

**THE INTEGRATED POST-SCHOOL EDUCATION AND TRAINING
SYSTEM: EXPLORING THE POLICY AND PROCEDURE
SHORTCOMINGS IN TVET TO HEIS ARTICULATION**

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REQUIREMENTS FOR THE DEGREE OF MASTERS IN
HIGHER EDUCATION**

BY

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DEDICATION

I dedicate this thesis to my family for all their support during the pursuit of this study.

A special dedication to my brother, Tembelihle Wakeni, with whom I am staying. I may have been a burden to him as he supported me with all the house chores as I was busy with and stressed by this research study.

I also dedicate this to all people close to me and my friends whom I may have unintentionally neglected as my stress level was becoming very high with the pressure that comes from the push to complete this qualification.

I also dedicate to almighty God and my Ancestors for granting me strength and zeal when I felt drained, and it felt as though it was impossible for me to continue with my studies.

I also dedicate this study to all TVET college students who have experienced challenges and injustices when trying to articulate to universities to further their studies and in the hope that that seamless articulation will soon be a reality without challenges associated with rejection, regression and non-recognition of hard-earned TVET qualifications.

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I acknowledge the college in the Eastern Cape that permitted me to use it as a research site.

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DECLARATION

I, Asiphe Delron Wakeni, student number 218083621, declare that this study 'The Integrated Post-School Education and Training system: Exploring the Policy and Procedure shortcomings in TVET to HEIs articulation' is my own work. The use of other people's work has been appropriately recognised through referencing in the text using APA 7th and has, in most cases, been paraphrased. It is my understanding this study is not being conducted by anyone else and is not being assessed or submitted concurrently to any other institution of higher learning.

A solid black rectangular box used to redact the signature of the student.

Asiphe Delron Wakeni

Date: 04 July 2022

ACRONYMS

AAAs - Articulation Arrangement and Agreements

BCom – Bachelor of Commerce

BED – Bachelor of Education

BTech – Bachelor of Technology

CAT - Credits Accumulation and Transfer

CET - Community Education and Training

CPUT - Cape Peninsula University of Technology

CUT – Central University of Technology

DHEST - Department of Higher Education, Science and Technology

DHET - Department of Higher Education and Training

DUT – Durban University of Technology

CGO – Career Guidance Officer

EC – Eastern Cape

ETPs – Education and Training Providers

FET - Further Education and Training

HE – Higher Education

HEIs - Higher Education Institutions

HEQSF - Higher Education Qualifications Sub-Framework

HRDC – Human Resource Development Council of South Africa

ICT - Information and Communication Technology

INSETA – Insurance SETA

ITS - Integrated Tertiary Software

ITSM - Information Technology Service Management

KZN – KwaZulu-Natal

MoA – Memorandum of Agreement

MoU – Memorandum of Understanding

NABS – National Articulation Baseline Study

NATED – National Accredited Technical Education Diploma

NCV - National Certificate Vocational

NDP – National Development Plan
NMU - Nelson Mandela University
NQF - National Qualification Framework
NSC – National Senior Certificate
PGCE – Post graduate Certificate in Education
PPI - Public Policy Implementation
PSET - Post School Education and Training
QC – Quality Council
QCTO - Quality Council for Trades and Occupations
RPL - Recognition of Prior Learning
SAQA – South African Qualification Authority
SETAs - Sector Education and Training Authorities
SSS – Student Support Services
TVET - Technical and Vocational Education and Training
UJ – University of Johannesburg
UNISA – University of South Africa
UoTs – University of Technologies
USAF - Universities South Africa
UWC – University of Western Cape
WIL - Work-Integrated Learning
WC - Western Cape
WSU – Walter Sisulu University

ABSTRACT

The phenomenon of articulation from TVET colleges into HEIs, vertical articulation, is a subject that is currently being investigated and has not yet been standardised, even though there is a policy that frames it. It requires education and training institutions to be engaged in partnerships to contextualise articulation according to their institutional contexts. The aim of this study was to explore the procedure and policy shortcomings of articulation from TVET colleges into HEIs as provided by the DHET articulation policy, with specific reference in the role played by a TVET college in the Eastern Cape in enhancing articulation of its graduates and exit level students, into HEIs programmes.

The study adopted a qualitative research methodology where 31 research participants were purposively selected using a non-probability sampling technique. The participants comprised four students' focus group discussions, a focus group for student support services campus staff, a structured interview with one member of the College Board management. Thematic analysis was used to analyse data from the participants from which four themes emerged, together with their subcategories.

The study found that the TVET College does not have any partnerships with HEIs that specifically address the articulation of its graduates and/or exit level students or one that includes articulation as one of areas of collaboration. The study also found that the college has done very little, at least formally, to ensure that students are aware of the articulation route to HEIs as enshrined in the student support services plan from DHET developed for colleges annually. The study also found that both students and SSS staff are not fully aware of the articulation to HEIs process, with some students not even being aware that such an articulation route exists, thinking that they can only progress in TVET programmes. The study also discovered that the majority of TVET students have an interest in the articulation route to HEIs, while the few who had no interest highlighted misconceptions resulting from lack of understanding of the articulation process as their rationale for not having an interest in that route. The study also discovered challenges that are hindering or jeopardising successful articulation

to HEIs. These challenges include curriculum mapping, lack of knowledge about articulation into HEIs process by both staff and students, and misconceptions about articulation into HEIs by students.

The study concluded that the college does not have any initiatives meant to enhance articulation in the form of internal policy, partnerships with HEIs, knowledge sharing with students and capacitation in the form of workshops. This has led to a lack of awareness about articulation into HEIs and misconceptions thereafter from the student body. The implications for this research are that, to enhance articulation into HEIs, the college should prioritise partnerships with HEIs; internal policy development; staff and student capacitation on articulation, all specifically for articulation. The DHET should grant colleges institutional autonomy when it comes to curriculum changes to a small percentage, 20 to 30 percent, while keeping the larger part, 70 to 80 percent, standard.

Table of Contents

DEDICATION.....	2
ACKNOWLEDGEMENTS	3
DECLARATION.....	4
ACRONYMS.....	v
ABSTRACT	vii
LIST OF TABLES	xi
CHAPTER 1	1
INTRODUCTION TO THE STUDY	1
1.1. INTRODUCTION.....	1
1.2. BACKGROUND TO THE STUDY	3
1.3. PROBLEM DESCRIPTION AND STATEMENT	5
1.4. RATIONALE FOR THE STUDY	7
1.5. AIMS AND OBJECTIVES OF THE STUDY	7
1.6. RESEARCH QUESTIONS.....	8
1.7. SIGNIFICANCE OF THE STUDY.....	8
1.8. LOCATION OF THE STUDY.....	9
1.9. DELIMITATIONS OF THE STUDY	9
1.10. SEQUENCE OF THE STUDY	10
1.11. SYNTHESIS.....	11
CHAPTER 2	12
LITERATURE REVIEW	12
2.1. INTRODUCTION	12
2.2. DEFINITION OF ARTICULATION IN THE EDUCATION SYSTEM CONTEXT	12
2.3. DHET AND SAQA INITIATIVES	20
2.4. CURRICULUM MAPPING	22
2.5. ARTICULATION ENABLERS AND ARRANGEMENTS	23
2.7. CHALLENGES OF ARTICULATION	29
2.8. CONCEPTUAL FRAMEWORK.....	32
2.9. SYNTHESIS.....	37
CHAPTER 3	38
RESEARCH DESIGN AND METHODOLOGY	38
3.1. INTRODUCTION	38
3.2. RESEARCH PARADIGM	38
3.3. RESEARCH DESIGN.....	39
3.4. CASE STUDY	40

3.5.	SAMPLING	41
3.6.	DATA GENERATION TOOLS	42
3.6.1.	Focus groups interviews	42
3.6.2.	Interviews	44
3.7.	DATA ANALYSIS	45
3.8.	TRUSTWORTHNESS	46
3.9.	ETHICAL CONSIDERATION	48
3.10.	LIMITATION AND DELIMITATIONS OF STUDY	48
3.11.	SYSNTHESIS	49
CHAPTER 4		50
FINDINGS AND DISCUSSIONS		50
4.1.	INTRODUCTION	50
4.2.	COLLEGE INITIATIVES AND ACTIVITIES TO ENHANCE ARTICULATION	52
4.2.1.	Management perspective	53
4.2.2.	Staff perspective	57
4.2.3.	Student Perspective	58
4.3.	AWARENESS OF ARTICULATION TO HEIs	62
4.3.1.	Staff awareness	62
4.3.2.	Students awareness	65
4.4.	STUDENT PERCEPTION TOWARDS ARTICULATION TO HEIs	66
4.4.1.	Why students enrolled in a TVET college	67
4.4.2.	How TVET college students perceive articulation to HEIs	70
4.5.	CHALLENGES OF ARTICULATING FROM TVET COLLEGE TO HEIs	73
4.5.1.	Curriculum Mapping	73
4.5.2.	Lack of knowledge about articulation into HEIs career pathway	75
4.5.3.	Misconceptions about articulation from the student perspective	75
4.6.	SYNTHESIS	77
CHAPTER 5		79
CONCLUSION, RECOMMENDATIONS AND FUTURE RESEARCH		79
5.1.	INTRODUCTION	79
5.2.	CONCLUSION OF THE STUDY	79
5.2.1.	College initiatives and activities to enhance articulation	80
5.2.2.	Awareness of articulation to HEIs	81
5.2.3.	Student perception towards articulation to HEIs	82
5.2.4.	Challenges of articulating from TVET College to HEIs	83
5.3.	IMPLICATIONS FOR THE RESEARCH	85

5.4.	FUTURE RESEARCH AREAS	86
5.5.	LIMITATIONS OF THE STUDY	87
5.6.	DISSEMINATION OF RESEARCH	87
5.7.	SYNTHESIS.....	88
	REFERENCES.....	89
	APPENDIX 1: GATEKEEPERS LETTER.....	99
	APPENDIX 2: PARTICIPANTS CONSENT LETTER	100
	APPENDIX 3: ETHICAL CLEARANCE	102
	APPENDIX 4: INTERVIEW QUESTIONS	103
	APPENDIX 5: EDITOR’S REPORT	104
	APPENDIX 6: TURNITIN REPORT	105

LIST OF TABLES

Table 1: Comparison of NCV vs NSC Admission Requirements

Table 2: Coding of Participants.

Table 3: Themes and Subcategories.

Figure 1: Engineering NATED Programmes pathways

CHAPTER 1

INTRODUCTION TO THE STUDY

1.1. INTRODUCTION

In South Africa, the Post-School Education and Training (PSET) system refers to all education systems other than basic or secondary education. These include public Higher Education Institutions (HEIs) sometimes simply referred to as universities, Technical and Vocational Education and Training (TVET) colleges formerly known as Further Education and Training (FET) colleges, Community Education and Training (CET) colleges formerly known as Adult Learning Centres, private HEIs and colleges and Sector Education and Training Authorities (SETAs). There are other entities of PSET other than education and training institutions, which are support organisations, qualification and quality assurance bodies and skills levy organisations. All these entities are under the leadership of the Department of Higher Education and Training (DHET), which has been changed to the Department of Higher Education, Science and Technology (DHEST) after merging it with the Department of Science and Technology. The DHET carries a government mandate to provide an integrated PSET system to citizens so they can improve their lives. The DHET defines PSET in the White Paper for PSET as an education system that comprises all education and training provisions for all those who have completed school, those who did not complete their schooling, and those who never attended school (DHET, 2013). Those who completed school go to university or TVET National Accredited Technical Education Diploma (NATED) programmes, N4 to N6. Those who did not complete their schooling but passed Grade 9 go to TVET National Certificate Vocational (NCV) and NATED programmes, Level 2 to Level 4 and N1 to N3 respectively. Those who never attended schools or dropped out before completing Grade 9 go to CET colleges. They all depend on meeting the specified admission requirements, not automatic admission.

The DHET aspires to have an integrated PSET system whereby all students will be able to move between different entities of PSET without being disadvantaged in terms of credits accumulation and transfer (CAT) and progression. This is clearly articulated in the White Paper, that the DHET aspires the PSET system to provide paths for

articulation between various qualifications, and there should be no dead ends for students; and should always enable students to further and improve their qualifications without undue repetition (DHET, 2013). The document further asserts that, to achieve the integrated PSET vision; all DHET institutions should play their roles as parts of a coherent but differentiated whole system.

In this study, articulation refers to the free movement of students within and outside PSET entities without any injustices and hindrances to students. Injustices refers to students having to repeat modules without credit for work already covered in other modules. There are many definitions of articulation in relation to education systems. Wikipedia defines articulation as the process of comparing the content of courses that are transferred between postsecondary institutions, like colleges and universities, such that the institution matches its courses to the requirements of coursework completed at another institution. The Minister of DHET, Dr. Bonginkosi Blade Ndzimande, in 2013, once asserted that:

“A well-articulated system is one in which there are linkages between its different parts; there should be no silos, no dead ends. If a student completes a course at one institution and has gained certain knowledge, this must be recognised by other institutions if the knowledge gained is sufficient to allow epistemological access to programmes that they want to enter”.

Articulation is also defined as

“mechanisms that enable student mobility within and among the institutions that comprise the tertiary system, for example, academic credit accumulation and transfer, recognition and equivalence of degrees, recognition of prior learning, and so forth” (Ng’ethe, Subotzky & Afeti, 2008,p.xvii).

Makura and Nkonki (2017) define articulation as a seamless transition or progression of students across learning outcomes, programmes, phases, and bands within an education system. All these definitions have commonality concerning articulation, which includes the movement of students within and between education systems, recognition of credits already accumulated and that this process should be seamless. All these common components ensure that students do not repeat course content that they already completed at another institution/course to which they are transferring and enable recognition of prior learning (RPL) and CAT.

1.2. BACKGROUND TO THE STUDY

The PSET system in South Africa comprises HEIs and TVET colleges. HEIs offer qualifications from National Qualification Framework (NQF) level 5, certificate, to NQF level 10, Ph.D., and are the most popular and preferred destinations for learners in basic education as compared to TVET colleges (DHET, 2013). As a result, most students who pass matric with good results enrol to study in universities if they meet the defined university admission requirements. Those learners who do not meet university admission requirements and those who fail matric end up enrolling in TVET as their last resort to access PSET. Other groups of learners who are eligible to access TVET colleges early are those who completed grade 9. Those learners who successfully pass matric but do not qualify for university admission and opt for TVET normally enrol for TVET NATED programmes starting from N4. The exit level for NATED is N6, to go to work-integrated learning (WIL) in the field. Those who fail matric together with those who completed Grade 9 and other Grades above enrol for TVET NCV programmes starting from NCV level 2. NCV level 4 is the exit level for NCV and is equivalent to Matric of basic education.

The DHET aspires to have a single coordinated integrated PSET system characterised by the articulation between programmes and its entities in the PSET system (DHET, 2013). This includes a progression from one PSET education and training entity to another without losing credits or repeating things that have already been covered elsewhere. As such, the DHET has developed strategic documents and policies in that regard. The strategic documents include the White Paper for PSET, which is outlining the DHET vision about PSET, and National Plan for PSET, which provides the DHET with the framework to align and integrate the work that is underway to implement the PSET White Paper and its policy goals (DHET, 2017b). Both these strategic documents have articulation as one of the key priorities in PSET. The policy formulations concerning articulation include recognition of TVET qualifications by HEIs specifically NCV level 4 (Umalusi, 2016) and articulation policy for PSET (DHET, 2017e). A government notice was gazetted, which was an appeal to universities to recognise TVET qualifications especial NCV level 4 as Matric equivalent (DHET, 2018). The gazette came as a result of the agreement between DHET and Universities

South Africa (USAF), which represent all South Africa's 26 public universities. This was followed by most universities, if not all, specifically specifying admission requirements for TVET NCV L4 and N3 graduates. The articulation policy states that it was developed to facilitate the movement of learners between and within the three sub-frameworks of the NQF and between and within institutions to enable student access, progression and mobility (DHET, 2017c). The three sub-frameworks are Higher Education Qualifications Sub-Framework (HEQSF), General and Further Education and Training Qualifications Sub-Framework known as Umalusi, and Quality Council for Trades and Occupations (QCTO) with each having different roles and responsibilities while they all encompass the articulation issue.

The DHET education and training entities and supporting quality assurance and accreditation bodies are all working towards achieving a single coordinated PSET system where students will be able to articulate between and within education and training entities (DHET, 2013). They all want to ensure that students can progress fairly, both horizontally and vertically, and be able to accumulate and transfer credits of already completed courses. However, with these efforts and plans in place, the articulation in PSET is still poor, particularly when it comes to articulating from TVET to HEIs. This was echoed in baseline study that the understanding of articulation between TVET and HEIs is still poor accompanied by fear of commitment from both TVET and HEIs, difficulty to deal with HEIs due to their autonomous status, lack of understanding of TVET qualifications by HEIs especially front desk personnel, and unhealthy relationship between the two entities with HEIs seeing themselves a superior partners leading to difficulty to arrange meetings (Lortan, Bolton, Maistry & Doorsamy, 2017). It was also asserted that even though articulation exist, in paper, between TVET colleges and HEIs but practically, in reality, it is not realized or successfully implemented (HRDC, 2014a). This has motivated me to further investigate the cause that may lead to poor articulation and policy shortcomings in PSET, more specifically from TVET to HEIs. This will lead to looking at policy shortcomings in addressing and achieving seamless articulation.

1.3. PROBLEM DESCRIPTION AND STATEMENT

The DHET Minister declared in the launch of the PSET White Paper that “South Africa needs a single, coherent, differentiated, highly articulated and yet diverse, non-racial, post-school education and training system with all sectors playing their role as part of a coherent but differentiated whole”. The White Paper itself addresses the need to have a coherent and single coordinated PSET system that facilitates articulation between all PSET entities (DHET, 2013). To ensure a highly articulated and integrated PSET system, the DHET gazetted a policy on articulation for the PSET system. This was to ensure that articulation occurs between the three NQF Sub-Frameworks; PSET institutions working together on learning pathways and provide learner support towards pursuing their pathways (RSA, 2017). The policy establishes the overarching conceptual structure, principles and policy statements to support the implementation of credible approaches to articulation within the PSET system. The articulation policy was developed to facilitate and give guidelines of articulation in PSET, defining the roles and responsibilities of all PSET stakeholders towards achieving a highly articulated system (Lortan, Bolton, Maistry & Graham, 2017). This would see students moving freely between and within the three NQF Sub-Frameworks avoiding qualifications with dead ends and loss of credits and self-marketing TVET colleges as stepping stones to HEIs for further studies (Branson, Papier, Hofmeyr & Needham, 2015).

Articulation has gained attention as a research area in the PSET system. Most research conducted has looked at the role played by universities in enabling the success of articulation with less evidence of studies that researched the role of TVET colleges in successful implementation of articulation as defined in the articulation policy. The South African Qualification Authority (SAQA) conducted a national baseline study on articulation, which investigated articulation from TVET to HEIs including articulation understanding by PSET learning institutions, existing articulation arrangements and their management, enablers and the tracking of learner progression in PSET (Lortan, Bolton, Maistry, Reddy & Doorsamy, 2017). Makura and Nkonki (2017) conducted research on the perceptions of both HEI and TVET staff constraints and enablers of articulation. Another study was conducted looking at structural

constraints and enablers of articulation in a specific university, looking at the role played by that university to successfully implement articulation (Mantashe & Nkonki, 2020). Regardless of all these efforts, research shows that articulation between PSET education and training entities is still poor, especially from TVET to HEIs. The impact of poor articulation is described by Branson et al. (2015) saying that it discourages learners to use TVET colleges as stepping stones to HEIs as it may lead to dead end qualifications. This challenge leads many students to prefer universities over colleges resulting in massification in HEIs. Maringe (2012) stated that there is little articulation and integration between the diverse range of PSET provisions highlighting lack of prior planning for progression in many PSET provisions and non-alignment of programmes due to different levels as major constraints of articulation despite having clearly defined NQF levels.

The question of articulation is important as it tries to prevent injustices towards students learning progression and in ensuring that RPL and CAT are implemented. Articulation focuses on avoiding unfair barriers to access and progression within the PSET system and facilitates student articulation across different qualification types and levels (DHET, 2017b). However, the document states that the lack of articulation relates to complex sets of factors, which include institutional histories, curricula alignment, and collaboration of institutions, focus on articulation, professional pathways, development of qualification processes and many other factors. It is important to improve articulation in PSET creating stronger links between TVET and HEIs encouraging learners to choose TVET colleges as institutions of choice as articulated in the PSET White Paper and NDP. The poor articulation between the NCV and university curricula limits the ability of TVET students to progress to HEIs.

The existence of quality frameworks/sub-frameworks and articulation policy fails to address the policy shortcomings of articulation towards the realisation of TVET to HEIs articulation. Furthermore, there seems to be lack of interest to promote awareness of the TVET to HEIs articulation pathway. The lack of prior planning for progressions and non-alignment of qualifications between PSET learning institutions were identified as severe constraints to articulation. This study, therefore, investigates the role played by a TVET college to enable successful articulation from TVET to HEIs as defined in the national articulation policy. It will investigate the initiatives with which the college is

engaged in preparation for successful articulation and in response to articulation policy roles and responsibilities.

1.4. RATIONALE FOR THE STUDY

My designation of Research and Innovation Manager in a TVET college involves conducting research in selected areas as per the college research agenda, mostly in teaching and learning as well as academic development or support. My experience of working both in a university and in a TVET college has put me in a better position to understand and articulate the common discourses that emanate from these two types of institutions and to have an understanding of their academic operations. Articulation to HEIs is one of the areas in which the colleges should support the exit support student as defined by the DHET Student Support Services (SSS) annual plan. The college has received a lot of challenges regarding the articulation of its students to HEIs to progress to HEI's academic qualifications. These challenges included the non-recognition of TVET qualifications by universities where the college had to intervene in the past when a student who came from our college was struggling to graduate in a university to which s/he articulated because of non-understanding of his/her TVET qualification. The other challenge included non-recognition of TVET qualifications where universities failed and/or were reluctant to credit TVET students with the credits they accumulated in the college. I considered this as failure to implement Recognition of Prior Learning and Credit (RPL) Accumulation and Transfer (CAT) which poses a threat of regression. With the availability of the DHET articulation policy that clearly defines and outlines the articulation process in PSET, together with the challenges experienced by TVET students articulating to HEIs, prompted me to conduct this research. The research aimed to look specifically at the college role in enhancing articulation with special reference to the procedure and policy shortcomings in the articulation process that jeopardise the achievement of the integrated PSET system DHET aspiration.

1.5. AIMS AND OBJECTIVES OF THE STUDY

The main goal of this research is to explore policy and procedure shortcomings that have an impact on successful and seamless articulation of TVET college students into HEIs with specific reference to the role played by the college in relation to the

implementation of articulation policy. The following are the objectives driving the achievement of the main goal:

- To explore reasons leading to poor articulation from TVET college to HEIs
- To determine TVET college staff and students' understanding of articulation from the TVET sector into Higher Education Institutions.
- To determine the level of support offered by colleges to students to enable articulation to HEIs to college exit students.
- To determine how TVET college exit students perceive articulation into HEIs.

1.6. RESEARCH QUESTIONS

The study was guided by the following critical research questions:

- What are the reasons leading to poor articulation from TVET colleges to HEIs?
- What is the TVET college staff and students' understanding of articulation from the TVET colleges into Higher Education Institutions?
- What support is offered by colleges to college exit students to enable articulation to HEIs?
- How do TVET college exit students perceive the articulation into HEIs?

1.7. SIGNIFICANCE OF THE STUDY

There has been a lot of research conducted in the area of articulation to HEIs. The researchers mostly concentrated on the contribution of HEIs in relation to articulation and the general understanding of articulation by both TVET colleges and HEIs. The studies included the baseline study that investigated the general understanding of articulation by both HEIs and TVET colleges, articulation enablers and their management and success, and tracking of articulating students by institutions (Lortan et al., 2017). Another study by Matshoba (2019) looked at the articulation of NQF level 4 qualifications, which include both NCV level 4 and matric, into HEIs. Mashongoane (2018) also investigated the impact of the NCV programme through tracing the past NCV engineering programme graduates looking at those who furthered their studies and those who went to employment. This study provides a different perspective in that it focuses on the colleges' responsibilities in enhancing articulation with specific reference to policy and procedure. As such, this research study is anticipated to

contribute to the body of knowledge of the subject matter and can contribute to the policy and procedure review and development.

1.8. LOCATION OF THE STUDY

This study was conducted at a rural TVET college situated in the Eastern Cape. The College has five campuses offering different qualifications, both NCV and NATED. The College is offering both business and engineering courses. The NCV programmes take three years to complete with NQF level 4 being the exit, with each level (2, 3 and 4) done for a year and a certificate is issued on completion of each level. The NATED engineering programmes are trimester courses starting from N1 to N6. The NATED business programmes are semester courses starting from N4 to N6. The NCV courses offered include Civil Engineering, Engineering and Related Design, Electrical Infrastructure Construction, Information Technology, Economics and Accounting, Primary Agriculture, Tourism, Hospitality, Management, Marketing and Office Administration. The NATED courses offered are Financial Management, Management Assistance, Public Management, Hospitality Management, Tourism Management, Marketing, Farm Management, Public Relations, and Engineering courses. The NCV programme has seven subjects, which comprise four vocational subjects and three fundamentals (Language of Learning and Teaching, Mathematics and Life Orientation), while NATED courses comprise four subjects per level.

1.9. DELIMITATIONS OF THE STUDY

The study will not include the NATED (N3) engineering programmes for articulation purposes to HEIs as these programmes have an existing common problem of not doing English which is a requirement in all HEIs as a Language of Teaching and Learning. A student with N3 is unable to articulate to HEIs because N3 is purely vocational and does not offer fundamental subjects, English and Maths (HRDC, 2014b). HRDC further articulated that only those N3 students who have also completed Matric are able to access HEIs as they have covered fundamental subject. Even though the NATED N3 is at NQF level 4 equivalent to Grade 12 and NCV level 4, however, the NATED programmes were conventionally associated with

apprenticeships providing mainly the theory part of engineering programmes apprenticeships offered in trimesters (Papier, Powell, McBride & Needham, 2018). The researcher has observed that almost all HEIs undergraduate academic programmes admissions requirements requires English, as a teaching and learning language, this means that for N3 students to be admitted they require additional special intervention in the form of coordination and collaboration. The NATED N1 to N3 programmes are proposed to be phased out by 2023 (DHET, 2020). The HRDC (2014) provided a clear depiction of initial intended pathways for NATED programmes including N3. The diagram is as follows:

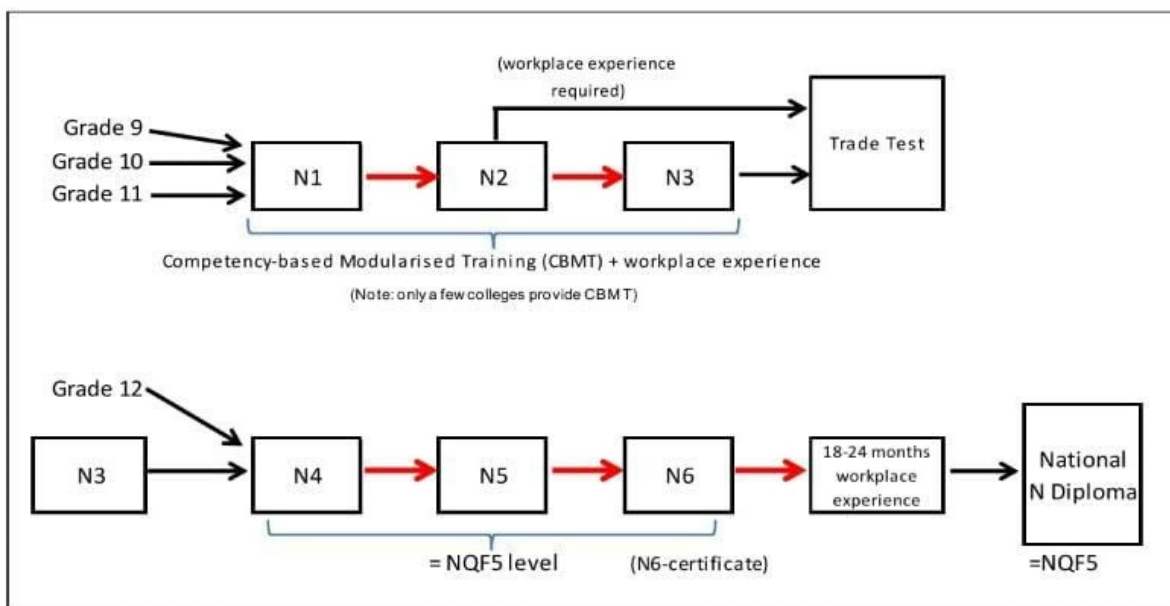


Figure 1: Engineering NATED Programmes pathways

This means that for the NATED engineering programmes to articulate seamlessly and smoothly, there will be a need of articulation arrangements to be in place between the TVET college and HEIs (Council on Higher Education, 2021). The study will also not look at the HEIs side in terms of the articulation arrangements they have, except as part of literature.

1.10. SEQUENCE OF THE STUDY

Chapter 1 gives a brief introduction of the PSET system and its entities including education and training providers and the quality enhancement entities, which are non-

education and training providers. DHET mandate and the aspiration of an integrated PSET system is outlined as defined in the PSET White Paper, followed by a brief description of what articulation means in the context of the study. The background to the research study is described, followed by the problem statement. Then the rationale, aim, objectives and research questions guiding the study are clearly stated. The chapter concludes by providing the definitions of the significance, location and delimitations of the study.

Chapter 2 provides a comprehensive literature review of the study, covering background areas of articulation in the education context, DHET and SAQA initiatives in relation to articulation, curriculum mapping, existing articulation enablers and arrangements, as well as the challenges hindering successful articulation from TVET to HEIs. The chapter closes by describing the conceptual framework of the study.

Chapter 3 gives a description of the research methodology to be used to find answers to the questions guiding the study to achieve the defined research objectives and goal.

Chapter 4 gives a representation of research data and findings arranged in themes identified during the data generation and data analysis processes.

Chapter 5 will provide the conclusions drawn from the study, followed by the implications of the study for different stakeholders and future research recommendations.

1.11. SYNTHESIS

This chapter gave a detailed introduction about the PSET and DHET mandate and integration aspiration. The articulation in relation to the education system was briefly described followed a detailed description of the background of the research. The problem statement, goal of the research, objectives and significance were stated. This study explores procedure and policy shortcomings in articulation from TVET to HEIs in relation to the realisation of integrated PSET system and seamless articulation. The next chapter will provide comprehensive literature review.

CHAPTER 2

LITERATURE REVIEW

2.1. INTRODUCTION

This chapter provides a synthesised critical review of related literature on the different studies investigating the barriers that lead to the articulation gaps that hinder the realisation of an integrated PSET system. Quality frameworks and sub frameworks, together with DHET articulation policy and related documents provide an insight on many related issues but fail to address poor articulation in PSET. There also seems to be a lack of articulation awareness within TVET colleges. This was stated by Makura and Nkonki (2017) in that accessing HEIs is still an issue that is confronting students from historically disadvantaged backgrounds, like TVET, such that they are challenged by different forms articulation. The authors further emphasise the TVET articulation challenge by labelling it as not a salient affair for many students. The difficulty in articulation from TVET to HEIs, is expressed by Needham (2019) highlighting that the PSET system is still pervaded with systematic and conceptual inconsistencies and challenges leading to PSET users experiencing a lack of articulation and coherence in the NQF Sub-frameworks. The study will specifically look at policy shortcomings that lead to articulation gaps, which deter articulation from TVET to HEI. It will look at factors affecting poor articulation from TVET to HEIs and the level of articulation awareness. The literature review will be categorised into different themes. The areas will include defining articulation and its forms in an educational context, the role of DHET and its entities and the scholarly work in the articulation field in South Africa.

2.2. DEFINITION OF ARTICULATION IN THE EDUCATION SYSTEM CONTEXT

Articulation has been seen in different settings in relation to its purpose in the education system. The World Economic Forum defines articulation as

the mechanisms that enable student mobility within and among the institutions that comprise the tertiary system, for example, academic credit accumulation and transfer, recognition and equivalence of degrees, recognition of prior learning, and so forth” (Ng’ethe et al., 2008).

Articulation is defined by the DHET (2017a) as the practice of connecting two or more qualifications together by constructing or finding the content relationships between them. Blom (2013) further defines articulation as a systematic coordination of course and programme content within and between educational systems or/and institutions facilitating the continuous and efficient progression of students from grade to grade, school to school, and from school to the world of work. Blom (2013) argues that the simple definition of articulation, that is the process that enables student mobility for them to progress along learning and different career pathways, hides the important part. This is that, to achieve an articulated system, there should be much deliberate and considered effort. This is to say that articulation is faced with barriers to realisation. QCTO (2014) defined articulation as the interactions and associations between the components of the NQF signalling a qualification capacity of giving access or partial access to another related qualification, allowing learning achievements to be recognised in different contexts. The common component in all these definitions is the mobility of students' enablement allowing students to move between qualifications and institutions. Another key point in articulation definition is that it should enable students' progression and recognition of prior learning, thereby enhancing lifelong learning. Different types of articulation are defined by Blom (2013) and SAQA (2020) as follows:

- Vertical articulation, which refers to the movement of students between different components of a learning system and different NQF levels. This is sometimes referred to as inter-institutional articulation.
- Horizontal articulation referring to the students' movement between different components of a learning system from one course or programme or department to another at the same NQF level. This is sometimes referred to as intra-institutional articulation.
- Diagonal articulation is like vertical articulation, except that it may include an additional period of learning or additional subjects may be required to qualify for the desired programme offered at an HEI, to a different NQF level. This form of articulation is like admission to a foundation or extended curricular programme that is usually accessed by students not meeting the requirements for mainstream admission.

Articulation is broadly understood using different categories or forms that are: specific articulation, systemic articulation, and boundary-crossing practices (Lortan et al., 2017). Systemic articulation is based on legislation, national policy and formal requirements in PSET. Specific articulation, known as articulation in practice, is based on the formal and informal agreements, like Memoranda of Understandings, between entities in PSET. Boundary-crossing practices refers to the adoption of boundary crossing practices including gap reduction between the development of policies related to articulation pathways and implementation, the strengthening of pathways, the enhancement of opportunities of access and progression alongside these pathways, education and training quality, appropriate prompt career development advising, and other various interventions needed to support learning. These types of articulation demonstrate the effort needed or activities to performed to successfully implement seamless articulation in an education system, including policy development, agreements between education institutions, and adoption of necessary practices to enhance articulation. Blom (2013) further categorises articulation into four metaphors responsible for providing conceptual framework for different kinds of articulation that can emerge in any education system. The categories are as follows:

- Articulation as a stairwell, referring to articulation between two or more learning institutions that offer programmes at different levels of NQF like TVET and HEIs which are mostly different programmes with few overlapping. This category directly relates to vertical or diagonal articulation, which refers to students' movement between different levels of the NQF, from lower, TVET college, to higher level, HEI.
- Articulation as a crossroad refers to movement of students within the same institution, intra-institutional, from one department or programme to another at the same level. This directly relates to horizontal or lateral articulation and students may need to do additional subjects that were not there in the initial programme.
- Articulation as a spirit level, this is like articulation as a crossroad. However, the student movement is between different institutions but at the same level. It contains both elements of crossroad and stairwell articulation as you may be credited with some modules covered and requested to do others that were not offered leading to study period extension.

- Articulation as a globalizer, this refers to students, graduates and staff mobility and employability at other international institutions through the standardisation of NQFs both continentally and internationally.

All these are to ensure that all students who want to move within the PSET system are not disadvantaged and will ensure credit accumulation and transfer as well as recognition of prior learning. It is also meant to ensure that students smoothly and seamlessly articulate between programmes within institutions and outside to other institutions, enabling both vertical and horizontal alignment and articulation. This research study will be focusing on vertical and diagonal and/or articulation as stairwell because it investigates articulation from TVET to HEIs, which are presented on different levels of the NQF, with few overlapping.

According to the White paper (DHET, 2013) one of DHET's highest priorities is the strengthening and expansion of the public TVET colleges, making them attractive institutions of choice for exit school learners. This is, however, not the case due to TVET offering non-degree programmes that sometimes lead to dead ends (Makura et al., 2017). It is important to ensure that those learners who did not qualify initially are able to access universities in the future, if they wish to take that route. The learners who aspire to be university graduates in future and be able to pursue higher degrees should be afforded the opportunity to do so. Students who pursued NATED programmes after completing N6 and the required work integrated learning they get the N-Diploma, NQF level 6 equivalent to National Diploma offered by Universities of Technology. Those students who complete TVET exit levels, NCV level 4 and N-Diploma should be able to progress to HEIs if they wish to further their studies there. Moreover, they should be rewarded for what they have already completed, meaning that they should progress to the next level of the NQF. Students who complete N-Diploma NQF 6 should be able to progress and be admitted enrolling for advance diploma NQF 7 if they meet the specified admission requirements.

These constraints are clearly articulated by Mantashe and Nkonki (2020) that a TVET diploma graduate at NQF 6 who spent 18 months covering a theoretical component

and another 18 months on a practical component in the relevant field (Work Integrated Learning) has difficulty in articulating to an advanced diploma in HEIs. Makura and Nkonki (2017) also articulated this, raising concerns of credit accumulation and transfer of students with TVET qualifications whereby certain HEIs are reluctant to admit NCV graduates and only awarding half credits to TVET diploma graduates through Recognition of Prior Learning (RPL), which should be only applicable to informal or non-formal learning (CHE, 2016). According to Graham, Lortan, Maistry and Warker (2017) the NCV and/or the N-diploma graduates should be the backbone of student transitioning from TVET colleges to HEIs' degree or diploma programmes, however, in reality, lack of curriculum alignment often impedes this. Students who complete NCV level 4, N3 NQF 4 and TVET diploma NQF 6 should be admitted in HEIs if they meet the specified admission requirements, vertically articulating to the next levels of the NQF.

There is an injustice when it comes to access to HEIs from TVET especially when compared to NSC. The higher education admissions in South Africa has always been largely centred on matric or Grade 12 students, which is a school leaving certificate (Mabila et al., 2006). This is still the case now, even though there is an articulation policy developed to address such injustices or complaints. This injustice has been further confirmed by the government gazette on minimum admission requirements for higher certificate, diploma and degree programmes requiring NCV level 4 of the NQF that, indeed, admission requirements for college NCV graduates are higher than those of matric NSC (DHET, 2018). A desktop comparison of NCV versus NSC admission requirements indicates that NCV requirements are higher. This, therefore, means that access opportunities to higher education institutions are not equal, suppressing TVET level graduates. This injustice is well articulated by Mantashe and Nkonki (2020) that the admission requirements, for NCV, to six diploma programmes, of a particular HEI under study, are higher than those of NSC irrespective that both qualifications are at NQF level 4 and exit level programmes. The following is an example of admission requirements for three engineering programmes from two different universities for both NSC and NCV.

Programme	University A (UoT)		University B (Comprehensive)	
	NSC	TVET (NCV/N3/N4)	NSC	TVET (NCV/N3/N4)
Mechanical Engineering	APS Score of 30 using Method 2 English (First language) 4 (50%) Mathematics 4 (50%) or Technical Mathematics 5 (60%) Physical Science 4 (50%) or Technical Science 5 (60%)	English (5) (60%), Mathematics (5) (60%), Engineering Science (3) with 60% OR E (N4) 60% M (N4) 60% ES (N4) 60%	English (Home or Additional Language) 4 (50-59), Mathematics 4 (50-59), Physical Science 4 (50-59)	Pass all 3 Fundamental subjects with 50% and above (English, Life Orientation and Mathematics). Pass with 60% and above in 3 of the Vocational subjects: Engineering Processes, Engineering Technology, Fitting and Turning, Automotive Repair, Engine Fabrication-Boiler Making or Sheet Metal worker, Welding, Refrigeration and Air Conditioning Process, Electro-Technology, Computer Integrated Manufacturing, or

				Mechatronics Systems.
Electrical Engineering	APS Score of 30 using Method 2 English (First language) 4 (50%) Mathematics 4 (50%) or Technical Mathematics 5 (60%) PS 4 (50%) or Electrical Technology 4 (50%) or Technical Science 5 (60%)	English (5) (60%), Mathematics (5) (60%) At least 3 of the following: Engineering Science (3) with 60%, Electrical Principles and Practice (3) with 60%, Electronic Control and Digital Electronics (3) with 60%, Electrical Workmanship (3) with 60% OR Mathematics (N4) 60% Engineering Science (N4) 60% Electrotechnics (N4) 60% Digital Electronics (N4) 60%	English (Home or Additional Language) 3 (40-49), Mathematics 4 (50-59), Physical Science 4 (50-59)	Pass all 3 Fundamental subjects with 50% and above (English, Life Orientation and Mathematics). Pass with 60% and above in 3 of the Vocational subjects: Physical Science, Electrical Principles and Practice, Electrical workmanship, Electronic Control and Digital Electronics, Electrical Systems and Construction or Electro-Technology

Civil Engineering	APS Score of 30 using Method 2 English (First language) 4 (50%) Maths 4 (50%) or TM 5 (60%) Physical Science 4 (50%) or Technical Science 5 (60%)	English (5) (60%), Mathematics (5) (60%), Engineering Science (3) with 60% OR Mathematics (N4) 60% Engineering Science (N4) 60%	English (Home or Additional Language) 4 (50-59), Mathematics 4 (50-59), Physical Science 4 (50-59),	Pass all 3 Fundamental subjects with 50% and above (English, Life Orientation and Mathematics). Pass with 60% and above in 3 of the Vocational subjects: Construction Planning, Construction Supervision, Materials, Concrete Structure, Roads OR An N3 certificate with C-symbols for at least four (4) subject including Mathematics and Engineering Science or D-symbol at N4 level of 3 Civil Engineering subjects + Mathematics, as well as the language
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				requirements for Senior certificate.
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Table 1: Comparison of NCV vs NSC Admission Requirements (Data Extracted from the Faculty prospectus of two HEIs (UoT and Comprehensive))

The table above depicts the admission requirements for three engineering programmes from two HEIs, comparing Matric and TVET qualifications requirements. Indeed, the requirements from TVET qualifications are higher than those of Matric in majority. Specifically, and notable, University A requires level 4 NSC Mathematics, and requires level 5 for NCV Mathematics. This is despite the notion that the study conducted by Umalusi found that, in relation to Mathematics, NCV levels 2, 3, and 4 covered more content than NSC levels 2, 3, and 4 (HRDC, 2014b). Another observation is that TVET qualifications have additional requirements, for example, all three programmes require only three subjects from NSC while in TVET NCV they require six compulsory subjects (three fundamental subjects plus three vocational subjects at 60%). This was echoed by Mantashe and Nkonki (2020) describing it as a constraint and unjustifiable discrepancy considering that NSC required additional subject are, in many cases, not even related to discipline articulating to, while NCV vocational subjects are related, to a larger extent, to the discipline articulating to. Mantashe and Nkonki further described this as an unfair advantage to NSC and a disadvantage to NCV graduates. It is also noted that, sometimes, the engineering science is required as part of NCV requirements even though it is not part of NCV PQM, rather NATED PQM. There is also a variation between two HEIs in terms of NATED requirements, one requires N3 while other one requires N4 as entry requirements. N3 is considered Matric equivalence at NQF level 4, unless there are amendments by NQF.

2.3. DHET AND SAQA INITIATIVES

The DHET and SAQA have, over the years, engaged in initiatives to address articulation problems in PSET. The DHET provided strategic direction and policy initiatives to improve articulation in PSET. The White Paper DHET (2013) articulates that the establishment of a coherent and coordinated post-school system is a major

part of ensuring that there is an easy articulation between different parts of the PSET. The DHET articulation policy (Draft Articulation Policy, 2016) was developed to enable the implementation of credible articulation in PSET ensuring that articulation transpires between and within the three qualification sub-frameworks. It actually outlines the roles and responsibilities of different stakeholders responsible for enabling articulation in PSET. These are the DHET, SAQA, the Quality Councils, education and training providers like HEIs, TVET and CET colleges and SETAs as well as other professional bodies (Bolton et al., 2017). The articulation baseline study supports this and adds that articulation policy ensures that institutions collaborate on the development of pathways and that support is offered to students about possible articulation pathways (Lortan et al., 2017). Both documents, White Paper and Articulation Policy, together with the baseline study on PSET articulation by SAQA are a clear indication of seriousness and determination by the DHET to address articulation issues in the PSET sector.

The DHET is working with SAQA to ensure that articulation is a success in the PSET sector (DHET, 2013). SAQA is specifically responsible for the implementation and further development of the National Qualifications Framework, which is a single integrated system responsible for classification, registration, publication and articulation of quality-assured national qualifications and part-qualifications (CHE, 2013; SAQA, 2019b). This is further expressed in SAQA (2017) that the NQF was formed as the means of integrating the education and training system in SA, including PSET, and to enable lifelong learning. It is further articulated that the NQF was formed to ensure that articulation is possible without learners reaching dead ends in their PSET studies. The articulation to HEIs has proved to be difficult to implement seamlessly; hence the call on articulation by design, which says articulation of learning pathways should form part of qualification design and purpose to enable CAT (SAQA, 2014). This is a basic principle of CAT defined by SAQA to improve articulation and CAT, that planning for articulation is key and this may include having articulation arrangements and agreements defined as inter-institutional partnerships and agreements with colleges (Mantashe & Nkonki, 2020). Graham, Lortan, Maistry, and Warker (2017) assert that curriculum structures should be in place to ease articulation transitions from TVET learners to HEIs and it should be a routine occurrence.

Terblanche (2017) argues that the promotion of NQF has failed to address the challenges of articulation with universities, to date, still reluctant to admit students who graduated from TVET college programmes such as NCV, Report 191, and Occupational Programmes. The articulation by design should also incorporate curriculum development that is aligned to enable articulation in the PSET called curriculum mapping.

2.4. CURRICULUM MAPPING

To ensure that articulation is a reality, it should be ensured that the curriculum is designed to permit articulation between succeeding levels of the National Qualifications Framework (NQF) such that NCV Level 4 can have access to a university diploma or degree, a process called curriculum content mapping. It has been said that the poor articulation of curriculum between the NCV and HEIs restricts the TVET students' mobility and progression to HEIs (Branson et al., 2015). Curriculum mapping is deemed a good method to enable articulation pathways design to related fields from TVET colleges to universities, enabling identification of gaps, overlaps and strengths in the curriculum (Nel, 2013). Byrnes, Paez, Blacker, Jackson, and Dwyer (2011) add that curriculum mapping should be a compulsory exercise and further used to motivate credit accumulation and transfer. These authors agree that both TVET colleges and universities should embrace curriculum mapping to be used for the purposes of credit arrangements and agreements and to improve transparency into gaining access to qualifications. Based on these arguments, it is clear that curriculum mapping requires collaboration between TVET and universities to enhance the success of articulation and eliminate biases associated with the articulation process. Curriculum mapping would be an integral part of articulation arrangements and agreements (AAAs) that are defined by Mantashe and Nkonki (2020) as formal and informal partnerships, collaborations and arrangements between universities and colleges that are strategic, long term and curriculum-related.

There are concepts related to curriculum mapping defined by Watermeyer (2012) as curriculum alignment and articulation, which are regarded as time-consuming complex processes as they require collaboration and interaction between all stakeholders

including education managers, educators and regulators. Curriculum alignment is defined as a process of linking individual entities or events along a learning continuum to ensure coherence and consistency between the intended outcomes and it shows relationships between content coverage and validity, and opportunities to learn further (Watermeyer, 2012). Curriculum articulation refers to the connection of students' experiences being made visible which constitutes logically seamless and progressive learning path (Watermeyer, 2012). These two concepts are going deep into articulation to the lowest level where curriculum developers should collaborate to develop curriculum aligned to progression requirements. Carter, Coyle, and Leslie (2011) argue that the use of learning outcomes can facilitate movement from TVET to HEIs as it indicates students' experiences in terms of knowledge and skills gained from previous studies. The learning outcomes would make the process of curriculum mapping and alignment easier and improve articulation.

2.5. ARTICULATION ENABLERS AND ARRANGEMENTS

There are relatively progressive steps taken by stakeholders in PSET and literature provision to ensure that articulation is successful. These include policy initiatives. The DHET articulation declaration and intent through the White Paper and policy development in articulation policy accompanied by SAQA articulation research (DHET, 2013, 2017c; Lortan et al., 2017) are the promising steps towards the achievement of an articulated and integrated PSET system. An agreement was reached between the Council for Quality Assurance in General and Further Education and Training (Umalusi), the DHET, and Universities South Africa (USAF) on the recognition of NCV level 4 for admission purposes to HEIs' qualifications and programmes (Umalusi, 2016). This was in response to many universities reluctant or unable to admit NCV graduates due to generally misunderstanding the qualification and not recognising that NCV is matric equivalent at NQF 4. This was followed by the development of articulation policy as a systemic articulation tool. Then followed a gazette of minimum admission requirements to HEIs' different qualification types, Higher Certificate, Diplomas and degrees, for candidates with NCV level 4 qualification (DHET, 2018). Most of these initiatives emerged at a meeting, 'Great Debate', organised by the DHET Minister between the three sub-qualification frameworks,

Umalusi, Quality Council for Trades and Occupations and Council for Higher Education, which found that there was no basis for systemic articulation between them, other than accessing HEIs through National Senior Certificate and few from NCV(Papier et al., 2016).

In response to all these articulation enablers, all universities have defined admission requirements for TVET or NCV qualifications in their admission guides or prospectuses. This is clearly articulated by Branson et al., (2015) that comprehensive universities such as the Nelson Mandela Metropolitan University and the University of Johannesburg started developing detailed entrance requirements for NCV graduates, enabling access to their universities. Mantashe and Nkonki (2020) further support this, stating that HEIs have taken advanced steps towards the creation of articulation guidelines promoting articulation from TVET to HEIs entry programmes like a diploma. The authors further argue that articulation guidelines enable systematic articulation especially if curriculum analysis is made between TVET and university programmes (Mantashe & Nkonki, 2020). This talks to articulation by design where curriculum alignment or mapping is done prior, as part of partnership or articulation arrangement and agreement, to improve articulation.

There are current successful articulation agreements between TVET colleges and HEIs. Bolton, Lortan, Maistry, Graham, and Maistry (2017) concur that there are several articulation arrangements and agreements amongst TVET colleges, UoTs and workplaces that are effectively implemented. Mokhele (2019) states that the scope and difficulty of articulation and credit transfer arrangements have extended to include both inter-institutional and intra-institutional articulation. The point above portrays the seriousness of articulation and that its non-implantation affects all PSET education institutions. Building formal linkages between and within all PSET subsectors is one of the significant objectives of PSET that is critical to achieving articulation from TVET to HEIs especially if there exists a better alignment in curriculum or programmes (Gibbon, Muller & Nel , 2012). Gibbon, Muller and Nel (2012) further state that seamless articulation needs to be enabled by clearly coordinated quality assurance systems; formalised articulation arrangements and agreements between PSET

learning institutions; curriculum alignment in shared programmes; and NCV curriculum review and subject combinations re-structuring to enable strong articulation with many exit pathways. Blom (2013) cautioned that effort towards enablement of student mobility allowing them to progress with different learning and career pathways are clearly communicated. However, he fails to emphasise that the achievement of an articulated PSET system requires coordinated effort and deliberation between all relevant PSET stakeholders. Blom further adds that articulation promises people mobility within PSET enabling them to move or change direction with relative ease without mentioning that there are several real and perceived barriers towards the realisation of an articulated system.

There was other two concepts that were shown as strong enablers of articulation. These were relational agency and participatory management, which refers to the understanding that building a relationship between and within PSET institutions requires a deliberate effort between involved entities and an open form of management that allows all relevant employees to be actively involved and participating in the articulation initiative, respectively (Bolton et al., 2017). The authors further state that relational agency is an essential component for articulation responsible for providing guidelines on how to form, maintain and sustain constructive and cooperative relations between and within PSET educational institutions. The NABS (Lortan et al., 2017) further identified seven enablers of articulation which are: collaborative relationships development; establishment, commitment to, and implementation of formal articulation arrangements and agreements; admission criteria that is inclusive; advising on career development; specific articulation focusing on certain learning pathways or transitions; roles played by entities to achieve articulation other than education institutions; teaching and learning quality and improved learner achievement levels.

All these enablers are closely related and talk directly to the deliberate effort that is required to achieve articulation. The next paragraphs will be based on the existing successful articulation initiative in PSET.

According to Blom (2013) Cape Peninsula University of Technology (CPUT) has articulation arrangements and agreements with five colleges in the Western Cape

(WC) region collaborating on different areas that include: the articulation of TVET students to CPUT programmes; foundation or bridging or extended curriculum programmes; capacitation of TVET lecturers; RPL for TVET students; retention and throughput rate improvement partnerships at the level of NQF 5; and career advice. This is further extended by Alexander and Francke (2019) that CPUT has an existing articulation arrangement with three TVET colleges in the Western Cape that is based on Information Technology Service Management (ITSM) NQF5 certificate that is developed, including curriculum, by CPUT and delivered by the three different colleges. The authors explain that the CPUT-TVET collaboration aims to strengthen access and articulation arrangements allowing both institution types to effectively deliver on their mandates and affirm the TVET sector as not only a provider of vocational ICT training. However, it can enhance its status as a feeder pathway into the HEIs. On completion of the certificate, students can choose the employment pathway or to be admitted in CPUT Information and Communication Technology (ICT) programmes. This is part of the agreement that 20 graduates per college, who qualify for admission, will be admitted. The agreement further indicates that those TVET ITSM certification graduates who do not meet minimum requirements for admission to CPUT ICT programmes have options to be admitted through different forms of RPL exercises. Alexander and Francke (2019) states that this collaboration has been hit by unforeseen challenges initially including Fees Must Fall, assessments, unavailability of affordable relevant courseware, and teaching and learning coordination which were later resolved. Another articulation initiative based in WC is between UWC and WC TVET colleges funded by INSETA to develop an NQF 5 qualification in financial planning to be offered by WC colleges (Papier et al., 2016). The articulation agreement entails seeing all graduates from the NQF 5 financial planning admitted to Advanced Diploma Financial Planning NQF 7 in the UWC Business and Finance school to further their studies. Those who complete Financial Planning at NQF 7 to be admitted to Postgraduate Diploma in Financial Planning at NQF 8 to further their studies. There is an indication that this articulation project was a success highlighting that, from intake of 200 students', 75% completed the NQF level 5 certificate offered by TVET colleges and 25% articulated to the UWC articulation pathway.

CUT signed a MoA with TVET colleges in the Free State province in response to the DHET articulation policy to broaden access and strengthen learner movement from TVET to CUT through articulation (Mokhele, 2019). The MoA enables TVET students to vertically articulate to CUT programmes such that NCV graduates and NATED N4 to N6 graduates are admitted to first year at CUT and N Diploma graduates are admitted to Bachelor of Technology programmes, now changed to Advanced Diploma. All these articulation options are pending meeting minimum requirements of CUT and, in some cases, B. Tech students coming from TVET as per the recommendations of a particular department may add additional modules in undergraduate programmes. The MoA covers a broad spectrum as a way of increasing chances of articulation success from TVET to CUT including prior collaboration on curriculum development, sharing of infrastructure, career guidance, and capacity building for TVET lecturers to improve teaching quality. The statistics from CUT Integrated Tertiary Software (ITS) show that the number of students admitted from TVET to CUT has increased since the agreement was signed. The MoA, however, is silent on N3 graduates that CUT agrees is on the same level as NCV level 4 and NSC, at NQF level 4.

UNISA has an articulation arrangement and arrangement with both Gert Sibande and Port Elizabeth colleges allowing these colleges to offer accounting sciences higher certificate at NQF 5 (Bolton, Govender & Matima, 2019). The students are registered by UNISA, and the colleges conduct all other activities like administration, tuition, academic support and student placement. UNISA is responsible for the development side of things, including development and delivery of course material, setting and marking of examinations, approval of lecturers employed by colleges to work on this programme, setting of admission requirements while the college is responsible for tuition and necessary support and personnel. However, the articulation agreement between UNISA and the two colleges fails to clearly communicate the articulation pathway that the graduates of this programme can take, more especially vertical articulation to university.

Nelson Mandela University further simplifies articulation pathways from TVET NCV graduates by clearly specifying which university Diploma programmes an NCV

graduate can articulate to depending on NCV qualification completed (Blom, 2013; NMU, 2019). For example, a student who completed Marketing NCV level 4 can articulate to many NMU diploma programmes that are Higher Certificate in Business studies, National Diploma in Marketing or Management or Tourism Management and B. Com general extended curriculum. Another example is if a student completed Finance, Economics & Accounting NCV level 4, then that student can articulate to Higher Certificate in Business studies, Diploma programmes which are Cost & Management Accounting, Internal Auditing, Economics, Accounting, (Financial Information Systems, Management, and Inventory Management and B. Com (General) Extended Curriculum. It is worth noting that all these articulation pathways are dependent on students meeting the stipulated minimum entry requirements. It is worrisome that most engineering programmes require physical science that most colleges are not doing, as it is not compulsory. This could one of the factors that will hinder success of articulation to NMU most engineering programmes. This is based on the observation that most TVET colleges offering engineering, both NATED and NCV, do not do physical science, while it is also observed that all HEIs, through their admission requirements posted on their websites, require physical science most engineering programmes. This curriculum mismatch between TVET colleges offerings and HEIs admissions requirements is described as poor curriculum articulation and is a barrier to successful articulation (Branson et al., 2015). Blom (2013) described this barrier as a structural blockage to articulation. Hence, CHE articulates that smooth articulation requires coordination and collaboration among PSET institutions, including joint planning, joint admission programmes and structures of communication and collaboration (Council on Higher Education, 2021). It is also noted that the articulation pathways specified are for accessing admission to diploma programmes only except B. Com (General) Extended Curriculum. This may mean that there are no articulation possibilities to all other NMU bachelor programmes, which is in contravention of the agreement between the DHET, USAF and Umalusi about recognition of NCV NQF 4 as a matric equivalent (Umalusi, 2016). This agreement includes the ability to use NCV NQF 4 to apply for admission to university bachelor programmes.

There are other successful articulation arrangements between other different HEIs and TVET colleges. These include articulation arrangements between DUT and TVET

colleges in KZN in different programmes like Engineering, Management Sciences and Education (Lortan, 2019). In Engineering, specifically Civil Engineering, the students who do not meet the minimum admission requirements, more especially in Mathematics, are encouraged to enrol for Engineering N4 and N5, Mathematics and Engineering Science, in TVET colleges. After completing in college, those students are then admitted in the Engineering programme, especially if they meet the minimum requirements and this is accompanied by intense academic support. Other students who are already studying in DUT Engineering when they are struggling with certain modules and failing them are allowed to register those in colleges and apply for credits at DUT after completing them in TVET. Another articulation initiative that exists between DUT and colleges is that of NATED or N students being admitted in the BED FET Technology education.

2.6. CHALLENGES OF ARTICULATION

There are difficulties experienced that hinder achievement of integrated PSET system, which is important to enable seamless articulation between the three sub-frameworks. Maringe (2012) states that there is less incorporation and articulation between different programmes and provisions of PSET, which include TVET colleges, HEIs, CETs, SETA programmes and youth, and professional development provisions. The author further expressed the challenges that are seriously constraining articulation leading to the existing reduced articulation between PSET learning programmes, which included: no prior planning for seamless progression across the different PSET learning provisions; and different programme levels that are not equivalent between HEIs and TVET making credit accumulation and transfer between different provisions very difficult to impossible for students.

Terblanche and Bitzer (2018) reiterate the necessity of curriculum reform in TVET colleges to enable seamless articulation between TVET and HEIs and improve student mobility. This statement indicates that the outdated TVET curriculum is one of the challenges meaning, in turn, that the required curriculum change must be a vehicle to improve articulation between PSET provisions. The required curriculum change should serve as a prior planning tool for future seamless articulation, and it should

incorporate curriculum mapping and alignment. The need to change and improve the TVET curriculum implies that it is outdated especially the NATED curriculum (Bolton et al., 2017).

The gazetted university admission requirements for college NCV L4 graduates are higher than their matric counterparts (Branson et al., 2015; Papier et al., 2016). Mantashe and Nkonki (2020) further support this, stating that entry requirements into diploma programmes are considerably higher for NCV L4 when compared to National Senior Certificate (NSC) in all the diploma programmes although both NSC and NCV L4 are rated at the same level descriptor of the NQF at level 4. The authors further state that this is regardless the fact that, in NCV, all subjects, if not most, are related to some degree to the qualification articulated to as compared to NSC's two or three subjects related to the qualification of choice. This implies that, to date, there is no clarity that justifies higher university admission requirements for TVET NCV L4 graduates compared to lower admission requirements for NSC. HEIs like NMU and UJ have detailed admission guidelines for TVET qualifications where they clearly indicate that a TVET graduate from a certain programme can articulate to a certain number of specified programmes in university.

Other barriers to articulation are mentioned by Bolton et al., (2017) which are lack of articulation awareness and poor communication; colleges not being in control of qualification development; lack of articulation communication downwards to university faculty and academic departmental staff; and articulation initiative overreliance on individuals leading to them falling or collapsing when that individual leaves the organisation.

All these articulation challenges are directly linked to articulation enablements. TVET colleges not having control over their qualification development makes it difficult to perform articulation enablers like curriculum mapping and alignment or analysis, matching of learning outcomes, and articulation by design. In TVET, curriculum development is regarded as a national competency due to minimal autonomy to

broaden their programmes leading to minimal room for improvement of programmes institutionally (Papier et al., 2016; Terblanche & Bitzer, 2018). In response to this challenge, Terblanche (2017) advises that curriculum development would be best done at college level to ensure flexibility and industry responsiveness, allowing colleges to make necessary changes when the need arises while DHET play a role at a policy level. However, this would be difficult given that all colleges write common examinations. Papier et al. (2016) further support articulation by design stating that academic programmes should facilitate all forms of articulation to avoid qualifications with dead ends, and not facilitated by institutions or individuals. Lack of articulation awareness among faculty and academic staff leads to lack of participatory management and relational agency resulting in disadvantaging TVET graduates during university admissions.

Another factor is that the articulation policy and other legislative or gazetted initiatives, which form the basis of articulation within and between education systems or sub-frameworks, form part of public policy and, as such, are subjected to public policy shortcomings. Studies on public policy implementation (PPI) have looked at challenges of public policy implementation. Tebele (2016) identifies factors that contribute to policy implementation shortcomings. These factors are precision and policy design clarity; policy instrument choice; institutional design; control structures; different implementation levels like macro and micro; capacity of administration and ambiguity of policy; and social acceptance leading to compliance and acceptance. These factors encompass all policy implementation stakeholders and are mostly self-explanatory. Signé (2017) further asserts that ambiguity, frontline implementers, funding and resources, together with politics and conflicts contribute to PPI failure. Both Signé and Tebele agree on the causes of PPI failure as they both mention ambiguity, people or entities responsible for implementation, resources and policy instruments choice, and compliance and politics. The DHET formulated articulation policy clearly describes the purpose of the policy and the roles of different education entities including the DHET, SAQA, QCs, Education and Training Providers like colleges, universities, and SETAs. This means there is no ambiguity and leaves other factors responsible for the shortcomings surrounding the successful implementation of articulation policy. The roles of ETPs, on which the study is based, are well

described in the articulation policy including the development of institutional policies and support for articulation, establishment of inter-institutional and intra-institutional partnerships and arrangements and other sub-activities(DHET, 2017c; Draft Articulation Policy, 2016).

The DHET and its entities have put in place various initiatives to ensure seamless articulation between and within programmes, vertical and horizontal articulation. These include the implementation of the NQF by SAQA which aims at promotion of articulation between different qualifications, however these initiatives have fallen short or not materialised at all with students still experiencing difficulties to route between different educational levels, programmes and qualification types (Branson et al., 2015). Despite the DHET strategic and policy initiatives and research to address articulation between PSET learning institutions, there is still little or no articulation, which remains a source of frustration for TVET learners seeking vertical progression pathways to HEIs (Papier & Needham, 2018). This limits the ability of TVET students to articulate to HEIs, leaving learners discouraged from using TVET as a stepping stone to HEIs (Branson et al., 2015). This is one of reasons TVET colleges are not the destination of choice for many learners from basic education. A lot of research that had been conducted has focused on what the HEIs are doing to ensure articulation between and within programmes including from TVET to HEIs. However, there is less attention to the TVET's role in supporting and improving articulation of its students to HEIs as defined in the DHET SSS plan. This plan states that it is the college responsibility to support students in articulation pathways at exit level, NQF level 4, N3 and N6. This is called exit support in the DHET SSS model. Hence, this research will be looking at the college role in supporting articulation from both staff in SSS and student awareness to reduce barriers to articulation.

2.7. CONCEPTUAL FRAMEWORK

There are many definitions that are used by different authors to define conceptual framework. All are related. Conceptual framework refers to a network of intertwined

concepts, supporting each other, that are combined to provide a complete understanding of a phenomenon (Jabareen, 2009). According to Kivunja (2018) conceptual framework refers to the overall, logical orientation and associations of everything that forms the underlying thinking, structures, plans, practices and implementation of your entire research study including research topic identification, the problem statement, the research questions, the literature review, the theories, the methodology, the methods, procedures and instruments, the data analysis and interpretation of findings, recommendations and conclusions. Grant (2014) further defines the conceptual framework as a logical structure of connected concepts or constructs that assist in visualising how ideas in a study relate to one another. The study will be underpinned by two theories, which are collaboration and epistemic injustice.

The study draws from collaboration in which different scholars have provided many definitions of, with Chrislip (2002) defining collaboration as a jointly beneficial association between two or more entities to achieve common goals by sharing duties, authority and accountability. This begins by creating a shared vision, maybe through MoU, and joint strategies to address problems facing any entity involved. Hence, it is regarded as a relationship that assists each entity to achieve its own goals. Collaboration has also been defined as a process where independent entities interact either through formal or informal negotiation and agreements, jointly creating rules and structures to govern their associations and how to decide on the matters that united them involving shared norms and mutually beneficial relations (Thomson & Perry, 2006). Collaboration refers to the cooperation, aiding, joining, colluding, concerting, and concurring or to getting together a group of individual or organisations to pursue positive purposes and sharing a joint goal (Makura & Nkonki, 2017b). Makura and Nkonki further say collaboration is necessary in PSET although research demonstrates that it is regrettably not happening due to multifaceted challenges experienced by HEIs. Collaboration can take place between staff members, institutions, staff-students among other possibilities with the purpose of knowledge creation, sharing and dissemination and problem solving. Collaboration will further look at whether the college has some collaboration arrangements and agreements to advance the articulation to HEIs project in the form of specific articulation. All

collaboration definitions show common aspects that collaboration should be based on shared mutually beneficial vision, goal achievement, agreement and joint development of everything.

Collaboration comprises many constructs including facilitation, adaptive work, holding environment, and decision making based on consensus (Chrislip, 2002). Chrislip (2002) defines these concepts as follows:

- Facilitation refers to the management of meetings between collaborating entities to ensure a good working relationship of all groups with the assistance of a facilitator who makes it easier for stakeholders while remaining neutral. Facilitation is further underpinned by three other concepts, which are development of complex agreements from smaller less consequential agreements, breaking down of the collaboration processes or meetings unless discussion of participants is around a common activity, and a recognition that prior preparation creates a conducive group working environment.
- Adaptive work refers to the ability to adapt ways of doing things, as there are no clear right answers to public problems requiring flexible engagements.
- Holding environment refers to the provision of a safe environment, both physical and emotional, where adaptive work can prevail given that different participants are having different positions towards the initial engagements.
- Consensus based decision making refers to reaching critical agreements collaboratively not based on the majority rule.

There are other concepts of collaboration that are outlined by Thomson and Perry (2006) are governance, administration, autonomy, mutual, and trust and reciprocity. Thomson and Perry (2006) have defined each of those concepts below. Governance refers to understanding of collaboratively involved entities to jointly make decisions on the rules to govern the association and create structures for taking agreements. Administration is referring to creation of administration structures to implement collective agreements. Autonomy is referring to ability of collaborating entities to work together to achieve shared goals even though they have different identities or cultures. Mutual beneficial relationship is referring to entities ability to assist each other with many things that further assist in forging common goals like sharing of resources.

Lastly, trust and reciprocity are referring to the exchange of things between participants for mutual benefits and trustworthiness especially when both entities show the same commitment of assistance. These concepts of collaboration are further supported and well described by (Davis, 2018). The governance concept is like consensus-based decision making.

This study will draw more on facilitation, governance, mutual beneficial entities and consensus-based decision making to explore collaboration activities that are put in place and conducted by the college to ensure improved articulation to HEIs from TVET. The collaboration lens will be used to determine whether there is any collaboration, interactions or information sharing between college-concerned units, like SSS unit and academic staff and students to improve their awareness of articulation. It will determine staff and student awareness levels on articulation to HEIs with the college. The SSS unit of the college is the custodian of the DHET SSS plan within the college in which articulation to HEIs is one of its areas. Governance will also be used to determine what the college senior management has done to implement articulation policy in relation to the college's roles towards implementation of articulation policy including college articulation policy development and establishment partnerships or agreements to facilitate seamless articulation of TVET graduates to HEIs.

Another theory that the study draws from is the epistemic injustice that belongs to Marinda Fricker. Epistemic injustice is the injustice that is related to knowledge including segregation and quieting; organised misrepresentation of one's contributions; undervaluing of one's standing in communicative practices; discriminating distinctions in authority; and unjustified distrust (Fricker, 2007). She further describes the epistemic injustice as injustice of distinctive epistemic kind of in which someone is wronged specifically in their capacity as a knower. Epistemic injustice is a "harm done to a person in her capacity as an epistemic subject by undermining her capacity to engage in epistemic practices such as giving knowledge to others testifying or making sense of one's experiences" (Crichton et al., 2017). McConkey (2004) also defined epistemic injustice as a problem of recognition

concerning the process of credibility transfer upon knowledge applicants, especially to the individuals that belongs to marginalised groups who may suffer from a lack of credibility even though they deserve to be counted as credible apprehenders. The epistemic injustice will be used to explore the unfairness and setbacks they experience due to lack of recognition of their TVET qualifications by HEIs. The non-recognition of their qualification may lead them having to repeat what they have already covered in TVET, and accredited. These forms of injustices lead to a person or entity suffering from credibility deficit.

This theoretical lens will be used to explain difficulties experienced by TVET college's graduates when it comes to vertical articulation to universities. This is regardless of strategic and policy initiatives in the form of systemic articulation. The systemic articulation initiatives by the DHET and its quality entities seem not to automatically ensure and facilitate specific articulation. It is expected that government legislation in the form of gazettes would pave the way for specific articulation through agreements and arrangements like MoU and MoA. However, it seems that TVET colleges are subjected to epistemic injustices thereby leading to credibility deficit. Boni and Velasco (2019) show that HEIs, as social entities, have great potential to challenge injustices arising from epistemic imbalances. The authors further state that the general role of HEIs is to enhance human development for social well-being and equality as well as having a responsibility to transform society positively through the training of extremely competent and principled citizens and to find solutions to public or social problems among other things. The articulation of TVET graduates to HEIs is one of the long existing public problems where HEIs should be at the forefront in finding solutions. It remains to be seen whether the HEIs autonomous status is the reason of epistemic injustices that could limit or even block the epistemic capabilities, articulation to HEIs, because the DHET gazetted agreements that facilitate easy articulation but admission requirements are solely set by HEIs (Lortan et al., 2017). The National Baseline Study also noted that broken relationships could lead to epistemic injustices, which relates to the lack of recognition and respect for different kinds of knowledge involving HEIs' misunderstanding of TVET qualifications and standards.

There is a link between these two frameworks, collaboration and epistemic injustice, the performance of the one affects the other. Lack of collaboration at all levels can lead to increased epistemic injustices due to lack of understanding between the two entities, HEIs and TVET. This is more so when the HEIs do not understand TVET qualifications because that will lead to HEIs not recognising and catering for TVET qualifications. This will reduce the chances of TVET graduates to seamlessly articulate to HEIs, leading to epistemic injustices towards TVET. This clearly indicates the importance of collaboration both intra and inter institutional levels as its non-existence may severely disadvantage TVET graduates, limiting or denying them access to HEIs.

2.8. SYNTHESIS

This chapter dealt with literature review relating to the study problem domain. A detailed description of articulation in relation to education system was outlined and the initiatives taken by both DHET and SAQA in response to the articulation issue were also highlighted. Different variables that form part of articulation shortcomings were discussed including curriculum mapping and challenges. The success stories in the form of articulation arrangements and enablers of articulation in PSET were outlined. The chapter closed with a description of the conceptual framework that guides the study.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1. INTRODUCTION

In chapter 2, I discussed the literature on articulation from TVET to HEIs looking into details the articulation initiatives by PSET institutions and challenges experienced. The chapter went on to discuss the conceptual framework for the study. This chapter focuses on the research design and the methodology used in this study, including discussion of research paradigm, research design, case study, descriptions of the processes involved in participant selection, data generation tools and its subsequent analysis. These were accompanied by the discussion of rationale for the different choices of selected methods. An explanation of trustworthiness, ethical consideration and delimitation of study will also be provided. This chapter seeks to represent the researcher's preference of the research design used for gathering data from the college officials, management and career guidance officers, and students on NCV exit level, who are all role players in ensuring smooth successful articulation from TVET to HEIs.

3.2. RESEARCH PARADIGM

A research paradigm is defined as “a basic set of beliefs and assumptions that guides a researcher's inquiry, implying that every researcher approaches research with a number of interlocking and contradicting philosophical assumptions and standpoints” (Thomas, 2010, p.2). According to Terrell (2016) a research paradigm has four major components. These are: axiology; ontology; epistemology and methodology. Kivunja and Kuyini (2017) further state that a research paradigm constitutes the abstract principles and beliefs shaping the way a researcher perceives the world, and the responding interpretation and action in that world. An interpretive paradigm will be used in this research as it allows the researcher to view the world through the perceptions and experiences of the participants (Thanh et al., 2015). Interpretive paradigm is a qualitative research approach attempting to understand the nature of the way in which a phenomena exists and operates within a given context from the

participant's perspective (Timulak & Elliott, 2019). The interpretive approach makes it imperative that the data collection and analysis process is clear and satisfactory to all stakeholders. Interpretive research is qualitative in nature and collection and analysis of data can occur simultaneously (Makombe, 2017).

The interpretivist paradigm is suitable for this study for me to integrate the interest of humans to this study. It is in the interest of humans that the phenomenon under study is understood and well executed, that is that articulation to HEIs is successfully implemented to ensure a smooth transition from TVET to HEIs, vertical articulation. Goldkhul (2012) states that it is essential in the interpretive paradigm to understand the subjective meanings of persons in the researched domains. Goldkhul (2012) further states that the main idea of interpretivism is to work with the existing subjective meanings in the social world; acknowledging that they are there, being able to reconstruct them, understand them, not distort them, and be able to use them as building blocks in theory. This is to say that I should be able to use existing information and knowledge about articulation between education systems, integrating it with the viewpoints of participants to derive the new meaning of what constitutes articulation to HE.

3.3. RESEARCH DESIGN

A research design is a plan, structure and strategy of investigation considered to obtain answers to research questions or problems (Kumar, 2011). It is also described by Thomas (2010) as a logic or master plan of a study that throws light on how the study is to be conducted, showing how all of the major parts of the research study, which include samples, groups, measures and programmes are working together to address the research questions. Qualitative research methods were developed in the social sciences to enable researchers to study social and cultural phenomena (Thomas, 2010). The author further argues that qualitative research is a realistic attempt to study the everyday life of different groups of people and communities in their natural setting and is more suitable to study educational settings and processes. The qualitative approach will be used to explore student's and college staff experiences and understanding of articulation pathways using interviews and focus

groups. Antwi and Hamza (2015) further articulate that qualitative research is used for describing things seen in close range to come up with and/or generate new theories and hypotheses. It is further stated that it is used when the topic or phenomenon is less known and there is interest to further to discover or learn about it. In most cases qualitative approach is suitable for understanding people's understandings and expressing their perceptions. Qualitative methods will be a good approach to staff and students' perception and awareness of the concept of articulation to higher education. As Msiza (2016) puts it, the qualitative research approach enables an understanding of people's ways of interpreting their experiences and meanings relating to their context.

Qualitative research is thought to be a suitable choice for this study based on the aim of this study, which is to explore the policy and procedure shortcomings in the articulation from TVET to HEIs. It will investigate the initiatives that the college is performing in preparation for successful articulation from TVET to HEIs in response to articulation policy roles and responsibilities. The qualitative research is appropriate for this kind of study as it allows data to be generated from a smaller sample (Langkos, 2018). Another benefit of qualitative research is that its effectiveness depends heavily on the skills and abilities of the researcher even though the reliability of its outcomes may be questioned due to their dependence on the researcher's interpretation. Qualitative research is relevant to this study because this research is motivated to establish key empowering and impeding factors that contribute towards successful articulation to HEIs from TVET. One of the main challenges of a qualitative study conclusion relates to the matters of bias and reactivity, hence, it is vital that questions are not influenced by the bias of the researcher; ensuring that responses to interviews are appropriately captured and summarised; and the use of an approved framework for data analysis.

1.12.

3.4. CASE STUDY

Case studies have been largely used in the social sciences and have been found to be especially valuable in practice-oriented fields, such as education, management, public administration, and social work (Starman, 2013). Crowe, Cresswell, Robertson,

Huby, Avery and Sheikh (2011) further define a case study as a research approach that is used to generate an in-depth, multi-faceted understanding of a complex issue in its real-life context. The case study enables the researcher to collect data from multiple sources which include primary and secondary sources. Data can be obtained from document reviews, observations, interviews and focus groups. The case study used in this research is a college situated in the Eastern Cape, which currently experiences challenges of articulation to HEIs. This is happening even though the DHET TVET SSS plan includes articulation to HEIs as one of its exit support activities. This study will specifically use a single case study design as the in-depth investigation will be made only in one college looking at what the college has done to enable articulation of students to higher education as specified in the DHET articulation policy.

A case study is appropriate for this study because the researcher wants to gain the concrete, in-depth, contextual knowledge about articulation from TVET to HEIs, exploring crucial implications, meaning and characteristics about the case. The case is a rural TVET college suffering from low articulation rate to HEIs due to suspected policy shortcomings. Baxter and Jack (2015) indicate that a case study facilitates the exploration of a phenomenon in its context using different data sources, ensuring that the phenomenon is explored using different lenses allowing for it to be understood and revealed in multiple facets.

3.5. SAMPLING

In qualitative research a sampling plan is required to determine the number of interviews, focus group interviews and observations that are required to answer the research questions (Moser & Korstjens, 2018). This depends on the data generation tools used in the research. Non-probability sampling is used in qualitative research, where the researcher purposefully seeks out participants that are deemed the best sources of information required (Ragab & Arisha, 2018). Participants will be members of staff, members of the SSS unit, Career Guidance Officers, Senior Manager, and selected students from different campuses of the college. The sample size and sample criteria have a great influence on the outcome or the goal of this research. To achieve

the goal of this research, purposive sampling is an applicable technique where participants were deliberately chosen to advance the purpose of this research (Ragab & Arisha, 2018). The selected participants fully understood the purpose of this study and the researcher will collect data from the selected sample according to their availability and willingness to participate. This was to ensure that participants are fully aware of the research purpose and willingly participate, as they are the primary source of information required to respond to the research questions. The total number of participants was 31 consisting of one member of a college broad management, four CGOs and 26 students to make four focus groups from four different campuses of the College. The three students focus groups consisted of 6 participants, with one students focus group consisting of 8 participants. The one with more participants was based on the number of participants who available and willing to participate and not based on any other reasons. The students selected were students on NCV level 4 and those on NATED N4 to N6 but articulated from NCV.

3.6. DATA GENERATION TOOLS

Data generation is a logical information gathering and measuring process from a selected number of sources to gather comprehensive and precise data about the problem domain. The study followed two approaches for data generation, categorised as primary and secondary data (Osang, Udoimuk, Etta, Ushie & Offiong, 2013). The secondary data collection method will comprise desktop research and review of documents, policies, strategic documents like Whitepaper, government gazettes, and agreements, of the DHET and its quality entities. Most of the secondary data will be drawn from a literature review. The primary data refers to data generated from research participants to assess their first hand experiences and attitudes about the problem domain (Kumar, 2011). The examples of primary data generation methods are interviews, questionnaires, focus groups, observations, experiments and others. This study used interviews and focus group interviews to generate primary data.

3.6.1. Focus groups interviews

Focus group are regarded as one of the most valuable tools for generating qualitative data (Dilshad & Latif, 2013). They are suitable for data generation from a large sample

of participants and it allows the researcher to increase the size of the sample of the qualitative studies (Dilshad & Latif, 2013). This method is suitable in this study, as data generation will be carried out with a large sample. The focus group discussions were used to collect data from the students from four campuses of the college. The other participants will be a focus group for CGOs who are selected based on their role of advising students on academic matters including exit support. Articulation to HEIs is also part of exit support of DHET SSS plan.

Focus group interviews are often used in the qualitative approach to gain an in-depth understanding of social issues aiming at obtaining data from a group of individuals that were selected on purpose (Nyumba, Wilson, Derrick, & Mukherjee, 2018). The composition of focus consists of a group of individuals that are homogeneous with a commonality in which a researcher is interested (Krueger & Casey, 2015; Moser & Korstjens, 2018). Viji and Benedict (2014) support this, stating that focus groups are a good way of gathering people together with comparable experiences and backgrounds for discussion on a specific topic of interest guided by a moderator who introduces topics and facilitates discussion. The role of moderator, the researcher, is to collect information on individuals' feelings and opinions as the discussion of issues and experiences on a given phenomenon continues (Arcelay-Rojas, 2018). The author further states that the focus group number depends on many variables, which are the topic, amount of information and questions. In this research, students were carefully selected from exit levels, which is where the exit support applies and CGOs who are responsible for facilitating that exit support in the form articulation to HEIs. The exit level students are faced with taking decisions of what to do after completing a certain exit level, in this case NCV NQF 4.

Different researchers have different views on the size of focus groups. It is not major differences but variations. Krueger and Casey (2015) categorised the traditional recommended size of focus groups based on commercial and non-commercial purposes with commercial recommended between 10 to 12 and 5 to 8 for non-commercial. According to Creswell (2012) focus groups are made up of four to six people where the facilitator asks the questions and elicits the responses of group

participants. Moser and Korstjens (2018) further indicate that focus groups generally comprise 6 to 12 participants. The authors further state that smaller focus groups are more suitable as they allow more participants to voice their views. The focus groups in this study will comprise 6 participants, which are NCV NQF 4 exit students from four campuses and one focus group consisting of CGOs. The research conducted is educational research for knowledge creation and qualification purposes, so it falls to non-commercial category.

3.6.2. Interviews

Interviews were conducted as a method of data generation. They are suitable for this study because they provide in-depth insight into the research problem (Harris & Brown, 2010). This is supported by McGrath, Palmgren, and Liljedahl (2019) stating that interviews in qualitative research are tools for data generation that can be used with many other methodological approaches and are preferred for understanding of interviewee's personal viewpoint of the researched phenomenon. As such, interviews were used to probe the college's position on articulation to HEIs. The purpose of the interviews was clearly explained as it is important that all participants understand it well. Moreover, interviews are subjective and classified into four types: open-ended or unstructured, semi-structured, structured, and group interviews. These classifications will be discussed in detail in the methodology chapter of the thesis.

Interviews can take different forms, face-to-face, telephone, and online. In this research, face-to-face interviews were conducted. a face-to-face interview refers to interaction between two individuals, participant and interviewer, focusing on different areas from personal to present and past issues(Moser & Korstjens, 2018). There are three different types of interviews as defined by Ryan, Coughlan, and Cronin (2009) which are standardised or structured, semi-standardised or semi-structured, and unstandardized or unstructured. Structured interview is when the interviewer sticks to the planned questions without any deviations outside the topic and are similar in nature to questionnaires. The semi-structured interview has questions planned. However, it allows for deviations during the interview though the use of open-ended questions authorising unprompted exploration of issues that the interviewee raises. Lastly, in

unstructured interviews, there are no questions that are pre-set, but just a conversation about a topic with the interviewer following the direction of response of participants. This study will employ a semi-structured interview approach whereby the researcher used pre-set interview questions allowing deviations during the interview for further probing.

3.7. DATA ANALYSIS

Gilliland (2006) defines data analysis as the process of transforming raw data into evidence-based interpretations that form the foundation for published material and is at the centre of credible qualitative research (Maguire & Brid, 2014). The generated raw data (for example notes, audio or video recordings) by the researcher of this study will be transformed into readable and usable text format. The raw data generated from interview and focus groups will be cleaned up and categorised into data subsets.

This study used thematic analysis which is described by Maguire and Brid (2014) as a process used to identify important and interesting themes and patterns from the collected qualitative data and use them to answer the research questions. Braun and Clarke (2014) further indicate that thematic analysis is conducted in six steps, which are familiarity with the data; generating initial codes; identify themes; reviewing of the themes; definition and naming of themes and production of report or write-up. The researcher followed these steps when analysing generated qualitative data. This included verbatim transcription of all recordings from interview and focus groups sessions as a way of familiarising himself with the data and moving through all the remaining five steps. The researcher, firstly, familiarize himself with the data by reading, and rereading the data and the notes taken during data generation. The researcher started grouping responses by highlighting them with different colours and did coding. The researcher compared the codes, and new codes were generated with other adapted. The related codes were used to formulate themes and subthemes and later reviewed them. The researcher, then, last reviewed the themes, modified them and ensured quality. The steps followed above when analysing data are informed by thematic analysis six-phase model which are as follows (Braun et al., 2016):

Phases 1 to 2 - Familiarization and coding.

Phases 3 to 5 - Theme development, refinement and naming.

Phase 6: Writing up.

One of the advantages of thematic analysis is its flexibility as it is a method not a methodology. As such, it can be used with many frameworks (Braun & Clarke, 2014; Maguire & Brid, 2014). To improve the trustworthiness of the data analysis process for focus groups, the researcher will use three measures, credibility, transferability and dependability (Nili, Tate & Johnstone, 2017).

3.8. TRUSTWORTHINESS

This research used four strategies to ensure the trustworthiness of this study. These are credibility, transferability, dependability, and confirmability (Guba, 2012; Korstjens & Moser, 2018; Krefting, 2008). Credibility refers to the ability and confidence of data and process analysis in addressing the area of focus. Transferability refers to the enablement and ability of other researchers to use the research findings in other research projects. Dependability refers to how many changes and alterations are made during analysis of data. Confirmability refers to ensuring that the interpretations and findings of the researcher are clearly derived from data demonstrating how the research arrived at conclusions and interpretations and is dependent on the achievement of credibility, transferability and dependability.

The credibility of this study has been achieved through triangulation of data generation methods which comprised both interview and various focus group discussions. Shenton (2004) asserts that triangulation involves using different methods, mainly observation, focus groups and individual interviews, which are regarded as major data generation strategies for most qualitative research. The author further asserts that ensuring honesty from participants through ensuring voluntary participation and understanding that no payment is made for participation also ensures credible participants. The research participants were drawn from various levels including students who are recipients of articulation, operational staff in the form of CGOs who

are responsible to work with students regarding articulation and management responsible for strategic initiatives regarding articulation such as partnerships and policies. The use of different participants from different levels meant that our data sources were triangulated which ensured that different experiences and viewpoints of different levels were verified against each other. Another method that was used was transparency in terms of explaining to participants that participation in this is voluntary with no remuneration to be expected which left me with participants that are willing to and genuinely participate.

It is difficult to ensure transferability in qualitative research studies because of the small samples that characterise these studies. However, the qualitative research can indicate to us what is possible even though we cannot generalise using those findings as its logic does not have huge statistical probabilities that can enable generalisation (Timulak & Elliott, 2019). The small number of research participants in qualitative research, together with different specific contexts make it difficult to apply and/or transfer the findings to other studies (Mnisi, 2014). However, the data was transcribed verbatim and thick descriptions were used. Also, the study forms part of a bigger research area of articulation that the DHET, SAQA and QCs are continuously conducting.

Dependability addresses the issue of reliability through having a detailed research design which can act as a prototype model for any other researcher who may want to repeat the research with similar participants in a similar context and expect same or similar results (Shenton, 2004). This study has a detailed research design clearly explaining the different components of research design including data generation and analysis tools and put in a logical manner. Confirmability is achieved when different researchers recommend and support the findings as the product of the inquiry free from any biases of the researcher (Mnisi, 2014). The use of triangulation also applies to confirmability in the form of reducing researcher biases. The detailed research methodology also assists in gaining confirmability in that the person reading will be able to trace the process followed to get the findings. The findings will be based on the

experiences of participants as all data generation sessions were recorded for reference.

3.9. ETHICAL CONSIDERATION

The research conformed with the ethical principles of honesty, openness, prudence, morality, confidentiality, and anti-discrimination (Žukauskas et al., 2016). This study also conformed to principles of voluntary and informed consent, confidentiality of participant shared information, research participants anonymity, and beneficence to ensure that participants are not harmed (Halai, 2006). The researcher assured all participants that information acquired shall be treated with privacy and confidentiality and their names shall not be mentioned. Therefore, pseudonyms were used for people's real names and real names for the sites to ensure anonymity. The participants were informed about their rights to withdraw if they felt uncomfortable at any point in the research without being penalised or disadvantaged. All research participants were informed of the research aims and objectives. The study also adhered to the University of KwaZulu-Natal ethical code of conduct. A formal written ethical clearance was obtained from UKZN Ethical Clearance Committee. However, a permission in a form of well-informed written consent was obtained prior to data collection. All consent forms distributed to participants for data collection purposes make reference to this permitted ethical clearance.

A participant-centred approach was adopted in order to minimise ethical issues that may arise to ensure that research participants are at the centre as they make a significant contribution to the research (R.D.C, 2018). This research used four strategies to ensure the trustworthiness of this study. These are credibility, transferability, dependability, and confirmability (Guba, 2012; Korstjens & Moser, 2018; Krefting, 2008).

3.10. LIMITATION AND DELIMITATIONS OF STUDY

Delimitations of a study is defined by Simon and Goes (2013) as the features arising from limitations set by boundaries of the scope of the study and referring to conscious exclusions and inclusions made during research design. In this study the horizontal

articulation inter or intra institutional were not covered as there are many other factors involved, which are beyond the scope of this research, to achieve such articulations. The study did not include the NATED (N3) engineering programmes for articulation purposes to HEIs as these programmes have an existing common challenge of not doing English which is a requirement in all HEIs as a Language of Teaching and Learning leading to a requirements mismatch. The study did not look at the HEIs side in terms of articulation arrangements they have except as part of literature. The researcher has based all arguments on vertical articulation from TVET to HEIs.

3.11. SYNTHESIS

This chapter presented and discussed the choice of research design and methodology for the study from research paradigm to data generation and analysis tools. Qualitative research approach was chosen as an appropriate research design approach using case study, interview and focus group discussions as data generation tools. Thematic analysis was a chosen data analysis tool. The achievement of the trustworthiness and ethical consideration of the study were also discussed in detailed.

CHAPTER 4

FINDINGS AND DISCUSSIONS

4.1. INTRODUCTION

The previous chapter discussed the research methodology that was used to respond to the research questions that informed this study. The researcher gave a description of the research paradigm, and the design of choice and sample was explained, then data production and analysis tools were outlined together with trustworthiness and ethical considerations of the study.

This section presents the analysis of the interview and focus group discussions that were conducted on four sites of the College and administration block. The campuses were Campus A, Campus B, Campus C and Campus D interviewed in that order, with no specific reason but based on the availability of participants. The focus group interviews were conducted amongst students who are at the exit level of NCV and NATED who came from the NCV stream. The interview was done with the member of management based in the admin. In this data representation participants and campuses will be called with labels. The campuses will be Campus A, Campus B, Campus C, and Campus D based on the sequence of focus group discussions. The participants will be labelled using the alphabetical letter used to label a campus together with a number corresponding to the first participation in the focus group discussions, for example participant 1 of Campus A will be A1 while participant 1 of Campus B will be B1, participant 1 of Campus C will be C1, participant 1 of Campus D will be D1 and the member of management will be referred to as M1. The participants of the SSS staff will be labelled as FGD P1, FGD P2, FGD P3, and FGD P4. The following is a tabular representation:

Interview with member of BMM	Focus Group discussion with CGO	Campus A Participants	Campus B Participants	Campus C Participants	Campus D Participants
M1	FGD P1	A1	B1	C1	D1

	FGD P2	A2	B2	C2	D2
	FGD P3	A3	B3	C3	D3
	FGD P4	A4	B4	C4	D4
		etc.	Etc.	Etc.	Etc.

TABLE 2: Coding of Participants

There were four themes that transpired during data analysis, and these are clearly outlined below with their subthemes or subcategories. This, then, means that each section will give a discussion of each theme together with the subthemes. The following themes emerged during data production with the participants and during data analysis.

- College initiatives and activities to enhance articulation
 - Management perspective
 - Staff perspective
 - Student perspective
- Awareness of articulation to HEIs.
 - Staff awareness
 - Students' awareness
- Student perception towards articulation to HEIs
 - Rationale for college selection by students.
 - How TVET college students perceive articulation to HEIs
- Challenges of articulating from TVET college to HEIs.
 - Curriculum mapping
 - Lack of knowledge about articulation into HEIs career pathway
 - Misconceptions about articulation from student's perspective

The following is the tabular representation of themes and subthemes:

THEMES	CATEGORIES
Theme 1: College initiatives and activities to enhance articulation.	<ul style="list-style-type: none"> • Management perspective • Staff perspective • Student perspective
Theme 2: Awareness of articulation to HEIs.	<ul style="list-style-type: none"> • Staff awareness • Students' awareness

<p>Theme 3: Student perception towards articulation to HEIs.</p>	<ul style="list-style-type: none"> • Rationale for college selection by students. • How TVET college students perceive articulation to HEIs
<p>Theme 4: Challenges of articulating from TVET college to HEIs.</p>	<ul style="list-style-type: none"> • Curriculum Mapping • Lack of knowledge about articulation into HEIs career pathway. • Misconceptions about articulation from student perspective

TABLE 3: Themes and Subcategories

4.2. COLLEGE INITIATIVES AND ACTIVITIES TO ENHANCE ARTICULATION

The theme deals with what is done by the college in support of successful articulation into HEIs looking at different perspectives including management, staff and student perspectives. The questions that were asked were: **What are the institutional/college initiatives in support of or to enhance articulation in terms of policy and articulation partnerships? What are the programmes or activities offered or conducted by the college that enable articulation to HEI academic programmes?**

Under this theme, the data suggest that the college is not engaged in any formal activities and/or initiatives that are meant to enhance articulation of college exit students to HEIs academic programmes. This suggests that, at the time of interview, there were no institutional policies nor partnerships with HEIs that are meant to enhance articulation to HEIs. It also transpired that there are no formal activities, in the form of workshop or so, meant to equip exit students with this articulation route leading to lack of information and understanding about the process of articulation from TVET to HEIs. It also transpired that the staff who are supposed to advocate and

increase awareness about this articulation pathway also have no understanding of this articulation route thereby calling for capacitation on articulation to HEIs from TVET.

4.2.1. Management perspective

Under the management perspective the research looked at whether the college has provision of policies and partnerships, which are regarded as a management role and responsibility, and are there to support and enhance articulation of TVET students who are in their exit levels into HEIs.

4.2.2. Policy provision

This is what the participant M1 who is a member of the college board management had to say in response to the question of college initiatives regarding internal policies on articulation during the one-on-one interview:

I will be lying Wakeni on that one, I will be lying in the sense that the reason we met with Prof. ABC (Vice Chancellor and Principal of the neighbouring university) as College Principals in the EC and we signed an MoU and then we came back and then we discussed with the relevant managers, then the initiative for us as the college to meet with Prof. EFG (Campus Rector of one of the campuses of the neighbouring university) to agree on having a plan on how to implement the MoU.

This was to say that there is an existing MoU between this neighbouring university and six public colleges in the province that needed relevant managers to act on it for the college to benefit on that MoU's areas of collaboration. When the researcher further probed whether articulation to HEIs was one of the areas of collaboration, the participant responded as follows:

I would be lying if I can say we have articulation policy in the college. I would be misleading you if I say there is an initiative that has been done. By this interview, I think you are reminding me that we have a policy gap which needs the attention of relevant units, Academic and SSS, to step on the groundwork that has been already laid with the neighbouring university, university XXX, as we have an existing MoU.

This served to reiterate that the existing MoU with the neighbouring university did not include articulation as one of the areas of collaboration defined in that MoU and that there is no articulation policy in place in the college. In concluding remarks regarding the availability of articulation policy, the participant said the following:

There's no nothing, there's not even a draft, there is not even the one that is supposed to be reviewed.

The participant responses were an indication or suggestion that the college does not have institutional policy to drive articulation enhancement in the college. In reference to policy issues regarding articulation, it was stated that there was no clear policy on issues of articulation from TVET to HEIs (Makura & Nkonki, 2017a). Makura and Nkonki further mentioned the importance of having a constantly reviewed and aligned institutional policy that promotes articulation, and which would facilitate articulation in developing settings like South Africa. This is in disregard of what Matshoba (2019) terms as an indication of clear policy intentions to ensure that articulation exists between NCV level 4 and HEIs qualifications in reference to the White Paper for PSET. Study that was conducted on easing the transfer of students from TVET colleges to HEIs programmes, it was stated that articulation from TVET colleges into HEIs requires detailed policies for credit transfer to take place from TVET students to HEIs academic programmes (Carter et al., 2011). This notion, policy requirements, was further supported by Mantashe and Nkonki (2020) that institutional policies and articulation documents should act as structures and systems that enable, not constrain, articulation by providing guidance to officials dealing with articulation issues.

4.2.2.1. Articulation partnerships

The research also looked at whether the college has some inter-institutional partnerships and collaborations that are specific for articulation purposes between the college and HEIs. In response to the question of articulation partnerships, participant M1 responded that:

At the moment, there is no signed agreement as I have said that there have been initiatives, not only with university XXX.

This statement was suggesting that there are no formal arrangements and agreements for articulation in the form of signed MoU and referred to the university XXX signed MoU as an example of initiative, even though that existing MoU with university XXX did not include articulation specifically as one of collaboration areas. The participant further indicated that, even though there is no formal agreement or partnership with HEIs to address and enhance articulation, there were initiatives that have been started with HEIs for the purposes of articulation. The following is what has been said by participant M1:

University YYY is eager and willing to enter into memorandum of agreement with the college. The university ZZZ is also willing. I personally went to university ZZZ but for lecturer development. But I think I did also have a meeting with the university people on the issues that relates to articulation. So, we also had a meeting with the university JJJ, because we are having these students that are doing primary agriculture NCV programme that was initiated by the fact that that a particular student was not the only student who wanted to go to university JJJ, but there were obstacles.

This suggests that articulation partnership talks were started by the college and also highlights that some of these initiatives were initiated as a response to challenges that were experienced by students who were trying to articulate to a university, primary agriculture students, and those that showed interest in articulating to HEIs after completing NCV level 4. Participant M1 further iterated that there are no formal partnerships specifically for articulation to HEIs, stating:

But in terms of having the MoU written for articulation purposes, there is nothing that is on paper and that exists, that's why I was saying it needs somebody who is going to run with that programme. I have laid the ground, but I cannot be following up because there are certain other things that one is doing and there are certain managers that are supposed to be doing this issue of articulation.

The participant believed that the relevant managers should be following up on foundations that have been laid in terms of initiating articulation partnerships with HEIs to formally finalise and put into practice. This belief is in line with the finding of the SAQA baseline study that a designated person through having an articulation office and the resourceful leadership are required to forge collaboration arrangements that

will drive successful articulation initiatives (Lortan et al., 2017). The collaboration and cooperation between institutions in PSET are required to ensure the successful implementation of articulation policy through programme planning, design and delivery (Baatjes et al., 2015). However, the responses of the participants are an indication of lack of collaboration as there is no dedicated person or office to facilitate thereby undermining having mutual beneficial partnerships, consensus-based decision making and shared governance on articulation issues.

In relation to the development of linkages for progression and articulation, it was argued that the key objective for a PSET system, that is critical to the achievement of an integrated PSET system, is to build formal linkages or partnerships between and among all the subsectors of the PSET system particularly regarding alignment between the TVET and HEI sectors (Gibbon et al., 2012). On his research on articulation in South African Education and Training system, Blom (2013) outlined some of the articulation best practices. These included NMU mapping the TVET academic programmes especially with their academic programmes; CPUT articulation agreement with five TVET colleges in the Western Cape which will see TVET students directly articulating to CPUT diploma and foundation programmes as well as DUT collaboration with KwaZulu-Natal TVET colleges which will enable direct articulation of TVET students and the implementation of Credit Accumulation and Transfer. The above best practices reflect articulation as a stairwell and diagonal articulation which demonstrate articulation between two or more institutions offering programmes of different levels in the NQF, thereby enabling vertical articulation. The college does not have any formal agreement in the form of an MoU, except the initiatives that are at early stages or fell through, which is in contrast to what is articulated by Lortan et al. (2017) that about a third of the TVET colleges stated that they are on existing formal articulation agreement and arrangements; with half of the overall number of public colleges participating in informal arrangements and, lastly, with one seventh of the overall number of public colleges being involved in the combination of formal and informal articulation arrangements. This is also in contrast to the recommendations made by Makura and Nkonki (2017) that, for institutions to enhance student articulation from TVET colleges to HEIs, there is an overarching need to create and formalise articulation partnerships with universities. Makura and Nkonki further

highlighted that they believe that “the formalisation of agreements through MoUs and collaborations between institutions at programme and course levels would help dispel the perceptions that FET college programmes are less rigorous and pitched inappropriately” and participants further suggested that “creation and formalisation of partnerships with universities”. Matshoba (2019) further articulated that the TVET colleges and UoTs have some inbuilt measures intended to ensure that the NCV programme at exit level, level 4, is not a dead-end qualification through formal collaborations in the form of MoU/As and this is based on TVET college students meeting HEIs admission requirements that are set. Matshoba further articulated that, to ensure successful capturing of articulation opportunities by students who completed TVET qualifications, there is a need for both TVET colleges and HEIs to collaborate on articulation matters.

Both, 4.2.1.1. and 4.2.1.2. are in contravention of the following: the DHET articulation policy specifies the role of college as education and training provider towards enhancing articulation to HEIs is to establish inter-institutional partnerships and arrangements to enhance vertical articulation between two or more Institutions, intra-institutional activities to support articulation and development of quality assurance policies to support articulation (DHET, 2017e).

4.2.3. Staff perspective

This subcategory was dealing with SSS staff perspective regarding supporting students with articulation to HEIs in the form of activities and/or workshops conducted or held formally by the college. Based on what participants said, it appeared that there are no formal activities or events that are facilitated by SSS staff for students to enhance articulation and increase students’ awareness about articulation. Articulation is only mentioned in passing in other workshops or events, not in detail due other factors to be discussed below and respond to those students who show interest by asking about this articulation pathway to HEIs. The following is what the participants said:

For my campus, it's basically more on giving information that there is indeed the possibility of moving to university. (FGD P1)

When the research probed further to find out the method of sharing the information if it was formal like in an organised workshop or was it just based on the response given to enquiring students. The participant stated the following:

It's not in a formal setting or it usually comes up when we are doing job readiness you see but you find out that there is not much information that I could give about articulation but it's just the basics and the process of doing it but it's not anything formal, focusing mainly on articulation. (FGD P1)

The researcher further probed to understand the content of the information shared. And the participant said the following:

It is information like telling them like Civil is offered in universities and that they should apply and all that, that's why I am saying it's nothing formal in terms of information of articulation process and that there is possibility of moving from TVET to university. (FGD P1)

Other participant said the following in relation to activities conducted to enhance articulation to HEIs and increasing students' awareness about that articulation route:

The only thing that I can contribute is that even myself nhe, I mentioned it in passing like I did it during the job readiness workshop that we do in second semester and in the last semester nhe, and usually most students they know if they want to articulate or not so they will approach you and ask you for assistance. (FGD P2)

The above is like what FGD P1 articulated that there is no formal event meant for articulation awareness and enhancement other than just mentioning it in passing in another formal workshop which is job readiness workshop which is also one of areas of student support defined in the SSS plan.

4.2.4. Student Perspective

Students were asked whether there are any programmes or activities that they have attended or been invited to regarding creating awareness and information sharing about articulation to HEIs. All participants from all focus group discussions indicated that there was never such a programme or workshop. They noted that it is some of the lecturers that normally talk informally about this articulation group during classes. This

means the study has found that there are no activities in the form of formal workshops or any similar events. Instead, its lecturers informally and randomly talk about articulation to HEIs. The following were said by participants:

Zange Zange Zange (meaning Never) (Group laughing), since I have studied in the college from NCV, for three years, now I'm in NATED I have never heard of any programme, not even a single day, you only hear a lecturer telling you that they studied in a university. (A4)

No! In the past three years three and half years I have been here I have never heard of such a programme. (B2)

Here you find for yourself the next step. (C1)

What we know currently is that from level 4 you either go to work or to NATED, N4. (A2)

The above responses show that the college has not made any intervention when it comes to enhancing student movement and transfer from TVET to HEIs, in the form of formal workshops or activities. And this is in contrast to what is defined in the SSS plan exit support that the SSS plan has specified articulation to HEIs as one of the exit pathways on which students should be supported (Phoumilay & Noonan, 2020). This statement is also in contrast to what Matshoba (2019) stated, that it is fundamentally important for NCV students, especially at exit level 4, to be offered advice about articulation opportunities that will be at their disposal after completing the NCV qualification including providing information on admission requirements and further studies to students aspiring to progress to HEIs.

Other participants said they only heard about this articulation route on informal engagements with lecturers during or outside classes. The following is what transpired from the participants:

But the only one person, a lecturer, who told me that as a person supporting my idea of furthering my studies and said s/he was studying here in, mentioning the college used as a case study, and then did in service and went to a university because s/he wanted to be a teacher, did practical in a college, and

got opportunity to teach in a college so it was a conversation between the two of us it was not something that we discussed in the group. Here at school, they will tell you that you have passed well why did you register for N4 why did not you go to university you have this number of distinctions, like that's not something you are told here at school. They will say continue with finance even though you are telling them that you will never be employed by bank because you are owing. (A1)

My lecturer, even though she does not tell us what to do, but she does ask us about our career aspirations, and she would say, I saw that my lecturer is business minded, if you want to do something related to business, she will tell you that a certain university does that in business even though she won't tell you what to do exactly. It is you who will decide what to do next. So based on the advice you are able one day to think that when you want to do something and remember what the lecturer said. (A4)

But there is nothing that comes to us from the college, for example nothing comes straight to us from college, we only hear it from lecturers only. (B6)

There is a lecturer who sometimes tell us about this articulation pathway otherwise there is no one else. Our lecturers in electrical always tell us about different opportunities after exiting the college. And they always emphasise it's not their duty to guide students on career pathways. (C1)

Yes, sir, there is something done by our lecturer in his PR (Public Relations) module, in PR there is a module talking about PR fields, the teacher once said that we must not only end here in college we have to go further if we know what we want but we should know that out of 40 or 44 in class only one person may be employed in the specific relevant field in the class, so I am trying to say that we do get such things from lecturers.

The above statements show the contribution made by lecturers regarding articulation to HEIs assisting students, even though informally, and this acts as a wakeup call that articulation of students should not be left with SSS only. The role played by lecturers, even if it is informal and unstructured, did not go unnoticed, hence the call to train

lecturers on this articulation route through awareness workshops and professional teacher development initiatives on articulation from TVET to HEIs (Makura & Nkonki, 2017a). The authors further expressed a statement that shows lecturer involvement, that informal articulation agreements that are in a form of gentlemen's agreements between the TVET college lecturers that are interested in articulation and articulation coordinators in the HEIs are problematic. This is emphasising that the orientation of articulation arrangements should be institution based and based on individuals because that leaves the arrangements vulnerable because individuals come and go and institutions stay. Wheelahan (2009) argued against the non-involvement of lecturers saying that the lecturers have been relatively disregarded in issues of policy even though they play key roles in assisting students in developing and realising their aspirations including support with different pathways including articulation to HEIs.

Participants further showed their interest in this articulation pathway under discussion and said the following:

If it was a college thing like orientation we were supposed to be called, those in exit and be told about articulation. (C1)

Yes, it is important to share this information so that people stay having information of exit pathways and know what they are doing now and where they can go. I can comment and say that in this interview there is something I have learnt like I have seen that it is important that I continue studying like as I am in NATED and will be getting my diploma I am not supposed to say I am stopping after getting it I should continue with my studies to university so that my employment chances will be high and promotions in the workplace. (B4)

But maybe in students' services there is someone who advises on these things related to articulation to university and motivate us. (B6)

And tell us that this diploma can be done in college or in university so that we can choose which side we want to study at. And they do that on their own by assisting us and get forms from universities so that those who are interested can apply. (B1)

Me I have noted something I am not sure whether it's a comment or contribution I think for us colleges especial students doing N6, SSS is supposed to invite people so that they can come and tell us people who are in N6 that guys you have this opportunity of going to university for one year to get a degree instead of staying at home or go and look for work. (B5)

These comments are a clear indication and proposition of the interest that the TVET students have regarding articulation to HEIs from TVET, advocating for: formal programmes or activities to assist the students with this articulation route, sharing of articulation information, career advice and exhibition.

4.3. AWARENESS OF ARTICULATION TO HEIS

The theme looked at the awareness of both students and staff including management about articulation from TVET to HEIs. Study found that majority of the participants, staff and students, are aware of the articulation and exit pathway to HEIs, however, both staff and students lack knowledge and understanding of how this articulation pathway works, leading to many misconceptions from students' side around articulation to HEIs prevailing and reluctance to articulate it from the staff side hence there are no formal initiatives meant to assist students.

4.3.1. Staff awareness

The following is what was articulated by M1, who is member of the college board management, indicating that she doubted that our college, students were aware of articulation to HEIs as an exit career pathway, having once attended an orientation programme in which nothing was said about articulation into HEIs. M1 further emphasised that:

I'm not sure if our students are aware that they can articulate and go to University XXX to proceed with their studies

and appealed that:

It's something that we should be advocating for from the side of students support services and registrations (college section where student support services fall under), so that students are aware that there are many doors that are open for them.

M1 further stated that:

They are not only confined to do NCV level 4, and then jump to N4 and N5 and N6, they can go from level 4 to the university qualification.

This statement is reiterating the multiple exit career pathways that are at the students' disposal after the exit level, NCV level 4.

The other participants, members of the SSS operational staff, who are supposed to be advocating the articulation to HEIs process to students in campuses said the following:

Oh ah, in my understanding articulation of students from our TVET to higher education, it's based on, it's us or is the process of students that are doing NCV in the college or doing NATED it does not matter and then now they want to go and further their studies to maybe university XXX, many people go there, or Bloem or wherever, whichever university that they want to go to. So, I think that is the process them from us the TVET sector to the universities wanting to further their status that is my understanding. (FGD P3)

The other participant had the following view:

Me from my side I know that students should be articulating, those interested, by choice or voluntarily nhe. (FGD P4)

All four participants mentioned that they have a common understanding about articulation to HEIs. The researcher further checked whether the participants had knowledge about the DHET articulation policy which give general guidelines and background about articulation to the HEIs career pathway, and it transpired that they are not aware of it. Below are their comments:

No, I have no idea, or I don't know Mr. Wakeni or I have never looked at it maybe I should say, I am not saying it's not there, it's just that I have never paid attention to it or look at it. (FGD P3)

The other participant added that:

With the articulation policy I think we would be lying if we say we have any insight about it. (FGD P1)

The other two participants said the following about articulation policy:

I was never aware that there is a policy that we need to follow up on, we are all the same, we would be delighted if you can tell us more about the policy or provide us with policy. (FGD P4)

No, even myself I'm not aware of the policy nhe, in fact, I've never seen it, so I don't even know if we have it, do we have it in the college? I've never seen it. (FGD P2)

The researcher further probed their awareness, as SSS staff, of the role they should be playing in enhancing articulation to HEIs and assisting students with this articulation route. Their responses were as follows:

It is part of our role but what is difficult to start or do it is based on the challenges that we mentioned, that we don't have access to the policy or no proper channels of doing it basically so hence I am saying we just mention it here and there but not having confidence of actually saying this is how is done so is to brush it at high level and then not get into it deep. (FGD P1)

Ja that's true because it's hard to talk about something that you don't have full information about, me obviously I was aware that we do have such, articulation to HEIs, since I did not have full information, which I still don't, it's difficult to stand up in front of students telling them something you don't know about so I think after this survey or interview even yourself if you can assist us to get more equipped we would appreciate that so that we can do our jobs better. (FGD P2)

What is articulated by these participants is based on the lack of understanding the articulation to HEIs pathway. The issue of ineffectiveness of career guidance services may exist and not assist in matters of advising about enablers of vertical articulation

into HEIs, especially for TVET graduates (Makura & Nkonki, 2017a). Lortan et al. (2017) also stated that, in support of staff awareness, there is fair level of awareness of articulation, both systemic and specific articulation, across the HEIs and TVET colleges. The SAQA baseline study found there were high levels of awareness about articulation by PSET institutions, with less said on the actual student support on articulation (Lortan et al., 2017). This may be an indication of general articulation concept and the career or learning pathway to HEIs with understanding the actual articulation process.

4.3.2. Students' awareness

This section will cover students' perspectives on awareness of articulation with others showing awareness even though lacking details and others highlighting that they never knew about this articulation until the time of the interviews. The first section shows those participants with little awareness. The following is what transpired from the focus group discussions:

I once heard about this possibility of going to study in a university after completing level 4, but I think the person who was sharing this I think he did not have enough information about this articulation pathway. Because he said there are certain university that don't admit you when you have level 4 and there those who take you when you have level 4 requiring 60% and above pass. (A2)

I will talk about/refer to me, I won't only study here in the college I want to study more because I still want to go to a university even though I am going to be having my N6 but what I want leads me to go to a university because I won't be able to get it here. (A3)

When you come from NCV to a university they say choose varsity with technology like university AAA, university YYY. (A6)

What I can say nhe, when you come from college, like coming from NATED, to university, let me make example with teaching like PGCE you are able to take one year there in a university. And the number of years will be reduced. (B6)

College ends in diploma then you can continue to university and get a degree, so from NATED after N6 you go to placement for practical and get back to get

your diploma now the advantage is that you can go to university for one year and get a degree. (B5)

I am aware of articulation because I was told by a lecturer that after completing NCV level 4 I can either go to a university or continue to NATED N4 in the college. (D3)

These comments suggest that students are aware of the articulation route to HEIs. However, they lack details of the process of articulation. There are also those participants who indicated that they did not know about the articulation pathway from TVET into HEIs until the focus group discussion. The following is what they said:

Okay. I did not, I really understand that it was possible for me to...., to move forward from the college to a university when I finish my level 4 and it wasn't something that we were told about that it's a possibility because we've always been told that a possibility ends here to further your studies and that you must further it here. I never even tried after passing level 4 because I did not know it was possible. For me personally it's the first time and I also have a question you know if you are already done to your NATED studies, is it possible to go into a degree and if you do your degree How long is it going to last? Because you already did your diploma? So, it wasn't clear. (A1)

When I arrived in the college, I only knew that you do levels 2 to 4 then NATED I only hear it now that I can also go to a university to further my studies. (D5)

In support of the above narratives by participants, Makura and Nkonki (2017) stated that it is possible for students to be unaware of various articulation routes that are there in South African PSET system. This unawareness can be a disadvantage to students as it can limit them when making decisions about their future career growth.

4.4. STUDENT PERCEPTION TOWARDS ARTICULATION TO HEIS

This theme will be dealing with two aspects regarding articulation to HEIs. The first will look at why students decided to enrol in a TVET college, specifically NCV. Secondly it will be looking at how the college students perceive this articulation pathway of furthering studies in a university. Under this theme, the study has found that most

participants have the interest to articulate further to HEIs with the few who indicated no interest basing that on misconceptions about articulation to HEIs caused by lack of knowledge about this articulation route and others basing it on the practical component that TVET offers. The study further found that most participants came to the college as an alternative after failing matric, and being unable to repeat due to different factors, even though they end up developing interest in college qualification citing the practical component as the major reason.

4.4.1. Why students enrolled in a TVET college

In this sub-category we are looking at the rationale to enrol in TVET college especially in NCV and then try to link this with their perception to be discussed. It has been found that most participants enrolled in the college because they failed their matric. The other few participants enrolled in college NCV programmes because of not getting spaces in universities due to being full and/not meeting admission requirements, while others cited the practical component of TVET college programmes as the major reason to study in TVET. The following is what transpired from the discussions:

I will answer that question according to me! I decided to come and study here at the college because I did not have grade 12, I did not pass my grade 12 so I needed grade 12 to be able to study further because I have a vision of me studying in a university one day. (A1)

The reason why I came here to the college because I did not have grade 12, and I did not even have something saying when I complete NCV level 4 I will go to university because what is offered in the university is also available here. (A5)

The reason I came to the college I did not pass matric, then it was said that in a TVET college level 4 is the same as Matric, we all get UMALUSI, but TVET UMALUSI is different from that of Matric because ours you study and have skills because these things we do we study then have a practical, not only theory, like life orientation, life orientation has theory and practical we do it in a computer like excel, word etc. (A6)

The reason I came to college is because I failed grade 12 even when I was in grade 12, I did not have interest of studying in a university even though I failed

grade 12 because I could see that the college graduates quickly get employment because they have a skill unlike those coming from university because from university you go out with theory only but when coming from college you have both practical and theory. Even now if degree was offered in a college I was going to continue here at the college and not go to a university. (A7)

I decided to come to TVET college because I did not pass grade 12, then I made research about TVET colleges then I found out that if you have studied level 2 to level 4 you get to get like UMALUSI like grade 12 and that UMALUSI is not just UMALUSI as it goes with experience of what you were doing because you can be able to go out and work. (A8)

The reason I came here was because I did not pass my matric so I had to start from NCV so that I can get the certificate and carry on. (B2)

The reason I came to the college is because I did not meet the requirements for me to study in a university so I decided to come to the college to get something at the end of the day, and I continued to NATED so that I don't struggle because if I stayed home, not coming to school, I would not get anything. I did not pass matric. (B3)

I decided to go to TVET college because I did not manage to pass grade 12 and I heard that level 4 is more powerful than grade 12 then and after, then I continued to N4 and N5 until I got to N6 and aiming for Diploma and for you to get diploma you have to do practicals then those practicals are good. (B4)

I wanted engineering so I had failed Grade 12 and the schools I was getting to repeat Grade 12 were expensive so I couldn't afford to repeat I heard that there is a school available in Gcuwa that is doing engineering so I came to apply here and since I wanted to do engineering and it was said there is practical and I thought I wanted to have a skill so that's how I came here and I was admitted. (C5)

Me, I had no interest of coming to study in a college, but I came to college because I failed grade 12 and I did not know if there are practicals here and I did not want to do civil engineering because I was doing accounting, so I ended

up being here. I wanted school then I got this one I found that courses offered here are engineering and primary agriculture and other courses were already full, so I was admitted in civil engineering. (C6)

It was full in the campus I wanted to apply on so I came here since I don't want gap year so as I continued as the year is progressing so I thought it's better that I must just remain in these levels I'm doing than starting Ns because it seems much easier going to Ns from NCV. (C3)

As for me I decided to enrol for NCV because one I did not know how things are done in the college like NCV and NATED, and then I had an option to change in the following year or the next semester but because of that practical side of NCV like in NATED you study and what not but you never get to touch the things you study about, so I thought NCV was best because of practical side I can guarantee when you say there is practical. (C1)

I decided to do NCV, yes, I have grade 12 but I did not pass it well, I wanted to do nursing I decided to come here for NCV because NCV I was told has practical then I came then saw things are happening I then really you get information more theory and more practical and touch the things you are studying about. (C2)

In reference to study career choice, Makura and Nkonki (2017) showed that, even though studying in TVET colleges is cheaper and has low admission requirements, they seem to be paradoxically unattractive destination to learners. The Makura and Nkonki attributed the unattractiveness to, probably, non- degree programmes offered by TVET colleges. In his thesis, Needham (2019) stated that students that are studying NCV programmes at TVET colleges have disclosed that TVET colleges were never their first choice of study, hence many students still held hopes that when they complete their NCV programmes they may advance to HEIs, regardless of reported slight articulation between TVET colleges and HEIs. It was also revealed that the NCV qualifications act as an alternative pathway, other than Matric, to HEIs that enables the NCV exit and completed students to register in HEIs as they were initially developed to address the ills of the N- programmes and to improve articulation to HEIs (Mashongoane, 2018). It was also stated that students decide to enrol in TVET NCV

programmes due to different reasons including financial implications, failure to pass matric, failure to meet university admission requirements despite passing matric, or lack of spaces in the university, owing to a tough race between them and matriculants resulting from limited spaces that are available at HEIs (Blom, 2013; Makura & Nkonki, 2017).

Even though the majority of participants enrolled to college after failing matric and/or not meeting university admission requirements or avoiding gap year or universities were full, however, Gaffoor and Van der Bijl (2019) revealed that TVET college students have a positive attitude towards studying in a TVET college due to the practical component of NCV programmes that is critical towards understanding the theoretical component and acquiring skills in the process. Gaffoor and Van der Bijl further showed that the other reason for students to enrol in TVET NCV programmes is the labour market entry prospect that is facilitated by vocational skills, including placement opportunities, together with getting NQF level 4 with practical exposure and furthering studies into HEIs.

4.4.2. How TVET college students perceive articulation to HEIs

In this section we will look at students' perceptions towards articulation to HEIs from TVET. The researcher wanted to determine whether the students have interest or not in this articulation pathway and accompanying stated reasons. The study found that there are mixed perceptions about articulation to HEIs from TVET with the majority having an interest in this articulation route and other participants against this articulation pathway. However, it was noted that those participants who are opposed to this articulation pathway based their arguments on misconceptions about articulation to HEIs which is a result of lack of information about the details of this articulation route. The following is what is said by participants:

I can say I have interest to go to university because when I came here in college, I told myself that I want to achieve my goals so if I stop here in N6 and don't get master's that will mean I haven't achieved what I wanted to do. Other jobs require degree, it requires people with a degree, and if you studied in a

college, you don't have degree you have diploma how are you going to get that job? (B6)

I want to have certificates you see like; I use them to get work so that I don't only have diploma when they here are work if you had a certain qualification you were going to be taken so I want to have all these certificates that are required in many places. (B1)

To add more to my brother, college ends in diploma then you can continue to university and get a degree so from NATED after N6 you go to placement for practical and get back to get your diploma now the advantage is that you can go to university for one year and get a degree, that's what I know sir. (B2)

I will talk about to me, I won't only study here in the college, I want to study more because I still want to go to a university even though I am going to be having my N6 but what I want leads me to go to a university because I won't be able to get it here, yes I agree that I'm currently doing financial management, the course that I want forces me to go to universities that is why I will work hard to go to university so I can do what I want. I wanted to be a doctor, but things did not happen but then now CA, universities here I come. (A3)

I think it would be good articulating from NCV level 4 to university because you will get different skills from college to university you gain different skills and different knowledge. Me, I have interest of going to the university because my dream is to wear that red gown and in the college such qualification are not available, so my dream is study until PhD. (A2)

Me, my perception about coming from college and going to study in a university, I think yes, I have already studied in a college, and I want to study more but I think it gives me advantage because I have practical and theory even though even in university, I will gain another experience. So, let's say now we apply for the same job and then you have studied in a university, and I have studied at college and also in a university that gives me front role to you because you have one experience, university experience, and I have advantage, so I think it is my perception that it is more advantage to study in a college and then to a university. (A1)

Like I said that I have an interest of studying in a university I still have even now because by look of things my aunt was supposed to have done something else but took teaching she did not want, so I don't want to end up be like her whereas I'm doing well with my accounting and see myself doing something I don't want so that's why I have an interest in a university and I already know the university I will apply to for the course I want. (A8)

Okay I have interest of going to a university because the number of years that I would spend on the programme I want would be reduced if I was going to three years, I will not do that three years after N6 and in-service training, then I would do it only in one year. (A3)

These comments indicate that students are interested in articulating from TVET to HEIs due to many reasons including higher degrees' aspirations, prospect of combination of two experiences of practical TVET programme and HEIs theoretical higher degrees which they believe will grant them edge over others with one learning experience in the labour market, reduced number of years to complete, other programmes not offered in college, and others. Study that was conducted by De los Santos and Sutton (2012) indicated that that students move from one institution to another to acquire degrees especially from TVET colleges to HEIs. Sibiya and Nyembezi (2018) indicated that educational aspirations were some of the motivations for TVET students to study further to HEIs including achievement of higher degrees and being qualified. The responses from participants showing interest in the articulation to HEIs pathway is in line with the basis behind introduction of the NCV programmes which was the alignment of TVET qualifications to provide opportunities for TVET college graduates to enter HEIs qualifications offered (Needham, 2019). It was also articulated by Makura and Nkonki (2017a) that the movement from TVET colleges to HEIs seems not to be a smooth sailing affair for most TVET students. Matshoba (2019) further iterates the youth aspirations to study further and the prospective benefits of PSET, which lies in the provision of strong motivation for young people to study further regardless of the low completion rate of post-school qualification.

4.5. CHALLENGES OF ARTICULATING FROM TVET COLLEGE TO HEIS.

This theme deals with the challenges that hinder successful implementation and support of articulation from TVET college graduates or exit levels into HEIs. The challenges covered in this section transpired from the primary data collected during data production. The challenges are categorised into the following subthemes: curriculum mapping; lack of knowledge about articulation into HEIs career pathway; misconceptions about articulation from student perspective.

4.5.1. Curriculum Mapping

The lack of curriculum mapping was identified by participants as one of the challenges that jeopardise successful articulation from TVET colleges into HEIs. Curriculum mapping is defined by Danver (2016) as a visual representation of the structure of a complex dynamic system showing dependent components deliberately located relative to each other to enable the achievement of intended student learning outcomes. It is further defined by Uchiyama and Radin (2009) as a process necessary for the creation of a visual representation of curriculum based on real time information to enable an increase in collaboration and collegiality in higher education. The following was mentioned by the participants:

Because you find that in other universities, they do not acknowledge N6 of the TVET sector. Alignment of subjects like doing correct subject so that a student does not start from scratch when articulating to a university. (FGD P2)

I also believe with what Anele is saying, that is, other universities do not recognise the N6, that's why I am saying It's a pity that I'm not quite familiar with the policy, articulation policy, because truly, in terms of the subjects that our students are doing from our colleges you find that they are not in line with what universities are offering. For example, a student is doing QS, which is a qualification on its own, so when articulating to a university where will this student start and what will they do? Hence universities put them on entry level, which is where/when TVET students complain that it's more of repetition because they find that what is offered at entry levels they already know because they may have covered it in N6. (FGD P1)

These statements are raising issues of non-alignment of subjects/courses, non-recognition of TVET qualifications like N6, and repetition of content covered due to TVET students not being credited in universities leading them to start from scratch. The White Paper for PSET promotes building of a PSET system that facilitates the students movement both vertically and horizontally, between different sub-frameworks and levels without dead end qualifications with the inclusion or provision of bridging programmes where necessary (DHET, 2013). Makura and Nkonki (2017b) further proposed the adoption of curriculum mapping to establish relevance, correspondence, and equivalence between TVET and HEIs programmes. This was a result of these authors noticing the lack of collaboration between HEIs and TVET colleges on articulation issues hence the proposal for collaboration on substantive issues of programmes alignment. Makura and Nkonki (2017a) also articulated that the Higher Education Qualifications Sub-framework (HEQSF) system has elevated TVET colleges into the PSET which is something that raises concerns when it comes to alignment implications for FET colleges since these institutions have distinct mandates, academic cultures and governance differences that were not aligned. Mashongoane (2015) also showed that qualifications provided learners with opportunities to progress to HEI studies, taking into consideration the appropriate subject combinations.

On the recognition of TVET qualifications, especially NATED N4-N6 programmes, it was stated that the possibilities of progression to HEIs diploma programmes, at NQF level 6, are very limited (Needham, 2019). The author further indicated that, in South Africa, articulation between TVET colleges and HEIs in mainstream undergraduate degree programmes has not yet been achieved and is currently achieved through the NSC certificate. This may be due to the high admission requirements set for TVET NCV certification as compared to NSC requirements which is termed as unfair treatment and discriminatory to TVET NCV graduates (Mantashe & Nkonki, 2020; Papier et al., 2016). However, a major constraint that may hinder curriculum mapping for articulation purposes was mentioned by Needham (2019) that the TVET colleges' lack of institutional autonomy disables them from offering specialised curriculum that may lead to committed articulation routes with HEIs as the programmes are owned by the DHET.

4.5.2. Lack of knowledge about articulation into HEIs career pathway

The participants further pointed out some other obstacles that hinder them in performing their role when it comes to assisting students with the career pathway of articulation to HEIs. The following were some of the obstacles relating to lack of knowledge about articulation:

No, Mr Wakeni I was saying nhe if I'm being honest, I do not have a lot of information regarding articulation into the varsities. Because you find that in other universities, they do not acknowledge N6 of the TVET sector so I struggle with that a bit, and I think it's something that we have to be equipped with so that we are able to pass the correct information to students and the varsities that our students can actually articulate. (FGD P2)

For me it's the policy, if it can be in place clearly outlining the articulation process so that we can be able to give correct information to the students because what I am getting now from the conversation that we just had is that we do not have enough information about articulation meaning that we are not doing justice to the students. (FGD P1)

The comments above indicates that lack of knowledge about articulation as a challenge towards successful supporting students in articulation. The comments further revealed a challenge facing TVET graduates when attempting to articulate to HEIs which is non-recognition of their qualifications by HEIs. The lack of recognition of TVET qualifications is described as one of the epistemic injustices that are facing TVET college graduates who wish to further their studies in HEIs(Lortan et al., 2017).

4.5.3. Misconceptions about articulation from the student perspective

There were some common misconceptions arising from participants who were opposed to articulation from TVET to HEIs citing various reasons. These misconceptions seem to be as a result of a lack of understanding of articulation into HEIs. Participants said the following:

Me, what I heard is that it was said that those things we do here at school when doing NATED are also done in varsity but the varsities where they are done like

when you come from NCV to varsity they say choose varsity with technology like DUT, CPUT yes, you don't come from the college to WSU because these courses are not there. Then when I have Diploma from N6 they said these subjects we do here are the same with those done in universities so I did not see the need of going to university as it will be the repetition of what I already know, because they will say what I know that I heard from N4 N5 N6. (A6)

Like on the other side it is a waste of time so because already you already have a diploma so I don't see the need to continue to university instead of looking for job and here in South Africa there is the issue of age restriction that is they want to employ people from 18 to 35 and while going to university the number of years is increasing so you will have the degree in your hands and don't get jobs because you are old. (B4)

I did not even have something saying when I complete NCV level 4 I will go to university because what is offered in the university is also available here and moving here, in college, after passing grade 12 going to university may have obstacles I may go there and not get NSFAS whereas I am already getting and continuing with it here in the college. As I have said in the beginning that I had never heard an interest in studying in a university, I still don't have it even now, but now what can be done for us people who have no interest of studying in a university, because there are many people who don't want to go to a university, we would like to have higher degrees like Masters here in a college, so that there is no need of going to a university even though you don't want to, to enable us to achieve what we want to achieve here in college without having to go to a university. (A5)

Me, I don't have interest of going to a university, I say that because things done in the college are the same as those done at university, the difference is small, like for example here we have office admin and in a university they programme on administration so these two seem the same so to me that's more like wasting time, I would prefer programmes to be added here in college so that if you want to do a degree you do it here in college together with honours, masters, etc. (A6)

These comments are stated by students who are opposed to articulation into HEIs believing that: what is done in the university is also available in the college disregarding different levels, higher levels offered by universities, fear of funding obstacles when they are already set in TVET, going to university is waste of time as they may already be qualified with a diploma and fear of age restrictions of 18 to 35 that is associated with opportunities. In relation to the participants who are opposed to the articulation route to HEIs, it worth noting that it was revealed that most of the students that exit college do not automatically aspire to advance into HEIs to further their studies, others seek employment, hence placement is one of the provisions encouraged in the DHET SSS plan together with entrepreneurship and articulation into HEIs (Matshoba, 2019). The author implied that the approach of one-size-fits-all will never work when it comes to articulation support based on students having different aspirations after completing an exit level. This was also stated in the DHET report (2017a) that NCV exit level graduates articulate to either HEIs for further studies if they meet admission requirements or to employment as NCV equips students with practical knowledge and skills that are necessary for entry in the labour market. The report further stated that NCV qualifications, like their NSC counterparts, were initially designed to enable students with the possibility of articulation into HEIs, directing students to specific fields corresponding to their vocational designation.

4.6. SYNTHESIS

This chapter highlighted what transpired in the field after the data has been analysed. It was evident, according to what the participants said, that the college has no institutional policy to drive articulation in the college and has no formal partnerships that are specific to articulation enhancement. It also transpired that participants, staff and students, understand the exit pathway articulation into HEIs. However, the understanding of the process itself is lacking or is not detailed. There are a lot of gaps, leading to misconceptions from students and calls for capacitation and fear of articulation from staff. It was also evident that most students have an interest of articulating into HEIs even though they also hold college in high repute due to its specialisation in the practical component. This may be because most students came to college after failing matric, coming to college as an available alternative. Challenges

that may hinder successful articulation initiatives were also discussed including the lack of curriculum mapping, lack of knowledge about the articulation process from the SSS staff point of view and misconceptions about this articulation route from the students' point of view.

CHAPTER 5

CONCLUSION, RECOMMENDATIONS AND FUTURE RESEARCH

5.1. INTRODUCTION

The previous chapter covered, in detail, the findings and discussion of the study in reference to **the integrated PSET system exploring policy and procedure shortcomings of articulation from TVET to HEIs**. It categorised the findings into themes, which had subthemes. In this chapter, I will provide conclusions drawn from the findings in the previous chapter and accompanying literature that supports or disagrees with these findings. **The goal of this study was to explore the policy and procedure shortcomings in articulation from TVET colleges into HEIs** in response to the DHET goal of an integrated PSET system and articulation policy. The study planned to achieve that by responding to four critical questions, which were: **What are the factors leading to poor articulation from TVET college to HEIs and other exit pathways within a college? What is the college staff and students' understanding of articulation from the TVET colleges into HEIs? How do TVET college exit students perceive the articulation into HEIs' career pathway? What support is offered by college to college exit students to enable articulation to HEIs?** The implications of the findings of the research will be outlined followed by proposed future studies in the area, limitations and dissemination of the research.

5.2. CONCLUSION OF THE STUDY

The study has drawn from two theories of collaboration and epistemic injustice in which each has different constructs that the study specifically draws on. The collaboration theory was used to explore whether the college has initiatives in the form of partnerships or collaborations with HEIs to enhance seamless articulation from TVET into HEIs. The study findings indicate that there are no collaboration initiatives in which the college is engaged, neither in a form of partnerships that will assist with inter-institutional vertical articulation from TVET to HEIs nor internal policy developed to guide articulation activities within the college that will ensure student and staff awareness is increased. This finding talks directly to the

collaboration constructs that the study specifically draws from of facilitation, governance, mutual beneficial relationships, in which the findings demonstrated that the college, through its broad management, has failed to facilitate partnerships with HEIs that are mutually beneficial in relation to the articulation of students. In relation to the theory of epistemic injustice, the research findings have indicated the challenges that led to TVET students suffering injustices like repeating things or curriculum that they have already covered in their studies, non-recognition of their qualification by HEIs, students who are not aware of this articulation route in which they expressed interest, and staff unawareness and lack of details about articulation process leading to them fearing to discuss something they don't know about with students.

The conclusion of the study will be structured in line with the themes that emerged during data analysis and presentation which are corresponding to the research questions that inform the study.

5.2.1. College initiatives and activities to enhance articulation

This theme looked at initiatives at different levels according to the roles and responsibilities of the position held by the participants. Different levels of participants included management, SSS staff, and students who are recipients of the initiative's end product. From the management point of view, the research revealed that the college does not have a policy guiding the articulation process within the institution and there are no partnerships with HEIs that are specific for articulation purposes. As such, the college management has acknowledged that there is a policy gap with regard to articulation from TVET to HEIs. This is against the roles and responsibilities of education institutions stipulated in the articulation policy. However, it is worth highlighting that the college does have partnerships with HEIs, but none is specifically for articulation in terms of areas of collaboration. It is also important to note that the college has started talking to HEIs regarding partnerships that will include articulation, even though this was informal and at an early stage with a high prospect of failure as there is no one assigned to champion it. From the staff viewpoint, it was found that there are no formal or formally organised activities or workshops that were conducted by SSS staff to enhance articulation to HEIs. They just mention in passing, without any details, that there is

a possibility of moving to study at a university. This viewpoint is supported by the students' point of view that they never attended a workshop organised by the SSS for articulation purposes. The students further revealed that it is some lecturers who normally mention it, here and there, informally that they can articulate and further their studies in HEIs. It was also revealed that some students hear about articulation from family members who, in most cases, have less information about it. This contrasts with the DHET SSS plan that specified articulation to HEIs as one of the exit support areas. These arguments are a clear indication that the college has done little to nothing to enhance seamless articulation from TVET college exit levels into HEIs academic programmes with no partnerships or policies to enhance articulation. This is happening even though the college staff participants, SSS staff and member of college broad management, have clearly voiced challenges that were experienced by the college students who wanted to articulate into HEIs in the past where they had to intervene, on several occasions. The little or no response to the call for support of TVET college exit students in articulation into HEIs can be attributed to non-availability of a person or office specifically responsible for dealing with students' articulation needs. The issue of availability of an articulation champion and office was stated as one of the enablers of articulation in the National Baseline study on articulation from TVET into HEIs (Lortan et al., 2017).

5.2.2. Awareness of articulation to HEIs

Under this theme, it is evident that both students and staff members have an understanding about articulation to HEIs, with a few students who mentioned that they were not aware about it until the day of interviews. It was also evident that, even though most staff and students have an understanding, they all lack full understanding about the actual process of articulation. The SSS staff have a full understanding that it is their role and responsibility to champion articulation initiatives at students' level in the college to enhance and support students on this articulation route as it is part of the SSS annual plan. However, they do not have knowledge about the articulation that gives general and background guidelines about articulation in PSET. This, therefore, means that there is a big articulation awareness gap. This is also made evident by a request from CGOs to be

capacitated in the articulation to HEIs route, to have full understanding about it including how's and levels of movement and everything else that will increase students' awareness about this articulation pathway. The lecturers are in a position to play a big role in increasing students' awareness about articulation to HEIs as they interact with students on a daily basis in classes and are mostly seen as role models by students. Students showed interest in this articulation route highlighting that it would be of great assistance if articulation advocacy can take that form of orientation to ensure that students have a broad understanding of articulation pathways ahead for better informed decision making. Lortan, Bolton, Maistry, Reddy, and Doorsamy (2017) stated that both lack of articulation awareness and poor communication and failure to communicate articulation initiatives and directives downwards to operational staff as barriers to articulation enhancement.

5.2.3. Student perception towards articulation to HEIs

Under this theme, the students responded with mixed feelings regarding their perception of articulation from TVET into HEIs, with the majority showing interest in this articulation route and with a few totally against it. It is worth noting that the majority of students came to TVET College because they failed matric, while others, who passed matric not having met admission the requirements in universities. Others found universities already full, and others were not willing to take a gap year, etc. Other students came to college, both those with and without matric, because of the practical component that is offered by vocational programmes. No student planned to come to college after completing matric. It is also worth highlighting that, regardless of the rationale that led different students to enrol in a college, the students grew fond of college programmes attributing that to the practical skills that they gain in the college. This includes those students who initially wanted to study at a university but ended in a college due to not meeting the admission requirements of the university. This conclusion has been summarised in relation to students' aspirations by stating the students future aspirations and what the students end up doing can refer to two different things (Pillay, 2012).

Most students showed interest in articulating to HEIs, citing the prospect of two experiences, college practical component and university theory, as a major advantage towards their career development and opportunities as compared to students with one experience. This interest can be attributed to the fact that most students initially wanted to study at a university but ended in TVET due to not meeting the admission requirements in universities and other obstacles like failing matric, universities already full and others. This interest is further attributed to students' aspirations of achieving higher degrees that are offered by universities and that are sometimes required to be employed in higher or senior positions in their prospective fields.

There are also a few students who showed no interest in articulating to HEIs. However, those students were basing their support arguments on misconceptions about articulation which is a result of lack of knowledge about the articulation process. These misconceptions included things like it is time wasting, universities and colleges are offering the same programmes with just name variations sometimes, universities are only theory based, university graduates not employable compared to college ones, not getting funding and many more. Other students even called for higher degree programmes to be offered in colleges to avoid them having to go to universities to access higher degree programmes, showing their strong feeling about TVET programmes. I can conclude that the misconceptions about articulation to HEIs emanates from students lack of awareness and knowledge about the articulation process, which can be attributed to no formal college interventions on students' articulation matters. These misconceptions may also be linked to past challenges that were experienced by TVET graduates when articulating to HEIs.

5.2.4. Challenges of articulating from TVET College to HEIs

In this theme, it can be concluded that the three challenges that emerged during data analysis are the major factors that hinder enhancement of articulation to the HE exit pathway, together with challenges outlined in the literature. The three

challenges that emerged are lack of curriculum mapping between TVET colleges and HEIs programmes, lack of knowledge about the articulation process and lack of awareness about national directives, as well as the misconceptions resulting from students' lack of awareness about articulation into HEIs.

It can be concluded that the challenge of lack of curriculum will remain a 'white elephant' due to TVET colleges' inability to redesign their curriculum that is regarded as a national competency due to it being owned by the DHET. Curriculum mapping requires a lot of stakeholders to intervene and the policy shift or changes that may be necessary to ensure seamless articulation becomes a reality and not the complex cumbersome process it is now. Curriculum mapping calls for intensive collaboration of all stakeholders having a role to play, especially TVET colleges and HEIs that aspire to the successful smooth seamless articulation of students between education systems.

In relation to the lack of knowledge about the articulation process, it can be concluded that the SSS staff, who are supposed to advocate and support students on this articulation route, have little knowledge about the articulation process. This leads to them not having confidence to communicate it to students. The lecturers, even though it is not their main responsibility to advocate articulation to students, seem also to not have full understanding of the articulation process. There is a need to capacitate the TVET staff, especially the SSS staff and lecturers, about the articulation process in which the study found that there is a serious gap and requested by CGOs. The lecturers are included because of the role that they played towards informally discussing articulation during their classes and/or during their informal conversations with students on career advice. Career advice and development was found to be one of the enablers of articulation in the national baseline study conducted by SAQA (Lortan et al., 2017). It is evident that the lack of awareness about articulation and not fully understanding it leads to misunderstanding and misconceptions about articulation which have a strong potential to hinder a smooth rate of transition from TVET to HEIs. The misconceptions have already been described.

5.3. IMPLICATIONS FOR THE RESEARCH

In this area, I will outline the recommendations that transpired from the study. The research found that the college is not engaged in any initiatives, policy or partnerships, to enhance articulation from TVET to HEIs. Both students and staff are aware of this articulation route except for a few students. However, all do not fully understand the articulation process; there is a mixed feeling about articulation from TVET to HEIs with the majority willing to articulate to HEIs to further their studies. A few, however, are not interested, basing their arguments on misconceptions and a myriad of challenges that are hindering articulation. Based on this, the following are the implications of this research.

The college should ensure that articulation into HEIs is articulated to TVET college students as early as during the first-year students' orientation programme so that students can be aware and plan early as to what career pathway they will take after completing an exit level and work accordingly towards their plan as there are multiple exit pathways at students' disposal. Articulation workshops should be held for exit students in the first quarter of the year or as early as possible, in collaboration with universities where possible, when partnerships are in place with them. The college employees responsible for articulation support should attend career exhibitions organised by HEIs and invite articulation champions in universities to provide guidance on this articulation pathway. This should follow after the articulation partnerships have been formalised as the articulation process is not standard. The college should prioritise the development of college articulation policy or guidelines that outline how the college responds to the DHET articulation policy and how students will be supported to realise this articulation route to those interested in taking it. This will assist in clearing and giving light to the common misconception associated with articulation from TVET to HEIs. The college should also prioritise collaborations and/or articulation arrangements and agreements or partnerships that are specifically for articulation purposes with HEIs formally in the form of MoUs. This may include specific special admission requirements and continuous monitoring of articulated students for progress. The college needs to capacitate staff on articulation to HEIs including Career Guidance

Officers and lecturing staff, to ensure that students get detailed and accurate information about articulating to HEIs. This will assist in ensuring that workshops are conducted for students for articulation and will limit the common misconceptions found in this research, thereby increasing articulation to HEIs. The DHET should ensure that curriculum mapping is done at a national level for the alignment of TVET and HEIs for articulation purposes, as the DHET is the owner of TVET programmes or qualifications, a process that may be very complex given that different HEIs operate independently as compared to centralised TVET programmes. Alternatively, the DHET needs to facilitate and fast-track granting TVET colleges institutional autonomy allowing colleges to make curriculum changes to a certain percentage, 20 to 30%, while still ensuring that the bigger part of TVET curriculum is standardised, a process that will depend on the strengthening of TVET colleges' curriculum specialists or developers and leadership to ensure capacity to handle curriculum change at a college level. The SSS staff need to conduct workshops specifically to discuss articulation to HEIs to increase students' awareness. The advocacy for articulation to HEIs should be conducted at all levels including orientation programmes, and not only to exit level students, to ensure that students are aware of this articulation pathway and for those who have interest to plan ahead for it. The plan by students, prior, to articulate into HEIs to further their studies will motivate students to do even better in their studies to meet the high admission requirements set for TVET college exit students by HEIs. The management, especially the SSS management, must familiarise themselves with the government or DHET prescripts and directives governing the SSS, like the SSS annual plan and the DHET articulation policy, to be in a good position to drive the implementation of such strategic initiatives

5.4. FUTURE RESEARCH AREAS

It would be intriguing to explore the possibility of standardisation of pass percentage or mark, for example, 50 percent to be used as a standard pass percentage for all programmes and/or modules in TVET colleges. The study deployed a qualitative research methodology with a small sample, and, in one

college, it would be great to deploy a quantitative research design methodology to explore a large student population covering all 50 public colleges. It would also assist to investigate the rationale of higher admission requirements and non-recognition for TVET students aspiring to articulate into HEIs as compared to their matric counterparts.

5.5. LIMITATIONS OF THE STUDY

The study encountered some limitations. The study planned to conduct all focus group discussions online via Zoom due to observing Covid-19 health protocols. However, this couldn't happen due to the difficulty in organising students to join the focus group on Zoom at a specific time and ended up having physical focus group discussions. The difficulty was or can be attributed to many factors including network connection problems in campuses, digital literacies challenge, difficulty in downloading Zoom prior, students available at different times. Another limitation was that we planned the students' focus group discussions to have six participants. However, due to responding to organisation challenges to accommodate possible non-patch-ups, I ended up organising a bigger number and ended up with some bigger focus group discussions of more than 6 participants in some campuses. This was not a problem because a focus group may have up to 12 participants as per the literature. The third limitation of the study is that it was conducted on one public college and all participants came from that one college. However, it can be used as a point of reference to studies that will use other or many colleges.

5.6. DISSEMINATION OF RESEARCH

The research was conducted for the fulfilment of requirements for a Master of Higher Education degree. However, sharing of research findings is an integral part, especially to policymakers and organisations as it involves policy and partnerships, as promised to some research stakeholders. As such, the copy will be kept by UKZN in their library and library system, another copy to be sent

to the college that was used as a research site for data generation, and the results may be presented in the TVET or SAQA conferences that are normally held annually. Individual participants will also be afforded copies of this research.

5.7. SYNTHESIS

The research has revealed that the college has done little or nothing in response to the articulation of students from TVET to HEIs. In simple terms, the college does not have any policy to guide the articulation process in the college and does not have partnerships specifically for, or including, articulation as one of its collaboration areas. There are just informal initiatives with no progress to report them. The college operational staff in the SSS unit, in the form of CGOs, are aware about articulation to HEIs but lack full details of the articulation and are not even aware of the DHET articulation process that guides the whole process of articulation. As such, there are no workshops that have been held in the college to support students with articulation to HEIs, as in a formal workshop form. Most students are aware of the possibility of articulation to HEIs. However, they also lack full knowledge about the articulation process which directly emanates from the lack of advocacy and no workshops held for articulation support. There are also a few students that were not aware about articulation at all. The majority have an interest in articulating to HEIs because of aspirations of higher degrees and the opportunity of having mixed studying experiences, HEIs and TVET, theory and practical. The few with no interest in articulating to HEIs is due to lack of knowledge and misconceptions about articulation. There are challenges that hinder seamless articulation from TVET to HEIs including lack of curriculum mapping, lack of full knowledge and understanding of the articulation process by both students and lecturers, misconceptions about articulation and others like higher admission requirements for TVET students compared to matric even though they are rated on the same NQF level, TVET outdated curriculum, and lack of prior planning of articulation activities.

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APPENDIX 1: GATEKEEPERS LETTER



UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

Faculty of Education
Higher Education Training and
Development
University of KwaZulu-Natal
Durban, 4041
Contact: 078 339 4348
Email: wakeniad@gmail.com
25 April 2021

Dear Principal

SEEKING PERMISSION TO CONDUCT A MASTER'S RESEARCH AT YOUR COLLEGE

My name is Asiphe Deiron Wakeni, student number: 218063621 and I am a Higher Education Masters candidate at the University KwaZulu-Natal (UKZN). For my project, I am investigating the policy and procedure shortcomings in TVET to HEIs articulation in the context of Integrated Post School Education and Training system.

I hereby request permission to collect data from the College staff and student through participation in structured interviews for my research study. The purpose of the interview is to identify the college initiatives towards articulation and awareness from staff and students.

All participants will be informed about the interview process including time and procedure, and the confidentiality of all information. Participant responses will be recorded using voice recording device with identities withheld to ensure anonymity and will be safely stored for the number of years specified by the University. All interviews will be conducted face to face.

I would like to be given consent to conduct this research study in your college with the college staff and students as participants.

Many thanks in advance for your participation in this study. For any further information, feel free to contact me. To grant me permission to conduct the study in the college, an area is provided below for your signature of approval and college stamp.

Yours Sincerely,
Asiphe Deiron Wakeni
Masters Candidate

College Stamp

Approved by:

Two large yellow rounded rectangular boxes with green borders, intended for the signature of the principal and the college stamp.

APPENDIX 2: PARTICIPANTS CONSENT LETTER



UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

Faculty of Education
Higher Education Training and Development
University of Kwa-Zulu Natal
Durban, 4041
Contact: 078 339 4348/wakeniad@gmail.com

Dear Participant

My name is Asiphe Delron Wakeni, student number: 218083621 and I am a Higher Education Masters candidate at the University KwaZulu-Natal (UKZN). For my project, I am investigating the policy and procedure shortcomings in TVET to HEIs articulation in the context of Integrated Post School Education and Training system.

This is to invite you to participate in a research study mentioned above that is conducted in a rural TVET college in the Eastern Cape. The aim of this study is to investigate policy and procedure shortcomings in TVET to HEIs articulation in order to achieve integrated PSET system that will see TVET students moving with easy to HEIs to further their studies. If you choose to participate in this project, please answer all questions as honestly as possible.

Your participation to this study is strictly voluntary and during participation, the participant can withdraw his/her participation at any time they feel uncomfortable or compromised. Also, note that there will be no penalty imposed to you and it will not affect you in any way.

All data that is collected from interviews will be kept confidential including the recordings of interviews and this data will be used only for purposes of this research study. To ensure that all information will remain confidential, no names or identities will be required; in case where they are required, they will remain private and will be seen by the researcher and supervisor. There is no compensation for participating in this study, as the study is not funded, nor there is any anticipated risks or discomforts related to this research that have been discovered currently. If interested in research results, the research report will be shared when completed.

Further questions regarding the study may be directed to:

- **Mr. Wakeni A.D (Researcher):** 078 339 4348; wakeniad@gmail.com
- **Dr. T. Mnisi (Supervisor):** 0312603972; Mnisi@ukzn.ac.za

You may also contact the **Research Office** through the following contact details:

Mr. Prem Mohun

University of KwaZulu-Natal

HSSREC Research Office

Govan Mbeki Centre

Contact details: Tel: 031 260 4557 and E-mail: mohunp@ukzn.ac.za



UNIVERSITY OF
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INYUVESI
YAKWAZULU-NATALI

This is to confirm that I _____ fully understand the study titled The Integrated Post School Education and Training system: Exploring the Policy and Procedure shortcomings in TVET to HEIs articulation. I understand the purpose of the study and I understand that my participation is voluntary and I can withdraw anytime without any penalty imposed on me.

Participant Signature: _____ Date: _____

DECLARATION

I _____ (Full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

If you are willing to be interviewed, please indicate (by ticking as applicable) whether or not you are willing to allow the interview to be recorded by the following equipment:

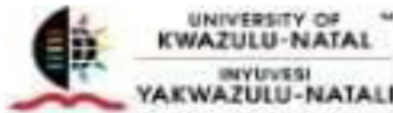
	willing	Not willing
Audio equipment		

SIGNATURE OF PARTICIPANT _____ DATE _____

.....

.....

APPENDIX 3: ETHICAL CLEARANCE



27 July 2021

Mr Asiphe Delron Wakeni (218083621)
School Of Education
Edgewood Campus

Dear Mr Wakeni,

Protocol reference number: HSSREC/00003017/2021

Project title: The Integrated Post School Education and Training system: Exploring the Policy and Procedure shortcomings in Technical Vocational Education and Training to Higher Education Institutions articulation.
Degree: Masters

Approval Notification – Expedited Application

This letter serves to notify you that your application received on 02 July 2021 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. **PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.**

This approval is valid until 27 July 2022.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2- 3 months before the expiry date. A close-out report to be submitted when study is finished.

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

HSSREC is registered with the South African National Research Ethics Council (REC-040414-040).

Yours sincerely,



Professor Dipane Hialele (Chair)

/dd

Humanities and Social Sciences Research Ethics Committee

Postal Address: Private Bag X14000, Durban, 4001, South Africa

Telephone: +27 (0)31 260 8100/45571557 Email: hrssrec@ukzn.ac.za Website: <http://www.ukzn.ac.za/research-ethics>

Founding Campus: Edgewood Howard College Medical School Pietermaritzburg Westville

INSPIRING GREATNESS

APPENDIX 4: INTERVIEW QUESTIONS

Focus Group semi-structured Interview Questions:

1. Why did you decide to study in a college?
2. Why did you decide to enroll for NCV?
3. What is your understanding and perception regarding articulation to higher education institutions?
4. What is your view of studying in a university (do you have interest or had an interest)?
5. Now that you are in college what are your chances of studying in a university (taking that articulation route)
6. Are you aware that you can still articulate and continue with your studies in a university?
7. What are the programmes conducted by the college and/or CGOs to share information about articulation into HEIs and possible articulation pathways?

Semi-structured one-on-one Interview Questions:

1. What is your understanding of articulation from TVET to HEIs and DHET articulation policy?
2. What are the institutional/college policy initiatives on articulation?
3. What is your understanding about the government gazette on recognition of TVET qualifications?
4. What are the existing articulation arrangements and agreements that are there between the college and HEIs to enhance articulation?
5. If any, what is the level, institutionally or by course/programme or both, of these arrangements and agreements?
6. What are the programmes offered by the college that enable articulation to HEI programmes?
7. What is the current articulation rate of the college students (if any) who successfully articulated to HEIs and at what level are those students admitted for in university from what level in college??

Focus group for CGOs

1. What is your understanding of articulation from TVET to HEIs and DHET articulation policy?
2. What are the institutional/college policy initiatives on articulation?
3. What is your understanding about the government gazette on recognition of TVET qualifications?
4. What are the existing articulation arrangements and agreements that are there between the college and HEIs to enhance articulation?
5. If any, what is the level, institutionally or by course/programme or both, of these arrangements and agreements?
6. What are the programmes offered by the college that enable articulation to HEI programmes?
7. What is the current articulation rate of the college students (if any) who successfully articulated to HEIs and at what level are those students admitted for in university from what level in college?

APPENDIX 5: EDITOR'S REPORT

Rod Taylor

Language editor & proofreader
Trading as
Wordstar

215 Republic Road
Randpark 2194

Telephone: 084 716 6588
Email: wordstar@iafrica.com

3 June 2022

To whom it may concern

Language Editing – Masters – A.D. Wakeni.

I have reviewed the proposal entitled “The integrated post-school education and training system: exploring the policy and procedure shortcomings in TVET to HEIS articulation” in terms of spelling, language and grammar and have made recommendations to the author concerning the changes necessary.



R. Taylor
MBA BSc DTM

APENDIX 6: TURNITIN REPORT

THE INTEGRATED POST SCHOOL EDUCATION AND TRAINING SYSTEM: EXPLORING THE POLICY AND PROCEDURE SHORTCOMINGS IN TVET TO HEIS ARTICULATION

ORIGINALITY REPORT

8% SIMILARITY INDEX	7% INTERNET SOURCES	3% PUBLICATIONS	0% STUDENT PAPERS
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