

**INVESTIGATING THE PERCEPTIONS OF THE RELATIONSHIP  
BETWEEN VOCATIONAL EDUCATION AND THE LABOUR MARKET:  
A CASE STUDY OF FET COLLEGE STUDENTS**

**By**

**Anthony Tolika Sibiya**

**Dissertation is submitted in fulfillment of the requirements for the degree of**

**MASTERS OF ARTS (SOCIOLOGY)**

**In the Faculty of Arts**

**At the**

**NELSON MANDELA METROPOLITAN UNIVERSITY**

**Supervisor: Dr N Nyembezi**

**Co- supervisor: Mr D Bogopa**

**APRIL 2017**

## DECLARATION

I, Anthony Tolika Sibiya, s205046975, hereby declare that the full dissertation for the Masters of Arts (Sociology) is my own work and that it has not previously been submitted for the assessment or completion of any postgraduate qualification to another university or for another qualification.

Sign.....

Date:.....

Anthony Tolika Sibiya

## ABSTRACT

The study sought to investigate the perceptions of TVET students regarding vocational education and its relation to the labour market. It hoped to illuminate connections or disconnections between vocational education and employment. The research emanated from the prevailing view that TVET education by its very nature is work-oriented and therefore those who enroll in TVET colleges are able to find employment. Furthermore, that conceptually the TVET curriculum was and continues to be regarded as skills-based for labour market demands thereby enhancing national competitiveness and economic growth. Qualitative questionnaires, which are open-ended in nature, were used to gather facts about students' beliefs and experiences regarding certain engineering programmes and services offered at TVET colleges. Non-probability sampling was used to select one hundred and thirteen (113) participants who voluntarily completed qualitative questionnaires, which were structured to elicit the required information, and the results reveal divergent views shared by students. There are those who feel very strongly that a TVET qualification, in engineering in particular, leads to employment due to its demand and the fact that the institution generally assists students through the placement unit makes it even easier to find employment. Other students firmly believed that whatever qualifications one attained, the world of work cannot accommodate them, as they do not have work experience. They felt this was unfair because they are unable to find employment without being properly monitored and trained by the very same industry that hopes to employ them in the near future. They argue that the only problem pertaining to unemployment is job scarcity, rather than skills scarcity. The research is framed within the human capital theory. Research findings reveal the fact that there is no link between vocational education and the labour market and as a result employment is not easy. There are personal skills required but they are not available in our educational curriculum, which focuses on educational aspirations. The research further posits five distinct but necessary interventions that students are suggesting in order to increase their lack of experience in the job market.

**KEYWORDS:** Education. Engineering. Qualifications. Skills. Unemployment. Youth

## ACKNOWLEDGEMENTS

- I am gratefully indebted to individuals and the institution, which along with the research platform enabled me to complete this research project.
- This project would not have been possible without the invaluable insights, supervision and mentoring of my supervisor, Dr. Nceba Nyembezi and Mr. Bogopa as co-supervisor. I greatly appreciate their unwavering support and words of encouragement and thank them for patiently working with me through the research process.
- I am also indebted to Prof. Peter Cunningham for his role and contribution to this project.
- I extend my gratitude to my boss, Ivor Baatjes, for his theoretical understanding and insightful contribution to my understanding of VET in general and PSET in particular. I further appreciate the flexibility and patience afforded me in completion of this project.
- I wish to express my heartfelt gratitude to my mother for instilling in me the values of diligence and perseverance. She has been supportive of me even though at times without understanding the reason for my studying further as she believes that overqualified people do not get jobs.
- My son and daughter, Siseko and Qhawe, for not querying my absence during their childhood development. I know that this project will inspire them, internalize the value and purpose of education in society. I dedicate this project to them.
- I wish to thank my research participants sincerely for their valuable contribution during the data collection process.
- I also wish to acknowledge the role of comrade Kungokwakhe Dlangamandla ntombi yase Matolweni in data presentation, your assistance is well appreciated leadership.
- Lastly, to all my friends who waited patiently to see this project completed. Ndithi lide latol'ilawu! I thank you for your words of support and validation of my capabilities.

## ACRONYMS AND ABBREVIATION

CHET	: Centre for Higher Education and Transformation
DHET	: Department of Higher Education and Training
DPRU	: Development Policy Research Unit
EMC	: Eastcape Midlands College
GDP	: Gross Domestic Product
HCT	: Human Capital Theory
HESA	: Higher Education South Africa
HSRC	: Human Science Research Council
LED	: Local Economic Development
NATED	: National Accredited Technical Diploma
NCV	: National Certificate Vocational
NDP	: National Development Plan
NEET	: Not in Education, Employment and Training
NMMU	: Nelson Mandela Metropolitan University
NMBM	: Nelson Mandela Bay Municipality
NSDS	: National Skills Development Strategy
OECD	: Organization for Economic Cooperation and Development
PSET	: Post School Education and Training
SA	: South Africa
SAQA	: South African Qualification Authority
SIPS	: Strategic Integrated Projects
SONA	: State of the Nation Address
SANSD	: South African National Skills Development

Stats SA : Statistics South Africa  
STEM : Science, Technology, Engineering and Mathematics  
TVET : Technical Vocational Education and Training  
UN : United Nations  
VET : Vocational Education and Training

# TABLE OF CONTENTS

## Contents

<b>DECLARATION</b> .....	<b>ii</b>
<b>ABSTRACT</b> .....	<b>iii</b>
<b>ACKNOWLEDGEMENTS</b> .....	<b>iv</b>
<b>ACRONYMS AND ABBREVIATION</b> .....	<b>v</b>
<b>TABLE OF CONTENTS</b> .....	<b>vii</b>
<b>CHAPTER ONE</b> .....	<b>1</b>
<b>BACKGROUND AND RESEARCH PROBLEM</b> .....	<b>1</b>
INTRODUCTION .....	1
<b>1.2 PROBLEM STATEMENT</b> .....	<b>3</b>
1.3    RATIONALE FOR RESEARCH .....	4
1.4 THE MAIN RESEARCH QUESTION .....	5
1.4.1 Research sub-questions .....	6
1.5    RESEARCH AIM AND OBJECTIVES.....	6
1.5.1 Research objectives.....	6
1.5.2 Scope of the Study .....	6
1.6    SIGNIFICANCE OF THE STUDY.....	10
1.7    LITERATURE AND THEORETICAL FRAMEWORK.....	11
1.8    RESEARCH METHODOLOGY.....	12
1.9    CHAPTER OUTLINE .....	13
1.10 CONCLUSION.....	15
<b>CHAPTER TWO</b> .....	<b>16</b>
<b>THEORETICAL FRAMEWORK AND LITERATURE REVIEW</b> .....	<b>16</b>
2.1 INTRODUCTION .....	16
2.2 HUMAN CAPITAL THEORY .....	16
2.3 HUMAN CAPITAL THEORY AND VOCATIONAL EDUCATION .....	19
2.4 SKILLS THESIS DISCOURSE AND EMPLOYMENT .....	21
2.5 HUMAN CAPITAL THEORY AND LABOUR MARKETS .....	22
2.5.1 Knowledge Economy .....	22
2.5.2 Labour Market Needs from Vocational Education .....	23

2.5.3 Skills Mismatch Discourse.....	23
2.5.4 Skills Shortage .....	24
2.6 CRITIQUE OF MARKET DRIVEN SKILLS .....	24
2.7 Youth Employment in South Africa.....	25
2.7.1 Graduate Unemployment in South Africa.....	26
2.8 INTERNATIONAL PERSPECTIVE ON VET.....	26
2.9 HISTORICAL BACKGROUND OF TVET COLLEGES IN SOUTH AFRICA.....	28
2.9.1 Post-apartheid Democratic TVET colleges in South Africa .....	29
2.9.2 Articulation process of TVET colleges.....	30
2.9.3 Policy Framework on TVET sector .....	31
2.10 POST SCHOOL EDUCATION AND TRAINING IN SOUTH AFRICA.....	33
2.10.1 White Paper for Post-School Education and Training in South Africa.....	34
2.10.2 Sector Education and Training Authority’s Role in the TVET Sector.....	35
2.11 UNEMPLOYMENT AND SOCIAL EXCLUSION .....	35
2.12 VET AND THE ECONOMY IN SOUTH AFRICA .....	36
2.13 CONCLUSION .....	37
<b>CHAPTER THREE.....</b>	<b>38</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>38</b>
3.1 INTRODUCTION .....	38
<b>3.2 RESEARCH PILOTING .....</b>	<b>38</b>
3.3 Research Paradigm.....	39
3.4 QUALITATIVE APPROACH .....	40
3.4.1 Case Study .....	41
3.5 TARGET POPULATION.....	42
3.6 SAMPLING PROCESS.....	42
3.6.1 Non-probability sampling .....	43
3.7 SELECTION OF RESEARCH SITE AND PARTICPANTS .....	45
3.8 DATA COLLECTION .....	45
3.8.1 Data collection instruments.....	46
3.9 DATA ANALYSIS.....	47
3.9.1 Data Transcription.....	48
3.9.2 Theme Identification and Coding.....	48



3.9.3 Data Analysis and Interpretation.....	49
3.10 ETHICAL CONSIDERATIONS .....	49
3.10.1 Gate keeping .....	49
3.12 INFORMED CONSENT .....	51
3.13 CONCLUSION.....	51
<b>CHAPTER FOUR.....</b>	<b>52</b>
<b>DATA PRESENTATION.....</b>	<b>52</b>
4.1. INTRODUCTION .....	52
4.1.1 Demographics of participants .....	52
4.1.2 Engineering programmes offered at College are listed below: .....	52
4.2. THEME 1: EDUCATIONAL ASPIRATIONS .....	53
4.3 THEME 2: EMPLOYMENT OPPORTUNITIES IN SOUTH AFRICA .....	58
4.4 THEME 3: TVET ENGINEERING QUALIFICATION IS IN DEMAND .....	64
4.5 THEME 4: DEMAND FOR QUALIFIED ENGINEERS .....	66
4.6 THEME 5: PERSONAL SKILLS REQUIRED .....	78
4.7 THEME 6: KNOWLEDGE AND SKILLS LEARNED .....	82
4.8 THEME 7: THINGS TO IMPROVE.....	85
4.9 THEME 8: SUGGESTIONS FOR THE WAY FORWARD .....	87
<b>CHAPTER FIVE .....</b>	<b>90</b>
<b>DISCUSSION OF THE RESEARCH FINDINGS.....</b>	<b>90</b>
5.1 INTRODUCTION .....	90
5.2 THEME 1: EDUCATIONAL ASPIRATIONS .....	90
5.3 THEME 2: EMPLOYMENT OPPORTUNITIES IN SOUTH AFRICA .....	91
5.4 THEME 3: TVET ENGINEERING QUALIFICATION IS DEMAND .....	93
5.5 THEME 4: DEMAND FOR QUALIFIED ENGINEERS .....	94
5.6 THEME 5: PERSONAL SKILLS REQUIRED .....	95
5.7 THEME 6: KNOWLEDGE AND SKILLS LEARNED.....	97
5.8 THEME 7: THINGS TO IMPROVE.....	98
5.9 THEME 8: SUGGESTIONS FOR THE WAY FORWARD.....	98
5.10 CONCLUSION .....	99
<b>CHAPTER SIX .....</b>	<b>100</b>
<b>RECOMMENDATIONS AND CONCLUSION .....</b>	<b>100</b>

6.1 INTRODUCTION .....	100
6.2 SUMMARY AND CONCLUSIONS OF THE STUDY .....	100
6.2.1 Getting employment is not easy .....	100
6.2.2 Educational aspirations .....	102
6.2.3 Personal skills required .....	103
6.3 RECOMMENDATIONS .....	104
6.4 RECOMMENDATIONS FOR FURTHER STUDIES .....	107
6.5 VALUE OF THE STUDY .....	107
6.6. LIMITATIONS OF THE STUDY .....	108
6.7. CONCLUSION .....	108
<b>GLOSSARY.....</b>	<b>110</b>
<b>REFERENCES.....</b>	<b>111</b>
<b>APPENDICES .....</b>	<b>117</b>
<b>Appendix 1: Ethics Clearance Letter .....</b>	<b>117</b>
<b>Appendix 2 Permission Letter from EMC College .....</b>	<b>119</b>
<b>Appendix 3: PROJECT INFORMATION FORM.....</b>	<b>120</b>
<b>Appendix 4: Informed Consent .....</b>	<b>123</b>
<b>Appendix 5: Questionnaire .....</b>	<b>124</b>

# **CHAPTER ONE**

## **BACKGROUND AND RESEARCH PROBLEM**

### **INTRODUCTION**

The ongoing concern facing South Africa today is the high level of unemployment, poverty and inequality. This is in the context of the recently reported 2.8 million of the 6.8 million 18 to 24 year olds in South Africa who are classified as not in education, employment or training (NEET). This figure of 41% of our youth is attributable to, amongst other things, limited access to post-school education and training opportunities, the lack of financial aid, and the restricted availability of employment and this figure is growing exponentially (DHET, 2012).

Young people, in general, particularly graduates are increasingly unemployed. There seems to be no guarantee of employment after education even for young people with qualifications that fall within the scarce skills category such as Science Technology Engineering and Math's (STEM). It is for this reason that the research was conducted to understand how TVET students perceive vocational education in relation to the labour market.

Youth and graduate unemployment has been illustrated by many research reports in South Africa, including but not limited to the National Treasury (2011) report. Altman and Potgieter-Gqubule, (2009) argue that there were about 3 million unemployed youth in South Africa. On the other hand, Sharp (2012) pointed out that there were more than 600 000 young people with qualifications who were unemployed, even among those who were graduates from the Technical Vocational Education and Training sector.

The dominant narrative in this regard is that young people are simply making poor career choices and are therefore responsible for their inability to access gainful employment. They find it difficult to access the world of work to secure work-based skills and experience and government policy interventions (such as Youth wage subsidy) seems not to be assisting either (Sharp, 2012).

The problem of the high level of unemployed youth is growing exponentially and many economic and political experts have consistently and openly vigorously engaged in the discourse of unemployment in South Africa. STATS-SA released a quarterly report in 2016 that shows unemployment in South Africa stands at 26.7%. Vocational education, through the TVET College sector and the larger National Skills Development Strategy, has been identified and emphasized as a key educational response in solving the youth unemployment crisis.

According to the White Paper on Post-School Education and Training (2014), the State forecasts a significant expansion of the TVET College sector to 400,000 students by 2030. Whilst Baatjes, Baduza and Sibiyi, (2014) are of the view that over the last decade, the importance of vocational education has come into sharp focus as radical changes in the global economic system, combined with scientific and technological innovation and transfer, required new, predominantly formal ways of preparing the youth and adults for the labour market. The role of vocational education is now more prominently associated with increasing the supply-side of human capital for the economy, as well as addressing increasing unemployment amongst the youth. Policy development for vocational education is shifting rapidly in ways that build a closer connection between vocational education for the youth and the provision of strongly regulated, institutional pathways from school to work (Baatjes, Baduza & Sibiyi, 2014).

An analysis of the skills crisis in South Africa reveals that skills shortages are particularly acute at the lower-middle, middle and higher-middle skills levels, which are covered more by FET colleges than higher education. This is particularly evident in the Eastern Cape and thus involving TVET colleges as a partial solution to the problem of large numbers of unemployed youth will ensure that more opportunities are made available for further studies in applied and vocationally-oriented qualifications - precisely the areas that have been identified by the South African Department of Labour as national scarce skills (DHET 2014).

## 1.2 PROBLEM STATEMENT

Unemployment is a problem facing young people and continues to be prevalent among graduates who are unable to find jobs in South Africa. The problem of youth unemployment is the most critical issue facing South Africa today, and Stats SA (2016) has released its quarterly report showing that unemployment has increased to 26.7% (Statistics South Africa, 2016).

Though this is not news to South Africans, it is worrying as in the past years it has been a dominant theme expressed by President Jacob Zuma in the state of the nation address; specifically rampant unemployment, poverty and inequality, (State of the Nation Address, 2012).

Furthermore, the Minister of Higher Education and Training, Blade Nzimande has raised concerns in the past about the high level of unemployment amongst the youth calling for Technical Vocational Education and Training to be more responsive to the needs of the economy and further calling for industry partnership, (Department of Higher Education and Training, 2011). This is an important issue as more than 3 million youth are not in employment, education or training. This group today is commonly referred to as the NEET (not in education, employment and training (DHET, 2011).

The alarmingly high level of unemployed youth has been debated by various economic and political experts who have been consistently and openly engaging extensively in this discourse of unemployment in general and youth unemployment in particular. For instance, Stats SA reported in the last quarter of 2015, that unemployment generally was at 25.5% (Stats SA, 2015). Young people who graduate are increasingly without work and as a result, there seems to be no guarantee of employment after education even for young people with qualifications that fall under the scarce skills category such as Science, Technology, Engineering and Math's (STEM).

This problem of youth and graduate unemployment has been identified in various research reports including National Treasury report (2011) which suggested that there were about 3 million unemployed youth in South Africa. This report corresponds with the DHET report on youth unemployment cited above and adds that more than 600,000 graduates with post-matric qualifications were unemployed Bhorat (2012).

The dominant narrative is that students are simply making poor career choices and therefore responsible for their inability to access gainful employment; they find it difficult to access the world of work to secure work-based skills and experience and government policy interventions such as the Youth wage subsidy do not seem to be assisting (Bhorat, 2012).

On the other hand, Vocational Education and Training, (VET) through the Technical Vocational Education and Training (TVET) College sector combined with the National Skills Development Strategy has been identified as a key educational response to solving the unemployment crisis among the youth (DHET, 2012).

The White Paper for Post-School Education and Training (PSET, 2014) concurs with the National Development Plan (2012), in that the state forecasts a significant expansion of the TVET college sector to 400, 000 students by year 2030. It is in this context that Baatjes, Baduza and Sibiya (2014) argue that the escalating interest in vocational education has mainly been driven, amongst other factors, by the marginal status of vocational training, and the selective inclusion of students' formal education and training programs.

They further argue that in the last decade, the importance of vocational education has come into sharper focus because of radical changes in the global economic system and such changes have been combined with rapid scientific and technological innovation and transfer. The latter was premised on a demand for new ways of preparing youth for the labour market (Baatjes, Baduza & Sibiya 2014). They further contend that the role of vocational education has been regarded as a primary source in increasing the supply-side of human capital for the economy, as well as addressing the escalating unemployment amongst the youth (Baatjes, Baduza & Sibiya, 2014).

### **1.3 RATIONALE FOR RESEARCH**

The primary motive for the research was to gain an understanding of how TVET college students understand the relationship between their education and the labour market. The research is significant because of the high level of unemployment amongst the youth in South Africa. The increasing level of unemployment is seen as detrimental to the future development prospects of young people in particular and the South African population in general.

It is therefore fitting to understand the perspectives held by the youth regarding the role of education in the economy and society and, furthermore to determine what informed such views and what solutions the youth propose in addressing unemployment. The study was underpinned by the fact that South Africa had a figure of more than 600 000 youth or graduates who were unemployed (Bhorat, 2012).

A study by the South African Qualifications Authority (SAQA) and Higher Education South Africa found that there is a gap between what employers expect of a newly graduated individual and what they get (Griesel & Parker, 2009). The study further showed that employers regard competence in areas such as English, ICT skills and general understanding of the world of work as important elements (Griesel & Parker, 2009). Whilst a study by the Development Policy Research Unit of the University of Cape Town found that those who have a tertiary qualification but not a degree, have a 50% chance of finding a job, while those with a degree have a 17% chance of being unemployed (Bhorat, 2006). He further argues that early school leavers make up the bulk of the jobless. The problem of graduate unemployment is framed within competing discourses of a skills crisis versus a job crisis. Many scholars have perceived lack of graduate preparedness as the dominant discourse, which also links poor choices made by students to unemployment (Ashton, Brown & Lauder, 2012; Marsh, 2011; Weis, 1990). Yet, at the same time, young people and students in particular are facing long-term unemployment. The TVET sector faces the largest deficit and requires the greatest intervention. The White Paper for Post-School Education and Training offers an ambitious vision for growth in the provision of higher and TVET education. An increase in knowledge and understanding of the sector is therefore imperative.

#### **1.4 THE MAIN RESEARCH QUESTION**

Do Technical Vocational Education and Training college students believe they will be employable after they have completed their engineering studies considering the current high rate of unemployment in South Africa?

### **1.4.1 Research sub-questions**

- How do TVET college students perceive the relationship between the engineering programmes they are enrolled in and their prospects of finding work?
- What informs students' understanding of their future career prospects?
- What are the factors that shape students' career choices?
- What role do TVET colleges play in shaping the choices of students?

## **1.5 RESEARCH AIM AND OBJECTIVES**

The study aimed at understanding any perceived link between education and the labour market, especially that the White Paper for Post School Education and Training offers an ambitious vision for growth in higher and further education provision in order to meet the country's high rate of unemployment.

### **1.5.1 Research objectives**

This study sought to achieve the following objectives:

- To investigate how the TVET college students perceive the relationship between the engineering programmes they are enrolled in and their prospects of finding work and their career choices.
- To contribute within the Sociology of Education.
- To come up with recommendations with the view to resolving some of these problems in future.

### **1.5.2 Scope of the Study**

The study was conducted in one TVET college situated in Uitenhage, where the engineering students' perceptions of their employability were studied. The college is one of two TVET colleges available in the Nelson Mandela Bay Municipality from which relevant participants were sampled.





**Figure: 1 Map of the Eastern Cape Province**



**Figure: 2** the Nelson Mandela Bay Map

The study was conducted within the province of the Eastern Cape (affectionately known as the Home of Legends) and this map depicts areas and towns of the EC. The second map is for the Nelson Mandela bay where Uitenhage is situated within the metro.



**Figure: 3** this map shows where the study was conducted and the institution is located in the Uitenhage area of Nelson Mandela Bay

## **1.6 SIGNIFICANCE OF THE STUDY**

This research sought to understand the perceptions of TVET students regarding vocational education and its relation to the labour market with more focus on students undertaking engineering qualifications. It was an important study which emanated from the prevailing view that TVET education by its very nature is work-oriented and therefore those who enroll in TVET colleges are able to access the world of work.

The study aims to illuminate connections or disconnections between vocational education and the labour market (employment), thereby incorporating the students' perspective into the youth unemployment discourse. The study further reveals new knowledge regarding what students perceive as the real barrier to youth unemployment and how to overcome that barrier. The discourse of youth unemployment has been narrated and concluded with no research being done to understand how students understand the predicament especially those who fall within the "scarce skills category" such as Science, Technology Engineering and Math's persuading it from TVET College.

The researcher further believes a study of this nature is significant because of the high level of unemployment amongst the youth in South Africa and argues that often young people are not consulted in the policy propositions and decisions are taken without their input being included.

There is a gap that exists in the literature in the sense that it makes students feel liable for their inability to be absorbed into the market. It does not address how confined the structure of the labour market is in South Africa. Capitalism is a factor of unemployment as where this system exists, unemployment is guaranteed, yet the literature rather puts blames young people for the problem. The study may expose the limitations of people's understanding of youth unemployment especially graduates, and may go a long way to contribute towards a holistic approach to combat the scourge of unemployment in South Africa in general.

The researcher's contribution would be to alter the misleading belief that our socio-economic problems can be achieved through formal employment. The study may further contribute to this preconceived idea that education is a panacea to all our problems as it has been revealed that this is not accurate.

The TVET education and curriculum content are part of an essential strategy to meet the existing demands of the labour force, enhance national competitiveness and thus promote economic growth.

However, it is the researcher's view that in all these debates about mismatch of skills and lack of graduate preparedness, there is a lack of empirical research that focuses on student perceptions about choices related to education and its relationship with the world of work. It is within this context that this study will be valuable especially as it focuses on students' views about the relationship of vocational education and training and prospects of employment.

### **1.7 LITERATURE AND THEORETICAL FRAMEWORK**

The current Vocational Education and Training and its application in South Africa advances the failed approach to human development, which is human capital theory. The defining feature of economic debate in recent decades is the importance to which neo-classical economics have attached human capital as a determining factor of economic success and competitive advantage (Brown, Green & Lauder, 2000). This naïve argument that education is the most important and single determinant of economic growth was initially advanced through human capital theorists Gary Becker and Theodor Schultz in the 1960s and early 70s. They reduced human behaviour to calculation rationality, wherein human beings are seen as purposeful and goal-oriented individuals who will invest in education in order to maximize their employment status. The emergence of the Human Capital Theory (HCT), which has proven to be a failure in so far as human development is concerned, was through post-World War II growth, which brought about new economies that according to this theory needed highly qualified and skilled personnel (Brown, 1999).

Baptiste (2001: 187) argues that “what is commonly labeled as consumption is really human capital investment which is about knowledge, attitudes, and skills that are developed and valued primarily for their economically productive potential.” He further pointed out that HCT refers to the productive capacities of human beings as income-producing agents in an economy and to the present value of past investments in the skills of people. He further defines human capital as investment in education which accounts for economic growth.

Brown, Green and Lauder (2000) argue that this economic rationale for education regarding investment in human beings is no different from investment in land or machines as they all

represent part of the technological enhancement of the economy (Brown, Green & Lauder 2000). South Africa's level of unemployment is currently at 26.7% (Stats SA, 2016) and graduate unemployment has reportedly escalated. The Department of Higher Education and Training has called for the expansion of PSET in South Africa to mitigate the unrelenting growth in youth unemployment and for PSET to be capacitated to absorb the youth who are growing into adulthood without being employed (DHET, 2012).

Allais and Nathan (2014) argue that the economy has experienced what has commonly been referred to as 'jobless growth' with capital, rather than labor-intensive forms of economic growth being the order of the day. This argument concurs with the long held view that the real reason for youth unemployment is lack of jobs in South Africa as the economy may grow without new jobs being created.

Horn (2006), is in support of jobless growth with the view that the challenge of unemployment in South Africa is an economic problem. Horn further argues within this context that socio-economic conditions such as crime, violence and poverty are directly linked to the high level of unemployment especially amongst the youth. It is further argued by Allais and Nathan (2014) that the relationship between education and the economy is an on-going concern around the world. They argue that in South Africa both the education system and economy have particular problems, largely originating from the apartheid system and the adoption of particular macro-economic models and strategies. On the one hand, we have exceptionally high levels of unemployment, and significant structural problems in our economy, whilst on the other hand millions of young people leave the school system with inadequate education (Allais & Nathan, 2014).

## **1.8 RESEARCH METHODOLOGY**

The methodological approach used in conducting the study was qualitative as participants were given the opportunity to explain their thinking and perceptions around vocational education in relation to the labour market. This approach has been carefully chosen as it usually aims for depth rather than quantity of understanding (Henning, 2004: 03).

Ferguson (1993) describes qualitative research as a set of methods for conducting research and as a set of beliefs about our knowledge of the world. Whilst De Vos (1998) defines qualitative research as a multi-perspective approach, using different qualitative techniques and data collection methods of social interaction aimed at describing, interpreting or reconstructing this interaction in terms of the meanings that the subjects attach to it. There are various forms of qualitative research such as participant observation, in-depth interviewing, and focus groups (Babbie and Mouton, 2001). The study used a qualitative questionnaire for data collection. A population in the context of this research means a set of people as a whole, with set characterization and sample as a sub-group of the population that the study aimed to understand. Babbie and Mouton, (2001) describe the population as the study object, which may be groups and organizations which also include but are not limited to individuals and conditions to which they are exposed. In this regard, the target population was TVET engineering students and as in any research, it is practically impossible to study and understand the entire population. When the population being studied is large, it is often impossible, and certainly inefficient, to study every person in that population (Chadwick, Bahr & Albrecht, 1984). “In social research there are two motivations for using sampling methods, be it probability or non-probability sampling; the first reason is time and cost, if conducted properly and diligently results may be positive and cost effective and the second reason for sampling is accuracy” Neuman (2006: 219). He further explains that the results of a well-designed, carefully applied sampling method produces results that are in the same range if not more accurate than trying to reach every single person. A researcher cannot observe or capture everything while conducting a study; the researcher needs to make an informed decision about what to observe for a particular study – that is sampling (Babbie & Mouton, 2001).

## **1.9 CHAPTER OUTLINE**

The rest of the dissertation consists of six chapters and is organized as follows:

**Chapter One:** Chapter One introduces the rationale for the study and its motivation; background introduction; the aims and objectives of the study as well as its significance and key questions related to the study; and chapter outlines.

**Chapter Two:** This chapter reviews international and local literature in relation to Vocational Education and Training (VET); offers refreshing historical background on TVET colleges in South Africa (SA); post-democratic TVET colleges in SA; articulation processes of TVET colleges and other related topics including but not limited to youth unemployment and vocational education; labour markets; VET in SA; Education and Economy in SA. Human capital theory is explained as well as other related sub-topics.

**Chapter Three:** This section outlines the research methodology and provides an outline of the qualitative research method; describes the research design and approach; target population; sampling methods and processes.

**Chapter Four:** This chapter presents the data collected through self-administered questionnaires as well as discussion around the findings, data interpretation and analysis.

**Chapter Five:** This chapter discusses the research findings.

**Chapter Six:** Provides a summary of the conclusions derived from the study findings. The chapter also discusses the value of the study; limitations encountered during the study, and offers some suggestions to relook VET and further research.



## **1.10 CONCLUSION**

This chapter offers the opportunity to engage with the study itself and its orientation and background. The next chapter deals with the literature review and theoretical framework that reveals the essence of the conception of the study. It further includes a critical examination of the effect of human capital theory as an entrenched discourse in education development theory. It is within this context that the Technical Vocational Education and Training sector has been presented as a panacea to skills shortages and development and is being constantly reconfigured to produce an effective skills base for advancing the country's economy.

## **CHAPTER TWO**

### **THEORETICAL FRAMEWORK AND LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This chapter reviews local and international literature in relation to Vocational Education and Training (VET); offers historical background on TVET colleges in South Africa (SA); post-democratic TVET colleges in SA; articulation process of TVET colleges and other related topics including but not limited to youth unemployment and vocational education; labour markets; VET in SA; Education and Economy in SA. Human Capital Theory is also explained as well as other related sub-topics. As discussed earlier the aim of the study was to ascertain how TVET students perceive vocational education in relation to the labour market and this chapter provides an in-depth review of the various topics related to the literature that has been reviewed.

It commences with Human Capital Theory as a framework from which this research was derived, explaining its limitation and how its approach to education has failed to live up to social development. The chapter further deals with topics in reference to broad areas such as vocationalisation from an international perspective, the historical background of TVET colleges, in South Africa referring to sub-topics specifically so as to explain them more clearly; the labour market and youth unemployment which formed the conceptual framework of the study. It further argues that the pervasive attachment of human capability through education is not only limited but misleading and this is endorsed by Human Capital Theory.

#### **2.2 HUMAN CAPITAL THEORY**

The term human capital refers to knowledge, attitudes and skills primarily developed and valued for their economically productive potential (Baptiste, 2001). Other scholars agree with its reference to the productive capacities of human beings as income-producing agents in the economy (Baptiste, 2001).

He further argued that, human capital formation is the name given to the process by which such capital is deliberately developed and the expenditure is called human capital investment (Baptiste, 2001). It is argued that this notion of human as capital was first introduced in the seminal work, *Wealth of Nations* by 18th century economist, Adam Smith and has been endorsed by other theorists such as Walsh and Baptiste (2001). Notwithstanding its long history, the theory of humans as capital remained relatively undeveloped well into the 20th century.

Baptiste (2001) argues that there are fundamental reasons that are posited by different scholars relating to human capital theory, the first one being articulated by John Stuart Mill and Alfred Marshall who distinguished between the acquired capacities, skills and knowledge of human beings, which are classified as capital, and human beings themselves. They argue that Baptiste found the mere thought of humans as capital rather offensive whereas to them humans were the purpose for which wealth and capital existed; the end to be served by economic endeavour.

The second reason resides within the widespread use of the Keynesian definition for consumption and investment. Keynes viewed consumption and investment as mutually exclusive category; expenditures of two different sectors of the economy, households and businesses respectively and further regarded education as largely a household expenditure and therefore treated it as pure consumption with no investment component (Baptiste 2001). Whilst Baatjes, Baduza and Sibiya, (2014) make the point that considering the above-mentioned reasons it is clear that the defining feature of economic debate in recent decades is the importance economists have attached to human capital as a determining factor of economic success and competitive advantage. They further argue that this notion that education is the most important single determinant of economic growth was initially advanced through the work of human capital theorists Gary Becker and Theodor Schultz in the 1960s and 70s.

According to Baptiste (2001), human capital theorists treat people as *homo economica*: radically isolated, pleasure-seeking materialists who are born free of social constraints or responsibility, who possess no intrinsic sociability, and who are driven, ultimately, by the desire for material happiness and bodily security (Baptiste, 2001). The assumption here is very clear that at all times individuals will attempt to maximize fulfillment of these hedonistic, self-indulgent desires.

The proponents of human capital theory assume that our world uses an educational meritocracy in which a person's socioeconomic status is limited, presumably, only by his or her educational investment. People with higher levels of education are always more productive than less educated people, and this differential in productivity is sufficient to explain all social inequalities.

Human capital theorists construe social inequalities not as injustice or the result of exploitation and oppression, but rather as the natural and inevitable outcome of a competitive, free market (Baptiste, 2001). For them free markets are the most legitimate social institutions; that is, they are the only institutions that can adequately and justly govern, regulate and explain human behaviours and achievements and the definition of human capital as knowledge, attitude and skills that are developed and valued primarily for economically productive potential (Bapstise, 2001). In human capital theory, investment in education accounts for economic growth and the rationale is that education is regarded as investment in human beings no different from investment in land or machines as they all represent enhancement of an economy according to Ashton, Brown and Lauder (2012). Therefore the human capital theory model advances the following:

- a) Education should be regarded as a private good that is a tradable commodity in the market place for money and status;
- b) Private return on human capital investment (education) provides an incentive to progress to further education;
- c) Further education should be oriented towards the labour market (supply and demand);
- d) Additional education can be translated into higher productivity, which results in higher earnings

This theory has since been severely criticized in a growing body of research and the limitations of human capital theory have become even more obvious as a result of the global economic crises as posited by Weis (1990); Brown, Green and Lauder (2000); Marsh, (2011); Ashton, Brown and Lauder (2012). Whilst Motala and Vally (2014) point out that despite a body of knowledge critiquing human capital theory, it remains central to skills formation policies in most countries.

The growing critique of this narrowly conceived notion of education in relation to social/human development has been exposed for what it is, not only with an advanced and well-grounded argument against it and its failures, but as it defines human beings on the same plane as machines or technological advancements. It is the researcher's view that a continuous and uncritical adoption of human capital theory persists and its associated practices for education suggest the need for considered alternatives.

There is a need for alternative approaches to education given the wide-ranging critique of HCT including its one-dimensional view of human beings; narrow understanding of skill and labour; its exacerbation of social inequalities; the development of 'underdevelopment'; blaming of the victims; and the privatization of social problems (Baptiste, 2001). Hyslop-Margison (2005) argue accurately that despite the claims of HCT that more, improved and higher education and skills will translate into economic growth for most developed and especially developing countries, this still needs to be put in place.

“Every education practice is profoundly influenced by theories of human and social behavior... but some theories are so flawed that they are likely to exacerbate rather than alleviate social ills” (Baptiste, 2001:185). This is clearly applicable to HCT whose reductionist view of human beings as homo economicus, that is human beings as social agents singularly concerned with the pursuit of self-interests, is oppressive, alienating and the antithesis of our ontological vocation to become more human (Baatjes, Sprees & Vally, 2012). Human Capital Theory does not allow for a range of learning practices that frustrate the development and freedom of human beings.

### **2.3 HUMAN CAPITAL THEORY AND VOCATIONAL EDUCATION**

A comparison between vocational education development and formal schooling will make for an informative debate in South Africa. Governments around the world have subjugated all forms of education including vocational education to HCT, hence the redefinition of learners as 'human resources' or 'clients', and educators as 'service providers'. The neoliberal appropriation of HCT, first appearing in South Africa in the 1990s, placed an even greater emphasis on the importance of the private individual investment, which in turn brought about abundance in privatization of education in our country (Baatjes, Spreen & Vally 2012).

Like many countries around the world, South Africa is reorienting its TVET system in order to harness TVET to national economic objectives as set out in the National Skills Development Strategy III, the National Development Plan and various skills projects intended primarily to serve business and industry interests, and to meet the singular interests of a largely unreconstructed labour market (Baatjes, 2005). Such a reorientation has resulted in the prevailing human capital policy in South Africa which promotes an education and training culture marked by perpetual training as seen in learnerships, skills programmes, and training schemes for the unemployed which are meant to introduce improvements to support industry's need for a highly-skilled and flexible workforce in a competitive global economy. The reorientation has seen the 'modernization' of the skills development regime in South Africa advocating infinite re-skilling, perpetual and rigorous training programmes as the solution to economic problems.

Investment in the education of individuals is therefore seen as the solution to all the structural problems of the economy and the labour market (Baatjes, 2005). The attachment of human capital as a factor for economic success has led governments around the world to invest heavily in education and training. Brown (1999) further points out that the massive expansion of higher education and several authoritative reports have emerged expounding lifelong learning. For him, the study of high skills in relation to the economy of the 21st century is essentially a study of post-industrial changes in our understanding of global, national, local and personal. This approach to education and human development is narrow because it fails to define skills formation as the development of the social capacity for learning, innovation and productivity Brown (1999). Many educationist scholar has heavily and accurately criticized the Human Capital Theory approach arguing that this theory is ideologically flawed as it fails to recognize that learning is not only a technical competence (Brown, 1999).

Whilst Ashton (2005) is of the view that the neoclassical approach in seeing the economy as analytically distinct from its social, cultural and political dimensions is an impediment to understanding skill formation in the future. This is what Human Capital Theory advances which has proven to be a failure (Ashton, 2005).

## **2.4 SKILLS THESIS DISCOURSE AND EMPLOYMENT**

Skills formation can be defined as the development of the social capacity for learning, innovation and productivity (Brown, 1999). This definition, explains Brown (1999), further registers the importance of both gains in productivity and innovation in production techniques, service delivery, product development and the blue skies research, as resources of wealth creation. It also recognizes that learning is not only a technical competence but a social capacity. This further affirms the point by Ashton (1986) that the neoclassical approach to understanding the economy should never be seen as distinct from its social, cultural and political dimensions because such an approach impedes social development. Within this context Allais and Nathan, (2014) argues that the South African economy has experienced what has commonly been referred to as 'jobless growth' with capital, rather than labor-intensive forms of economic growth being the order of the day. This is coupled with a prevalent argument from employers that they cannot find people with the right skills. The best solution to unemployment and skills problems is the entrepreneurial activity which is considered to be an important mechanism for economic development through job creation, innovation and its welfare effect, Herrington, Kew and Kew (2010). They further explains that South Africa has a shortage of priority skills that are necessary to ensure wider access and participation in the country's growing economy. They further contend that massive and growing unemployment was and is a major problem especially evident amongst the country's youth who, more often than not, lack the experience and skills necessary to access employment in the formal sectors (Herrington, Kew & Kew, 2010). Young people are forced to create their own opportunities and attempt to provide their own form of employment according to Herrington, Kew and Kew (2010) who argue that the country is in a crisis of youth unemployment, given the inability of the existing formal sector to absorb the growing labour force, coupled with burgeoning youth unemployment.

## 2.5 HUMAN CAPITAL THEORY AND LABOUR MARKETS

Trends in labour market transitions suggest that where a country's population is relatively young, and the youth form a large part of the national population, an increase in unemployment amongst the youth is almost inevitable (Perold, Cloete, & Papier, 2012). They further argue that this is not only a South African issue as reports from the Organization for Economic Cooperation and Development (OECD) countries between 1960 and 2004 also suggest that there is no systematic pattern that exists between the size of the youth cohort and their access to the job market.

According to Perold, Cloete and Papier (2012) an important factor in youth labour-market participation is the length of time that young adults remain out of work. In other words, the longer the period spent outside of the labour market, the less chance there is of accessing stable, paid employment.

“World economies are recovering but continue to experience a severe economic downturn. The GDP growth is slowing down rapidly and was expected to be negative, in 2009, in the US, Japan, Britain and the Euro area. Unemployment is rising and consumer demand is falling, as the real economy is hit by the consequences of financial turmoil” Brunello (2009:145).

### 2.5.1 Knowledge Economy

“A concept of a high skills economy is defined as an economy with a wide distribution of workforce skills where these are fully utilized to achieve high productivity across a wide range of sectors, at the same time producing high wage rates and relative income equality, and a high level of workforce co-operation supported by civic trust and social capital is seen as an important part of the model” (Ashton, 2005: 64). Having struggled with high levels of unemployment within the neo-liberal policy framework for instance, this problem in the USA was resolved by the growth of new industries, such as information technologies, which provided new sources of investments and improved productivity, Ashton (2005). He further argues that at a superficial level it appeared that the USA had resolved the problem by allowing the market forces to operate freely and these had provided new, highly skilled, well-paid jobs in the new industries, and as a result, some of the old low skilled jobs had been replaced by highly skilled, highly paid jobs.



This was seen by Britain as a remedy, which then meant that they themselves had to encourage market forces to generate the new jobs in the knowledge economy which would result in the creation of a high skills economy, according to Ashton (2005).

### 2.5.2 Labour Market Needs from Vocational Education

In many instances, what is often defined as employer's expectations of education, employers often emphasise personal qualities when selecting candidates. This was British industry's response to their government's green paper on higher education. Arguably, personal qualities cannot be taken for granted even in applicants with very good academic qualifications. While you may have academic skills but lack the ability to communicate, and show leadership, alongside numeracy and specialist skills, you fail dismally as a candidate (Lauglo & Lillis, 1988).

They further argued that for instance the confederation of the British industry in its report on education and training reiterated that as much as they need specialized skills, they put a premium on abilities such as positive attitudes, the ability to communicate, as well as leadership qualities. In 1986, the recruitment units from Saint Andrew's University, Scotland argued in a similar way at the Confederation of Industries of Britain that there has always been and always will be huge demand for broadly based first-degree candidates who are recruited for their trained minds, problem-solving capacities, social skills and mobility explains Lauglo and Lillis (1988). Moreover, industrial and commercial recruiters found the arts and social science graduates who meet these requirements were more amenable to training in new skills, say Lauglo and Lillis (1988).

### 2.5.3 Skills Mismatch Discourse

Mismatch of skills in the labour market happens when employers are unable to, or have difficulty employing people they need because they are not readily available in sufficient numbers with the required skills, argue Belt, Campbell and Giles, (2010). Whilst Bennett concurs that the possession of these skills is important, as it is the permit for a new graduate to make an immediate contribution to a business (Bennett 2002). Whilst Lauglo and Lillis (1988) are of the view that vocationalization policies are a quest for greater labour market relevance in education; therefore, they argue for a better articulation between the content of the schooling and the subsequent

application of the acquired skills, and especially for improved productivity with workers earning a decent livelihood.

#### 2.5.4 Skills Shortage

Rasool and Botha (2011) argues that there is no widely accepted definition of a skills shortage or of how government should respond to it, therefore, the nature, scale and severity of skills shortages are often miscalculated, misunderstood and misused which results in poor public policies, with their associated high levels of wastage. As a result, the reliability and validity of labour market data is worrying. The discourse of skills shortage and unemployment is a global phenomenon and whereas skills shortages are relatively small in England, it is still estimated at around 63 000 across the economy (Belt, Campbell & Giles, 2010).

Current skill shortages affect just three percent of establishments, predominantly in small organizations in England. The highest proportion of skill shortages are found in skilled trades and professional occupations explains Belt, Campbell and Giles, (2010). There are vigorous debates amongst various interest groups about the chronic skills shortages in the country and the inability of the education and training system to meet the demand-driven needs of the economy. “Despite these debates and ongoing policy reforms, the nature of the skills shortage in South Africa remains poorly defined” (Rasool & Botha 2011:03).

In some quarters, an allegedly inflexible labour market is also blamed, and it is sometimes seen as a paradox that South Africa can have both a skills shortage and high levels of unemployment (Allais & Nathan, 2014).

## **2.6 CRITIQUE OF MARKET DRIVEN SKILLS**

The route of market driven skills policies have placed tremendous limits on the potential of social development (Motala & Vally, 2014). They argue that problems arise from the untested assumptions that pervade much of the thinking and research on the relationship between education, skills development and employment. Brown (1999) concurs with this notions arguing that learning is not only a technical competence but also a social capacity.

This further affirms the point by Ashton (1986) that the market driven or neoclassical approach of seeing the economy as distinct from its social, cultural and political dimensions should be discouraged because such an approach impedes social development. It is this market oriented skills thesis that has resulted in more fundamental and transformative approaches being deliberately underrepresented or omitted. They are of the view that fundamental issues arise from examining the relationship between education and training and the economy. However, it is imperative that education and training systems be preceded by some orientation as to the nature of the economy that is being referred to (Motala & Vally, 2014).

“In the course of high levels of unemployment amongst the youth they tend to stay on or to enroll in school during tough economic times rather than entering the labour market” (Weis, 1990: 3).

## **2.7 YOUTH UNEMPLOYMENT IN SOUTH AFRICA**

South Africa had an unemployment rate of approximately 28% in the first decade of democracy up to 2004, but using the broad definition of unemployment, which includes those who are willing to work, but not searching, the unemployment rate stood at 41% (Klasen & Woolard, 2008). The National Treasury (2011) reported in its discussion paper that over 30 percent of 18-24 year olds with tertiary education which includes university degrees, university of technology diplomas and college certificates were unemployed. Unemployment remains one of the major societal and macro-economic problems facing South Africa and the vulnerability of youth to the challenges of unemployment points to the need for a holistic approach to youth development. The reality is that there is a scarcity of jobs and one major policy should ensure that the youth do not lose touch with the labour market. Unemployment duration in three-year cycles is not an uncommon feature amongst many of the unemployed youth (Perold, Cloete & Papier, 2012).

According to the Minister of Higher Education and Training: “Crisis’ is a well-chosen word to describe youth unemployment, to have three of seven million 18-24 year-olds sitting at home doing nothing is a real concern for the department (DHET, 2012). Whilst Stats SA (2016) reported that unemployment has increased in South Africa to 26.7 %. This was 2, 2 percentage points higher than reported in the fourth quarter of 2015.

### 2.7.1 Graduate Unemployment in South Africa

The high level of unemployment in South Africa affects not only the uneducated youth but also those who have interfaced with higher education institutions, such as traditional university institutions or Technical Vocational Education and Training institutions as graduates are just as affected by this social condition. Unemployment is so serious that even students from engineering fields appear to be affected. Prinsloo (2011) argues that there are an estimated 300 000 unemployed graduates in South Africa that cannot find jobs, a third of whom are trained in the engineering and science fields.

City Press (2012) reports that students doing engineering studies were discussing their aspirations, dreams and uncertainty regarding their future prospects. The article reported that whilst these engineering students are no different from thousands of other young South Africans studying at various tertiary institutions or post school education institutions, what appears to be more challenging is the fact that even TVET college students face a tougher battle for jobs than their peers (City Press, 2012). This report seems to affirm the naïve view held by Prinsloo (2011) that this was mainly owing to a gap between the supply of skills and demand for skills in the labour market of the country. According to Prinsloo (2011) graduates in the fields of engineering and science, mainly from TVET colleges are given the knowledge and some practical training by institutions, but then left without any work experience and ultimately remain unemployed.

## **2.8 INTERNATIONAL PERSPECTIVE ON VET**

The term vocationalisation was taken to mean curriculum change in a practical or vocational direction (Launglo & Lillis, 1998). They further argue that this is an antiquated, recurring policy theme in many countries around the world. These policies are mainly a political response to poor articulation of schooling with the world of work, the labour market. Vocational education is meant to ease school leavers into practical jobs or training for self-sustenance or employment especially under the conditions of widespread and worldwide unemployment of young people (Launglo & Lallis, 1998).

In France for instance, vocational education is provided at secondary level and leads to diplomas and at the first stage of tertiary education leads to advanced technician certificates. Vocational practitioners in partnership with professional bodies and experts develop the content of these training programmes; such that no diploma or advanced certificates can be modified or created without the consent of these committees of experts and professional bodies and vocational practitioners (Béduwé & François Giret, 2011).

The committee reviews the content of the diplomas on a regular basis to adapt them to the advanced technological and organizational changes occurring in the workplace. In France, diplomas are designed to apply to specific professions or to vocational knowledge in order to identify the type of activities a diploma would include and are designed to equip young people with specific operational knowledge and learning capacities that enable them to adapt easily to the technical innovations occurring in the labour market.

Béduwé and François Giret (2011) further explain that the integration of graduates into formal employment is carefully monitored and verified so that the target set for each diploma is reached by the graduates. Often young people expect that the training courses they choose will lead them to the jobs defined by the standards. Potential employers form part of the committee in designing the qualification and focus on the field of study of the young people they recruit as it may correspond to the knowledge and skills they are looking for (Béduwé & François Giret, 2011).

As expected, the convergence of interests leads one to believe that having quick access to long term jobs as defined in the standards, is the best thing that can happen to young vocational training graduates. A situation where the job matches the training is seen as an optimal situation for the labour market and goals achieved for all vocational training programmes (Béduwé & François Giret, 2011). “It is within this context that for adolescents and young adults around the globe, occupational choice and transition from school to work constitute an important developmental task with significant consequences for their future potential in financial, social and psychological domains” (Tomasik, Hardy, Haase & Heckhausen, 2009:38).

Tomasik *et al.* (2009) further argue that though the transition from school to work is, compared to only a few decades ago, now characterized by uncertainty as well as unpredictability and requires increased efforts in self-regulation to successfully find one’s way into the labour market.

Furthermore, Tomasik *et al* (2009) argued that, in Germany if adolescents do not start vocational training within at least two years of graduation from school they are unlikely to ever receive vocational training. They then face the challenge of competing for an apprenticeship, which will in turn have a strong impact on their future career and financial prospects in a situation of scarce supply and faced with a deadline for starting an apprenticeship. Tomasik *et al.* (2009) further explains that in German, the transition from school to work involves an urgency that is taken seriously as part of the country's development. Youth career choices and aspirations are influenced by many factors including, but not limited to, family, school, social-cultural experience. In some cultures like the Asian cultures, the career aspirations of individuals are strongly influenced by one's social systems and family, particularly the parent's expectations.

## **2.9 HISTORICAL BACKGROUND OF TVET COLLEGES IN SOUTH AFRICA**

In the 19th and 20th centuries, South Africa witnessed the emergence of technical colleges and formal apprenticeship training in response to the rapidly growing needs of the mining industry, as well as the railways and other industries emerging at the time (Stumpf & Niebuhr, 2012). These emerged under the national Department of Education, were transferred to the provincial education departments, and then incorporated into a differentiated school system namely technical, agricultural and home economics schools.

The development of railways was important and necessary to cater for the movement and the population influx to the gold and diamond regions (Sooklall, 2005). This expansion of railways led to the growth and development of the mining industry and the demand for railway mining technicians. The government railways began the first technical education classes for railway apprentices in their workshops in Durban around the 1900s and similar classes were started in the Cape in 1890 as well as at the central South African Railways in Pretoria in 1902. Typical subjects taught for these courses were machine construction, practical mathematics, carriage building and sketching (Sooklall, 2005). She further argues that the fact that training developed and expanded across regions of South Africa it became apparent in the early 1900s that interest in technical education was beginning to grow rapidly. Between 1906 and 1916 many new colleges were opened and by 1910 there were technical schools in various regions such as Pretoria, Durban and

Pietermaritzburg. The Pretoria trade school opened in 1909 which prepared students for mechanics, woodwork, printing, plumbing and wagon building as well as electronic trades whilst Durban-based technical schools provided the vocational training necessary to enter technical, commercial and teaching occupations but did not prepare students for trades (Sooklal, 2005). College education other than the technical high school courses was defined as higher education.

Even in the light of these developments the period between 1950 and 1980 was characterized by relative stagnation of technical colleges, and by racial and ideological engineering (Sooklal, 2005). The state, employers and organized labour in this period made several attempts to place skills and technical and vocational education and training more firmly on the national agenda and the state's efforts were characterized by a narrow instrumentalist of "skills" (Report of the De Lange Commission, 1981) and were complicated and compromised by the wider political and economic developments that were taking place around the 1970/80s (Sooklal, 2005).

Sooklal (2005) further explains that in the 1970s and 1980s, South Africa was characterized by intensifying political conflict and economic decline. The country's increasingly limited skills base was a major constraint to growth and, at the same time, the acceptance of African urbanization necessitated new approaches to the training and advancement of African workers. Unskilled and rural Afrikaans-speaking workers felt threatened by African workers who competed for their jobs. They considered it necessary to protect their interests in the labour market through racial divisions.

Sooklal (2005) further points out that vocational education and training systems that evolved between the 1940s and the 1960s consisted of various elements in support of segregated labour and skilled work and artisan training was reserved for white workers. This was institutionalized through the apprenticeship system that provided on the job training, supplemented by theoretical training through a network of public technical colleges and public entities, such as Eskom, Telkom, Transnet and others.

### 2.9.1 Post-apartheid Democratic TVET colleges in South Africa

The post-apartheid democratic government was faced with a college sector that did not fit its purpose and a number of institutions located far from centers of economic activity. The changes in the economy led to an increasing mismatch between offerings of colleges and the demands of

industry and the late 1990s saw a process of policy development for the then technical college sector resulting in the Further Education and Training Act No. 98 of 1998, which laid out a vision for transformation (Akoojee, McGrath, & Visser, 2008). .

This was followed in 2001 by the New Institutional Landscape Document, which translated that vision into proposals for 50 new public TVET colleges with a mandate to improve quality and responsiveness in the education sector. This process of transformation was supported by significant research activity, including nine provincial situational analyses of colleges and provincial labour market reviews by the Human Sciences Research Council explains Akoojee, McGrath and Visser, (2008).

Fisher, Jeff, Powell and Graham (2003) argue that the TVET sector lies at the crossroads between general education, higher education and the world of work. The TVET sector was meant to facilitate national human resource development. In the context of large scale unemployment with continuing skills gaps in key areas of the economy, there is a great reliance on the TVET sector to produce the intermediate to high-level skills required in a changing global and national economic environment.

The central focus of TVET programmes is to remain relevant and meaningful to the respective community realities in which they might find themselves being transformative so as to bring about a greater measure of equity, participation and democracy, (Centre for Community Development Barclay Centre commission report, 2001). The report argues that decisions about whether TVET programmes are relevant or not can only be determined by the communities themselves. It posits that in a democratic society like South Africa it is incumbent upon TVET curricula to increase the levels of relevance by providing choices and enabling learners to develop themselves as human beings.

### 2.9.2 Articulation process of TVET colleges

The TVET sector in South Africa faces a multitude of complex problems and TVET systems across the globe are fundamentally shaped by the effectiveness of their articulation with the world of work on one hand and by the extent to which they grant meaningful access to further and higher learning on the other hand (Kraak & Hall, 1999).



They argue that this has not been the case in South Africa and, regrettably, the TVET system has failed both in articulating itself to the world of work and to furthering higher learning. This failure within the system in relation to the quality and relevance of TVET programmes, leads to inadequate preparation for higher learning and articulation paths to the world of work (Kraak & Hall 1999).

Baatjes, Baduza and Sibiyi (2014) concur that the current TVET sector and its structure has failed to link young learners to real employment prospects in the world of work and has also failed to provide a meaningful learning pathway for employed adult workers to return to formal study to improve their overall skills and competencies. Increasing joblessness and underemployment amongst graduates is now being explained as a failure of curriculum models, including the lack of proper work-based learning or work-integrated tools that fail to provide the proper skills required by the labour market (Baatjes, Baduza & Sibiyi, 2014).

### 2.9.3 Policy Framework on TVET sector

The dominant discourse argues for the massification of vocational education as an emancipatory instrument to address the phenomenon of high unemployment. Yet government continues to build on the failure of the skills development legislation of the late 1990s intended to channel more working class and unemployed youth into industrial and technical education (Baatjes, Baduza & Sibiyi, 2014). In support of this, Kraak and Hall (1999) highlight four distinct areas, which are problematic in the TVET sector:

#### *Horizontal and vertical divisions in the governance of the TVET sector*

The sector is horizontally differentiated across a wide range of ministerial jurisdictions. For example, Kraak and Hall (1999) point out that some colleges fall under the control of the DoE (Department of Education), while Agriculture, Health and Police departments' further overlap with higher education in the provision of programmes at NQF levels 4 and 6.

#### *Programme fragmentation*

College programmes are fragmented and disorganized hence there is no clear articulation to the world of work. There is a confusing array of programmes with few points of articulation and little equivalence between them.

These programmes differ widely with respect to quality standard provisions, outcomes and curriculum (Kraak & Hall, 1999). They posit that the college sector is fragmented into two separate and impermeable streams. One is general education and the other training programmes, which are regarded as completely separate entities, because schools are designed for academic learning. Few schools have links to the world of work and few incorporate career or vocational education courses into their formal academic curricula (Kraak & Hall, 1999).

#### *Negative perceptions of Technical Vocational Education*

Outside the formal secondary school sector, TVET does not have a good reputation and vocational education and training lacks parity of esteem with traditional academic schooling. There is a perception around the TVET sector that it offers second-rate, poor quality education and is for those who have failed in the formal education system, and these perceptions are hard to overcome resulting in the perpetuation of the stigma attached to Technical Vocational Education and Training (Kraak & Hall, 1999).

#### *Systemic challenges of the TVET sector*

As South Africa does not function in isolation from the rest of the world, it is evident that vocational education remains confined by the stigma of a system generally characterized by: (a) programmes for students who work with their 'hands and not their heads' that is, programmes that do not train students to think conceptually and critically; (b) programmes for poor black youth and adults who do not have access to highly-skilled, prestigious jobs and careers; (c) skills provisions that are obsolete in a rapidly changing economy; and (d) institutions that fail to provide students with an alternative to schooling (Kraak & Hall, 1999).

Baatjes, Baduza and Sibiyi (2014) point out that as the instrumentalist focus on vocational education increases, the historic race/class inequities are likely to be reproduced under this subsector of education in particular. Kraak & Hall (1999:22) disagree as “the period from 1979-1981 characterized a new phase for colleges as the Wiehahn and Riekert commissions of inquiry made provision for the permanent urbanization, unionization and apprenticeship of African workers in the former white urban industrial sites of South Africa.

This commission, led to new colleges which sprang up, and changes occurred. However, almost the entire former Department of Education, Training, and Bantustan colleges are still relatively young institutions, under 20 years of age and because of the turbulence of the past 2 decades, there has been insufficient time for the establishment of partnerships between colleges, industry and an effective culture of learning.

## **2.10 POST SCHOOL EDUCATION AND TRAINING IN SOUTH AFRICA**

In the first half of the 20th century Vocational Education and Training (VET) in South Africa shifted from traditional master-apprentice forms of training to introducing courses at technical colleges as part of the apprentice's overall training. The sense in the current context of VET is that much effort is being made to overcome the historical inequities in the vocational system, though there is a long way to go, (Moll, Steinberg, Broelmaan, Gewer, Fischer, Moletsane, Sewlall, 2005).

In the current era, VET has a pedagogical necessity to develop employees that are qualified and adaptable to the needs of the workplace. However, the business community expressed little satisfaction concerning the quality and adaptation of knowledge, skills and performance of young employees and postulated that schools, vocational education and training institutions and work were not sufficiently linked to one another (Jossberger, Brand-Gruwel, Boshuizen, & Van de Wiel, 2010).

Jossberger *et al.* (2010) further argue that technological, economic and social developments force the education system to adapt continuously to new content and requirements. The importance of vocational education in post-apartheid South Africa is underscored in national skills formation policies related to the Technical Vocational Education Training sector (TVET), the National Skills Development Strategy (NSDS) as well as increases in funding. Significantly the importance of the vocational education sector has recently been emphasized in pending policy as set out in the White Paper for Post-School Education and Training (DHET, 2014).

### **2.10.1 White Paper for Post-School Education and Training in South Africa**

The White Paper defines a vision for the type of post-school education and training system the Department of Higher Education and Training aims to achieve by 2030. In this way, the post-school education and training system will meet South Africa's needs (DHET, 2014). Furthermore, this paper outlines a policy direction to guide the education department and other institutions towards building a developmental state with a vibrant democracy and flourishing economy. The priority is to strengthen and expand PSET institutions in South Africa. Above all, emphasis has been on strengthening partnerships with employers, both at the system level and that of individual colleges and such opportunities will assist colleges to locate opportunities for work-integrated learning (DHET, 2014).

The White Paper refers specifically to training systems, curricula and training providers and employers having a close relationship particularly for those providing vocation training. It further identifies the importance of expanding other forms of job training, including learnerships and internships in non-artisan fields. These are the salient points of the White Paper:

The department argues that it aimed at establishing a post school system that:

- Can assist in building a fair, equitable, non-racial, non-sexist and democratic South Africa;
- Build a single coordinated post-school education and training system; expanded access, improved quality and increased diversity provision.
- Stronger and more-cooperative relationship between education and training institutions and the workplace.
- Lastly, this educational vehicle must fulfill the needs of individual citizens, employees, employers and broader societal development according to the Department of Higher Education and Training (2014).

However, the business community expressed little satisfaction concerning the quality and adaptation of knowledge, skills and performance of young employees and postulated that schools, VET institutions and work were not sufficiently linked to one another, explains Jossberger *et al*, (2010). It is within this context that there should be facilitated partnership of industries (employers) with TVET colleges.

### **2.10.2 Sector Education and Training Authority's Role in the TVET Sector**

As a result of the above, Sector Education and Training Authorities (SETAs) have a crucial role to play in facilitating such workplace learning and partnerships between employers and educational institutions. SETAs must focus on developing skills for those enterprises and the development of a skills pipeline leading to such workplaces, as it is these initiatives that will give rise to a central skills planning system for TVET colleges.

In the context of technological, economic, and social developments which force the educational system to adapt continuously to new contents and requirements, competence-based education is a solution to reducing the gap between a dynamic labour market, and education and integrating theory and practice seems especially relevant for vocational education Jossberger *et al*, (2010). These scholars go on to describe students in vocational education as 'do-learners', which suggests that the learning of theories alone is insufficient for these students to connect and apply to the work context.

### **2.11 UNEMPLOYMENT AND SOCIAL EXCLUSION**

The challenge of unemployment and poverty as a global phenomenon is understood variously within different national contexts. In the UK for instance, emphasis is placed on the culture of dependency which assumes that the socially excluded have developed an unhealthy dependency on state support which inhibits them from investing in their human capital or looking for a job, according to Brown (1999). Alternately, he explains that in South Korea the issue of social exclusion takes a completely different form, given the lack of the western model of state welfare. The question of unemployment is part of a major national debate about how the country should respond to downsizing advocated by the IMF, which will lead to mass unemployment. Thus, the manner in which the state addresses the issues of unemployment and poverty is central to South Korea's skill formation strategy in the future.

Seeing the economy as analytically distinct from its social, cultural and political dimensions is neo-classical in approach and impedes the understanding of skills requirements. The rediscovery of the social construction of skills has led to growing interest in the concept of social capital, argues Brown.

Treat and Hlatshwayo (2012) contend that the problem of unemployment and the crisis in education are discussed in ways that suggest these are essentially the same thing - or at least they must be addressed together. “We are often told of the need to urgently create jobs, but at the same time we are told that this would be difficult if not impossible to do, because of a desperate shortage of skills that we are told exists among South African workers” (Treat & Hlatshwayo, 2012: 2).

Increasing unemployment due to international competition for low-skilled work, technological innovation and the economic slowdown, has also made the question of social exclusion increasingly problematic, especially when public expenditure is under pressure (Brown, 1999). The high unemployment rate among the youth is not only a South African issue as countries such as Spain, Italy, and France are also confronted with high rates of youth unemployment (Treat & Hlatshwayo 2012). They further argue that although this is rarely mentioned in the context of these debates, the important point is that unemployment is a structural feature of capitalism, meaning under capitalism unemployment is guaranteed.

## **2.12 VET AND THE ECONOMY IN SOUTH AFRICA**

The relationship between education and the economy is an on-going concern around the world. In South Africa, both our education system and our economy have particular problems, largely originating from the apartheid system and the adoption of particular macro-economic models and strategies. On the one hand, we have exceptionally high levels of unemployment, and significant structural problems in our economy, while on the other hand millions of young people leave the school system with an inadequate education. (Allais & Nathan, 2014)

Education and training outside of the school and university systems require significant expansion, thus a skills shortage is widely regarded as a major contributor to South Africa’s high unemployment levels, explains Allais and Nathan (2014).

In some quarters, an allegedly inflexible labour market is also blamed, and it is sometimes seen as a paradox that South Africa can have both a skills shortage and high levels of unemployment. (Allais & Nathan, 2014). As a result of this disconnection between education and the economy or labour market, approximately three million young people between the ages of 18-24 are not

accommodated in either the education and training system or the labour market. This is a waste of human capability and a potential source of serious social instability (DHET, 2012).

## **2.13 CONCLUSION**

This chapter has provided an overview of the literature relative to VET and reveals how HCT has been narrowly misrepresenting the role of vocational education in society. This limited understanding of vocational education and its existence is concerned with economic value, limiting the contribution that human beings have in society beyond economic terms. VE should be about building pedagogical strategies that are necessary, firstly to develop humans to be adaptive and responsive to societal needs as opposed to the narrowly conceived idea that humans should be regarded as employees that need to adapt according to the needs of the workplace. It should also continue articulating and responding to poor schooling or lack of access in relation to the labour market. Vocational education is supposed to be about easing school leavers into jobs or self-employment and further breaking new ground for young people to have necessary and practical skills to access and respond to social conditions, which are not limited to poverty and unemployment, in particular.

South Africa continues to be faced with high levels of unemployment particularly among the youth. SETAs must be reconfigured to play a direct role in facilitating workplace learning and partnerships between employers and educational institutions.

The following chapter will deal with how the study was undertaken, which research methodology was used in conducting the study and further illustrates which technique was employed in collecting data.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

The previous chapter dealt with the literature review relating to the subject of this study as well as where Human Capital Theory was employed as the theoretical framework for the study. This chapter outlines the research design and methodology used in conducting the study, explains why this method was chosen and deals with the techniques employed to collect data and data analyses. The primary aim of the research is to investigate how TVET college students perceive the relationship between the engineering programmes they are enrolled in and their prospects of finding employment. The research further aims to understand the factors, which shape students', career choices especially those from the Uitenhage-based engineering college focused on in the study.

#### **3.2 RESEARCH PILOTING**

The process of testing the reliability and validity of questions was undertaken in this study. Eighty (80) participants were sampled to test the meaning and relevance of the questions posed in the study and as all agreed to the questions this simplified the data collection exercise.

They all responded to questions once the study and its purpose was explained to them, and they were also asked to complete the questionnaire and provide their response to the nature of the study, the questions and whether or not they are user-friendly. It was agreed that the language was clear and that the questions were suitable for an empirical study.



### 3.3. RESEARCH PARADIGM

Holding a particular worldview or paradigm influences individual behaviour; attitudes and beliefs and at times even professional practice. Henning, Van Rensburg, and Smith (2004) define a paradigm as an assumption or theory that enlightens research.

Paradigm determines the position any particular researcher takes with regard to the subject matter of his or her research (Henning; Van Rensburg & Smit, 2004). At the same time, Rubin and Babbie (2005) supports this view that paradigm also determines what falls within or outside of the limits of a genuine study. In short, a paradigm is a structure within which theories are constructed that influence how the world is perceived and shapes people's understanding of how things in the world are interlinked.

This study adopts a qualitative research approach within a critical research paradigm. The critical research paradigm has its roots in the critical theory of the German philosophers, George Hegel and Karl Marx, and in the critical pedagogy of Paulo Freire (Vine, 2009). These relevant historical figures believed that it is constructed in unequal terms. For example, for Marx, capitalist society comprises of the ruling class or bourgeoisie - who are those who own the means (mode) of production and the proletariat - the workers who do not own the means of production but rather offer their labour to the ruling class who are the owners of production.

The researcher agrees with Freire and Marx who strongly believed that the powerful people, those who are wealthy because of their class position in society, act as oppressors and the working class and the poor are viewed as the oppressed. Thus, critical theory sees a conflict of interests between the powerful and powerless members of society (Vine, 2009). Whilst McLaren and Giarelli (1995) make the point that critical research is not only about finding out the dominant and oppressive structures and hegemonic discourses in society, but more about emancipation and liberation.

Knowledge is created through dialectical means, for example dialogue, although power relations always exist (Freire, 1970). For example, people who are requested to participate in research at times assume or view the researcher as an 'expert', and this kind of relationship is disempowering as it prevents participants from opening up freely.

Maluleke (2014) argues very strongly and believe that social inquiry is not ‘value free’, therefore it is not class neutral. Whilst Neuman (2006) argues that social reality is influenced by many dynamics, for example social, political, cultural, economic, etc. Rubin and Babbie (2005) makes the point that no knowledge about the world is objective, but all knowledge about the world is subjective, that is, it is shaped by people’s social or political positions, beliefs, cultures and experiences. Maluleke (2014) makes the point, by arguing that there is no objective researcher who collects objective data, but research is always influenced by the researcher’s position in society.

### **3.4 QUALITATIVE APPROACH**

This research study falls within the scope of the qualitative research approach broad framework. This approach was used as an attempt to investigate how students perceive youth unemployment which is inclusive of graduates with scarce skills qualifications but not limited to engineering. This approach to the study has been carefully chosen because it aims for depth rather than quantity of understanding (Henning, 2004). As posited by Henning the study was to gather students’ knowledge and their understanding of the relationship, if any, between vocational educations and training in so far as employment prospects are concerned. This approach was chosen specifically because it focuses on what participants think and their actions, and the meanings they attach to their lives.

Neuman (2006) argues that the qualitative approach is rarely concerned with representative sampling; rather it focuses on the relevance of the research topic, which determines the people to be selected. It is within this understanding that the qualitative approach was employed as a relevant method in this study; as participants were given the opportunity to explain in writing their perceptions around vocational education in relation to the labour market.

Ferguson (1993) describes qualitative research as a set of methods for conducting research and as a set of beliefs about our knowledge of the world. The proposed research method is framed within the qualitative explanatory and descriptive research design. The explanatory part of the study has been used as the basis for critically describing the discussion of the findings.

De Vos (1998) defines qualitative research as a multi-perspective approach, using different qualitative techniques and data collection approach to social interaction aimed at describing, interpreting or reconstructing this interaction in terms of the meanings that the subjects attach to it. There are various forms of qualitative research such as participant observation, in-depth interviewing, and focus groups (Babbie & Mouton, 2001). Though this qualitative research approach has been severely criticized for its subjectivity as argued in the research paradigm above, from the perspective of critical social theory any claim to neutrality in research is far-fetched or even impossible. There are many factors that the qualitative approach takes into consideration hence it can sometimes be referred to as constructivist, as well as interpretative, descriptive, explanatory and so on. The intention for this approach as Neuman (2006:15) explains is to build new theory and at the same time expose the limitation of the existing theory. It is clear that the study adopted both the descriptive and explanatory design, which assisted in gaining students' experiences and determining what informed their choices in this regard.

In further explaining the qualitative approach in context, in relation to description and explanatory design, Babbie and Mouton, (2001) argue that this research approach has always been focused on describing the actions of the research participants in detail in an attempt to understand these actions in terms of their own beliefs, history and context.

#### 3.4.1 Case Study

A case study is one of several ways which the researcher used within the qualitative approach because its prime objective is to understand human beings in a social context by interpreting their actions as a single group, community or event. Within the context of seeking to understand the TVET engineering students' perceptions of VE in relation to the labour market – the EMC became the case study for this research. Yin (2009) defines it as an empirical research inquiry that explores existing phenomenon within its real-life context, especially when boundaries between phenomenon and context are not clearly articulated. The case study approach was necessary and useful given the contextual situations in the college(s) and it is more significant because the conditions of the event being explored are critical particularly when the researcher has no control over events as they unfold.

### **3.5 TARGET POPULATION**

The researcher's main target population was college engineering students especially those who were in their final year of study. According to Babbie and Mutton (2001), a population is a set of people as a whole, with set characterization. They further explain that it can be groups and organizations that also include but are not limited to individuals and conditions to which they are exposed. On the other hand, Neuman, (2006) argues that there are three terms with similar meanings, which can be a source of confusion, but they are interrelated especially in social research. These are population, universe and sampling. The focus of the research was predominantly engineering students who are doing both National Accredited Technical Education Diploma (NATED) and National Certificate Vocational (NCV) programme. The number of registered students in both NCV and NATED programmes in the College is 883. This number is made up of two campuses offering and specializing in engineering courses.

### **3.6 SAMPLING PROCESS**

In any research, it is practically impossible to study and understand the entire population. It is within this context that non-probability sampling was necessary in this study. The researcher's beliefs are further affirmed by Chadwick, Bahr and Albrecht (1984), as they argue that when the population being studied is large, it is often impossible, and certainly inefficient, to study every person in that population. It was therefore not possible to study all 883 engineering students registered with EMC.

A sample is a sub-group of the population that the study aimed to investigate. Neumann (2006) argues that the researcher in the qualitative research rarely examines the entire population for various reasons; therefore, a sub-group (sample) is chosen to best represent and reflect the population from which it was drawn. A total number of 200 students are completing their final year in the field and the total number of sampled students from the college was one hundred and thirteen (113) in both NCV and NATED programmes.

In terms of gender, there were forty-five (45) male students and sixty-eight (68) female students. The research can easily be conducted from the sub-group, which represents the population so that the findings of the study can be used objectively to derive conclusions that will best represent the

entire population. It is believed that this research approach does not concern itself about a representative sampling, because what is important is the relevance of the research topic rather than representativeness, which determines which people are, selected (Neuman, 2006).

Neuman (2006) argues that in social research there are two motivations for using sampling methods, be it probability or non-probability sampling. The first reason is time and cost; if conducted properly and diligently results may be positive and cost effective whilst the second reason for sampling is accuracy (Neuman, 2006). He further explains that a well-designed, carefully applied sampling method produces results that are in the same range if not more accurate than trying to reach every single person.

### 3.6.1 Non-probability sampling

From preliminary inquiries, it was estimated that the sample will be a maximum of 60 students in the engineering field but the study ended up with a sample of 113 students in total as a reasonable number. The sampled size was considered sufficient for the purposes of the study and the process ran over a two-day period. The researcher was the only person who collected data from the EMC institution and permission to conduct the study was granted. The researcher will be the only person who has access to the data and the names of participants will remain anonymous as was explained to them.

There are two types of sampling in the social science research which is non-probability and probability sampling and the researcher found purposive sampling suitable and appropriate for the study as well as convenience sampling which both fall within the non-probability sampling category. Sampling refers to a smaller set of cases a researcher selects from a larger group/pool and generalizes to the population (Neuman, 2006). It is the selection of a portion of a group of interest or unit of analysis (Babbie & Mutton, 2001). When non-probability sampling is used, the researcher rarely determines the sample size in advance and has limited knowledge about the large population from which the sample is taken (Neuman, 2006).

Babbie and Mutton (2001) support this view that a researcher cannot observe or capture everything while conducting a study; the researcher needs to make an informed decision about what to observe for a particular study – that is sampling. The natural feature of qualitative research is not interested

in the size of the population, but in the depth of the information to be gathered. As a result, qualitative researchers usually limit their focus to a few sites, or even one site and the researcher limited the sites to one college focusing only on engineering students. The student population as primary participants was briefed about the research and it was explained repeatedly that their participation was voluntary and that they should only share information willingly. Neuman (2006) argues that like any social research qualitative and quantitative researchers use sampling methods differently and in most cases debates around sampling come from researchers who use quantitative style as their primary motive is to get a representative sample.

Qualitative researchers rarely draw a representative sample from a huge number of intensely sampled cases (Bobbie & Mutton, 2001) who further argue that what is relevant to the qualitative research is the topic being discussed rather than representation, which determines which people are selected. This was the case with this study, as the researcher chose engineering students from the college, because the topic itself addresses the perception of TVET engineering students in relation to the labour market in terms of employability.

The engineering field is often referred to as “critical scarce skills” thus the investigation into this field became paramount at least from the researcher’s perspective, therefore students’ perceptions regarding the nature of their qualification in relation to the labour market was important.

The aim of the research was to explore how TVET college students perceive the relationship between the engineering programmes they are enrolled in and their prospects of finding employment and to ascertain what informs students’ understanding of their future career prospects. Constructing the questionnaire requires that questions must flow together smoothly as the researcher wants each participant to hear exactly the same question and respond accordingly (Neuman, 2006).

### **3.7 SELECTION OF RESEARCH SITE AND PARTICIPANTS**

The reasons for selecting the College, which is situated in Uitenhage, in the Eastern Cape Province, were twofold. Firstly, the researcher chose this college for convenience purposes as well as easy access over the period of the study due to its close proximity. Most importantly, besides being a student the researcher works closely with the college, and is also familiar with the students and staff, and has a general understanding of the dynamics of the institution.

Secondly, given that the study focuses on vocational education in relation to the labour market with specific focus on engineering qualifications which is often mentioned as a “scarce skill”, the college fortunately offers engineering qualifications and was therefore an appropriate site for this study. The college has two campuses dedicated to engineering studies and understanding students’ perspective on VE in relation to employability was relevant to the study itself.

The focus of the study was mainly on the College which is one of Nelson Mandela Bay Municipality region’s public TVET colleges of the eight colleges in the Eastern Cape. Amongst other programmes, they offer engineering-related programmes that could provide the skills required by the automotive sector and other related industries in the western region (Nelson Mandela Metro) of the Eastern Cape and the country at large. The fact that engineering is often referred to as a “critical scarce skills” meant that the study of this field had become paramount.

### **3.8 DATA COLLECTION**

The typical nature of the research domain of the social science presents the greatest challenge to the methodological ingenuity of the researcher (Mouton & Marais, 1990: 75). They argue that it is more challenging when human beings are being subjected to investigation for a number of reasons and key to this factor is that they are rational, historical and normative beings.

Dates of appointment were set up with the College management to meet with students at the engineering campus at both campuses. The researcher briefed the participants on the objectives of the study and the importance of their participation and they willingly agreed, and the management was also supportive.

Their privacy was assured as the data process unfolded and this was in line with the ethical considerations of privacy and anonymity. The environment was conducive for both the researcher and students and there were no interruptions from other students who were not sampled by virtue of falling outside of the research scope. The researcher protected the identity of participants during the research process and a written consent form was signed prior to the research process taking place. A request for permission for the research was also sent to the college concerned and permission was granted.

### 3.8.1 Data collection instruments

A qualitative self-administered questionnaire was used as a form of collecting information from participants who were asked to answer appropriately. Qualitative questionnaires are open-ended in nature and are used to gather facts about people's beliefs, feelings, experiences in certain programmes, services offered, and activities and so on. The open-ended questionnaire was designed in such a way that participants had the freedom to express their views in response to the questions asked without any influence or clues from the researcher (Walonick, 1993).

The questions were open-ended to allow the participants to write either positive or negative responses based on the type of questions. The data gathered in this way was helpful since the researcher sought to understand how TVET students feel about employability issues. Responses acquired from the participants could influence the institution to change strategies in designing certain courses to suit the labour market. However, this technique may not be helpful if researchers are interested in quantifying and confirming hypotheses about certain occurrences. The positive aspect of qualitative questionnaires is that they are flexible and could be worded in different ways to allow participants to give responses in their own words.

The introduction and the aim of the study were presented to the students. They were also informed that their participation was voluntary and that they could withdraw from participating in the study at any time without any obligation to provide reasons. Participants were then given a questionnaire to complete at home and return by the next day. A questionnaire was structured through four sections ranging from high school background, to current studies, curriculum and knowledge industry, as well as employment opportunities.



A list of questions was chosen after considerable testing, with a view to stimulating trustworthy responses from sampled students. This type of self-administered questionnaire is relevant for this study because the population itself is adequately literate and the aim was to find out what students thought about the topic presented to them.

The researcher explained the questions to the sampled participants and further ascertained whether they understood and would be able to complete and respond accordingly. This method of data collection has a higher level of completion rate than mail surveys for instance. The questionnaires were delivered to participants and after completion they were collected the following day.

According to Neuman (2006), this type of process is cheap, ensures a high response rate, and allows an individual researcher to conduct the study. The advantage of this method of data collection is popular in social research because it is easy and cost efficient. This is exactly what the researcher experienced, as he could reach both campuses of EMC within two days. Questionnaires were given directly to participants who then read the instructions and questions, and then completed their answers.

This approach of collecting data from a self-administered questionnaire assisted in getting students' firsthand experience and what informed their choices in this regard. Unlike techniques in quantitative approach, which are concerned about representation, the participants had an opportunity to explain their thinking and perceptions around vocational education as far as employability in the labour market is concerned.

In most instances research methods often explain how the inquiry should proceed and it involves analysis of assumptions, principles and procedures in a particular approach of inquiry (Schwandt, 2001). Methods in the main, explains Schwandt (2001) explicate and define the kinds of problems worth investigating.

### **3.9 DATA ANALYSIS**

Qualitative information remains critical in analyzing any set of data and it is often harder and more complicated to recognize patterns and relationships in this challenge of unemployment and the literature. Data analysis is a process of gathering all the necessary data and information useful for supporting and drawing conclusions of the research (Babbie & Mutton, 2001).

The information gathered through this process has generated a new paradigm shift from students as far as unemployment is concerned and that helps in adjusting some of the theories around the causes of unemployment or graduate unpreparedness. A comparison was also done of the information that has been collected with other information in the literature review. Comprehending findings of the data collected involves revising and restating the purpose of the research, the research question and the literature review.

### **3.9.1 Data Transcription**

In social research after collecting data, the researcher has the responsibility to transcribe the written responses in order to do in-depth and thorough data assessment or analyses (Nueman, 2006). For this study the entire data collection process was compiled in English because participants though given the option of using a language of their choice opted to use English. The use of English was convenient for the researcher and participants as the researcher could transcribe the data and the participants were literate in the language.

The researcher wrote the participants' responses and transcribed them without making any changes. The researcher only transcribed their responses to make sense of what participants may have wanted to convey, in other words there was no need for translation, merely clarification.

### **3.9.2 Theme Identification and Coding**

In order to easily analyse data, the researcher employed open coding. When describing this process Henning (2004) refers to it as a process, wherein data is thoroughly examined and divided into categories to ascertain if there are any similarities or contrast. It is these categories as they are divided that are called themes (Nueman, 2006). This process of dividing data or clustering it according to similarities and differences was useful and helped with the interpretation of data and themes as this gave a detailed description of the matter being investigated and the interpretation of the participants.

### **3.9.3 Data Analysis and Interpretation**

The researcher has coded data as explained above and clustered it according to themes, which necessarily led to both analysis and interpretation of this data. As alluded to in the previous section the thematic analysis was used to cluster data into various categories with the intention of identifying dominant themes and sub-themes.

Matthews and Ross (2010) explains that thematic analysis is ‘a process of segmentation, categorization and relinking of aspects of the data prior to final interpretation. It was found that clustering the themes was critical for the interpretation, analysis and discussion of the data because themes make it easier to quote the participants directly.

Mathews and Ross (2010) posit that themes make it easy to relink some aspects of data and allowed the actual words and ideas of the participants that are discussed to emerge rather than the ideas of the researcher. This process necessitated that the responses of the participants were continuously reviewed to ensure that the data was accurately interpreted and analyzed. The in-depth understanding and thoroughness of this process ensured that the data is trustworthy and reliable. Data analysis is a process of gathering all the necessary data and information that is useful for supporting and drawing conclusions of the research (Nueman, 2006). Comprehending findings of the data collected involves revising and restating the purpose of the research, the research question and the literature review

## **3.10 ETHICAL CONSIDERATIONS**

### **3.10.1 Gate keeping**

Ethical considerations in social research are important for any research to take place and the researcher was conscious of ethical issues in the study. As it is well known in the social enquiry that part of the researcher’s responsibility is to protect the participants during the research process this was consistently adhered to. Ethics in any research process articulates a common set of values upon which sociologists build their professional and scientific work (Neuman, 2006).

Participants do not volunteer to participate in the study - they are asked to participate. Although participants voluntarily participate in the study, they need to be protected from any harm that may arise because of their participation. The participants can be harmed in different ways, for example if they are asked to reveal embarrassing information about themselves or if their answers are published. If the researcher fails to keep the information of the participants confidential, it can become an ethical problem (Babbie & Mutton, 2001).

Permission to conduct this study was granted by NMMU Research Ethics Committee and the College. For the purpose of this study, the researcher carefully and consistently endeavored to follow ethical research procedures and participants were made aware of informed consent and their right to withdraw at any time.

The researcher took a number of steps to minimize or prevent ethical problems while conducting this study. Participants' permission was requested both verbally and in writing and after reading the consent form, the participants signed to show that they understood their rights in the process of the study and what their contribution entailed. The participants' names were not presented to a third party, as promised in the consent form. Most importantly, it was made clear that there were no incentives for participating as incentives may influence the results (Nueman, 2006). The participants were assured that the research will not result in their exploitation for selfish academic ends but instead will make a contribution to participants' lives by deepening their understanding of the economic structure in relation to education. Most importantly, participants were made aware that the study is a university project and is in no way connected to the government or DHET nor would it in any way influence their employment prospects.

In general, rules and standards of ethics are intended to provide both general principles and rules to cover professional situations and their primary goal is the welfare and protection of individual participants, in this instance sampled students and groups with whom the researcher worked.

### **3.11 CONFIDENTIALITY**

Research involving human beings seeks to protect respondents from invasion of privacy, breaches of confidentiality and distress caused by issues raised in the research data gathering process itself. The information received was handled ensuring the confidentiality of those students who participated.

The college as an institution was ensured of confidentiality and the privacy of its students first and foremost, its property and its image as an institution. Although the participation itself was carried out on a voluntary basis, the participants remained anonymous.

### **3.12 INFORMED CONSENT**

The researcher wrote a covering letter of consent to undertake the research at the college as mentioned, with the knowledge that the research process schedule remained anonymous. The students as participants were informed that the process is voluntary and they may discontinue should they desire to do so at any time. The college granted their permission for the study to be undertaken and they welcomed it.

### **3.13 CONCLUSION**

This chapter has presented the methodology used in the study and further described the process followed in collecting the data, for example paradigm, sampling and collection methods as well as ways to ensure trustworthiness. The chapter further presented a discussion on the methods used in the study and also provided justification. Furthermore, the chapter explained the use of the self-administered questionnaire as an instrument used for collecting data. Once this had been collected, the next step was to make sense of it and the chapter that follows will present the discussion of the findings.

## **CHAPTER FOUR**

### **DATA PRESENTATION**

#### **4.1. INTRODUCTION**

The previous chapter discussed the methodology and design of the study. This chapter will present the findings and analysis of the study, and as discussed in the previous chapter the data collection process was completed through self-administered questionnaires.

##### **4.1.1 Demographics of participants**

Although the research anticipated a thorough reflection of all races, only three could be evident as African students accounted for the greatest number doing engineering related courses followed by coloureds and only one white student. The participants were between the ages of 18 and 21 and there were forty-eight (48) in total of which 22 to 25 year olds accounted for the greatest number of fifty-six (56) and there were nine (9) between ages of 26-29 years and older. Eighty-eight (88) students have completed their basic schooling whilst only twenty-five (25) did not finish their basic schooling. When asked whether they wanted to work after matric or further their studies, one hundred and one (101) students wanted to further their studies after completing matric, only eleven (11) wanted to find employment and one student wanted both. As mentioned, this information was collected through a self-administered qualitative questionnaire, which focused on four key aspects: personal information and school background; current studies by participants; employment prospects and lastly the curriculum and knowledge.

##### **4.1.2 Engineering programmes offered at College are listed below:**

Renewable Energy Course (an NCV Programme)

Electrical Infrastructure Construction

Electrical Engineering

Electrical Related Design (fitting and turning)

Mechanical Engineering (fitting and turning)

Information Technology and Computer Science

Electrical engineering (renewable engineering)

NCV fitting and turning

Engineering and Related Design (fitting and turning)

Engineering and Related Design (engineering related design)

Electrical Engineering (fitting and turning)

Each participant in the study had to respond to a set of questions contained in the questionnaire. The detailed responses of participants were mostly to questions asked and also linked with the objectives of the study as well as what the literature reveals about youth unemployment.

*An example of the questions was: Think back to high school, what were your hopes and dreams for the future?*

#### **4.2. THEME 1: EDUCATIONAL ASPIRATIONS**

The state must live up to the founding principles of the freedom charter, where it declares that the doors of learning and culture shall be open and that educational shall be free, compulsory, universal and equal for all children. What the participants aspired to do beyond the basic schooling system was to further their educational interests and the state must create that environment where young people are able to study and fulfill their dreams. Suffice to say educational interest would always be there for most South Africans, especially young people, beyond matric qualifications. The state should ensure that it creates access for young people to institutions of higher learning as well as post schooling education institutions to ensure that the education desires of young people are met.

### Sub-theme 1.1 Studying further

*“To obtain a degree and diploma so that I can more qualified; my hopes and dreams were to further my studies at NMMU doing electrical engineering to fulfill my dreams because my goals were to see myself successful, become an engineer; to be what I want in future, become successful and independent”.*

*“Studying further it’s what I always wanted to do so that I can attain a certain diploma or degree”.*

*“I wanted to study further because I wanted to pursue my dreams; because I wanted to learn more and be a graduate one day, to have a bright future and fulfill my dreams to become an engineer”.*

*“Get qualifications to work in the department of my choice; because I wanted to be successful in life and in order for that to happen I need to study further in addition to having a matric”.*

*“I was hoping and dreaming to study further and be what I want to be to have a successful life, a better future and to be a motivational speaker one day but because I didn't reach the points and do well in my grade 12 studies I decided to come to college to do engineering studies to have a skill and to be qualified for the type of job I want and here in S. We always say education is the key to success and that is what I wanted”.*

*“I want to study further so that my dreams can come true and work will come when I have a diploma”.*

*“I know clearly that educational success depends on my commitment to my studies; the main reason I wanted to study further was that I wanted to gain more knowledge about the career path of my choice”.*

*“To have more knowledge than I have now for my career and studying is the tool that will help me; because I needed more information about the course I wanted; to have more skills and knowledge about the career I have chosen”.*

*“I want to study further and achieve my goals, it’s very important to study to be something one day and be able to be successful in life”.*



*“Nowadays if you are not educated you won't be employed; so I want to have a lot of knowledge before I go into the workplace”.*

*“There are more people who have N6 so I am thinking about going to NMMU to study further”.*

*“I need to study further to get a qualification for the job I want”.*

*“Studying further meant I will gain more knowledge about the career I want to follow and get work”.*

Other students further explained why they felt it was important to study further after completing school:

*“Education is one thing that can offer me a better job as I also have dreams of becoming something in life”.*

*“I would really love to study further while earning a wage at the same time because life is all about money and money's what we use to buy food and clothes that we eat and stuff; I wanted to study further and become successful in my life”.*

*“I believe by furthering my studies I will be able to get everything I want by a certain age and time rather than earning very little money and being unable to afford what I want. I can't earn R2 000 a month for the rest of my life”.*

*“I saw that in order to get employment one must be educated; I wanted to study further as I am doing now to educate myself and to prepare for my future”.*

*“It's because these days you will not receive a great job without furthering your studies; I wanted to further my education in order to get a decent job and provide for my family; because it is difficult to find a job for someone with matric”.*

*“So that I can get a better job/work; I wanted to further my studies so that I can get a proper job”.*

*“I want to study further because grade 12 is nothing these days, you need to have a qualification in order to get employment hence education does not end, more education means more chances of getting work”.*

*“I am still young and need to study further so that I can get a better job that I wouldn't be able to obtain if haven't studied further”*

*“I wanted to have a good qualification so that I can get a good job; so that I can be able to get a good paying job with my qualification and that I acquire knowledge”.*

*“Because I knew that there is no chance of getting a job after high school I wanted to become pathologist or system engineer”.*

*“Because when you study further you could get a better job than a person who did not study; it was to study further so that when I get a job I can be in a dignified position”.*

*“To be a better person and be successful in life and as well as be independent”.*

*“I want to become something in life and not fall into the unemployment role of young people today or work in factories and I want to provide a better life for myself”.*

*“I wanted to have qualifications and better knowledge; to get higher education and expand my knowledge and then get a proper job in order to gain knowledge and skill in your chosen career. Knowledge is power and once you attain the knowledge nobody can take it away from you”.*

*“Because education is the key to success and to be able to get a good job earning a lot of money you need to be educated”.*

*“The real reason I wanted to study was that I saw people who finished grade 12 doing nothing because of unemployment in our country and another reason I chose to study further is that my ambition was to fix things, mostly electrical things, like appliances because there are better chances to get employed easily when you become an electrical engineer”.*

*“I wanted to study Electrical Engineering hence I went to a technical high school and worked hard to earn good money; because when you study further there are a lot of opportunities for jobs”.*

*“I want to study further so that I can qualify for a job; because I want to have a qualification in something so that I can get a good job”.*

*“I wanted to study further because after grade 12 there are no good jobs. I can't find a good job by only passing grade 12 and I wanted to study electric engineering because I like the course so that I can complete my studies first and not go back to studying when I am older. The more you further your studies, the more work opportunities you will get because I want to attain a decent, well paid job”.*

*“I wanted to study further so I can have a good quality job”.*

*“This certificate graduation will only be the start of my career and so I will have to study further”.*

#### Sub-theme 1.2: Employment

*“I want to be independent and also my aunt has got no enough money to support me. I want to achieve my goals now”.*

*“I am currently a student and my dreams for my future are to work on my career”.*

*“I want to work because of my situation at home where there is no steady income so after I get my qualification here I'll look for work then I can study further”.*

*“I wanted to provide enough money to support my unemployed parent and my two younger siblings”.*

*“I only had a mother at that time and she was unemployed, so being the eldest child it was my responsibility to provide for them”.*

*“To be financially stable so that I can provide for myself and my family”.*

*“I wanted to work because at home we are 6 of us and I am the first one and my mother is raising us as a single parent”.*

*“Due to circumstances at home I had to go look for work so I can have an income”.*

*“I grew up in a family where both my parents did not finish school and they gave me hope to study further because they were doing whatever they could to keep me in school”.*

*Question 2: In your opinion what is the primary reason for youth unemployment in South Africa?*

#### **4.3 THEME 2: EMPLOYMENT OPPORTUNITIES IN SOUTH AFRICA**

The fact is that unemployment is a serious concern amongst young people. They blame the lack of employment on the government for being unable to create opportunities for young people. They further explain that the narrative of the shortage of skills is a myth and the reality is there are no jobs readily available in the economy. They also point out that the narrative of lack of experience leading to remaining unemployed is unfair and that TVET education is poorly supported as it is not recognized. Their alternative to this social condition of unemployment is to support voluntary service as a way of mitigating unemployment and they also support the creation of small and medium enterprises.

Sub-theme 2.1: Government's Incapacity to Create Job Opportunities

*"There is job scarcity and many people in South Africa and some are uneducated due to money problems which prevent them from studying further".*

*"Graduates are the ones who are unemployed here in South Africa; those who are successful don't have qualifications whilst graduates are unemployed".*

*"It is scarce because most people do not get jobs like in IT and the reason is that we do things we don't like, like electrical engineering because it brings money".*

*"The youth of South Africa have the same careers and this problem leads to a lack of jobs".*

*"The value of the rand isn't powerful so work opportunities are scarce".*

*"There aren't any available jobs for the youth".*

*"Most people lack information on how they can get jobs or lack skills".*

*"I think it is because of jobs are hard to find and our education system is poor".*

*"There is a lack of jobs because many educated people can't find jobs".*

*“Students that have completed this course must be employed so that we can better our standard of living”.*

*“This is due to the lack of work posts being advertised, because I think there are a lot of job opportunities available but the youth is not well informed about them”.*

*“The youth do not want to study further, and when they are going further with their studies jobs are scarce”.*

*“There are no jobs readily available in the labour market”.*

*“People are unemployed because of a lack of jobs”.*

*“The few available jobs are poorly managed and reserved for pals”.*

*“The primary reason for youth unemployment in South Africa is the lack of jobs created by the government”.*

*“People are not wanting to go out there and look for jobs, it doesn't mean you'll get a job related to what you've studied for after you have graduated. Take any job you'll see you'll get a proper job as time goes by”.*

*“There are no jobs, factories, workshops are few and they employ people who are not in need and people who don't qualify and sometimes our government is the fault”.*

*“Not enough jobs offered and where they exist they ask for those with experience, which we obviously don't have”.*

*“No job opportunities available for people with education”.*

*“Government is not providing jobs to the unemployed in the country”.*

*“The value of the rand doesn't allow for many job opportunities”.*

*“There is a lack of jobs for graduates in SA”.*

*“Firstly, there are not many job opportunities and also not being qualified plays a role”.*

*“Also we face the challenge of the lack of job opportunities”.*

*“Government is not producing enough jobs for the youth”.*

*“There are no opportunities for them and government doesn’t think about them and create more jobs for unemployed people”.*

#### Sub-theme 2.2: Lack of experience

*“The reason the youth is unemployed is because of the lack of experience in the work place. The employees need experience from the graduates and how do they get experience when they come from colleges or universities? We have relevant skills especially as students from colleges because we combine theory and practicals; we lack experiential training which leads us to not be employed”.*

*“There is a lack of experience in that particular field and also people are uneducated”.*

*“People lack qualifications and experience that are needed in a work place”.*

*“Because of that you need to have experience in different types of work which is impossible to get after you have just finished studying”.*

*“Because they are looking for work experience while busy studying and you come from college after having graduated”.*

*“In colleges you must pay for the practical work and companies need people who have experience”.*

*“It is because of lack of experience because many places ask how much experience you have but you have only just come out of college/university”.*

*“Lack of work experience”.*

*“Experience as most companies want experience. Age is also a factor as companies don't consider youth over the age of 35 years regardless of their education”.*

*“Experience is the biggest problem with engineers looking for jobs”.*

*“Most companies want people with work experience so that they do not waste money”.*

*“Companies always look for employees with experience but how do you get experience if you do not find work”.*

*“I think it is because of a lack of experience. Most people graduate from school and it’s not easy for them to be employed because the employees are always looking for experience e.g. where will I get three years’ experience when I am coming straight out of college”.*

*“In most instances in some fields they want experience and how do they expect us to have experience if they don’t train us”.*

*“They want experience”.*

*“Every company wants work experience and with the TVET graduates you don’t have work experience”.*

*“Because they say you need 3 years’ experience so where are you going to get this experience because you are coming straight from college”.*

Sub-theme 2.3: Lack of education and resources

**Others students offer another perspective on youth unemployment:**

*“People are under-qualified for jobs”.*

*“These days without school there will be no opportunities for a good job”.*

*“They don’t study and are too lazy to look for jobs”.*

*“Lack of education”.*

*“They are not educated”.*

*“Lack of education and ignorance and in some cases it is favouritism from the people who make recommendations from the institutions”.*

*“Because the youth of S.A lack the education required in order to get a job because most jobs in S.A need educated people”.*

*“Uneducated people remain unemployed”.*

*“A lack of knowledge results in unemployment”.*

*“Unemployment is because of a lack of education, lack of career knowledge and changing to careers that are not in demand”.*

*“I think it is a lack of education. I am not talking about grade 12 but further education because in our country there are opportunities for graduates”.*

*“Some of the problem is because they are not educated”.*

*“Lots of people do not want to study, are lazy and they expect miracles to happen”.*

*“Yes, the reason is that sometimes people are over-qualified for jobs or they are under-qualified which becomes a problem for employers”.*

*“Unemployment is a result of poor education”.*

*“They don’t have enough qualifications”.*

*“There is a lack of qualifications and only relying on grade 12 certificate”.*

*“There is a lack of resources in terms of supporting skills development programmes”.*

*“Some of the youth are satisfied with a grade 12 certificate which nowadays is not enough for employment”.*

Sub-theme 2.4: Lack of trade test, outdated syllabus and experiential learning

Their responses are as follows:

*“They might have qualifications but most companies want someone with practical skills”.*

*“Because once you complete this course you can sit at home and not get employment if you do not have the trade test”.*

*“Because some company feel the qualification they have is not good enough”.*

*“The syllabus at TVET colleges specifically is outdated and irrelevant to the real work place”.*

*“Most private companies are looking for people with skills rather than theoretical knowledge”.*



*“There are few companies that want to employ students from the college”*

*“What they choose to study is not useful in the market”*

*“Yes, because at times they need trade test and a license which we cannot afford to have due to its cost”.*

*“Because the certificate is equivalent to grade 12”.*

*“Lack of apprenticeship”.*

*“The main reason people don't get work is because they don't have experiential learning”.*

*Sub- theme 2.5: College education not recognized*

*“Many graduates with TVET qualification don't get employed because they have graduated from colleges”.*

*“Because at college students are not taken seriously, or employers say they don't have enough qualifications”.*

*“Other organizations do not take the college programs seriously”.*

*“They are not taken seriously by people when they study at TVET”.*

*“TVET graduates are not taken seriously”.*

*“Because most people from TVET colleges are still unemployed even after graduation”.*

*“They need more qualifications and few companies come to the college and look for students who have certain subjects”.*

*“I've seen so many TVET graduates who are not doing anything because their qualification is not recognized”.*

*“TVET is not that much in demand, that's why you have to do something else that is in demand”.*

*“Graduates with TVET qualifications are seen as inferior people compared to those with degrees. They are not worth employing”.*

*“People don’t know what NCV is, making it difficult for us to find a job”.*

*“It’s because most of TVET students don’t have matric certificates and job vacancies require matric certificates”.*

*“There are hardly any jobs for certificate or diploma students; you need a degree to qualify for jobs and it is not possible to obtain this from the college”.*

*“A TVET qualification is dropping in terms of demand”.*

***What do you think is the reason why people who graduated with engineering qualifications struggle to get job opportunities?***

There were also some students who felt very strongly that a TVET qualification, especially in engineering, leads one to full employment.

#### **4.4 THEME 3: TVET ENGINEERING QUALIFICATION IS IN DEMAND**

Some participants claim that the engineering qualification is in demand and it is easy to find employment immediately after graduation if you are qualified. They further claim that because of its training orientation access to employment opportunities is easy for them. However there were those who were vehemently opposed to the idea that an engineering qualification is a way to guarantee employment.

Sub-theme 3.1: Training and practical work

*“Most graduates get work easily, because most of the things that you have been taught also have practicals which have to be done. We first do theory and then complete practicals afterwards”.*

*“Most people that I know who were TVET students are working, especially the engineering students”.*

*“Because you will get training at a company”.*

*“The college provides information about the student to companies so that the student could get work easily”.*

*“I think TVET graduates are more likely to get employed”.*

*“Basically two thirds of graduates with TVET qualifications get jobs”.*

*“From my point of view you will get employment because you learn the theory and do the work practically in such a way that they prepare you for work”.*

*“Companies hire students from colleges because they have practical skills”.*

*“Companies do come to the college for internships so they inform the students to present their CVs”.*

*“TVET colleges provide a lot of practical work which makes us employable as these are skills that are needed in the industry”.*

*“I believe it's the poor mentality of those that are less qualified than those from universities not knowing that we are the most qualified due to the kind of training and practicals that we get here”.*

*“They find jobs easily because they do a lot of practicals so they have experience about what work industry will be like”.*

*“Because I am studying electrical engineering which my country needs the most”.*

Sub-theme 3.2: Recruitment unit helps

*“Some people who have graduated told us that they found jobs immediately after graduation”.*

*“The colleges find work for those who passed well but others struggle to find work in the outside world”.*

*“Some TVET colleges place their students in employment”.*

*“It's because not all of them struggle to get jobs, many of them are employed”.*

*“I am not sure because I have no experience but. I do agree to an extent because I hear rumours that at least some companies employ TVET graduates and give them internships”.*

*“In this course that I am doing it will not be difficult because it is in demand and also new in South Africa”.*

*How long do you think it will take you to get employment after graduation and what makes you confident about your response?*

#### **4.5 THEME 4: DEMAND FOR QUALIFIED ENGINEERS**

The participants claim that there is a high demand for people with engineering qualifications and more so with renewable energy because it's new. Voluntary service is also encouraged if there are no jobs in the market as well as the creation of small to medium enterprises for self-employment and job creation.

Sub-theme: 4.1 Renewable energy courses are in demand

*"Because the Renewable course is in demand so it will be easy to get a job".*

*"The course that I am doing is in demand as the government wants students who can bring change to the crisis that South Africa is facing regarding electricity that is being generated from a natural resource e.g. solar energy".*

*'Because we have a crisis in SA which leads to load-shedding and we're here to study and come up with solutions using wind, water and solar energy".*

*"The course I am doing is in demand and the college also provides employment opportunities".*

*"Because electricity is the most demanding field and today fresh ideas are needed".*

*"Many companies offer internships and learnerships".*

*"I will keep applying until I get one because the engineering world is a very big field and there are many posts for engineers in the newspapers every day".*

*"Soon after graduation because the electrical course is needed in South Africa, it is one of the greatest resources".*

*"There are many job adverts I see in newspapers every day, so I don't think it will take long to find a job".*

*“Because I will finish the course in December and companies normally start to hire in the electrical field from June to July”.*

*“From my point of view the course I'm doing is in demand and once I have the qualification I don't think there will be a problem”.*

*“Engineering is also in demand”.*

*“The graduates in engineering studies don't struggle to get work because there are many fields, so people that are doing engineering are in big demand”.*

*“Because when you are finish your course some companies offer you a job”.*

*“There are posts that are available after you have completed your apprenticeship”.*

*“It is an advantage because we are doing some of the things that we will need to do when working in the industry”.*

*“Engineering is a field that provides things that are needed by everyone”.*

*“Most of the companies we see on television are looking for engineers”.*

*“Jobs are being created these days”.*

*“I know a few people who are qualified engineers that are struggling to get a job”.*

*“In engineering jobs aren't scarce if you have the qualification”.*

*“There are so many advertisements but people choose to ignore them because they want the places that they want and they end up unemployed”.*

*“I've never seen one without a job”.*

*“Engineering opportunities are wide; there are lots of companies that want engineers”.*

*“There are many companies out there that can provide better service”.*

*“In engineering there is always a problem to be fixed or a part to be made so that means an extra hand is always needed”.*

*“Because South Africa employs engineers every day as engineering is very important”.*

*“People who do engineering are more likely to get job opportunities”.*

*“Most companies have machines doing their work so the study of machines is part of engineering”.*

*“People with university engineering qualifications find jobs easily as there is a demand for engineers”.*

*“Everything is all about engineering and engineers are needed everywhere”.*

*“There is a demand for engineering but the qualification is also congested so companies must select carefully”.*

*“You have to have all the necessary qualifications and the practical knowledge to be able to get a good job”.*

*“Because there is plenty of work available for engineering students and therefore it becomes easier for us to get employment”.*

*“It’s because engineering is in demand in South Africa today”.*

*“People in engineering can get jobs it just depends what qualifications you have and where you want to work”.*

*“Engineering in SA is in demand”.*

*“They have the advantage over university students because they do practicals”.*

*“Engineers are in demand not only here in South Africa but elsewhere”.*

*“Artisans are in demand especially when you do NCV because of the practicals but people do not want NCV because it takes longer but they regret it later”.*

*“Our nation is in need of engineers so there is no way that this kind of job is scarce, it only needs someone to look in the right place”.*

*“People take engineering even though it is not their passion”.*

*“Engineering is a scarce skill in South Africa so they find jobs very easily because they are needed”.*

*“Engineering is the best career that has a lot of opportunities, we have a lot of companies that deal with engineering and some of our students have internships in companies and this shows that an engineering qualification means you will not struggle to get work”.*

*“Because most industries require engineering and the engineers are the most sought after”.*

*“Because most of the people I know who studied engineering are working”.*

*“It depends on which field of engineering but engineering is in demand now”.*

*“They are the people most needed in the industry”.*

*“Companies look for engineers”.*

*“Engineers are the people who are in demand, there are job opportunities for them”.*

*“They are the people who are most needed in the field”.*

*“I will get a job fast because we need engineering”.*

*“There are many companies who want people with engineering qualifications”.*

*“Immediately, because everything is about engineering”.*

*“Because there are many people who study engineering which makes the competition tough and it is difficult for all of us to get employed”.*

*“Because everyone these days is doing engineering since it was once scored and there was a high employment rate”.*

*“Many people who did engineering are working because there are many engineering companies who need qualified people”.*

*“I don't know but one thing I know is that once one has an engineering qualification he/she can start her/his own company”.*

*“Too many jobs for engineering people”.*

*“Most of the workers these days want engineering”.*

*“Because most of the companies go to the colleges if they want to employ engineers.*

*“Most of the posts require people with engineering”.*

*“There are many engineering companies”.*

*“They don't really struggle that much but sometimes they get jobs that are not related to what they studied”.*

*“Engineering is needed in South Africa”.*

*“I don't know a lot of people with engineering qualifications but the few that I know of are in the process of getting work”.*

*“It's because everybody these days is doing engineering so there are many graduates who will be looking for jobs”.*

*“Engineering people are people that we want in South Africa so that they can reduce the problems with electricity that we are facing”.*

*“Because there are many companies that want engineers and I will apply early for a job”.*

*“At the beginning of each year, there are posters looking for engineering students”.*

*“Companies do come to the college to ask but since we are not fully qualified we can't stop school to work”.*

*“The course that I am doing is still new and it will be in demand. Because of the crisis that S.A is facing now with the problem of Eskom and load shedding”.*

*“Because it is a necessary job and many people need engineers”.*

*“Because I always see vacancies on the internet and newspapers and even at school they always post ads”.*



*“Our country is suffering in terms of electricity. I think I am the solution that is the reason why they have developed new careers in renewable energy in order to fight the poor electricity supply”.*

*“I get good results and I am a hard worker so I will definitely get a job and besides more companies need electricians”.*

*“Renewable energy is the future form of producing electricity and not many South Africans are qualified to do it”.*

*“Renewable energy is high in demand, our skills are needed”.*

*“It is because there are lots of companies who are in need of the skills I have”.*

*“The engineering course is in demand and there are a lot of advantages to it”.*

*“Because usually the internship programmes are being advertised at the beginning of the year”.*

*“As our supply of electricity is under a lot of pressure, I think my skills will be in demand because there aren't many electricians around especially in PE”.*

Sub-theme 4.2: Getting employment is not easy

*“Renewable energy has just been introduced in S.A so it will take a while for the job market to grow and it won't be easy”.*

*“Getting employment is not that simple, it takes time”.*

*“It's a new course in South Africa that needs a lot of publicity”.*

*“I have seen it before, some they just casual jobs, and they don't get the jobs for which they have they are qualified.”.*

*“I am not well known and I am poor, so I don't have the influence I need to get a job”.*

*“There are no job advertisements, apprenticeships or learnerships available”.*

*“It's because there are still a lot of graduates in the location”.*

*“It's because there are many people wanting these jobs”.*

*“Because nowadays it’s very difficult to get a job once you are qualified and have graduated”.*

*“Because it is not easy to get a job you must study and have a qualification and skills”.*

*“Because I know too many students who did the engineering course and they are unemployed”.*

*“There are a lot of graduates who have graduated in this course but do not work”.*

*“It is not easy to find a job because they are scarce”.*

*“Because of the favoritism in the institution”.*

*“Employment is scarce”.*

*“Companies don't usually employ students with an engineering qualification/certificate from college”.*

*“I have friends with engineering degrees who can't find work in S.A so they have left the country”.*

*“Most graduates are still struggling to get a job”.*

*“People who have graduated with engineering qualifications really struggle to get formal employment because of a lack of jobs”.*

*“They struggle because in reality there are many more engineers out there that are unemployed but very qualified and who sometimes have to change their careers”.*

*“It’s true that most graduates in engineering still struggle to get employed”.*

*“Most of the high end engineering jobs are either taken by people with no qualifications or taken by people from overseas”.*

*“I know of people who have not and they are struggling to find work”.*

*“I have read it in the newspapers and seen it on the news”.*

*“Getting a job after graduating is not guaranteed, it depends on a job opening”.*

*“Many people that are graduates do not have jobs and are sitting at home with their qualification”.*

*‘Work is hard to find these days regardless of the field and some will get jobs, it depends on how you approach the company and how you do research for the job’.*

*“There are many students looking for jobs”.*

*“The value of the rand is weak”.*

*“We are a doing a certificate and most businesses are looking for degrees”.*

*“Jobs are scarce and most of them want applicants with a matric certificate”.*

Sub- theme 4.3: Positive attitude and motivation

*“Besides being focused on passing, I have a positive attitude to whatever I apply myself to, am driven and that is what is more important even before a qualification”.*

*“Because there are many graduates, applying does not mean I will get a job immediately”.*

*“Because I will go out and search for jobs till I get one”.*

*“Because as a graduate I expect to get a job in 3 months and it’s what they are looking for and I have potential”.*

*“It depends on the individual and how she/he tries to go and look for work”.*

*“Sitting and hoping for work won’t assist anyone”.*

*“Because I believe that there is a job that is waiting for me”.*

*“Because after I graduate I will look for posts and apply for a job then wait for the company to respond”.*

*“I have been doing this course for 3 years now including practicals. My major subject is fitting and turning and at the moment I can perform maintenance on lathe and milling machines and can also operate them”.*

*“I believe it's not only the qualification that matters but also just how eloquent you are as an individual i.e. how well you can express yourself or rather communicate”.*

*“I decrease my qualifications to N3 so that I can meet their requirements then after a year or three years I will show them my real N6 qualification”.*

*“Because I will be submitting CV's to several places that are relevant to the course I studied and I think that it will take time”.*

*“Because I will have to go and look for a job and it doesn't take a little time to find a job”.*

*“Because I won't sit down, I will hunt for a job because it won't come looking for me”.*

*“Because of my dedication to my school work nothing can stand in my way”.*

*“Because here in S.A there are few jobs and I would have search one out”.*

*“I will do job hunting all over so that I will get it”.*

*“The course that I am doing has very few people in its job market providing for the fact that there will be work after my studies”.*

*“I know of a few companies where I can apply for an apprenticeship, am hoping they will accept me”.*

*“I am connected and have good marks”.*

*“They are many other learners or students looking for jobs, so I may not get a job from the first or second interview”.*

*“Well given the location I stay in it is very rare to find a job with my career prospects so I will have to go to another city”.*

*“I am positive that if the government could improve and take action on the recommendation it can be possible”.*

***If you do not get employment, what will you do?***

They responded with three different aspects as to what they would do in the event that unemployment affects them after graduating, and these are:

volunteering; establishing their own business as they are skilled and lastly others argued that they will continue studying. They responded as follows:

Sub theme 4.4: Voluntary service

*“Volunteering in some company”.*

*“I will do a lot of volunteering”.*

*“Volunteer at an electrical company to gain experience”.*

*“Voluntary work for companies that are doing something related to the course I am doing to get experience and be prepared for the job market”.*

*“Study again or volunteer in something”.*

*“I cannot stay home so I can study further and volunteer in companies that operate in the same field in which I am studying”.*

Sub-theme 4.5: Establishment of SMMEs to create jobs

*“Design clothing and sell it”.*

*“Try to create an opportunity to make a job for myself like offering basic computer lessons”.*

*“I will try to look for funds or someone to sponsor me so I can start my own constructing business”.*

*“I will definitely create a job for myself, there are posters looking for engineering students and I am capable of doing house wiring and fixing in electrical appliances”.*

*“Start something that will make me busy maybe start a project and help those who can't help themselves”.*

*“Will try and build my own company or team work to create something to make it work for us in the future and use our skills or further my studies”.*

*“Continue studying or start my own business”.*

*“I will start my own company”.*

Sub theme 4.6: Furthering studies at post graduate level

*“Study further while still hunting for a job”.*

*“I will further my studies and go to university”.*

*“I would further my studies and apply for work in a different country”.*

*“I’ll try and further my studies”.*

*“Try to study further and get a casual job if possible”.*

*“I will study further so as to gain more knowledge”.*

*“Study further until I get my Master’s degree”.*

*“I will study further for another career so that I have a second option”.*

*“Further my studies like going to university”.*

*“Go to university to do my diploma”.*

*“I will keep on looking or continue with the course at a higher institution”.*

*“Will keep on studying and try to develop another skill”.*

*“I will study further to improve my employment chances”.*

*“Actually I am planning to further my studies and get a better qualification”.*

*“I will go back to school and further my studies”.*

*“Study for another qualification”.*

*“Change careers”.*

#### Sub-theme 4.7: Search for employment opportunities

*“Keep looking and maybe will get a part-time job and try to study further”.*

*“I will keep looking for employment opportunities”.*

*“I will continue searching for a job”.*

*“I will wait until I get employed or do another course that will make it easier for me to get a job”.*

*“There are not many job opportunities in South Africa”.*

*“Many graduates that I know are still searching for a job”.*

*“Try to find something even if it’s not related to what I’ve graduated in”.*

*“I will find ways for my skill to work for me until I find something”.*

*“I will keep on looking and hunting for a job until I find one”.*

*“Keep on looking or study if I get a bursary”.*

*“Try harder to apply for learnerships and apprenticeships everywhere”.*

*“Keeping looking for a job and use my practical skills to jobs in order to earn some money”.*

#### ***One student responded in this manner:***

*“I am from a poor family in Peddie and if I’m going to have difficulty in finding a job I will be very disappointed. I really don’t know, I will see in 2018”.*

Although most students seem to disagree with the notion that people with engineering qualifications struggle to get employment. They believe that engineering skills are in demand and this view further affirms the government’s position that engineering is part of what it calls a “scarce category” suggesting that those who have engineering qualifications are in demand. Hyslop-Margison (2000) argues that when reflecting a historical pattern consistent with various market economy crises, governments and corporations from industrialized countries around the world are heralding vocational education and training reform as a major determinant of economic success within the new global economy order, with the view to addressing the high level of unemployed youth.

Yet, according to Baatjes et al (2014) vocationalism and job training do not appear to be the preference of youth in South African society. Currently, only 400,000 (DHET, 2013) youth are enrolled in TVET Colleges and participation in NSDS-related programmes such as skills programmes and learnerships remains low. Baatjes and Hamilton (2012) too have highlighted the plight of thousands of youth, particularly working class youth, who struggle to make their way into employment in the formal labour market.

This argument by Baatjes and Hamilton (2012) seems to find resonance with some responses from students who believe that whatever qualifications one holds, the real world of work is not ready for them as they do not have working experience, which they described as unfair because they cannot get this without being properly monitored and trained by the very same industry that hopes to employ them in the future. The only problem we are faced with is job scarcity contrary to skills scarcity.

**What skills or requirements do potential employers look for in a prospective employee?**

#### **4.6 THEME 5: PERSONAL SKILLS REQUIRED**

Participants of the study strongly believe that personal skills in some instances, soft skills, are necessary, such as a positive attitude, interpersonal skills, hard work and dedication. They further argue that no one should be denied access to employment with skills required and qualification, on the basis of a lack of soft skills, but suggest that everyone should possess them.

Sub-theme 5.1: Hard work and dedication

*“Hard worker with drive and being disciplined as well as qualified”.*

*“Hard work is required and a positive attitude so that the person will not only work in the company but help it grow”.*

*“Companies look for people who work hard, people who get good marks in class because that means you study and you know the work and you won't give problems when you are working”.*

*“A dedicated and passionate person”.*

*“Hard working person with leadership skills and work morality”.*



*“Hard work, dedication and wanting to learn more”.*

*“Some one that is serious about his/her job”.*

*“Someone who is hard working and able to represent the company and most importantly loves the job”.*

*“Someone has skills; works harder; someone has to commit to his work”.*

*“A person with a good background is what the company is looking for, a person who has patience for work, who works and finishes on time”.*

*“Hard work, determined to work and employees who are always on time”.*

*“Confident employee and a hardworking person, also someone who can work under pressure”.*

*“They are looking for a person who is greatly skilled, a very hard working person, dedicated and a person who will be alert and always practice safety”.*

Sub-theme 5.2: Ambitious, assertive, commitment and visionary

*“Ambition, determination, skill, commitment and willingness to progress”.*

*“An assertive person that is willing to do his/her job effectively”.*

*“They are looking for the person who can manage to do his/her work on time, a person who is confident, someone who has a vision and can bring the industry to a high level and people who can work with other people”.*

*“To know what you are doing; be good at your job; be a quick learner”.*

*“To know your work; be committed to what you do”.*

*“An employee who’s ambitious; dedicated and willing to learn”.*

Sub-theme 5.3: Teamwork, professional and reliable

*“Reliable people that are also trustworthy”.*

*“An employee must be very professional; learn quickly about the work they are being taught and must be able to do their job diligently”.*

*“To improve in the industry in a professional way and apply what one has done at school”.*

*“They are looking for someone who can do his/her work and work under pressure, someone who can manage their work and work in a team”.*

*“The competency and ability to do the job by seeing how qualified one is to do the job”.*

*“A qualified person first, someone who has good manners and is honest, also it must be a person with can obtain good results”.*

Sub-theme 5.4: Competent, productive and knowledge

*“Knowledge; intelligence; creative and someone who has self-confidence”.*

*“Someone with good morals; who knows how to be productive; punctual and is a quick learner”.*

*To be productive; know about time management, loyalty, honesty and flexibility”.*

*“A competent person who can work under pressure and who is an honest person”.*

*“The productivity of the employee”.*

*“The dedication of the employees to their jobs”.*

*“If an employee is well trained, follows the rules laid down by an employer and is reasonable”.*

Other students felt that companies are looking for:

Sub-theme 5.5: Experience and qualifications

*“Experienced people with qualifications, who are punctual, responsible and productive”.*

*“Work ethic, Skills, as well as experience and qualifications”.*

*“Work experience, intelligent, trustworthy employee, a willing person.*

*“Experience, determination and willingness to work as well as being able to grow and contribute to the company’s profits”.*

*“Qualification, Skills, be able to communicate with people and be honest”.*

*“Qualified candidate, confident person who can work with people, honest and willing to provide input to their company”.*

*“Qualified person and experienced hard worker”.*

*“Qualification, experience in the area of work”.*

*“Someone who possesses the qualifications and the practical experience of the job, who is diligent and very hard working”.*

*“To be qualified with working experience”.*

*Strong character; qualification and experience”.*

*“It should be more than 50% pass rate of your qualifications and an experience of maybe 2 years”.*

*“A qualified and skilled employee. A hard worker and someone who is motivated and of course have the relevant qualification for the post”.*

The responses from students seem to suggest that qualification and skill is one and the same thing and that should be enough to gain admission to the job market. Hard work, confidence, teamwork, honesty and determination as well as commitment are all generally termed as soft-skills and cannot be a barrier for their employment as they are not taught in educational institutions. Though these soft skills are important they should be secondary for employment purposes with the primary factors being qualification, which is used interchangeably with skill.

**What knowledge and skills do you think you are acquiring by doing this engineering qualification?**

#### **4.7 THEME 6: KNOWLEDGE AND SKILLS LEARNED**

There is no doubt about the valuable knowledge and skills that students are acquiring in their respective engineering-related qualifications and as they explain they are better equipped and prepared for any task in the job market as they have both the qualification and skills. With the knowledge they have from TVET institutions and if they can be given a chance to prove their worth, they can contribute to the economy of this country.

However, they are asked if they have working experience which they obviously do not have and they will not have this as long as they are not trained on the job.

Sub-theme 6.1: Engineering is about technical skills

*“Installing and manufacturing of photovoltaic solar panels, solar water geysers and wind turbines”.*

*“Preparing me to be an electrical engineer by being trained on solar heating systems, solar panels and wind turbines”.*

*“To become a qualified electrician”.*

*“To help repair the infrastructure of the country”.*

*“My course is preparing me to assist my community to try and design and build new renewable energy technologies in order to generate new clean energy to reduce carbon emissions”.*

*“To become a technician working on PV systems, wind turbines and solar water heating systems”.*

*“To be able to fix electrical appliances”.*

*“To be an installer of PV systems/solar water heaters.*

*“To be a PV technician and wind turbine technician and lastly to be a designer of PV systems.*

*“To be a PV and solar technician and also an energy auditor as my last year is 2017”.*

*“It is preparing for me to be a wind turbine technician and to have my own company”.*

*“Fixing machines, making tools, welding and also fixing pipes and installing them”.*

*“Preparing me for being able to install solar water heating, wind turbines and solar panels”.*

*“To become an installer of renewable energies”.*

*“The course is preparing me for 3 different aspects in renewable energy such as solar installations, wind turbines and solar water heating systems”.*

*“To be a solar engineer or photo voltaic technician”.*

*“Preparing me to work in building solar panels, solar water systems and in South Africa to use electricity from natural resources and not Eskom”.*

*“To fix electrical appliances etc., working on sub-stations, streetlights.*

*For working in an electrical field such as Eskom”.*

*“Most of the time it is for workshops since our field is based on electrical systems”.*

*“Is preparing me to handle electricity”.*

*“Learn more skills about engineering; to be a tool maker; how to work with lathe machine so that I could have my own company one day”.*

*“Being able to operate and understand the functioning of electricity and the dangers that go with it”.*

*“To become a fitter so that I am able to do facing, parallel turning and drilling using a machine”.*

*“In the world of the industry I want to be able to work with equipment and handle the pressure in the industry”.*

*“Preparing to help other people to fix computers and cellphones”.*

*“To know things about communication, how electrical appliances work and to build things with the knowledge I have gained”.*

*“To do motor mechanic installations and work with starters”.*

*“Skills for creating solar panels and manufacturing water systems”.*

*“Knowledge to know more about how to connect cables in order to be employable”.*

*“Machining on a lathe, milling machine, safety rules of operating the particular machine, know the rules and the do’s and don’ts when operating machines”.*

*“Design website page for companies and get experience in a working environment”.*

*“Safety and working with the proper equipment”.*

*“Skills using my hands to give power and be able to build circuits, DB’s and geysers, connections and knowledge: electrical theory”.*

*“To be able to wire, to be able to find faults but all in all it’s preparing me to know generally about electricity and how to install it”.*

*“To fix electrical appliances and to install components properly as well as fix devices”.*

*“To have more knowledge about electrical engineering like fault finding, how to wire the circuit and how to design it”.*

*“How to deal with electrical devices and know more about them”.*

*“The skill that I get is to work with electrical devices and components”.*

*“I know how to install and design PV; already I can calculate how many PV’s I will need for a full house and how much money one can save by using renewable energy electricity”.*

*“Skills - PV technician, solar technician”.*

*“To be able to work with electricity and be able to wire a house”.*

*“Be able to install PV systems in a house; know the difference between the electric supplies”.*

*“Wind turbine technician skills, solar panel installer, and also with the knowledge that electricity can be produced using natural resources”.*

*“Knowledge on how to work with electricity and how electrical equipment works as well as safety aspects of the job”.*

*“How to assemble and disable any electrical machine”.*

*“Creating programs and design systems”.*

*“Technical, Programming and analysis”.*

*“There is so much knowledge in the Renewable energy technology field and it touches on more than just engineering. Hands on training is important and I will acquire more skills”.*

*“To be able to repair electrical things and to save money home. Instead of buying new appliances I will just repair them”.*

**What suggestions do you have to improve your course for employability prospects?**

#### **4.8 THEME 7: THINGS TO IMPROVE**

There seem to be five distinct but necessary interventions that students are proposing to increase their lack of experience in the job market and these are: practical's, companies visiting colleges for on-the-job training; free trade tests; use of relevant and current software, ensure that the course is not equivalent to grade 12/matric and link the course with companies for internship/work-exposure.

Sub-theme 7.1: Practical training on the job

*“There must be more training to have more experience”.*

*“We need more practicals to improve employment absorption”.*

*“They should do programmes that will link us to the engineering programmes, because it is hard sometimes because we were not introduced to the company by the school”.*

*“Yes, to get a company to agree to students visiting them to see how they work”.*

*“We need to have more and more companies visiting our college for training and more on-the-job training”.*

*“To do more practicals and be given laptops because some of us don't have computers at home to practice being able to do more electrical science”.*

*“Would suggest that we would be taken to companies that are in communication with what we do”.*

*“We should get more time on our practicals and the trade tests should be done on our campus”.*

*“The course should get us company positions so that when we leave the campuses we have a lot of experience because these companies are looking for experience”.*

#### Sub-theme 7.2: Free trade test/license training

*“Yes, by doing a trade test and becoming an artisan”.*

*“They must create programmes for final year students especially be able to take a trade test for free because not all of us can afford to pay for it”.*

*“Yes, by creating or developing a programme for learners at least for level 4 students and government must give a hand in this by creating the programme for trade test free of charge”.*

#### Theme 7.3: Internship/work-exposure programmes

*“Yes, if we could have internship work hand in hand with companies to gain work experience and to have a feel of what it is like to be employed”.*

*“Yes, provide more work exposure so that we can get experience”.*

*“Go visit companies that I see myself working for one day”.*

*“Yes, the TVET colleges must be more in touch with engineering companies”.*

*“By letting us gain experience and by letting us, the college and the company work together”.*

#### Sub-theme 7.4: Improve outdated software and research capacity



*“Yes, they must stop teaching us to use programmes using old, outdated software that is irrelevant in the job market”.*

*“Student counseling, lets students know what they are getting into and how to get through it”.*

*“If there could be any institution that could offer a degree at least in this course”.*

*“To restructure research capacity and development of college institution; to be abreast of latest developments and be current”.*

*“Maybe with more research on how to help students find out what the company wants from them by the time they finish school”.*

Sub-theme 7.5: Improve NCV course content

*“Make the course to be more advanced than a grade 12 qualification because some of us have grade 12 already”*

*“Course content must be improved to be relevant to current demands of society and economy”.*

#### **4.9 THEME 8: SUGGESTIONS FOR THE WAY FORWARD**

These were suggestions that aimed to improve employment prospects for graduates and young people in general. These positive suggestions raised by sampled students in this study really demonstrate a high level of socially engaged students with issues in the discourse especially those that affect them directly. These include what should be the way forward and general comments about everything related to the study itself; the unemployment question and general questions that they have. Students had this to say in closing:

*“The voluntarily service must be encouraged and internships must guarantee work opportunities”.*

*“I don’t feel the need for English and Life orientation studies; I feel that if the college could focus on core subjects and mathematics the pass rate would increase”.*

*“The college must have working relationships with other institutions such as NMMU as well as SETAs to enhance a high rate of employment prospects”.*

*“This issue of unemployment is a very huge concern to us, thank you for investigating this and for soliciting our views”.*

*“Companies that work and train electricians must start building relations with colleges so that we can benefit”.*

*“We would really like to find jobs according to our course/qualification, so please help with practicals as much as you can”.*

*“TVET qualifications and graduates must also be treated in the same way as other institutions such as universities”.*

*“College qualification should not be equivalent to grade 12, because a college is a post school training education institution”.*

*“It would be very nice if NMMU could offer a course in renewable energy technologies”.*

*“Post school qualification should serve as necessary training for job entrance”.*

*“The state should ensure that graduates irrespective of the institution, get employment and the private companies must take full responsibility”.*

*“I am so glad that there is the opportunity to study at college without being forced to pay when registering because before there were no opportunities and that is why you will find older students only studying now”.*

*“College graduates should not struggle to get employment and the department must ensure it re-looks and restructures college programmes”.*

*“Yes, I do hope that one day this research study will help to come up with solutions to the above mentioned problems”.*

*“Jobs should be given to those who have worked hard to achieve the job requirements and not those who do not deserve them”.*

#### **4.10 CONCLUSION**

The chapter provided a detailed discussion of the study results. In order to provide the context for the discussion, the chapter reported on the demographic details of the participants, provided a thematic description of factors that related to youth unemployment in general and graduates through the lens of study participants, and presented a review of literature that supported the study findings. The descriptive analysis of the findings point to various suggestions that must be created such as internship programmes, work based learning and also restructuring of the college programs.

## **CHAPTER FIVE**

### **DISCUSSION OF THE RESEARCH FINDINGS**

#### **5.1 INTRODUCTION**

This section presents the discussion on the findings of the study. The research findings are categorized according to eight broad themes, with each having sub-themes emanating from the data collection process. The section further provides a brief explanation of the relevance of each theme in relation to the study objectives. The intention is to provide a systematic and integrated picture of the phenomenon being studied. Furthermore, the thematic findings are then linked to the literature studies that either confirm or dispute the established findings of the research. The discussion will be focusing on the broad themes and not necessarily sub-themes.

#### **5.2 THEME 1: EDUCATIONAL ASPIRATIONS**

The theme emanates from the responses given by participants to the question in the self-administered questionnaire. The question was as follows:

*Think back to high school, what were your hopes and dreams for the future?* The findings from participants suggested that their educational aspirations whilst at school were to study further after finishing high school and then get employment. This educational desire for employment emanates from Human Capital Theory, which argues that investment in the education of individuals is therefore seen as the solution to all the structural problems of the economy and the labour market (Baatjes, 2012). The findings however, affirm the argument made by Baptiste (2001), that human capital such as knowledge, attitude and skills primarily exist and are valued for economic productive potential, meaning without those, chances of being economically productive are high (Baaptise, 2001).

This approach to education and human development is narrow because it fails to define skills formation as the development of the social capacity for learning, innovation and productivity (Brown, 1999). On the other hand, Marsh (2011) argues that education bears too much of the burden of our hopes for economic justice, and moreover, that we expect education to accomplish impossible goals. He further argues that the appeal for education has displaced the debate about social class and economic power that progressive forces need to have if we are to understand the causes of and the remedy for sustained poverty and increasing inequality. To start this debate, Marsh (2011) argues that we need to dismiss the belief that all or even most of our economic problems can be solved in a classroom as this debate is being propagated by human capital theorists, who narrowly argue that education is about individual investment for personal development and success. The findings further address factors that shape career choices, which, amongst others are poverty and high levels of unemployment.

### **5.3 THEME 2: EMPLOYMENT OPPORTUNITIES IN SOUTH AFRICA**

The lack of job opportunities is well documented and findings affirm that unemployment is a serious issue. The state is being blamed for a lack of capacity to create employment opportunities for the majority of South Africans. These findings are a direct response to the question: *In your opinion what is the primary reason for youth unemployment in South Africa?* The high level of unemployment in SA is because there are no jobs readily available for young people, meaning jobs are scarce in the labour market. Young people are also required to have experience they do not have, so experience is also a barrier to any job opportunities that may be available in the market. One question asked: *How do you expect graduates to have experience when they leave colleges/universities?* In some instances, lack of education also plays a role in their unemployment status, as the primary reason for unemployment is that jobs are scarce regardless of one's educational status. In addition, the reality is that college education is not recognized in the labour market, as it seems there is no value in vocational training in South Africa.

These students appear to affirm and sustain the view that is held by many leading scholars and a new body of knowledge that says youth unemployment is caused by job scarcity or there are no jobs readily available in the labour markets.

The students' argument was further legitimized by the National Treasury Report (2011) which stated that over 30 percent of 18-24 year olds with tertiary education, which include university degrees, university of technology diplomas and college certificates were unemployed.

The question may arise as to why they were not employed even with tertiary education? Can it be as students suggest that there are no jobs available in South Africa? It is believed that TVET students are being supported in this view by the evidence as Stats SA (2012) also reported that the highest rate of unemployment in South Africa is amongst the youth and also increasingly graduate unemployment and they confirm this number to be at 25.5% (StatsSA, 2012). Scholars such as Alias and Nathan (2014) argue that this high rate of unemployment within the context of the South African economy has experienced what has been commonly referred to as jobless growth with capital, rather than labor-intensive forms of economic growth being the order of the day, (Alias & Nathan, 2014).

It is confirmed that unemployment remains one of the major societal and macro-economic problems facing South Africa and the vulnerability of youth to the challenges of unemployment points to a need for a holistic approach to youth development (Baatjes, Baduza & Sibiyi 2014). The reality is that there is a scarcity of jobs and one major policy should ensure that the youth do not lose touch with the labour market according to (Baatjes et al 2014).

Employers do not seem to agree with this view that unemployment is because of job scarcity instead they argue to the contrary and say there is a mismatch of skills. For instance, Belt, Campbell and Gilles (2010) argue that a mismatch of skills in the labour market happens when employers are unable to, or have difficulty in, employing people they need because they are not readily available in sufficient numbers with the required skills (Belt *et al*, 2010). Students are vehemently opposed to this dominant narrative of a mismatch of skills as purported by many including business in the discourse of skills and employment. The growing evidence by students suggests that, contrary to what most companies explain as a reason for youth unemployment and a lack of skills or skills mismatch for youth employment, the reason is lack of experience.

This lack of employment relates to insufficient practical's and experience as opposed to a lack of skills argue students and this argument is further supported by Prinsloo (2011), who contends that graduates in the fields of engineering and science, mainly from South Africa's Further Education

and Training colleges (now TVET), are given the knowledge and some practical training by institutions, but then left without any work experience and, ultimately, unemployment as cited in Prinsloo (2011). The understanding of why there is a lack of employment or job opportunities for young people particularly graduates from the student's perspective appears to be in opposition to the dominant view that a lack of skills is the main reason. On the contrary, students view this differently as explained by their response as aforementioned and students also affirm what Brown (1999) has always argued that the challenge of unemployment and poverty as a global phenomenon is understood differently within different national contexts.

Seeing the economy as analytically distinct from its social, cultural and political dimensions is neo-classical in approach and impedes the understanding of skills requirements explains Brown (1999). The rediscovery of the social construction of skills has led to a growing interest in the concept of social capital argues Brown (1999). Also Coleman cited from Brown (1999), argues that this neo-classical approach in seeing the economy as distinct from its social and cultural dimensions, is critical of the mainstream economic analysis because it ignores the fact that individual actions are embedded in a social context and that norms, interpersonal trust, social networks and social organization are functions not only of society but also of the economy as well.

The students do not agree with the view that it is a lack of skills that impedes graduates from getting work opportunities. As Motala and Vally (2014) concurred with Treat and Hlatshwayo (2012) that there is no widely accepted definition of a skills shortage or of how government should respond to it. Therefore, the nature, scale and severity of skills shortages are often miscalculated, misunderstood and misused.

#### **5.4 THEME 3: TVET ENGINEERING QUALIFICATION IS DEMAND**

There seems to be a positive attitude amongst some students that even though they recognize that unemployment is a reality and affects the youth directly as they lack experience instead of skills they are confident that they will immediately obtain employment with their qualification especially here in South Africa more so because it is in demand and they have rare skills. There seems to be confidence in this generation about employment after completion of their qualifications. However, other students seem to suggest otherwise confirming that getting a job after school is not guaranteed.

Some suggest that voluntary service is an option to gather necessary training; establishing their own small/medium enterprises in order to create job opportunities; study further up to postgraduate level or search even harder for employment.

Baatjes and Hamilton (2012) have highlighted the plight of thousands of youth, particularly working class youth, who struggle to make their way into employment in the formal labour market, therefore those who are of the view that employment, is not guaranteed after school or getting it is not easy find resonance with this argument.

#### **5.5 THEME 4: DEMAND FOR QUALIFIED ENGINEERS**

There seem to be divergent views gathered from students. The findings are derived from the following question in the self-administered questionnaire: *What do you think is the reason that people who graduated with engineering qualifications struggle to find job opportunities?* There are those who feel very strongly that a TVET qualification especially engineering leads one to full employment because of its demand. What makes it even easier is because training and practicals as well as the placement unit in the college normally assist students in finding work. The TVET colleges do play a role and contribute in career choices and the development of students.

The view by students further suggests as Hyslop-Margison (2000), argues that a historical pattern consistent with various market economy crises, governments and corporations from industrialized countries around the world are heralding vocational education and training reform as a major determinant of economic success within the new global economy order, with the view to address the high level of unemployed youth. It appears that some students disagree with the notion that people with an engineering qualification struggle to get employment because the qualification is in demand and this view by students further affirms the government's position that engineering is part of what it calls a "scarce category". Thus suggests that those who have engineering qualifications are in demand in the economy. Whilst other students firmly believe that whatever qualifications one holds, the real world of work is not ready for them, as they do not have working experience, which they described as unfair because they cannot get experience without being properly monitored and trained by the very same industry that hopes to employ them in the near future. The only problem we are facing is job scarcity contrary to skills scarcity, one responded.



The high level of unemployment in South Africa affects not only the uneducated youth but also those who have interfaced with higher education institutions, such as traditional university institutions or Technical Vocational Education and Training institutions so graduates are just as affected by this social condition.

Unemployment is so serious that even students from engineering fields appear to be affected by unemployment. Prinsloo (2011) further explains that there are an estimated 300 000 unemployed graduates in South Africa that cannot find jobs, a third of whom are trained in the engineering and science fields. Furthermore, City Press (2012) reports that students undertaking engineering studies were discussing their aspirations, dreams and the uncertainty of their future prospects. The article reported that these engineering students are no different from thousands of other young South Africans studying at various tertiary institutions or post school education institutions. What appears to be more challenging is the fact that TVET college students face a tougher battle for jobs than their peers (City Press, 2012).

This report seems to affirm the naïve view held by Prinsloo (2011) that this was mainly owing to a gap between the supply of skills and demand for skills in the labour market of the country. According to Prinsloo (2011) graduates in the fields of engineering and science, mainly from TVET colleges are given the knowledge and some practical training by institutions, but then left without any work experience and, ultimately, remain unemployed.

Yet, according to Baatjes et al (2014), vocationalism and job training do not appear to be the preference of youth in South Africa. Currently, only 400,000 (DHET, 2013) youth are enrolled in TVET Colleges and participation in NSDS-related programmes such as skills programmes and learnerships remains low.

## **5.6 THEME 5: PERSONAL SKILLS REQUIRED**

On the question of what skills requirements potential employers look for in a prospective employee, the following responses were received: The students' responses seem to suggest that qualification and skill is the same thing and should be enough to be able to be employed in the job market, and hard work, confidence, teamwork, honesty, and determination as well as commitment

are all generally termed soft-skills and cannot be barriers for their employment, as they are not taught in educational institutions.

Though these soft skills are important for consideration they should be secondary for employment purposes with the primary factors being qualification, which at times is used interchangeably with skill. The findings seem to concur with Launglo and Lillis, (1998), when they explain that the term vocationalisation was taken to mean curriculum change in a practical or vocational direction.

They further argue that this is rather an outdated theme in many countries around the world. These policies are mainly a political response to the poor articulation of schooling with the world of work, the labour market. As it is, vocational education is meant to ease school leavers into practical jobs or training for self-sustenance or employment especially under the conditions of widespread and worldwide unemployment of young people (Launglo & Lillis, 1998).

The findings however further entrench the view by Rasool and Botha (2011) who cite Benjamin (2008) and Ellis (2008) in support of the argument that there is no widely accepted definition of a skills shortage or of how government should respond to it, therefore, the nature, scale and severity of skills shortages is often miscalculated, misunderstood and misused and this results in poor public policies, with their associated high levels of wastage. As a result, the reliability and validity of labour market data is worrying (Rasool & Botha, 2011).

It therefore stands to reason as Kraak and Hall (1999) point out that the TVET sector in South Africa faces a multitude of complex problems and TVET systems across the globe are fundamentally shaped by the effectiveness of their articulation with the world of work on one hand and by the extent to which they grant meaningful access to further and higher learning on the other.

They further argued that in South Africa this has not been the case and regrettably the TVET system in South Africa has failed on both counts as it has failed to articulate itself to the world of work and to further higher learning. This failure within the system in relation to the quality and relevance of TVET programmes, leads to inadequate preparation for higher learning and the articulation path to the world of work (Kraak & Hall 1999).

Baatjes, Baduza and Sibiyi (2014) concur that the current form of TVET sector and its character have failed to link young learners to real employment prospects in the world of work and it has

failed to provide a meaningful learning pathway for employed adult workers to return to formal study to improve their overall skills and competencies.

Increasing joblessness and underemployment amongst graduates is now being explained as a failure of curriculum models, including the lack of proper work-based learning or work-integrated tools that fail to provide the proper skills required by the labour market (Baatjes, Baduza & Sibiya, 2014). One can therefore say that, based on these findings and discussion that there is no linear relationship between the VET and the labour market and having an education does not automatically lead to employment.

## **5.7 THEME 6: KNOWLEDGE AND SKILLS LEARNED**

Students have no doubt that they are acquiring valuable knowledge and skills with their respective engineering-related qualifications. The following are the findings of the question: *What knowledge and skills do you think you are acquiring by doing the engineering qualification?* They argued that the qualification is about technical skills and as a result they are better equipped and prepared for any task in the job market as these technical skills and qualifications put them in a better position for employment. With the knowledge they have from TVET institutions if they can be given a chance to prove their worth they can contribute to the economy of this country. However if they are asked about working experience, they obviously do not have this as long as they are not trained on the job. Mismatch of skills in the labour market happens when employers are unable to, or have difficulty in, employing people they need because they are not readily available in sufficient numbers with the required skills, argues Belt, Campbell and Giles, (2010). Bennett (2002) concurs that the possession of these skills is important as it is the permit for a new graduate to make an immediate contribution to a business (Bennett 2002). On the other hand, Launglo and Lillis (1988) are of the view that vocationalisation policies are a quest for greater labour market relevance in education; therefore, they argue for a better articulation between the content of the schooling and the subsequent application of the acquired skills and especially for improved productivity with workers obtaining a decent livelihood. In many instances, in what is often termed as employer's expectations from education, employers put emphasis on personal qualities when selecting candidates. This is what the British industry said in response to their government's green paper on higher education. Arguably, personal qualities cannot be taken for granted even in applicants with

very good academic qualifications for while you may have academic skills you may lack the ability to communicate, have leadership, numeracy and specialist skills, and fail dismally as a candidate (Lauglo & Lillis, 1988).

## **5.8 THEME 7: THINGS TO IMPROVE**

What suggestions do you have to improve your course for employability prospects? The findings suggest that there are five distinct but necessary interventions that students are suggesting to increase their lack of experience in the job market. These are: practicals/companies visiting colleges for on-the-job training; free trade tests; use of relevant and current software; making sure that the course is not equivalent to grade 12/ matric and linking the course with companies for internship/work-exposure. This further affirms the point by Ashton (1986) that the market driven, neoclassical approach of seeing the economy as distinct from its social, cultural and political dimensions should be discouraged because such an approach impedes social development.

It is this market-oriented skills thesis that resulted in more fundamental and transformative approaches being deliberately underrepresented or omitted. They are of the view that fundamental issues arise from examining the relationship between education and training and the economy. However, it is imperative that education and training systems be preceded by some orientation to the nature of the economy being referred to (Motala & Vally, 2014). Unemployment remains one of the major societal and macro-economic problems facing South Africa and the vulnerability of youth to the challenges of unemployment points to the need for a holistic approach to youth development.

The reality is that there is a scarcity of jobs and major policy should ensure that the youth do not lose touch with the labour market. Unemployment duration in three-year cycles is not an uncommon feature amongst many of the unemployed youth (Perold, Cloete & Papier, 2012).

## **5.9 THEME 8: SUGGESTIONS FOR THE WAY FORWARD**

The students' suggestions for the way forward were question-based rather than suggesting solutions; however, these demonstrated a socially informed stratum of society. Some questions revealed frustrations and a lack of faith in education and its ability to resolve social problems like

poverty and unemployment. On the other hand, Marsh (2011) argues that education bears too much of the burden of our hopes for economic justice, and that we expect education to accomplish impossible goals. He further posits that the appeal for education has displaced the debate about social class and economic power that progressive forces need to have if we are to understand the causes of and the remedy for sustained poverty and increasing inequality. In order to commence a debate he argues that we need to dismiss the belief that all or even most of our economic problems can be solved in a classroom as is being propagated by Human Capital Theorists, who argue that education is about individual investment for personal development and success.

## **5.10 CONCLUSION**

The chapter provided an in-depth discussion on the findings of the study revealed by the data. For contextual purposes, the chapter dealt with thematic descriptions of issues that relate to vocational education and training as far as the labour market is concerned from the perspective of the participants. The chapter further presented a literature review which supported the findings or disputed the views on the public discourse about unemployment altogether. Where there are divergent views evident in the findings, they were also presented with literature affirming those that are held by leading scholars. In some instances the findings were clearly supported by the literature review, where it became clear that the issue of unemployment is a serious concern shared by participants. Furthermore, the cause of this social condition, which is a lack of jobs or scarcity of employment, is supported by a growing body of literature by scholars from different schools of thought.

The issue of skills and experience has been rejected by the findings as the reason for the unemployment of young people especially graduates and lack of relevant course content was mentioned as a problem. The participants' responses seem to suggest that qualification and skills are one and the same thing and that should be enough to gain employment. The findings further explain that hard work, confidence, teamwork, honesty and determination as well as commitment are all generally termed as soft-skills and cannot be a barrier for employment, as they are not taught in educational institutions. Though these soft skills are important for consideration they should be secondary for employment purposes with the primary factors being qualification, which at times is used interchangeably with skill.

## **CHAPTER SIX**

### **RECOMMENDATIONS AND CONCLUSION**

#### **6.1 INTRODUCTION**

This chapter provides a summary of conclusions from the research findings and will further discuss the value as well as limitations encountered during the study.

#### **6.2 SUMMARY AND CONCLUSIONS OF THE STUDY**

This study was conducted with college students in Uitenhage in the Nelson Mandela Bay region in the Eastern Cape Province, South Africa who are doing level 3 in engineering. The research study was framed within the Human Capital Theory. The study wanted to understand any perceived link between vocational education and the labour market, especially since the White Paper for Post School Education and Training offers an ambitious vision for growth in higher and further education provision in order to meet the country's high rate of unemployment. One hundred and thirteen (113) students were sampled and contributed significantly to the topic. The intention was to understand how Eastern Cape TVET college engineering students perceive the relationship, if there is one between vocational education and the labour market. This research was necessary to gain students' perspectives on vocational education in relation to the labour market. A self-administered questionnaire was used to solicit their views and as a result, qualitative research was employed in the study.

##### **6.2.1 Getting employment is not easy**

Participants share divergent views when it comes to unemployment and engineering qualifications. There are those who argue that an engineering qualification is in demand and this view by students further affirms the government's position that engineering is part of what it calls a "scarce category". This suggests that those who have engineering qualifications are in demand in the economy.

Whilst others firmly believed that whatever qualifications they hold, the real world of work is not ready for them, as they do not have work experience, which they described as unfair because they cannot get this without being properly monitored and trained by the very same industry that hopes to employ them in the near future. The only problem we are faced with is job scarcity contrary to skills scarcity. The high level of unemployment in South Africa affects not only the uneducated youth but also those who have interfaced with higher education institutions, such as traditional university institutions or Technical Vocational Education and Training institutions and graduates are just as affected by this social condition.

The state is being blamed for the lack of capacity to create employment opportunities for the majority of South Africans.

*“Young people are also asked for experience they do not have, so experience is also a barrier to job opportunities that may be available in the market”.*

Others argue that to expect them to have experience whilst coming from school is unjust and unfair showing a lack of appreciation of their education and commitment to build prosperity.

Employers seem unable to accept the view that unemployment is because of job scarcity, instead they are arguing to the contrary saying that there is a mismatch of skills. For instance, Belt, Campbell and Gilles (2010) argue that the mismatch of skills in the labour market happens when employers are unable to, or have difficulty in, employing people they need because they are not readily available in sufficient numbers with the required skills (Belt *et al*, 2010). Students are vehemently opposed to this dominant narrative of a mismatch of skills as purported by many including business in the discourse of skills and employment. The findings of the research suggest that contrary to what most companies explain as a reason for youth unemployment and instead of a lack of skills or skills mismatch for youth employment the reason is lack of experience, which is unfair. This suggestion related to insufficient practicals and experience as opposed to a lack of skills, argue students, which is further supported by Prinsloo (2011), who concurs with the assertion by students that there is a lack of employment in SA to support the fact that there are an estimated 300 000 unemployed graduates in South Africa that cannot find jobs, a third of whom are trained in the engineering and science fields.

Furthermore, the City Press (2012) reports that students doing engineering studies were discussing their aspirations, dreams and their uncertainty as to future prospects. The article reported that whilst these engineering students are no different to thousands of other young South Africans studying at various tertiary institutions or post school education institutions, what appears to be more challenging is the fact that TVET college students face a tougher battle for jobs than their peers do (City Press, 2012). These students appear to affirm this view that is held by many leading scholars as well as a new body of knowledge that says youth unemployment is caused by job scarcity or there are no jobs readily available in the labour market. Allais and Nathan (2014) argue that this high rate of unemployment within the context of the South African economy, which has experienced what has been commonly referred to as jobless growth. It is relevant to contend that unemployment remains one of the major societal and macro-economic problems facing South Africa and the vulnerability of youth to the challenges of unemployment points to a need for a holistic approach to youth development (Baatjes, Baduza & Sibiyi 2014). The reality is that there is a scarcity of jobs and major policy should ensure that the youth do not lose touch with the labour market, according to (Baatjes et al 2014). Whilst Brown (1999) has always argued that the challenge of unemployment and poverty as a global phenomenon is understood differently within different national contexts.

### **6.2.2 Educational aspirations**

The findings from participants suggested that their educational aspirations whilst at school were to study further after finishing high school and then get employment. This educational desire for employment is entrenched from Human Capital Theory, which argues that investment in the education of individuals is therefore seen as the solution to all the structural problems of the economy and the labour market (Baatjes, 2005). The findings however, affirm the argument made by Baptiste (2001), that human capital such as knowledge, attitude and skills primarily exist and are valued for economic productive potential, meaning without these the chance of being economically unproductive are high (Baaptise, 2001). This approach to education and human development is narrow because it fails to define skills formation as the development of the social capacity for learning, innovation and productivity (Brown, 1999).



On the other hand, Marsh (2011) argues that education bears too much of the burden of our hopes for economic justice, and moreover, that we expect education to accomplish impossible goals. He further argues that the appeal for education has displaced the debate about social class and economic power that progressive forces need to have if we are to understand the causes of and the remedy for sustained poverty and increasing inequality. To start this debate he argues that we need to dismiss the belief that all or even most of our economic problems can be solved in a classroom (Marsh, 2011) as this debate is being propagated by Human Capital Theorists who argue that education is about individual investment for personal development and success. The findings further reveal factors that shape their career choices, which amongst others are poverty and the high level of unemployment, which when combined lead to personal ambitions that are centered on personal skills.

### **6.2.3 Personal skills required**

On the question of what skills/requirements, do potential employers look for in a prospective employee?

The students responses seem to suggest that qualification and skill are one and the same thing and that should be enough to be employed in the job market, and hard work, confidence, teamwork, honesty and determination as well as commitment are all generally termed as soft-skills and cannot be a barrier for their employment as they are not taught in educational institutions. Though these soft skills are important for consideration they should be secondary for employment purposes with the primary factors being qualification, which at times is used interchangeably with skill. The findings seem to concur with Launglo and Lillis, (1998), when they explain that the term vocationalisation was taken to mean curriculum change in a practical or vocational direction. They further argue that this is rather an antiquated policy in many countries around the world. These policies are mainly a political response to the poor articulation of schooling with the world of work, the labour market.

Vocational education is meant to ease school leavers into practical jobs or training for self-sustenance or employment especially under the conditions of widespread and worldwide unemployment of young people (Launglo & Lallis, 1998).

The findings however further entrench the view by Rasool and Botha (2011) who argues that there is no widely accepted definition of a skills shortage or of how government should respond to it, therefore, the nature, scale and severity of skills shortages are often miscalculated, misunderstood and misused and this results in poor public policies, with their associated high levels of wastage. As a result the reliability and validity of labour market data is worrying (Rasool & Botha, 2011).

It therefore stands to reason that as Kraak and Hall (1999) point out the TVET sector in South Africa faces a multitude of complex problems and TVET systems across the globe are fundamentally shaped by the effectiveness of their articulation with the world of work on one hand and by the extent to which they grant meaningful access to further and higher learning on the other hand. They further argue that in South Africa this has not been the case and regrettably, so which means the TVET system in South Africa has failed on both counts; it has failed to articulate itself to the world of work and to further higher learning. This failure within the system in relation to the quality and relevance of TVET programmes, leads to inadequate preparation for higher learning and the articulation path to the world of work (Kraak & Hall 1999).

Baatjes, Baduza and Sibiyi (2014) concur that the current TVET sector and its character has failed to link young learners to real employment prospects in the world of work and has also failed to provide a meaningful learning pathway for employed adult workers to return to formal study so as to improve their overall skills and competencies. Increasing joblessness and underemployment amongst graduates is now being explained as a failure of curriculum models, including the lack of proper work-based learning or work-integrated tools that fail to provide the proper skills required by the labour market (Baatjes, Baduza & Sibiyi, 2014). One can therefore say, based on these findings that there is no linear relationship between VET and the labour market; having an education does not automatically lead to employment.

### **6.3 RECOMMENDATIONS**

This section deals with recommendations that need to be applied to improve vocational education relevance to societal challenges and respond to socio-economic problems that amongst others are poverty, inequality and unemployment. It also further outlines the future research that should be undertaken following the results of this study.

## **Recommendations for theme 1: Educational Aspirations**

- The evolution of VE in SA remains complex and multifaceted; this is so because of the power of neo-liberal ideology, which is entrenched in our education system, which has gained significance in SA from the late 1970s. Through this prominence of neo-liberal ideology, VE has been reduced to the exclusive acquisition of relatively narrow band employment related or job specific skills and competencies. To address *the educational aspirations* of young people, vocational education should be about articulating and responding to poor schooling or lack of access in relation to the labour market.

## **Recommendations for Theme 2: Employment opportunities**

- Vocational education should further assist the state by easing school leavers into jobs or self-employment and break new ground for young people to have the necessary and practical skills to access and respond to social conditions which are not limited to poverty and unemployment particularly as South Africa continues to be faced with high levels of unemployment particularly among the youth, as explicitly argued in the findings.
- It should not only enable young people to look for employment in the labour market as advocated by Human Capital Theory, which is exactly what is happening with the South African VET system.

Education is one of the ideological institutions that serve to maintain the status quo of the ruling class. The education system offers subjects that train learners for specific occupations within the labour market or economic system. Although working is necessary for humans to survive, it should not be the only priority of VET.

## **Recommendations for Themes 3 and 4: TVET engineering qualification in demand**

- VET should do more than train young people to become engineers or even artisans. It should furnish young people with the knowledge and skills they need in life in order to contribute to local development, for example knowledge about the economy.
- SETAs especially those that have a direct link with engineering related course such as EWSETA; MERSETA must be reconfigured to play a direct role in facilitating workplace learning and partnerships between employers and educational institutions.

### **Recommendation for Theme 5: Personal Skills required**

- VET needs to be improved not to better serve the market, but rather to equip individuals with the knowledge and skills they need to survive in their everyday lives and VET needs to be context-dependent. It also needs to speak to their rural context and should support their way of life.

### **Recommendation for Theme 6: Knowledge and Skills required**

- There should be inclusion of local people's participation in the planning, curriculum design and teaching which needs to be re-emphasized to strengthen ownership and control of education for societal purposes.
- The state has a responsibility to ensure that vocational education protects democratic ideals while still preparing students for future career challenges beyond meeting narrowly defined business needs. A morally appropriate model for vocational education is found within comprehensive democratic approaches rather than what is currently in place, which is narrowly conceived as skills-based programmes.

### **Recommendation for Theme 7 & 8: Things to improve and way forward**

- The White paper on PSET must directly guide the Department of Education & Training and other institutions toward building a developmental state with a vibrant democracy and flourishing economy.
- TVET and Tertiary education institutions must develop responsive curricula that address the needs of society beyond forced "market responsive curricula" which are targeted and niched to capture a market segment and to respond to market needs, because this market responsive curricula not only produces inequalities and exclusion but also ignores the obvious ways in which markets manufacture needs and desires as opposed to merely responding to them.
- The College sector must strive to equip and strengthen its research capacity; remove out-dated materials which are no longer relevant in modern day technology advancement.

## **6.4 RECOMMENDATIONS FOR FURTHER STUDIES**

- It is recommended that the study be replicated to include all stakeholders in the college sector as well as institutional management.
- There should be more research conducted to revise the relevance of the curriculum content of TVET programmes in relation to the labour market.
- The group: Not in Education, Employment or Training (NEETs) and its experience of PSET also needs to be researched.

## **6.5 VALUE OF THE STUDY**

Research on youth/graduates' unemployment rarely focuses on TVET students as it appears as though their views or perception on any issue do not matter. It is in this context that the research was conducted to bring to the fore the students' views especially of TVET colleges in the unemployment debate. It is important to value all voices in any debate especially those of young people as they are struggling with unemployment even with their post-matric qualifications. For contextual purposes, the study dealt with the thematic description of issues that relate to factors that shape students' understanding of their future career prospects in so far as work is concerned from the participants' point of view.

The study contributes to the existing body of knowledge by tapping into the potential that exists in students from the TVET sector in relation to social issues. Their suggestions to improve graduates' prospects would also add value to many more interventions that are being applied by relevant stakeholders especially government and the private sector in order to respond to the unemployment problem. The limitations of the study are discussed in the section below.

## **6.6. LIMITATIONS OF THE STUDY**

Research by its very nature and application encounters a host of limitations and this study is no exception, containing at least three limitations. Firstly, the study was restricted to participants of the target field of engineering and findings cannot be generalized to other samples.

The second limitation is sampling bias might also exist as participants who volunteered to take part in the study were mostly black Africans, followed by coloured students and few white students with no Asian students involved.

Lastly, while the study was conducted in English to avoid the loss of valuable data during translation, participants were encouraged to use the language of their choice however, they all responded in English. Some of the responses were therefore vague and poorly written, effectively revealing that there is an insufficient command of English as a medium of instruction amongst final year students in the institution particularly in the engineering field.

## **6.7. CONCLUSION**

The study explored college engineering students' perceptions of vocational education regarding the labour market. It sampled one hundred and thirteen participants from all races, who were in their final year(s) of studying. Data analysis was done through thematic categorization with each theme having its own relevant sub-theme such as:

- Educational aspirations
- Employment opportunities in South Africa
- TVET College qualification in demand
- Demand for qualified engineers
- Personal skills required
- Knowledge and skills learned
- Things to improve
- Suggestions for the way forward

Thematic analysis and discussion revealed divergent views shared by students, regarding unemployment of TVET graduates or their employment. Some feel very strongly that a TVET qualification especially in engineering leads one to full employment because of its demand and the fact that the institution normally assists them through the placement unit, making it even easier to get a job. Other students firmly believed that whatever qualifications one holds, the real world of work is not ready for them, as they do not have working experience, which they described as unfair because they cannot get this without being properly monitored and trained by the very same industry that hopes to absorb them in the near future. They argue that the only problem pertaining to unemployment is job scarcity rather than skills scarcity.

Unemployment in South Africa is very high, especially among the youth. The most distressing aspect of South Africa's unemployment crisis is the extent to which it has grown in the democratic period. Its rise affects not only the uneducated youth but also those who have interfaced with higher education institutions, such as traditional university institutions or Technical Vocational Education and Training institutions and graduates are just as affected by this social condition because there are no jobs in the market.

## GLOSSARY

**ARTICULATION-** arrangements enable students to progress from a completed qualification to another with admission and/or credit in a defined pathway. Credit is the value assigned for the recognition of equivalence in content and learning outcomes between different types of learning and/or qualifications

**ECONOMY-** is the large set of inter-related production and consumption activities that aid in determining how scarce resources are allocated

**Human Capital Theory-** is a term popularized by Gary Becker, an economist from the University of Chicago, and Jacob Mincer that refers to the stock of knowledge, habits, social and personality attributes, including creativity, embodied in the ability to perform labor so as to produce economic value

**LABOUR MARKET-** is the place where workers and employees interact with each other. In the labour market, employers compete to hire the best, and the workers compete for the best satisfying job.

**Not in Education, Employment and Training(s)** - a young person who is no longer in the education system and who is not working or being trained for work

**Post School Education and Training** - it's an abbreviation for Post School Education and Training, a post matric- education and training institution

**SKILL-** An ability and capacity acquired through deliberate, systematic, and sustained effort to smoothly and adaptively carry out complex activities or job functions involving ideas (cognitive skills), things (technical skills), and/or people (interpersonal skills).

**State of the Nation Address-** the State of the Nation Address (SONA) is a constitutional obligation and yearly tradition, wherein the chief executive reports on the status of the country, unveils the government's agenda for the coming year, and proposes to Congress certain legislative measures

**Technical Vocational Education and Training** - is an education, training or learning activity which provides knowledge, skills and attitudes relevant for employment or self-employment

**Vocational Education and Training** - is that part of tertiary education and training which provides accredited training in job related and technical skills. It covers a large number of careers and industries like trades and office work, retail, hospitality and technology

**White Paper** - is an authoritative report or guide that informs readers concisely about a complex issue and presents the issuing body's philosophy on a matter. It is meant to help readers understand an issue, solve a problem, or make a decision.



## REFERENCES

- Akoojee, S., McGrath, S. & Visser, M. (2008). "Further education and training colleges". In: Press, K. & Kraak, A. (Eds), *In Human resource development review 2008: education, employment, and skills in South Africa*. Cape Town: HSRC Press.
- Allais, S. & Nathan, O. (2014). "Jobs? What Jobs? Skills? What Skills? An overview of studies examining relationships between Education and Training and Labour". In: Motala, E. & Vally, S. (Eds), *Education, Economy, and Society* (pp. 103-124). Pretoria : Unisa Press .
- Altman, M. & Potgiter-Gqubule, F. (2009). *The State of Youth: Labour Market Status and Policy Challenges: Pretoria- HSRC*. . Pretoria: HSRC.
- Ashton, D. (1986). *Unemployment under capitalism: the sociology of British and American labour markets*. . Greenwood Press.
- Ashton, D. (2005). High skills: the concept and its application to South Africa . *Journal of Education and Work Vol. 18*, 01.
- Baatjes, B. & Hamilton, S. (2012, 01 20). *Blade's paper fails to make the cut*. Retrieved May 02, 2014, from available: <http://mg.co.za/article/2012-01-20-blades-paper-fails-to-make-the-cut> . : <http://mg.co.za/article/2012-01-20-blades-paper-fails-to-make-the-cut>
- Baatjes, I. (2005). Neoliberal Fatalism and the Corporatisation of Higher Education in South Africa, Education as Market Fantasy or Education as a Public Good. *Quarterly Review of Education and Training. Vol. 12, No. 1*, 25–33.
- Baatjes, I, Baduza, U & Sibiyi, AT. (2014). Building a transformative pedagogy in vocational education in South Africa. In S. a. Vally, *Education, Society and Economy*. Pretoria:: Unisa Press.
- Baatjes, I., Spreen, C.A & Vally, S. (2012). "The Broken Promise of Neoliberal Restructuring of South African Higher Education". In: Pusser, B & Margison, S. (Eds), *Universities and the public sphere: Knowledge creation and state building in the era of globalisation*. New York: Routledge.
- Babbie, E., & Mouton, J. (2001). *The Practice of Social Research*. Oxford : Univesity Press.
- Baptiste, I. (2001). Educating lone wolves: Pedagogical implications of human capital theory. . *Adult Education Quarterly*, 55 (3):, 184-201.
- Béduwé, C. & Béduwé and François Giret , J. (2011). Mismatch of vocational graduates: What penalty on French labour market. *Journal of vocational behavior* 78(2011), 68-79.

- Belt, V., Campbell, M & Giles, L. (2010). *Skills for jobs: Today and tomorrow the National strategic skills Audit for England. The evidence report. Vol 2* . UK.
- Bennett, R. (2002). Employers' Demand for Personal Transferable skills in Graduates: a content analysis of 1000 job advertisement and an associated empirical study. *Journal of Vocational Education and Training*, 54 (4), 457-475.
- Bhorat, H. (2006). Youth unemployment and education in South Africa: *Harold Wolpe Memorial Trust open dialogue*, Cape Town .
- Bhorat, H. (2012, 06 16). *young-jobless-and-desperate-degrees-with-no-guarantees*. Retrieved October 21, 2013, from <http://www.citypress.co.za/news/>: <http://www.citypress.co.za/news/>
- Brown, P. (1999). Globalization and the Political Economy of High Skills. *Journal of Education and Work. Vol. 12, No. 13*.
- Brown, P., Green, A., & Lauder, H. (2000). *High skills: Globalization, competitiveness and skill formation*. . New York: Oxford University Press.
- Brown, P., Lauder, H., & Ashton, D. (2012). *The Global Auction: The Broken Promises of Education, Jobs, and Incomes*. . Oxford: Oxford University Press.
- Brunello, G. (2009). The effect of economic downturns on apprenticeships and initial workplace training. *A review of evidence. Empirical Research in Vocational Education and Training* 1(2), 145-171.
- Chadwick, B.A., Bahr, H & Albrecht, S. (1984). *Social Science Research Methods*. Englewood Cliffs NJ: Prentice-Hall.
- City Press. (2012). *Young, jobless and desperate- will FET (now TVET) college fix our future*. City Press. Retrieved September 18, 2014, from Available: <http://news/young-joblessness-and-desperate-will-FET-nowTVET-college-fix-our-future->: <http://www.citypress.co.za>
- Department of Higher Education and Training. (2014). White paper on post –school education and training. Building an expanded, effective, and integrated post-school system. Pretoria, Gauteng, RSA.
- Department of Higher Education and Training, 2013. Statistics on Post School Education and Training. Pretoria, RSA.
- Department of Higher Education and Training, 2012. Green Paper on Post School Education and Training, Pretoria, RSA.
- Department of Higher Education and Training, 2011. National Skills Development Strategy II.

Pretoria, RSA.

De Vos, A.S.(1998). *Research at Grass Roots: A Primer for the caring Professions*. Pretoria:

Van Schaiks.

Ferguson, D. (1993). . Something a little out of the ordinary: Reflections on becoming an Intrepretivist Researcher in Special Education. *SAGE Journal. Remedial and Special Education. Vol. 14 no. 4* , 35-43.

Fisher, G., Jaff, R., Powell, L., & Graham, H. (2003). Public Further Education and Training: In: Kraak, A & Perold, H(Eds). *In Human resource development review: education, employment, and skills in South Africa*. Cape Town: HSRC Press.

Freire, P. (1970). *Pedagogy of the oppressed*. London : Penguin.

Griesel, H. & Parker, B. (2009). *A baseline study on South African graduates from the perspective of employers in Pretoria, South Africa: a study by SAQA and HESA*. Pretoria.

Henning, E. (2004). *Finding your way in qualitative research*. Pretoria: Van Schaik.

Henning, E., Van Rensburg, W., & Smit, B.(2004). *Finding your way in Qualitative Research*. Pretoria : Van Schaik.

Herrington, M., Kew, J. & Kew, P. (2010) *Tracking Entrepreneurship in South Africa: A GEM Perspective*. SA GEM Report, Graduate School of Business, Cape Town.

Horn, G. (2006). Educational solutions to improve the employability of senior high school learners. *South African Journal of Education, Vol 26(1)113–128*. EASA.

Hyslop-Margison, E.J. (2000). An assessment of the historical arguments in vocational education reform. *Journal of Career and Technical Education, 17 (1):* , 23-30.

Hyslop-Margison, E.J. (2005). *Liberalizing Vocational Study-Democratic Approaches to Career Education*. University Press of America.

Jossberger, H., Brand-Gruwel, S., Boshuizen, H & Van de Wiel, M. (2010). The challenge of self-directed and self-regulated learning in the vocational education: a theoretical analysis and synthesis of requirements. *Journal of Vocational Education and Training Vol 62 No 64*.

Kraak, A. & Hall, G.(1999). *Transforming further education and training in South Africa: volume one-qualitative findings and analysis*. Pretoria: HSRC.

Lauglo, J. & Lillis, K.(1988). *Vocationalizing Education-An International Perspective*. London: Pergamon Press.

- Maluleka, L.(2014). *A critical analysis of government policy on appropriate rural vocational education and training in the light of the perceptions of youth in Mavalani in Limpopo. Masters. Thesis.* Durban: University of Kwa- Zulu Natala.
- Marsh, J. (2011). *Class dismissed: Why we cannot teach or learn our way out of inequality.* New York: Monthly Review Press.
- Matthews, B. & Ross, L. (2010). *Research Methods- A practical guide for the social sciences.* Pearson Education Ltd.
- McLaren, P.L & Giarelli, J.M.(1995). *Critical Theory and Educational Research.* New York: State University of New York Press.
- Moll, I., Steinberg, C., Broelmaan, I., Gewer,A., Fischer, E., Moletsane, R. & Sewlall, S.( 2005). *Being a Vocational Educator a guide for Lecturers in FET Colleges.* SAIDE.
- Motala, E. & Treat, J.(2014). Unemployment, Skills and Education Policy. *Education Policy Consortium.Post School Education Journal Review, Vol. 1 No 1. .*
- Motala, E. & Vally, S. (2014). *Education and Jobs don't add up-Market driven skills policies limit potential of social development.* Retrieved July 17, 2014, from [www.mg.co.za](http://www.mg.co.za): Available: <http://mg.co.za/article/2013-01-29-education-and-jobs-dont-add-up>.
- Mouton, J. & Marais, H.C. (1990). *Basic concepts in the methodology of the social science.* Pretoria: HSRC Press.
- National Treasury (2011). *Confronting youth unemployment: policy options for South Africa.* Pretoria: National Treasury. RSA.
- National Development Plan. (2012).
- Neuman, W.(2006). *Social Research Methods-Qualitative and Quantitative approaches.* USA: Pearson Education Inc.
- Perold, H., Cloete, N., Papier, J. (2012). *Shaping the Future of South African Youth – Rethinking post-school education and skills training.* Somerset West: African Minds for Centre for Higher Education and Training (CHET), Southern African Labour and Development.
- Presidency. (2012). *State of the Nation Address.* Available at <http://www.gov.za/events/state-nation-address-2012>.
- Prinsloo, L. (2011). *Lack of work experience leaves graduates unemployed:* Available: <http://www.engineeringnews.co.za/article/lack-of-work-experience-leave-graduates-unemployed-2011-05-20>.

- Rasool, F. & Botha, C.J.(2011). The nature, extent and effect of skills shortages on skills migration in South Africa. *SA Journal of Human Resource Management/SA*. Vol. 9(1).
- Rubin, A., & Earl R. Babbie, E.R, (2005). *Research Methods for Social Work*
- Schwandt, T. A. (2001). *Dictionary of qualitative inquiry*. SAGE Publication In.
- Sharp, L. (2012). *Young, jobless and desperate – Degrees with no guarantees*. Retrieved June 16, 2015, from Sharp, L.2012.Young, jobless available: <http://www.citypress.co.za/news/young-jobless-and-desperate-degrees-with-no-guarantees->: <http://www.citypress.co.za>
- Sooklal, S.(2005). *The structural and cultural constraints on policy implementation. A case study on further education and training colleges in South Africa. PhD Thesis*. Pretoria: University of Pretoria.
- Statistics-South Africa.(2012). Statistics South Africa, Quarterly Labour Force Survey, Quarter 4 . Available: <http://www.statssa.gov.za/publications/P0211/P02114thQuarter2012.pdf> [2014, March, 2].
- Statistics South Africa (2015). Statistics South Africa, Quarterly Labour Force Survey, Quarter 4 . Available: <http://www.statssa.gov.za/publications>
- Statistics-South African.(2016).Statistics South Africa, Quaterly Labour Force Survey, Quarter 1. <http://www.statssa.gov.za/publications/P0211/P02111stQuarter2016.pdf> .
- Stephan, K, & Woolard,I .(2008). Surviving Unemployment Without State Support: Unemployment and Household Formation in South Africa. *Journal of American Economies, Vol 18, No 1*.
- Stumpf, R., & Gustav Niebuhr, G. (2012). *Vocational education in South Africa. Building on what works in the education strategies for improvement*. Parktown: Centre for Development Enterprises.
- Tomasik, M. J., Hardy, S., Claudia, M., Haase, C.M, & Heckhausen, J.(2009). Adaptive adjustment of vocational aspirations among German youths during the transition from school to work. *Journal of Vocational Behavior 74 (2009) 38–46*.
- Treat, J. & Hlatshwayo, M. (2012). *Youth Unemployment-understanding causes and finding solutions-reflecting on education, skills and livelihood*. Johannesburg : UJ: CERT.
- Vine, R. (2009). *Research paradigms: positivism, interpretivism, critical approach and poststructuralism..available: <http://rubyvine.blogspot.co.za/2009/10/research-paradigms-positivism.html>*[2016, May, 24].

- Walonick, D. S. (1993). *Everything you need to know about Questionnaires*. Available: <http://www.statpac.com/research-papers/questionnaires.htm> [2016, August 14]. .
- Weis, L. (1990). *Working class without work: High school students in de-industrializing economy*. London: Routledge.
- Yin, R. (2009). Case study research design and methods., . *Canadian Journal of Action Research* Volume 14, Issue 1, 2013, pages 69-71.

## APPENDICES

### Appendix 1: Ethics Clearance Letter



**Nelson Mandela  
Metropolitan  
University**

*for tomorrow*

• PO Box 77000 • Nelson Mandela Metropolitan University •  
Port Elizabeth • 6031 • South Africa • [www.nmmu.ac.za](http://www.nmmu.ac.za)

SOUTH CAMPUS  
FACULTY OF ARTS  
Tel . +27 (0)41 5042855 Fax. +27 (0)41 5041661  
[Noxolo.mngonyama@nmmu.ac.za](mailto:Noxolo.mngonyama@nmmu.ac.za)

Ref: H/15/ART/SA-002

23 NOVEMBER 2015

Mr A T Sibiya  
P O Box 367  
REDOUBT  
4808

Dear Mr Sibiya

INVESTIGATING THE PERSPECTION OF THE RELATIONSHIP BETWEEN  
VOCATIONAL EDUCATION AND THE LABOUR MARKET: A CASE STUDY OF FET  
COLLEGE STUDENTS

Your above-entitled application for ethics approval served at the FPGSC Higher Degrees sub-committee of the Faculty of Arts Faculty Postgraduate Studies Committee.

We take pleasure in informing you that the application was approved by the Committee.

The Ethics clearance reference number is H/15/ART/SA-002, and is valid for three years, from 10 NOVEMBER 2015 – 10 NOVEMBER 2018. Please inform the FPGSC, via your supervisor, if

any changes (particularly in the methodology) occur during this time. An annual affirmation to the effect that the protocols in use are still those for which approval was granted, will be required from you. You will be reminded timeously of this responsibility.

We wish you well with the project.

Yours sincerely

Mrs N Mngonyama

FACULTY ADMINISTRATOR

cc: Promoter/Supervisor  
HoD  
School Representative: Faculty FPGSC





08 May 2015

To whom it may concern

This communication serves to confirm the permission granted to Mr Anthony Sibiya from CIPSET at NMMU to conduct his research at the college.

He will conduct his research with lecturers and students at the different campuses serving his respondents.

Yours faithfully

A handwritten signature in black ink, appearing to be 'D Kilian', is written over a horizontal dashed line.

D Kilian Vice Principal: Registration

Creating New Futures

**UITENHAGE CAMPUSES**  
Private Bag X35  
Uitenhage, 6230  
Tel: 041 995 2000  
Fax: 041 995 2008  
E-mail: emc@emcol.co.za

**GRAHAMSTOWN CAMPUS**  
PO Box 142  
Grahamstown, 6140  
Tel: 046 636 1575  
Fax: 046 636 1823  
E-mail: emc@emcol.co.za

**GRAAFF-REINET CAMPUS**  
PO Box 696  
Graaff Reinet, 6280  
Tel: 049 891 0201  
Fax: 049 891 0181  
E-mail: emc@emcol.co.za

[www.emcol.co.za](http://www.emcol.co.za)

Chairman of Council: CM Gawe; Principal: JJ Mbana

## Appendix 3

### PROJECT INFORMATION FORM

<b>RESEARCHER'S DETAILS</b>	
<b>Title of the research project</b>	INVESTIGATING THE PERCEPTIONS OF THE RELATIONSHIP BETWEEN VOCATIONAL EDUCATION AND THE LABOUR MARKET: A CASE STUDY OF FET COLLEGE STUDENTS
<b>Reference number</b>	H/15/ART/SA-002
<b>Principal investigator</b>	Anthony Tolika Sibiya
<b>Address</b>	Department of Sociology & Anthropology, NMMU South Campus, Summerstrand
<b>Postal Code</b>	6000
<b>Contact telephone number</b> (private numbers not advisable)	073 189 7445 or 041 504 1297

<b>DECLARATION BY OR ON BEHALF OF PARTICIPANT</b>		<u>Initial</u>
<b>I, the participant and the undersigned</b>	(full names)	
<b>ID number</b>		

<b>A.1 HEREBY CONFIRM AS FOLLOWS:</b>		<u>Initial</u>
<b>I, the participant, was invited to participate in the above-mentioned research project</b>		
<b>that is being undertaken by</b>	Anthony Tolika Sibiya	
<b>From</b>	Sociology & Anthropology Department	
<b>of the Nelson Mandela Metropolitan University.</b>		

<b>THE FOLLOWING ASPECTS HAVE BEEN EXPLAINED TO ME, THE PARTICIPANT:</b>		<u>Initial</u>
2.1	<b>Aim:</b>	
	<ul style="list-style-type: none"> <li>• To explore how TVET college students perceive the relationship between the engineering programmes they are enrolled in and their prospects of finding work.</li> <li>• To ascertain what informs students' understanding of their future career prospects.</li> <li>• To examine factors that shape students' career choices</li> <li>• To determine the role that TVET colleges play in shaping the choices of students.</li> </ul>	

2.2	<b>Procedures:</b>	Data gathering process schedule will be administered over a two weeks period.		
2.3	<b>Risks:</b>	There are no known risks to me.		
2.4	<b>Possible benefits:</b>	Understand the unemployment challenges in relation to vocational education		
2.5	<b>Confidentiality:</b>	My identity will not be revealed in any discussion, description or scientific output by the investigator.		
2.6	<b>Access to findings:</b>	Any new information or benefit that develops during the course of the study will be shared and communicated to me in writing.		
2.6	<b>Voluntary participation / refusal / discontinuation:</b>	My participation is voluntary	YES	NO
		My decision whether or not to participate will in no way affect my present or future care / employment / lifestyle	TRUE	FALSE

<b>3. THE INFORMATION ABOVE WAS EXPLAINED TO ME/THE PARTICIPANT BY:</b>								<b>Initial</b>
Anthony Tolika Sibiyi								
in	<b>Afrikaans</b>		<b>English</b>	X	<b>Xhosa</b>		<b>Other</b>	
and I am in command of this language								
I was given the opportunity to ask questions and all these questions were answered satisfactorily.								

<b>4.</b>	No pressure was exerted on me to consent to participation and I understand that I may withdraw at any stage without penalisation.	
-----------	---	--

<b>5.</b>	Participation in this study will not result in any additional cost to myself.	
-----------	---	--

<b>A.2 I HEREBY VOLUNTARILY CONSENT TO PARTICIPATE IN THE ABOVE-MENTIONED PROJECT:</b>		
Signed/confirmed at	on	20
Signature or right thumb print of participant	Signature of witness:	
	Full name of witness:	

**STATEMENT BY OR ON BEHALF OF INVESTIGATOR(S)**

I,	Anthony Tolika Sibiya	declare that:							
1.	I have explained the information given in this document to	(name of patient/participant)							
2.	He / she was encouraged and given ample time to ask me any questions;								
3.	This conversation was conducted in	<b>Afrikaans</b>	<input type="checkbox"/>	<b>English</b>	<input checked="" type="checkbox"/>	<b>Xhosa</b>	<input type="checkbox"/>	<b>Other</b>	<input type="checkbox"/>
	And no translator was used <u>OR</u> this conversation was translated into								
	(language)	by		(name of translator)					
4.					<b>YES</b>		<b>NO</b>		
Signed/confirmed at		on				20			
Signature of interviewer		Signature of witness:							
		Full name of witness:							

### **IMPORTANT MESSAGE TO PARTICIPANT**

Dear participant

Thank you for your participation in this study. Should, at any time during the study:

- an emergency arise as a result of the research, or
- you require any further information with regard to the study.

Kindly contact

Anthony Tolika Sibiya

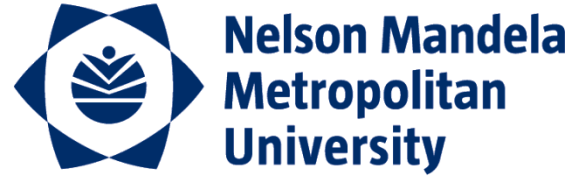
at telephone number

073 189 7445 or 041 504 1297

## Appendix 4

### Informed Consent

PO Box 77000 • Nelson Mandela Metropolitan University  
Port Elizabeth • 6031 • South Africa • [www.nmmu.ac.za](http://www.nmmu.ac.za)



*for tomorrow*

Department of Sociology & Anthropology  
Tel . +27 (0)41 5042197  
[AnthonyTolika.Sibiya@nmmu.ac.za](mailto:AnthonyTolika.Sibiya@nmmu.ac.za)

I hereby give consent to participate in the study: **INVESTIGATING THE PERCEPTIONS OF THE RELATIONSHIP BETWEEN VOCATIONAL EDUCATION AND THE LABOUR MARKET: A CASE STUDY OF FET COLLEGE STUDENTS**

I have read the Project Information Statement explaining the purpose of the research project and understand that:

- My participation is voluntary.
- I may decide to withdraw my participation at any time without penalty.
- All information obtained will be treated in strictest confidence.
- My name will not be identifiable in any written reports about the study.
- A report of the findings will be made available to me upon request.
- I may seek further information on the project from Anthony Tolika Sibiya 041 504 2197.

---

Signature

---

Date

Appendix 5

Questionnaire

**Research Study: INVESTIGATING THE PERCEPTIONS OF THE RELATIONSHIP BETWEEN VOCATIONAL EDUCATION AND THE LABOUR MARKET: A CASE STUDY OF FET COLLEGE STUDENTS**

Date Completed .....



---

**Instructions**

**Tick in a box where it is provided or  
Write in the space provided**

---

**Section A: Personal Information**

1. Age  
18-21  22-25  26-29  older 29
2. Gender  
Male  Female
3. Race  
African  Coloured  White  Asian
4. Did you complete grade 12 *Tick the appropriate box*  
 Yes  No
5. Think back to high school. What were you hopes and dreams for the future? *Tick the box below*  
Work  Study further

Write down the main reason for your answer (If you need more space you may write on the back of the page.)

.....

.....

.....

**Section B: Current Studies**

6. What course/programme are you doing?

.....

7. How did you choose this course? (you may give more than one answer)

A Friend told me about it

Parent/Relative

On my Own

Career exhibition

If other please specify

.....

**Section C: Employment Opportunities**

8. South Africa's unemployment rate affects scarce skills (such as engineering) graduates. In your opinion, what is the primary reason for youth unemployment in South Africa?

.....  
.....  
.....

9. Are there other reasons for unemployment, if so what are they?

.....  
.....  
.....

10. Graduates with TVET qualifications find it difficult to get employment.

Strongly agree  Agree  Neutral  Strongly disagree  disagree

Give the main reason for your answer

.....  
.....

11. The curriculum of the course you are doing is relevant to South Africa's job market.  
Strongly agree  Agree  Neutral  strongly disagree  Disagree

12. Do you see yourself getting a job with the qualification you are studying?  
Yes  No

13. How long do you think it will take you to find employment, after graduation?  
3 Months  6 Months  1year

Give the main reason for your answer

.....  
.....

14. If you don't find work after graduating, what will you do?

.....  
.....

15. A vocational education and training (VET) qualification makes you employable?  
Strongly agree  Agree  Neutral  Strongly disagree  disagree

16. People who graduated with engineering qualification struggle to get work- opportunities  
Strongly agree  Agree  Neutral  Strongly disagree  disagree

Give the main reason for your answer

.....  
.....  
.....

**Section D: Curriculum and Knowledge industry**

17. What do you think a company is looking for in an employee?

.....  
.....  
.....  
.....



18. What is your course preparing you for?

.....  
.....  
.....  
.....

19. What **knowledge** and **skills** do you think you are acquiring by doing this qualification?

.....  
.....  
.....  
.....

20. Do you have any suggestions to improve the course that would make you more employable?

.....  
.....  
.....  
.....  
.....

**Section E: General Comments**

21. Do you have any other comments/questions?

.....  
.....  
.....  
.....

**THANK YOU VERY MUCH FOR YOUR PARTICIPATION IN THE STUDY**