and cannot be applied to NQF 6 qualifications. Respondent H agreed that the RPL process is difficult; it necessitates a lot of effort since applicants must demonstrate that they have acquired the numerous abilities necessary for education through self-development.

RPL is not a good avenue, and that is part of the problem we have at the moment. People ask, why must I put a portfolio of evidence together? You know, I qualify. Why must I? So, I think those are the issues” (Respondent G),

There is no alignment, no professional qualification where a person can claim that he or she has a diploma in business management, marketing management, and got accepted at a UoT; or can explain that they are only doing two subjects because the subjects were not part of the TVET

programme. *“The only thing I've heard, and I'm not sure if it is still going on, is that through the RPL process”* (Respondent D)

previously, one needed two N6s plus working experience to be eligible for RPL to pursue a BTech. Respondent E notes: *“We're still not sure if one student got it correctly, but he did, with two diplomas from TVET”* (Respondent E).

Not only is the RPL calculation lacking, but the lower pass score for NATED Report 191, Business studies, also plays a role in the lack of portability to higher education institutions. One needs 40% to pass N4, N5, and N6. Respondent F states that *“with 40%, a NATED student can go to the next level, but at UoT, the student must sweat blood and tears to get to 50, 60, or 80 to progress to the next level.”*

5.15. The approach to subjects and knowledge in NATED 191 programmes does not allow for portability to higher education.

Another issue with portability is that NATED is primarily concerned with industry, and when an industry pursues specific regulations, it locks down how they connect portability to a university of technology. The concept of portability means that TVET students must be able to attend universities of technology as well as other universities.

The NATED programme was created by the Department of Basic Education (Respondent A). In the past, the NATED programme was operated in a different way; it was run on principle, with only one practice. But now it is simply theory and then practice, so everything is different (Respondent B). TVET and university courses are drastically different, especially when it comes to communication. Universities focus on research, whereas NATED focuses on getting students into jobs. Some programmes require students to conduct research, but this is not the case in TVET (Respondent C).

“I think when it was still the Technikons some people developed that syllabus and was given over to TVET. And I think while TVET was still, before TVET, we even had another FET” (Respondent E).

When it comes to choosing which business studies programme to pursue in a college, top management usually makes the decisions. If they believe a programme does not suit a certain campus, they will remove it, and lecturers do not have input (Interviewee E). Individual TVETs may approach a university and show an interest in collaborating (Respondent A). With a great

deal of effort, TVET NATED 191 can easily transition to higher education. Students who enrol in this NATED programme can transfer from a TVET college to a higher education institution, however they must begin in the first year (Respondents C, D, E, F, G, & H).

The majority of NATED subjects are not equivalent to those in higher education. A student cannot start at NQF level 5 because he or she has a National Diploma (Respondent A). That is something that DHET should work on (Respondent C). The curricula do not differ from one another, but the content does.

According to Respondent D:

“The syllabus of an HR diploma in TVET is equivalent to that of a first-year class in UoT. Personnel management is covered in HR N4-N6. When you combine the three semesters, it is equivalent to the entire curriculum of only one year in that subject. A national diploma exists here in the NQF level frameworks, it moves from level 1,2,3, GET. 4 - NCS, 5 - certificate, 6 - higher certificate, 7 - professional degree, 8 - advanced diploma, postgraduate diploma, 9 - masters, 10 –PhD” (Respondent D).

The TVET sector curriculum was not designed with higher education articulation in mind. The goal of TVET is to create a skilled workforce that does not require further training. TVET students spend the same three years as university students pursuing a Diploma in Human Resources. The National Diplomas from TVET are not recognized by the UoTs as equivalent to or on the same academic level as higher education at the relevant SAQA level. The TVET degree has the same degree name, and the same logos because both fall under the DHET umbrella. Respondent G puts forward the idea that,

“The vast majority of people do not have the financial means to attend a TVET college and then transfer to UoT. Who can afford to do that these days? We must ensure that there is more parity in qualifications such as NQF level 5 or NQF level 6; we cannot ignore this; this issue must be addressed at some point” (Respondent G).

In Respondent E’s view, the

“The fallacy is that, rather than what the students believe, I already have this qualification, so why do I have to start over from the beginning? Because no university accepts the N6 Certificate, which has a practical equivalence to a Diploma. And that is where the big challenge comes in. Nothing done at the TVET is on par with that of the university. That is the biggest challenge that we have, you didn't study what we would

study in the first year. It is either too practical or less theory than what you would find within the university” (Respondent E).

The issue of portability remains a hurdle, as students who received their diploma through the TVET face difficulties while attempting to enrol in an advanced diploma at a university. Respondent I asserted some institutions require TVET students to repeat the same diploma at the university to qualify for the advanced diploma, which is unnecessary and unfair to the student who has already invested three years.

5.16. Conclusion of chapter 5

Because the Department of Higher Education and Training oversees both the TVET and HE sectors, one might conclude that there is coherence and parity between the two, promoting portability. The chapter identified 15 characteristics that impede portability and increase disparity between the two sectors.

One of the issues with lack of portability was highlighted as the history of NATED and TVET. The history was tied to the structure of the NATED qualification and how it changed when FET became TVET. The structure and substance of programmes and qualifications were largely unchanged. NATED was created to help technicians educate students with the technical skills they need to succeed in the workplace. The NATED system is an outdated higher education system that should be linked to a university of technology, although this is not the case.

The perception of TVET as a last alternative for students who are unable to progress to higher education is also a barrier to articulation. The popular opinion of TVET is unfavourable, and students who are not academically strong are assumed to be limited to TVET colleges, according to the interviews. The same perception is being passed on to NATED students, to the point where NATED students have lost faith in the qualifications they are receiving.

TVET structure and practices are more closely related to elementary and secondary school systems than to higher education. Lack of portability is exacerbated by the fact that TVET colleges are run as a school. The contrast in management style, in which universities have the liberty to develop their own curriculum and moderate their own qualifications, gives universities the upper hand in preventing NATED students from pursuing further education at their institutions.

Not only that, but a lack of resources is cited as one of the disparities. While universities have ample resources in terms of appropriate equipment and facilities, the TVET sector lacks these resources to the extent where textbooks are in short supply in the TVET NATED sector.

The NATED course's curriculum is out of date and irrelevant. Some of the curricula were last reviewed in 1995 and would be of no use in learning in 2021. The content of NATED programmes is not as comprehensive as that of universities. While universities have the right to refresh their curricula, the TVET sector has no authority over the design or contents of the curriculum. This is thought to be the main reason for the lack of portability. The gap in the curricula is evident.

Furthermore, the NATED programme's structure and university admission requirements were noted as barriers to portability. The NATED programme is constructed in such a way that the practicality of the course takes up much of the percentage of the programme, whereas colleges place a greater emphasis on the theoretical component of their programmes. UoTs do not recognize the internship part of the NATED programme, even though work integrated learning is inherent in their programmes. The rationale for this is that in the University of Technology WIL requires a portfolio of evidence and that the WIL component in the UoTs need to be assessed. The completion of WIL programmes is ensured by a well-regulated process, whereas there is no established framework to follow in the TVET sector. Even though the DET requires a portfolio of evidence before awarding the National Diploma, there is no enforcement of this requirement.

Furthermore, Quality Assurance Councils have been a stumbling block. There is no clarity amongst the quality assurance bodies on the main quality within the TVET sector. The Council on Higher Education (CHE) is the accrediting body for higher education, yet it is remarkable that it does not accredit the TVET sector. This was seen as the most significant impediment to portability. It was determined that Umalusi, which is responsible for basic education, oversees quality assurance, with the QTCO stepping in to handle the occupational side of TVET, which is linked to NATED programmes.

Given the fact that higher education programmes such as HR and other business studies qualifications are taught at TVET colleges, one may presume that the professional bodies that accredit the higher education's sister programmes might do the same for the TVET programmes. That is not the case, however. TVET qualifications are not recognized by professional bodies,

and as a result, they are not involved with TVET qualifications, which is regarded as a portability barrier.

The qualifications of the lecturers were also identified as problematic, with it being determined that lecturers often lacked the appropriate qualifications and expertise to teach in the NATED programmes. While it was noted that the DHET is making every effort to qualify TVET lecturers, the vocational skills required to teach at TVET level are lacking.

The NATED pass mark was identified as a source of concern and a contributing factor to the lack of portability. Since the UoTs do not recognize 40% as a passing grade, it is difficult for a TVET NATED student to qualify for future studies with a 40% pass grade.

Furthermore, the NQF, which was supposed to act as a vehicle for articulation, opposes the NATED programmes. The NATED qualifications are listed on the NQF at a lower level than what is specified. According to (Respondent I) a student with a NATED certificate and an internship completed is placed on NQF level 6, although universities recognize the NATED nation diploma qualification as NQF level 5, which prevents them from transferring to an advanced diploma qualification at NQF level 7. The lack of consistency regarding the NQF level is a key impediment to portability.

The data obtained revealed that there was no plan or preparedness for the NATED programme to transition to higher education for additional study. There is no articulation mechanism in place. NATED lecturers take it upon themselves to consult with higher education personnel where their students may be able to continue their studies. However, because there is no formal mechanism and the university has the right to set admission requirements, such efforts frequently fail.

It was thought that, because the NATED places a strong emphasis on internship to obtain the National Diploma, the students' relevant past learning would count in their favour. However, the RPL policy is not implemented since universities do not consider the internships to be a well-structured programme. Furthermore, because of the rigidity of the RPL process, the number of students who go through it to continue their education at universities is far too small. To be recognised, students must make the effort to create a portfolio of proof. The RPL system does not help with portability.

The way subjects and their knowledge were approached in NATED 191 programmes was also noted as a barrier to portability. The NATED programme was created with industry in mind, and as a result, its content and underpinning knowledge differs from that of universities, including

universities of technology. As a result, the university of technology appears not to be aligned with the NATED programme.

One of the barriers to portability has been the disparity between the two sectors. There is no system in place to ensure parity between the two sectors.

CHAPTER SIX

ANALYSIS

6.1. Introduction

The White Paper for Post-School Education and Training (DHET, 2013) defined the post-school level as consisting of Adult and Community Education and Training (ACET) institutions, TVET, universities, and SETAs. While the DHET serves as the administrative authority for all these institutions, each is governed by its own set of laws and has various levels of accountability for reporting, curricula, and responsibilities. One of the main concerns mentioned in the White Paper is the question of articulation pathways between different institutions and qualifications (DHET, 2013: viii). The proposed system must allow for articulation between multiple qualifications, without dead ends, and provision be made for students to enhance their certifications by not repeating courses. The educational and training system should have made it a priority to address the needs of students of all ages and abilities. The White Paper, therefore, underlines the necessity of expanding access, improving quality, and increasing diversity.

The focus of this research is on the problem of articulation that diplomates of TVET colleges face when attempting to continue their education at universities, a problem that has surfaced interestingly at least since the introduction of qualifications in the TVET college sector in 2007. The study's objective was to gain a better comprehension of the portability problem in respect to all the national stakeholders.

6.2. In comparison to university entry requirements, the perception and view of TVET and the entry requirement for NATED programmes are lower.

The TVET sector, which includes the NATED qualification, faces the challenge of being perceived at the sector for students or learners who are academically challenged, despite its contributions to the economy in terms of building skills capacity to curb the country's unemployment rate. The sector is perceived to be the last resort for learners: *TVET is perceived as an institution for students who have lost all hope*. This is a perception gleaned from the data that TVET education is a last resort for those who cannot access university or are academically challenged. This perception can be viewed as a hindrance to progress to higher education (Zelege, 2018:1), and reinforces the belief that TVET is a lesser educational option to university. This notion would seem to be supported by the interview data. However, the idea that TVET colleges are a last resort is untrue, according to Respondent G. As previously mentioned, the

state has highlighted poor perceptions of TVETs as a barrier to rising enrolments in both practice and the policy landscape. It is believed that this would necessitate a more calculated strategy for ensuring enrolment, throughput, and completion. when there is no chance left of being accepted into a university, as indicated by Respondent C. According to the African Union (2007:8), the public, including parents, believe that vocational education is only for those who are academically challenged. For that matter, students attending vocational school in many nations find it difficult, if not impossible, to progress to higher education. As a result of this view, TVET students believe they are not good enough (Respondent C). Above all, TVET is viewed as either substandard or as a secondary option after secondary education regardless of the student's interests or ability. Due to the stigma associated with technical and vocational vocations, people often overlook relevant and lucrative career options in sectors where employment demand is higher (Hiebert & Borgen, 2002:14).

TVET, in general, is a separate parallel system within the educational system, with its own institutions, programmes, and teachers. This condition tends to exacerbate the inferiority complex regarding the vocational track. As a result, it is critical to establish articulation pathways between TVET and higher education (African Union, 2007:9). This portability is necessitated by policy drivers that either create or drive the demand for it. A goal of the South African National Skills Development Strategy (DoL, 2001) is to increase access to higher education and training. It is necessary for the PSET sector to have a flexible system of articulation to improve accessibility to high-quality education and skills development prospects so that students from TVET colleges can access high-quality, relevant education possibilities in higher education.

Respondent D) highlighted that *“the reality is that inherently, those that have been deemed to be previously disadvantaged individuals did not get adequate access to higher education institutions”*. These students resort to TVET to pursue a qualification. Above all, this social injustice is deemed a legacy issue in the South African higher education landscape. It is indeed a sociological construct, and it is the cultural image and lack of social justice that causes this entire construct of TVET to fail, causing TVET colleges and students to regard themselves as inferior in terms of instruction. All people have a right to social justice, which is a basic human right, irrespective of the socioeconomic status, gender, race, class, culture, nationality, belief, maturity level, sexuality, handicap, and state of wellbeing (Zajda, Majhanovich, and Rust 2006:11). *“TVET must first get societal acceptance before it can generate a workforce that is genuinely practical in South African culture,”* recommended Respondent H. It is critical that

TVET lecturers become advocates of elevating the awareness of their students. Learning for social justice must evolve from structuralism and vocationalist perspectives on education (which emphasize job training) to one in which the conventional paradigm of education is transformed into a transformative approach (White and Talbert, 2005: 59).

TVET offerings have to be acknowledged as more than merely trade qualifications, and they have to be treated equally to universities of technology or universities in the workplace, albeit in a distinct stream. They do, however, have the same prospects for advancement and recognition as those who work.

6.3. The kind of educational processes within the TVET sector inform the ways in which business studies are organized, which portray TVET operations as a school.

TVET offers more of a downward than an upward prospect. It is gloomy since it places too much emphasis on the school component of its service and not enough on how it connects to HE. In terms of how its operations and learning and teaching are carried out, TVET college management is like that of a large school. Students are taught in a classroom and are treated like children. TVET is one of the main points of focus as part of a bigger educational agenda (Webster and Sausner, 2007), and therefore falls within the PSET sphere where students should be taught and treated as tertiary students.

Interviewees shared the sentiment that TVET students are not articulated to the higher education institutions because TVET institutions do not have the autonomy to make decisions.

The autonomy of TVET Colleges in terms of training and education is restricted, and there is relatively minimal variation in the TVET sector (HRDC. 2014: 34). The universities that have the sovereignty to make decision and run their affairs regard the TVET sector as substandard and as operating at school level.

6.4. Lack of resources hampers delivery of teaching in the TVET.

The lack of educational and practical resources makes articulation difficult. Respondent A mentioned that *“It would be difficult to find a textbook in some programmes, leaving lecturers to use their own experiences to teach.”* However, for TVET education to reflect its egalitarian potential, government must ensure more equitable and fair access to resources (Zajda et al. 2006:10) for the sector.

There are challenges with infrastructure development in the TVET sector, and the practical component of the training becomes a crucial component. As a result, it is a difficulty for TVET lecturers and students to have access to learning resources which progress the value of the curricula and begin to make the alignment with the world of work clearer to people who do not have access to resources to work on.

6.5. The disconnection of the NATED Report 191 Business studies programmes' curriculum and vocationally based business studies programmes in HEI

The NATED Report 191 programme's curriculum design and content are a substantial barrier to mobility. To a large extent, legacy programmes have not kept up with the most recent modernization of learning programmes. Some of the curricula were last amended in 1980, while others date back as far as 1970. The curriculum does not contain the practical element the programme needs. It was mentioned by Respondent A that *“The computer practice N4, N5, and N6 subject curriculum still refers to discs rather than the laptops that we now have.”* (Respondent A). Meanwhile, curricula are supposed to be designed by selecting the appropriate content (Allais 2012:336).

Some of the difficulties to articulating TVET certificates into higher education have been worsened by the sector's lack of curriculum studies research.

Meanwhile (Respondent I) indicated that,

“The development of programmes and syllabi for TVET falls on the shoulders of the Directorate of the DHET. Whereby the directorate ensures that the syllabi are up to date and available ... A good example is the public management course at a University of Technology (Respondent I).

There is no parity between curricula offered at TVET colleges and those offered at universities of technology.

There is lack of coherence between the institutions in some of the curriculum content of the TVET subjects and that of the universities, especially the universities of technology. It should be noted that many students who had successfully completed N4-N6 subjects were enrolled into National Diplomas in fields such as business and engineering at the former technikon, and this practice continued following the merger of these institutions. Academic departments, on the other hand, *“Appear to be less willing to continue with this practice in recent years, owing to the fact*

that the subject content of some N4-N6 programmes appears to be outdated, and academics argue that FET College students are increasingly struggling to adjust to the cognitive demands required at NQF levels 5 and 6 of National Diploma programmes” (Respondent G). The current trend in contemporary curriculum, both vocational and general education, is to bring curricula closer to the concreteness of the world, or what is referred to as a context of human action in which meanings are derived from concrete events or experiences that occurred in a specific time and place (Allais.2011:16).

The NATED curricula are outdated and speak about irrelevant content that is not needed in the current market demand. Curricula like communication and office practice speak about things that are no longer used in the real world, according to a (Respondent E). For example, the curriculum speaks about “*fax machines, even though most students had no idea what a fax machine is*”. The current Business studies curriculum needs to be updated and made relevant (HRDC, 2014:42).

NATED’s curriculum is not based on the ability to challenge cognitive application. NATED is largely focused on the industry. When the industry seeks certain requirements, it limits how they link portability to higher education. The curriculum design is a mystery to TVET college staff. NATED students believe the curriculum and qualifications are the same at TVET and UOT institutions, and that there should be some credit transfer when they want to further studies at a university of technology.

From the above, it is evident that the content of the TVET NATED curriculum does not meet the UoT’s curricular standards. In the interview with Respondent D, a comparison was made between the NATED HR programme and the UoT HR programme. The content of personnel management levels N4-N6 differs from that of the UoT's first to third year levels.

In the TVET sector, horizontal articulation² could be employed to promote portability. This could be a potential innovation within the sector and may be incorporated into programmes to address the sector's negative perceptions. Students and families would then have a better pathway for their educational journeys and explorations.

² Horizontal articulation is articulation “within the framework. from one occupational qualification to another on same NQF Level; and or Across Sub-Frameworks on the same NQF Level.” (QCTO: 2020:5)

6.6. The knowledge form of the TVET colleges do not correspond with the admission requirements with UoT

University of technology are shifting towards traditional and comprehensive universities by becoming more academic and research oriented. As a result, the admissions requirements have become more in line with what the universities have to offer.

TVET students lack the ability to analyse complex issues, identify the core problem and solutions, synthesize, and integrate disparate elements, clarify values, effectively use numerical and other information, collaborate and constructively with others, and, perhaps most importantly, communicate clearly both orally and in writing (Ball, 1985: 232). The knowledge formation in the TVET is a contributor to the lack of portability. Nonetheless, there has been an academic shift with regard to UoTs altering their original aim and attempting to imitate established universities. After they merge of some UoTs, they began to place a greater emphasis on producing postgraduate degrees such as postgraduate diplomas, master's degrees, and doctoral degrees. In the mergers, and in transitioning to university status, UoTs have lost qualifications such as the BTech and significant linkages with colleges and switched to a research focus. This structural change in PSET has impacted on college articulation.

Students who got their diploma through TVET colleges experience challenges enrolling in an advanced diploma at a university. Some institutions, according to Respondent I, demand TVET students to repeat the same diploma at the university. This is unnecessary and unfair to students who have already invested three years.

6.7. Quality Assurance Council issues

The fact that quality councils operate differently, and have different requirements for TVET college programmes than they do for university programmes is the main impediment to portability. This is a systemic issue that will continue to obstruct portability until it is addressed. The White Paper on Post-School Education and Training (2013:71) explains that the quality councils are the key governmental entities in charge of quality assurance and certification. The Council on Higher Education (CHE), Umalusi, and the QCTO are the three relevant quality councils. They oversee the three NQF sub-frameworks, as well as providing, assessing, and certifying qualifications. However, there is no clear direction among TVET college stakeholders as to who is responsible for ensuring the NATED programme's quality. DHET produces the programme at the national level and consults with Umalusi.

The National Qualification Framework Act (1997) establishes the CHE as the single quality assurance body for HEI. The CHE is also responsible for the development and maintenance of the HEQSF (RSA, 1997). It must assist in the promotion of the quality of higher education in the country. The function of the CHE is clearly stated: it is mandated to ensure quality assurance in the higher education institutions which fall under the DHET. From the interviews conducted, it is evident that the CHE does not consider the TVET sector one as its responsibility. Respondent F noted that *“the disparity between these sectors is due to the fact that the two sectors have distinct quality assurance councils”*.

Umalusi, on the other hand, develops and manages the quality of a sub-framework of qualifications for general and further education and training, as well as policies and criteria that it proposes (to SAQA) for qualification registration on the NQF (Umalusi. 2020). With the understanding of the above-mentioned function of the Umalusi, the UoTs do not see their qualifications as close to equity with the TVET sector. This is a significant barrier to portability because, despite the NQF level, the UoTs consider TVET to be subminimal due to its quality assurance body.

It is imperative to note that with the NQF task to the SAQA in the development and the articulating the NQF, each of the three quality councils is assigned to oversee a sub-framework of qualifications within an integrated National Qualifications Framework. While Umalusi is recognized as the quality assurer for FETs, which TVET colleges offer, it is also worth mentioning that NATED programmes are not considered FETs but rather post-secondary qualifications. Considering this, the Council on Higher Education (CHE), rather than Umalusi, should oversee quality assurance for the NATED qualification. The NQF allows for possible continuity between FET, and HE programmes, but there are significant disparities between the two.

6.8. Professional bodies do not recognise TVET qualification, and no one knows who created the curriculum.

Professional associations do not recognize the NATED qualification, which has contributed to a lack of alignment between the two sectors. There is a lack of alignment between UoT and TVET as they compare their qualifications to those of a professional body (Respondent F). According to SAQA (2019:14-17), professional bodies are also regarded as articulation enablers, as they promote robust promotion of the NQF regulatory framework.

The South Africa Board of Professional Practice (SABPP) is an association of HR professionals. As a regulating authority, it is aware of the National Diploma HR in the TVET sector and the university sector. These degrees are part of the SABPP service field and have the same name. They do, however, have a disparity between their articulation and the field in which they are used. There is no professional body or agency that oversees the NATED programme accreditation or sub-qualification structure. While higher education develops and enhances its curricula, the TVET sector does not have a competent curriculum development body. This is one of the factors that makes articulation difficult.

6.9. Underqualified lecturers)

Lecturer qualifications are a systemic issue in that college lecturers pitch their teaching at a specific level that does not necessarily coincide that of university professors. There may still be lecturers who are unable to assess or provide the degree of service that a lecturer or teacher is expected to provide. Lecturers are hired to lecture in the TVET system without knowing what is taught in the schools or universities. As a result, they teach from a textbook and are unaware that most of their curriculum is outdated.

It is also a legacy issue because when the colleges were FET colleges, there were no requirements that said a college lecturer had to have a minimum level of qualification to be a lecturer at a college. Within that systematic movement, there are still lecturers without appropriate qualifications. Even though some higher education institutions have been developing degrees as a means of upskilling lecturers at TVET colleges (Respondent A, B, C, & D) there is still a gap. The gap is primarily due to qualifications, as the majority of TVET lecturers are either from the private sector or from technical colleges. They do not have a professional qualification whereas most university lecturers are both academically and professionally qualified. TVET students are hindered from articulating to higher education because of the disparity in their lecturers' educational qualifications. While many university teachers are both academically and professionally qualified, TVET lecturers only have an academic qualification. The impact on knowledge is higher the more knowledgeable and exposed the lecturers are to both academic and professional forms of knowledge.

6.10. The lower pass mark for NATED in comparison to the universities

The lower pass mark on the TVET NATED final exams, on the other hand, has become one of the barriers to portability. To proceed from one level to the next, NATED students must pass 40

percent of their exams result in N4, N5, and N6. Respondent F acknowledged that UoT students must struggle to get a pass mark of 50%, whereas TVET students only pass with 40%. The fact that developing external assessment systems for national qualifications is a priority for the rest of the post-school system does not matter in the NATED assessment, (DHET (White Paper 2013:73). There is a pass mark mismatch between the two sectors. The UoTs are aware that the pass mark for progression in the TVET sector is lower than that of the UoTs, and as a result, the NATED qualification does not meet the UoTs' requirements.

6.11. NQF level disjunction

Universities of technology are gradually reorienting themselves as conventional universities. They are constantly re-curriculating to align with the Higher Education Quality Sub-Framework, and the National Quality Framework. This has resulted in a tremendous lack of coherence across and within the NQF sub-frameworks, which is one of the reasons for the portability bottleneck. The NQF bands for these two sectors are not aligned, according to (Respondent G), even though on the same NQF level.

According to the NQF band and the level descriptors, it is theoretically possible (DHET 2017:6) for portability from the NATED qualification to the higher education institutions. In practice, the General and Further Education and Training Qualifications Sub-framework (GFETQSF) and the HEQSF are not properly aligned for portability to happen, even though the NQF governs South Africa's education and training system (DHET White paper 2013:69).

Because the rules, mandates, and authority of multiple statutory authorities in the PSET sector are not aligned, the NQF regulation landscape is inaccurate, which has an impact on programme creation processes and epistemological approaches. According to Respondent F, the TVET qualification is not pitched at the correct NQF level descriptor, while on the DHET website, this National Diploma from a TVET colleges is equivalent to NQF level 6 and 360 SAQA credits. This demonstrates the confusion that exists inside the PSET system programme development. The Diploma in Human Resource Management in NATED is at NQF level 6 with 360 credits under the occupational qualification (DHET, 2020)). There is also a Diploma in Human Resources on NQF level 6 with 360 credits on the HEQC or HQESF under the CHE's HEQC (CHE, 2013:21-26). These two qualifications are on the same NQF ladder and the same SAQA descriptor (CHE, 2013:12-17), yet one seems to be of more value than the other. NQF level 5 is an entry-level qualification for higher education (CHE, 2013:26), and according to the higher

education qualification framework (HEQF, 2007:21). According to the (DHET,2020:1) statement of work experience logbook designed for business studies internship programmes, a NATED Report 191 qualification is on NQF Level 6 with 360 credits. And the RSA (2001a) Part 1 (N4–N6) places the NATED business studies qualification on NQF Level 6 as a national diploma.

The national diploma received by NATED students after completing the 18-month internship is equivalent to a university diploma, while the (Respondent F) claims it is not. This is a significant impediment to NATED student articulating to a higher education institution for further study.

The TVET colleges are placed at the intersection of all 3 sub-frameworks of the NQF, and hence three quality councils. The PSET landscape resides under different quality councils which complicated the recognition of qualification equivalence and articulation. It will take a concentrated effort to distinguish between SAQA and the influence of the National Quality Framework (NQF).

The White Paper (2013) promotes articulation within and between all university types and encourages mechanisms that promote articulation and ensure no dead ends for students. However, in the mergers that some experienced, and transitioning to university status, UoTs have lost qualifications such as the BTech, and the significant linkages they had with colleges and switched to a research focus, in line with most HEIs. This structural change in PSET has impacted on college articulation.

The NQF began as a unified National Qualifications Framework. However, because there were so many concerns and issues that were influenced by politics, the framework was divided into three sub-frameworks. As mentioned on page 54 Respondent G explained how tension existed in the two sectors in relation to the qualification framework.

The split between basic and higher education occurred in April 2009, when the Department of Higher Education was set up. Duties regarding higher education and training were given to the DHET, which falls under the auspices of the Ministry of Higher Education (RSA, 2008: 6). The question of how to achieve equivalence between TVET college qualifications and NQF levels 6 and 7 on the HEQSF alignment becomes a concern.

One of the NQF's purposes, according to the SAQA website (SAQA, 2020), is to "facilitate access to, and mobility and progression within, education, training, and career paths." It is important to remember that this goal is to make articulation as simple as possible. However, legislation, requirements, and implementation in the higher education sector prevent this from

happening. There is no coordination between the two sectors to make articulation easier. Respondent H reported that the only way there can be alignment between the two sectors is to obtain the highest certificate available at TVET level. However, it is imperative to understand that the highest certificate does not aim to increase the theoretical component in TVET- higher education. Although it is intended to be aligned based on the NQF structure, the challenges are in the delivery of the qualification.

Integration of TVET students into higher education remains a challenge. Disparities of esteem (Blom, 2016:3-6) are still perceived as a roadblock to mobility and access. The vision of SAQA, which is to provide a world-class National Qualifications Framework that works for the people of South Africa (SAQA, 2022), has a long way to go because SAQA's ineffectiveness is affecting the NQF's construction and the NQF itself is ineffective. It is worth noting that articulation in the post-secondary system is lacking.

6.12. No articulation between NATED and the new HEQSF in Business studies

There is no suitable alignment between NATED Business studies and Higher Education Business studies programmes to help with articulation. Interviewees believe that students who participate in NATED programmes can transfer from the TVET college sector to the higher education sector. However, Branson, Papier & Needham (2015:46) see this as unfeasible and unavailable. All PSET legislation and policies, including the White Paper for Post-School Education and Training (2013), the Draft National Plan for Post-School Education and Training (n.d.), and the NQF Act (2008b) Act No. 67 of 2008, include articulation (DHET, 2021:2). The inability of NATED Diploma student to articulate to higher education for further studies contradicts the NQF's goal of eliminating educational dead ends (White Paper for PSET, 2013: viii, xvii, 71). The NATED qualification has no mechanism to facilitate articulation.

NATED Report 191 Business studies, according to Respondent I, has a role in providing students with a pathway to a national diploma. In fact, this is not the case. Intermediate level qualifications, such as NQF 5 and 6, are thought to be outside the purview of universities and should thus be offered by other sorts of institutions, either as a destination in themselves or as a gateway to a HEI (HRDC, 2014: 34).

6.13. Limitations of RPL as a tool in aiding articulation

RPL could have been a useful tool in facilitating the portability of TVET NATED diploma to higher education. A student who does not meet the university admission requirements but has a TVET qualification should use the RPL technique. SAQA (2016:4) will agree that possessing the NQF level 5 and work experience should be seen as a steppingstone to continue study; however, it is not the case with a NATED qualification. Articulation and recognition of prior learning are two strategies that allow the state to gradually increase the availability and accessibility of further education and training. As SAQA (2016:5) states, RPL is a multi-dimensional technique that assesses non-formal and informal learning and certifies it against standards for credit, access, inclusion, or advancement. NATED students with an N- Diploma gain practical experience in learning processes through mentoring and on-the-job training, which falls under the RPL category. Despite this, universities do not recognize the TVET NATED qualifications. UoTs would prefer to combine a student's RPL with their N4 qualification to admit them to the first year rather than a diploma programme. RPL is intended to help students improve their passing grade to further study at a higher institution. However, not recognizing the RPL undermines the RPL's goal of improving progressive articulation (SAQA, 2016:4). Ironically, DHET (2021:5) mentions that to help students transition from TVET institutions to universities, RPL, CAT, and flexible learning services are also utilized.

The ability for universities to make their own admissions decisions is not beneficial to the TVET sector. A TVET student with a national diploma is entitled to apply for external subject recognition in the first year of the UoT national diploma. In terms of credit accumulation transfers, two or three TVET subjects equate one UoT subject for business studies. Credit transfer is the movement of credits toward a qualification or part-qualification on the same or different level, usually between different programmes, departments, or institutions, according to the SAQA policy and criteria for credit accumulation transfer as amended in SAQA (2021: 5). According to (Respondent F), the UoT's external subject recognition policy stipulates that 70% of the curriculum must be equivalent in content, assessment criteria, NQF level, and SAQA credits. The NQF placed NATED N diplomas on the same level as UoT N diplomas, and credit accumulation transfer is expected to work in this regard. By allowing credit transfer, the Articulation Policy for the Post-School Education and Training System of South Africa creates a properly connected and articulated post-school system (DHET, 2017:2, 4,13,). However, credit transfers from the NATED to the UoTs are not available.

Many students should have entered the HEI through the RPL route, according to Respondent G. This is not the case; the RPL process puts students under a lot of stress because they must construct a portfolio of evidence, which is a time-consuming process. Students would not need to follow the RPL method if the portability of the TVET NATED National Diploma to higher education was taken more seriously. Because there is no process in place, TVET students must work much harder to be awarded the opportunity to study further at an HEI.

The NQF's articulation programme requires students to have studied all the way up to level eight or nine in their subject area before articulating, rather than starting out with a theoretical foundation. Respondent H, ironically, expressed the same perspective, stating that articulation requires someone who has completed some form of learning and then worked through the RPL process. Respondent G brought to light that the number of students articulating through the RPL process to higher education is minimal.

The South African NQF supports a culture of life-long learning by allowing for credit accumulation and acknowledgement of earlier learning. Students have the possibility to get both formal and informal learning through theory and practice. RPL is expected to be one of the key mechanisms for enabling mobility from NATED N Diploma to Higher Education. Because the HEI does not recognise the N4 to N6 qualifications on NQF level 6, however, NATED graduates should be recognised for further study through RPL.

6.14. No mechanism in place to ensure parity.

The interviews conducted give evidence that there is no mechanism in place to enhance parity within the two sectors. Interviewees from TVETs and the UoT believe that there is nothing TVET lecturers can do to raise standards. There is, however, little possibility for collaboration between the two sectors. Interviewees are, however, unaware of any procedures and mechanisms in place to guarantee portability. It is possible, although the DHET does not encourage portability.

There seems to be no strong managerial leadership to put mechanisms in place to allow parity and portability between the two sectors. The development of strong, professional management and leadership ability as well as a proper qualifications framework and monitoring mechanism to drive the entire system is also linked to the delivery of high-quality TVET (African Union, 2007:10). There is no curriculum developer in a college to ensure that college curricula and that of higher education institutions are cohesive.

NQFs are essential to the effectiveness of articulation mechanisms in the TVET system, according to the African Union (African Union 2007:40). QCTO and SAQA reclassified N4 to N6 qualifications as NQF level 6 qualifications. The UoTs do not recognize TVET qualifications at the same level. The UoT does not admit TVET NATED students to diploma qualifications – this is because these programmes cannot be compared. TVET students with NQF level 6 qualification are admitted to UoTs in their first year. National legislation does not properly aid the articulation process, and a qualifying structure is not set up in this way. To make the procedure easier, it assigns the owners to specific institutions and appoints staff to each of those institutions. SAQA (2017:7) states that N4-6 qualifications lead to a National Diploma, which leads to HEI degree studies, However, due to the lack of a mechanism to facilitate the process, such portability is not occurring.

6.15. Conclusion of chapter 6

Portability is all about providing well-thought-out qualification pathways that are viable and relevant, allowing capable students to proceed across various sectors in ways that relate to their career planning and thinking, as well as how they intend to advance in their professions. However, the overarching purpose for portability is the construction of professional pathways that are not actually bound institutions, but rather career and learning pathways that must be implemented throughout the PSET system. The entire issue of portability must be centered on encouraging universities and colleges to engage with one another on an equal footing.

The information gathered revealed that the NATED programme's origins were to facilitate easy articulation to the then-technikons, which have since combined with other institutes to form the universities of technology. The FET changed its name to TVET to phase out the NATED programmes and replace them with the NCV, which shifted the focus away from the NATED. However, the NATED programmes were not phased out, and the programme's historical legacy was not altered. There are no major systemic procedures or aspects that shaped the NATED Report 191 business studies programmes in the TVET sector with the goal of advancing to higher education. There is no regulation or policy that allows or enforces this. Because of the constant upgrade and drift of the UoTs, the NQF, which may have been the main motivator for portability, is no longer recognized.

The quality councils which quality assure the NATED Report 191 and higher education institutions are clearly not the same, and their requirements are not the same. Portability is not possible because the quality councils differ.

The RPL, on the other hand, may have been used as an articulation vehicle, but the RPL process, on the other hand, is far too long and cumbersome for NATED students to follow. Furthermore, the RPL is viewed by the UoTs as a means of meeting the first-year admission requirement with one or two subject credit transfers, rather than a means of progressing to further study.

It was also disclosed that TVET, which was previously known as FET, inherited the prior Technikons curricular framework. The programme's creator was unknown to interviewees, who speculated that it was an old programme. The goal was to educate students with theoretical and technical experience so that they could contribute to the economy's labour force. It was created so that students could learn theory in class before being sent out into the field for hands-on experience. To date, the NATED programmes have carried out the same mandate. This curriculum was closely associated with the WIL component of the universities of technology. Even though both sectors include a WIL component, universities of technology do not consider the NATED programme to be on par with their own. The UoT respondent argues that its WIL component is entrenched in their curriculum and that it provides credit to students, which helps them get a passing grade. In the TVET NATED sector, however, this is not the case. Professional bodies also accredit universities of technology by reviewing and approving their curricula. This allows UoTs to understand and respond to market demand, unlike the NATED programme, which continues to use an outmoded curriculum that is no longer relevant in today's market. This is seen as an impediment to portability.

The purpose of business studies in NATED Report 191 programmes in principles was to show how curricula, educational processes, and system mechanisms are linked to vocationally focused business studies programmes in higher education. The NATED courses, on the other hand, are seen as outmoded and irrelevant by the UoTs. Furthermore, the NATED curricula lack the same depth of content as the UoTs, demonstrating that the NATED's vocational and technical component is unrelated to higher education.

The numerous problems involved with portability as they relate to legacy programmes are evident from this study (N-programmes). TVET colleges in South Africa have a standing unresolved issues that need to be addressed at the national level to attract UoTs to collaborate with TVET colleges. To enhance portability across TVET Colleges and UoTs, a guideline on

how to establish inter-institutional portability agreements at the programme and curriculum level should be developed.

Recommendation

The suggested actions will serve as the foundation upon which SAQA, quality councils, the Department of Higher Education and Training, PSET institutions, and others will have to reflect and begin moving toward the realization of a smooth articulation between TVET and higher education qualifications, as envisioned in the White Paper on Post-Secondary Education and Training (2013), thereby penetrating and fulfilling the objectives of the NQF.

There is room for improvement in terms of collaboration between TVET colleges and key industry stakeholders, public and private sector employer bodies, and professional bodies when developing TVET college curricula, particularly if these curricula are to be responsive and relevant in today's knowledge society.

More high-level dialogues between TVET colleges and universities of technology are clearly required to enhance access, mobility, and articulation, as envisioned in the 2013 White Paper for Post-School Education and Training. It is considered that South Africa can learn from the other countries' model of harmonising programmes in selected fields of study across higher education institutions to harmonise TVET colleges and universities of technology.

To address the individual demands of students, the TVET educational programme can provide variety of learning courses. A new educational framework is also needed to dismantle outdated divisions between academic and vocational education, as well as between instruction and preparation.

This shows that Universities can enter a Memorandum of Understanding with TVET to assist the transfer of skills from TVET to universities, particularly universities of technology, because NATED has a high credit rating.

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