

VOCATIONAL CURRICULUM REPORT 191 (NATED) AS A CURRICULUM: A CASE STUDY OF THREE EASTERN CAPE TVET COLLEGES

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By

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ABSTRACT

This study aimed to investigate if there are any possible gaps in the offering Vocational Curriculum Report 191, in terms of knowledge, skills and link to the world of work. This study was a case study of three Technical and Vocational Education and Training Colleges that offer Vocational Curriculum Report 191, and it was geographically limited to the province of the Eastern Cape. The five main findings from this study were that firstly, the curriculum offers theory without practice. Secondly, there is a mismatch between what is offered as curriculum at Technical and Vocational Education and Training Colleges and what the labour market wants. Thirdly, lecturers do not have the practical exposure that relates to their fields of study. Fourthly, Vocational Curriculum Report 191 does not promote self-employment of its students and lastly, the curriculum is outdated and does not comply with the criteria of current employment opportunities. The study recommends that the curriculum be reviewed and revised. Technical and Vocational Education and Training colleges need to have in site practice facilities to cater for the practical application of theoretical knowledge of students. Partnerships between Technical and Vocational Education and Training Colleges, the labour market and Sector Education and Training Authorities are strongly recommended in this study.

KEY WORDS: Technical and Vocational Education and Training Colleges, Vocational Curriculum Report 191, N-courses, Labour Market, Skills, Vocational Education.

DECLARATION

I declare that **Vocational Curriculum Report 191 (NATED) as a Curriculum: A case study of three Eastern Cape TVET colleges** is my own work and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references.

.....

Signature

.....

Date

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ACRONYMS & ABBREVIATIONS

CTE	Career and Technical Education
DES	Department of Education and Science
DHET	Department of Higher Education and Training
ETC	Etcetera
ED	Employment Department
NATED	National Education Qualification
NCV	National Certificate Vocational
NCVQ	National Council for Vocational Qualifications
NEET	Not in Education, Employment or Training
NVQ	National Vocational Qualifications
OECD	Organization for Economic Cooperation and Development
PSETA	Public Service Sector Education and Training Authority
QCTO	Quality Council for Trades and Occupations
SETA	Sector Education and Training Authority
SME	Small medium Enterprise
S.S.S.	Student Support Services
TVET	Technical and Vocational Education and Training
U.K.	United Kingdom
VET	Vocational Education and Training

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CHAPTER 1

INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

Technical and Vocational Education and Training (TVET) college sector, as it is presently known, came into being in 2006 with the proclamation of the TVET College Act. The former 152 technical colleges were amalgamated into 50 TVET Colleges with multi-campus sites. To address the issue of scarce skills and poor quality vocational programmes and qualifications, the Department of Higher Education and Training (DHeT) introduced the National Certificate (Vocational) NC (V) at public TVET colleges in 2007. The NC (V) curriculum is defined by a broad approach to education and training and a shift from theory-only curriculum to a curriculum in which theory and practice are combined. The NC (V) provides programmes in 14 vocational fields that are meant to be responsive to the priority skills and demands of the South African economy (SAIDE, 2006).

These NC (V) programmes were introduced to phase out the curriculum Report 191(NATED) programmes that were offered by the TVET colleges. The Minister of Higher Education and Training, Dr. Blade Nzimande, in his Budget Vote Speech at the National Assembly said:

“I have reversed the decision made three years ago to phase out the NATED Report 191 programmes (commonly known as the N-courses) as a result of strong demand from the colleges and employers” (Nzimande, 2011, p 3)

1.1.1 BACKGROUND OF THE STUDY

Technical and Vocational Education and Training colleges offer vocational education that is generally known as ‘education that prepares people for specific trades’, for example, artisans (Education, 2008). Curriculum Report 191(NATED) is one of the vocational programmes that are offered by the TVET colleges. This programme leads to either formal employment or self-employment once the student completes his or her

N6 certificate. Students are required to do work-based experiential training for either eighteen or twenty four months in order to be awarded a National (N) Diploma.

According to the National Education policy, there are three forms and levels of the instructional offerings in the instructional programme (NATED). The first is a theoretical instructional offering that aims to teach the theoretical knowledge that is needed which underlies the near future for an occupation which the student is being made ready for. To be able to master the necessary skills, arrangements are also made for practical applications, laboratory work, simulation models, role play and case studies. The second is practical instructional offerings, which put emphasis on practical or manual skills. The third is integrated instructional offerings, where there is no distinct provision made for subjects such as Mathematics, Science and Drawing, but such supportive contents are combined with the relevant subject theory. It is also stated that for a student to be awarded a National (N) Diploma, he or she is required to have a minimum of three years, including experiential training, following entry into TVET College (Education, 2000)

Curriculum Report 191(NATED) offers three main vocational streams, namely, Business studies, Engineering studies as well as Utility studies. Engineering studies offer levels N1 to N6 in different courses such as Electrical Engineering and Mechanical Engineering. Business and Utility studies offer levels N4 to N6 in courses that include Business Management, Financial Management, Clothing Production, Art and Design, Food Services and so on. Students who have passed Grade 12 can register for N4, whilst those who have completed grade10 with Mathematics and Science can enroll for N1 in engineering studies. All these programmes lead to a National (N) Diploma.

There are eight Public TVET colleges in the Eastern Cape Province that offer vocational curriculum. In 2007, the new curriculum, National Certificate Vocational [NC (V)] was phased in to replace the curriculum Report 191(NATED) that was offered by TVET Colleges. The decision of phasing out the NATED curriculum was then reversed when the DHET was established in 2009. Since then, nothing has been done to

improve NATED programmes, and as a result, they are fast becoming irrelevant and outdated in addressing the issue of employability in the Eastern Cape. Its irrelevance is becoming the core problem in the academic sector as well as the labour market. The report of the ministerial task team confirmed that some of the Report 191 courses have been faulted for lack of relevance to current technology and industry practice. They added that many NATED courses have not been reviewed for decades, with the result that some of their content is now obsolete while other material that is important for today's industry has yet to be included. (Duncan, 2012)

According to the Department of Higher Education and Training, It is estimated that roughly 65% of students at colleges are unable to secure workplace experience, a requirement for completing N diplomas which is valuable to students (Garza, 2013).

The Development Planning Division Working Paper Series no.28 argues that:

“A high investment in education will allow children to leave school with the skills required by a growing economy to become economically active and a boon for the nation. Conversely, a stagnant economy or a young population with a skills set that does not match employment opportunities, means that yet another generation will face the prospect of exclusion and endemic poverty.” (Mayar, 2011, p.7)

Therefore,

“the fact that better-educated young people remain poor suggests that the labour market has not been playing a successful role in alleviating poverty and that the education system is not delivering the skills needed in the labour market” (Mayar, 2011, p.9)

This study therefore seeks to investigate possible gaps in the Vocational Curriculum Report 191.

1.1.2 VOCATIONAL CURRICULUM: A GLOBAL PERSPECTIVE

In Western countries such as the United Kingdom (UK), Germany and Australia, curriculum frameworks for vocational education remain postulated on behavioural accounts of the objectives and process of learning. Outcomes-based or behavioral curriculum commonly guides instruction or the subject and the assessment of measurable outcomes. Governments, governmental agencies (e.g. Organization for

Economic Cooperation and Development) and industry often benefit from these curriculum arrangements (Billet, 2003)

In western countries such as Germany, United Kingdom and Australia, 14-19 (referring to age) education was introduced in 1987 into the public discourse. Pring et al. define 14-19 (referring to ages 14 – 19 years) education as the vocational education offered by the colleges from the age of 14 in post-compulsory education for young people unlikely to achieve A-C grades at schools to prepare them for the world of work. The schools send these 14-19 year olds to the colleges in an attempt to keep them interested where they have traditionally followed courses in areas such as construction, catering and hair and beauty (Pring, Hayward, & Hodgson, 2009).

The context for the emergence of 14-19 is the breakdown in the traditional relationship between the Education and Training system and the youth labour market. All learners were required to study technology, access work-related learning, develop the 'core competences' required for further study and to experience career education and guidance (Hodgson & Spours, 2008).

Billet conducted a research study on vocational curriculum and pedagogy in Europe. In his research report, he put emphasis on the complex role of vocational education as part of 14–19 education. He referred to vocational curriculum as 'the program that was established to prepare young people for the world' (Billet, 2003). The many ways in which the term *vocational* is used reflect the many different purposes which 14–19 education serves and its huge and diverse student body. Some qualifications are highly specific and oriented to a particular occupation whilst others are more general, and are sometimes referred to as vocationally related or pre-vocationally related (Wolf, 2011). Curriculum 14-19 is broader and more work related and continues to be the subject of debate and change, mainly as a result of government initiatives to help all learners achieve their full potential (Jones & Duckett, 2006).

The challenge of addressing what is meant by vocational education is exemplified in Billet's report, where vocational education is presented as an umbrella term which

brings together diverse purposes and goals, and a range of different qualifications and forms of education and training. He cited Wolf's report that states:

"There is no formal definition of 'vocational education' in England, and the term is applied to programmes as different as the highly selective, competitive and demanding apprenticeships offered by large engineering companies and the programmes which recruit highly disaffected young people with extremely low academic achievement" (Billet, 2003, p.7).

In the 1980s, the Employment Education in Wales and Scotland merged to establish a revision of Vocational Qualifications, and the National Council for Vocational Qualifications (NCVQ) was set up in England and Scotland to advance a national system of competence-based Vocational Qualifications that included a new framework to be awarded by the main (existing) awarding bodies; the criteria was that the qualifications or training must reflect work-based needs. Industries must own and develop qualifications and employers' views where needed (Anonymous, 2000).

The failure of the NCVQ system to bond the skills gap or to supply urgent skills needs and shortages at intermediate craft and technician levels is well illustrated in the two major Vocational Education and Training innovations of recent years, namely, Training Credits and Modern Apprenticeships which have both suffered as a result of being linked via funding mechanisms to National Vocational Qualifications (NVQ) outputs. According to the Hyland report, although Training Credits can be used to good effect in the interests of trainees and employers, the demands of precise work-related National Vocational Qualifications to which training systems are strictly tied do not generally match trainee/employer requirements, and often serve to distort and frustrate individual training plans (Hyland, 2006).

According to Jones, the Director-General of the City and Guilds of London Institute, students cannot be assured of good employment if their training is not based on a vibrant understanding of what skills are needed for a chosen career (Jones & Duckett, 2006).

Therefore, government and employer bodies in a number of countries have promoted generic vocational capabilities and key qualifications as being relevant and applicable across workplace activities. However, such measures seem to be neither effective nor realistic. The broader the generic competency (e.g. problem-solving or team work), the less likely it is to be useful, except at the most general level (i.e. look before you leap, think before you act). There are also grievances from French and German vocational students that much of what they learn in general education is not strictly applicable to their vocational goals, although one wonders if they may not think differently about this in retrospect when promotion at work imposes greater demands on their core skills (Green, 2010).

In Australia, an interest in generic skills was first demonstrated in the 1980s and was re-invigorated in the late 1990s and again in 2001 and 2002. Employers have played a key role in emphasizing the importance of these skills and defining them. In 1999, the Australian Industry Group commissioned a report in the training needs of Australia's industries. The opinions of 350 companies from the industrial, construction, and information technology sectors were canvassed. Among many findings, it was also noted that there is an increasing premium that is being placed on generic skills such as problem-solving, team skills, willingness and ability to adapt to be developed prior to recruitment. The report then outlined the skills that are required by the Australian industry if it is to remain globally competitive (Gibb, 2004).

The Australian Chamber of Commerce and Industry & Business Council of Australia undertook a wide-ranging study of generic employability skills in Australia and elsewhere. They have identified the subsequent skills as key to employability: communication skills, initiative and enterprise skills, planning and organizing skills, technology skills as well as personal attribute skills. In addition to the skills proposed, a series of attributes have been identified which employers believe are key to employability. They added that in the workplace, generic skills are a central feature of job descriptions and the staffing process. For new staff, the workplace can use a range of ways to help acquaint staff so they acquire what the workplace imagines in terms of

employability skills, standards of work and the attributes expected of employees (Green, 2010).

Afeti indicated that one of the important issues of Technical and Vocational Education and Training (TVET) is its alignment towards the world of work and the stress of the curriculum on the acquisition of employable skills. He added that another important characteristic of TVET is that it can be delivered at different levels of sophistication, meaning that it can respond, not only to the needs of different types of industries, but also to the different training needs of students from different socio-economic and academic backgrounds, and prepare them for gainful employment and sustainable livelihoods (Afeti, 2007).

Vocational Curriculum is understood as the curriculum that imparts knowledge to the learners. Young and Gamble (2006) argued that vocational curriculum needs both conceptual and practical knowledge. They added that in policy terms, the vocational route faces two directions (further study and employability), therefore, it cannot offer theory without practice.

It is acknowledged that the problems are being known with regard to theory as it is currently imparted in colleges. These problems do not stem from the lack of immediate applicability of such knowledge, as is frequently assumed, or from the broad use of prescribed textbooks; these problems arise because many students who are currently undertaking college studies do so without access to practical work. Without access to practical work, these students learn theory as theory, mainly for examination purposes and for access to further study (Gamble & Young, 2006).

Training and Vocational Education systems in Africa vary from country to country and are conveyed at different levels in different types of institutions, including technical vocational schools and colleges. In Western Africa in particular, customary apprenticeship offers major opportunities for the acquiring employable skills in the formal economy. In Ghana, the formal sector accounts for more than ninety percent of

all training in the country (Afeti, 2004). In almost all countries in Africa, large numbers of graduates coming out of the formal school system are unemployed although opportunities for skilled workers do exist in the economy. The situation has brought into sharp focus the disparity between training and labour market skill demands. Critics argue that the lack of input from prospective employers into curriculum design and training delivery is partly responsible for the mismatch (DoHR, 2007).

The official objectives of the Vocational Education Programme in Zimbabwe focus on improving general education (awareness of trades, professionals and materials in the respective trade areas) as well as on expansion of technical skills to a level where students become independent (Mupinga, Bunett, & Redmann, 2005).

1.1.3 THE SOUTH AFRICAN SCENE

In South Africa, the early beginnings of vocational or trade education for adolescents were interconnected to the relief of poverty. The Dutch Reformed Church established the first trade schools in the 1890s, and the main aim was to train poor white boys in rural areas in basic trade work and to prepare the girls for domestic work. In their efforts to bring all white children within the scope of the law on compulsory education for white youth, the South African government and its provincial administrations made certain special types of education to meet the special needs of special children who could not be suitably dealt with in ordinary schools (Gamble, 2003).

In this practice, vocational education was considered as a proper pathway for making difficult young people useful to the society by preparing them for some form of productive work. A historical perspective shows that from its earliest beginnings, technical and vocational education has incorporated three forms of educational provision. Firstly, technical education referred to science instruction as found in general education where it functioned as a foundation for practical knowledge. Secondly, vocational education referred to forms of compensatory education with a practical aim. Finally, industrial education focused on the imparting of skill in some form of handcraft,

as well as the inculcation of discipline, obedience and regular work habits (Gamble, 2003).

Education Policy defines Vocational Education in South Africa as education that is regarded as referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, understanding and knowledge relating to occupations in various sectors of economic and social life (Pandor, 2008).

The Green Paper states that the vision for the TVET colleges is to be vibrant institutions that offer vocational and job-related qualifications, mainly to young people (16 to 24 years old). It further put emphasis on the point that TVET Colleges must become institutions of choice for young school leavers, offering general vocational training as well as providing academic and theoretical education for apprentices. (Garza, 2013)

The vision is for a TVET system that has colleges located all over the country which are embedded in and serving the needs of their communities and for all graduates to be empowered to address the needs of the economy and the country. This would ensure that those emerging from colleges and universities, as well as those already employed, are provided with the skills they need to be productive, flexible, innovative and able to earn sustainable livelihoods in a fast-changing economy. South Africa needs to be at the forefront of knowledge-creation to enhance the economic, social and cultural lives of all citizens (Nzimande, 2012).

Needman and Papier conducted a study on what young people think about Vocational Education in South Africa. Their report states that in the Western Cape, a number of learners from the urban schools noted that they saw vocational education as a dead end. Some of these learners mentioned that learners who had done TVET courses ended up working either in restaurants as waiters or as shopping centre packers. On the other hand, in the Eastern Cape, learners seem to know nothing about vocational

education and college other than its purpose, and said that perhaps they would consider college careers if they knew more about them (Needham & Papier, 2011)

The practical aspect of vocational education is seen as an advantage for two reasons. Firstly, it means that by the time the student goes into employment, he or she is already acquainted with the job. Secondly, from an employer's point of view, it is an advantage to hire someone from the TVET College because it would be a lot easier to train the student, and it would take less time, thus saving them money (Needham & Papier, 2011).

Gamble and Young outlined two features that differentiate TVET curricula from the compulsory phase of schooling in all countries. Firstly, it symbolizes the beginning of specialization for learners (and, therefore, of student choice or tracking). Secondly, it is a dual-purpose system because it prepares learners for Higher Education and the labour market (Gamble & Young, 2006).

Education and Training on its own cannot resolve the problem of unemployment, though it is an important component as a short-term solution as well as for long-term goals. The challenge in technical and vocational TVET and TVET colleges is both a qualitative and quantitative one. That means more education and training must happen in skills areas that are of better relevance to the labour market. Skills are needed both to enable employment with established employers and to assist entrepreneurial self-employment (Pandor, 2009).

Gamble suggested that if colleges focus on training for employability in the wider sense, they will, by implication, be preparing students for a labour market where the likelihood of getting a job and keeping a job for life is no longer to be taken for granted (Gamble, 2003).

Therefore:

'The college community, in my view, must expand its horizons and see the world....they must understand that our broad goal is to develop the economy in a way that responds to the needs of

all South Africans. TVET's would need to provide training programmes that are needed in the real world in order to sustain livelihoods for many unemployed.' (Nzimande, 2013, p.1)

1.2 MOTIVATION FOR THE STUDY

The researcher has noticed that there have been no changes or updates on the Vocational Curriculum Report 191 since he began his lecturing career.

Vocational education aims to provide knowledge and skills to people to join the workforce. This is then not possible if Vocational Curriculum Report 191 offered by the TVET Colleges is not responsive to the needs of the community. New National Certificate Vocational [NC (V)] courses that are responsive to the labour market were introduced in 2007 and are updated from time to time, but nothing has been done on NATED courses. The fact that more TVET graduates are not being placed in employment means that the NATED courses are not marketable. A possible gap in the intended outcomes of Vocational Curriculum Report 191 and current economic reality demands need to be researched.

1.3 RESEARCH PROBLEM

The South African government has made vocational education and job creation one of its priority issues, with a view to supplying the labour market with sufficient numbers of qualified workers, thereby lowering and reducing social inequality within the country (Grunwald, 2012).

The Minister's strategic session with entities and stakeholders revealed that more than 11 000 TVET graduates have no access to in-service training, and have joined more than the three million 'not in education, employment or training' (NEET) cohort. While the unemployed youth is more educated than older cohorts, they do not appear to have the skills required by the economy, thus suggesting that vocational schooling is not regarded as a reliable source by employers (Nzimande, 2013).

The main problem that the researcher has identified, as a lecturer at Buffalo City TVET College in East London, is that a number of TVET college students are not able to gain access to the labour market in order to gain work experience as required by Vocational Curriculum Report 191.

The syllabi that is currently being used is dated 1995. In Financial Accounting for example, Balance Sheet is now known as the Statement of Financial Position of a business, and the NATED curriculum document is still using the old terminology. In Office Practice, there are machines like Tele-text, gramophone, floppy disk, which are still in the current NATED curriculum documents (Education, 1995). This implies that the needs of the labour market today are the same as back then in 1995. If then this is the case, the researcher assumed that Vocational Curriculum Report 191 does not favour students in preparing them for the labour market in the 21st century.

This study aimed to investigate if there are any possible gaps between what Vocational Curriculum Report 191 entails and what the labour market wants.

1.3.1 RESEARCH QUESTIONS

The following research questions guided the research:

1. How does Vocational Curriculum Report 191 promote employability of students?
2. How relevant is Vocational Curriculum Report 191 to ensure knowledge and skills transfer needed by students?
3. How does Vocational Curriculum Report 191 support the marketability of students?

1.4 PURPOSE OF THE STUDY

The purpose of the study was to determine the relevance and responsiveness of Vocational Curriculum Report 191 in preparing students for the world of work.

1.5 SIGNIFICANCE OF THE STUDY

The main aim of this research study was to investigate the relevance and responsiveness of the existing Vocational Curriculum Report 191 to the labour market. Nzimande put emphasis on that TVET's need to provide relevant training programmes that are responsive to the needs of the real world (Nzimande, 2011). The main focus of TVET programmes, mainly, is to address the shortage of skills in the country. This research study will make a meaningful contribution to the TVET College sector as the gaps between the NATED programmes and the shortage of skills in the country will be outlined. The DHET will also benefit from this study when they consider the revision of the NATED programmes. The labour market will benefit from this study, since their needs for skilled labour will be taken into account when revising the curriculum. The colleges will be able to produce what is required by the labour market.

1.6 DELIMITATIONS OF THE STUDY

The study focused on the relevance and responsiveness of Vocational Curriculum Report 191 to labour market requirements. It did not endeavour to formulate a new curriculum. The study was geographically limited to the province of the Eastern Cape, and three of the eight TVET colleges were involved.

1.7 DEFINITIONS OF TERMS

For the purpose of this study, the following terms were used and understood to mean:

Vocational Curriculum- in the dictionary (Oxford, 2007), this refers to pursuing a particular career or occupation. In this study, Vocational Education and Training was viewed as referring to: those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, the acquisition of practical skills, understanding and knowledge relating to occupations in various sectors of economic and social life (Pandor, 2008).

Promote- means to elevate or encourage (Oxford, 2007). In this study, *promote* meant the ways vocational curriculum encourages employment.

Knowledge- means understanding, wisdom or familiarity (Oxford, 2007). In this study, knowledge refers to the understanding that the students gained from learning Vocational Curriculum 191.

Skills- mean expertise, mastery, competence, or artistry (Oxford, 2007). In this study, skills refer to the expertise that the students possess after completing their studies at the TVET Colleges.

Labour Market - the members of the population who are employed (Oxford, 2007). For the purpose of this study, Labour Market meant the industry or the workplace that the students join after exiting the TVET Colleges.

Relevance: means significant, appropriate, related, fitting (Collins, 2005). In this study, relevance meant the appropriateness of Curriculum 191 as a curriculum.

Marketability: means being in demand (Collins, 2005). In this study, marketability referred to the demand of NATED students after they have completed their studies.

1.8 METHODOLOGY

1.8.1 THE RESEARCH APPROACH

This study was a qualitative study. Qualitative research is described by Briggs et al. (2007) as predominantly investigative research that is used to advance an understanding of fundamental reasons, opinions, and motivations. It provides awareness into the problem or helps to cultivate ideas or hypotheses for potential quantitative research (Briggs & Coleman, 2007). This study was located within the interpretive case study design, and its main focus was on Vocational Curriculum Report 191.

Once the research questions were formulated, the researcher identified TVET Colleges as units of analysis for the study. Data collected from the Colleges was done through semi-structured interviews and questionnaires. College students, college alumni and college NATED lecturers were selected as participants on the basis of their involvement with the curriculum offerings. Once data was analyzed, concepts were developed, and meanings derived were discussed. In Chapter 3, an in-depth presentation is given of the methodology used in this study.

1.9 LIMITATIONS OF THE STUDY

Time: it was acknowledged in this study that time was a limiting factor as interviews needed more time, and the researcher was working both full-time and part-time. The respondent's time was very limited due to the other commitments they had.

Money: since the researcher had to travel to conduct research, costs were incurred, and that was kept in mind by the researcher.

Distance: the researcher traveled to visit the three colleges, and this entailed time, financial resources and careful planning.

Alumni's: could not talk about the link between the college and the labour market.

Students: could not talk to the needs of the market.

Lecturers: could not talk about the practical that relate to the subjects they teach.

1.10 ORGANISATION AND STRUCTURE OF THE REPORT

Included in the research study are the following interrelated chapters:

Chapter 1: Introduction and background

This chapter has set the scene for the rest of the research report. An overview is offered of what is to follow in the next chapters. It starts with perspectives on international and national practices regarding vocational curricula, followed by the problem statement, significance of the study and concludes with the limitations to the study and the organization of the research report.

Chapter 2: Literature Review

The concept 'curriculum' was focused on in this chapter. This was followed by the international and national vocational curriculum offerings where Vocational Curriculum Report 191, as curriculum offered nationally, was discussed in-depth, and the chapter concluded with the theoretical framework.

Chapter 3: Research Design

All the research methods that were employed in this study were tabled. Firstly, the research orientation was tabled and fully discussed. This was followed by the selection of participants within the case as well as the advantages and disadvantages of a case study approach and sampling. Different methods of data collection and the ways in

which the data was going to be analyzed were also discussed, followed by the ways that were employed to the quality in the research study. Lastly, the issue of how the research ethics were considered was discussed.

Chapter 4: Data presentation

In this chapter, the data that was collected by the researcher to understand the phenomena that was being investigated is presented. The biographical information of all the participants per TVET College was tabled, followed by coding per institution. The data on how Vocational Report 191 Curriculum promotes employability through self-employment, how relevant the afore-mentioned report is in ensuring that it transfers the needed knowledge and skills and the ways in which it supports the marketability of its students was presented in detail.

Chapter 5: Discussion

The data that was collected and presented in chapter four was discussed in this chapter. The different ways in which Vocational Curriculum Report 191 promotes the employability of its students, the ways in which Vocational Curriculum Report 191 ensures the transferability of knowledge and skills needed by its students, as well as the shortcomings of the Vocational Curriculum Report 191 were fully discussed.

Chapter 6: Summary, conclusion and recommendations

Here, the main ideas of this study were highlighted, followed by conclusions drawn by the study, the potential contributions of the study, recommendations. This chapter was concluded by tabling the issues of further research.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The contextual framework of this study was presented in Chapter One. It ended with a summary of the different chapters. In this chapter, the concept of academic and vocational curricula is addressed through different perspectives. Firstly, a discussion on the different aspects of curriculum is presented, followed by an international perspective on vocational curricula and proceeds to national perspectives. The implementation of vocational curricula, internationally and nationally is rounded off by an in-depth look into Vocational Curriculum Report 191. The chapter concludes with an analysis and presentation of the theoretical framework of the study.

2.2 CURRICULUM: THE CONCEPTUAL FRAMEWORK

2.2.1 THE MEANING OF CURRICULUM

2.2.1.1 WHAT IS CURRICULUM?

The word 'curriculum' originates from the Latin word 'currere'; it was used in its earliest period to refer to 'a race-course, a race itself, a place of actions or a series of activities (Garza, 2013).

Booyse et al. (2012) define curriculum as a sequence of pre-meditated events that are envisioned to have educational significance for one or more learners. It also refers to a much broader interpretation of curriculum as the inter-related totality of aims, learning content, evaluation procedures and teaching-learning activities, opportunities and experiences which guide and implement the didactic activities in a planned and justified manner (Booyse & Du Plessis, 2012).

The definition used by the Scottish Curriculum Authority (the official body in authority for curriculum), in its latest official curriculum document, is that curriculum is the entirety of experiences which are planned for children and young people through their education, wherever they are being educated. The document further states that the purpose of curriculum is to help children and young people to become up-and-coming

learners, self-assured individuals, accountable citizens and effective contributors (Garza, 2013).

2.2.1.2 GENERIC ACADEMIC CURRICULUM

According to Lunenberg (2006), the content of the generic academic curriculum includes a variety of matters in which the student is anticipated to gain some knowledge and competence. There are academic subjects such as Language and Literature, Mathematics, the Natural and Social Sciences and Fine Arts that are ordinarily associated with the idea of curriculum. These are primarily intellectual in nature.

Curriculum may also include applied studies that develop skill in the industrial arts either for personal satisfaction or for vocational purposes. Other studies combine the academic and real-world in preparation for professions such as law, medicine, or teaching. Still, another group of academic subjects, neither primarily intellectual nor practical, may best be described as personal in coordination. In this category are provisions for physical and mental health education, sex and drug education, development of mature human relationships, and growth of desirable attributes and values (Lunenberg, 2011).

Davis stated that an outcome in curriculum is a culminating demonstration of learning; it is what the student should be able to do at the end of a course. Outcomes-based curriculum is an approach to education in which resolutions about the curriculum are motivated by the exit learning outcomes that the students ought to display at the end of the course. He suggested that in outcome-based curriculum, product defines process. Outcome-based curriculum can be summed up as results-oriented thinking and is the opposite of input-based curriculum where the emphasis is on the educational process and where we are happy to accept any outcomes (Davis, 2003).

2.2.1.3 GENERIC VOCATIONAL CURRICULUM

General vocational education forms part of upper secondary and initial tertiary education across many countries. It takes miscellaneous forms, including work-related

learning for all students, elective vocational subjects within a wider curriculum, isolated vocational pathways within institutions and in some countries, distinct institutions specializing in vocational education. What is meant by vocational education may vary across different countries and within different forms of provision. However, two common features influence its meanings and purposes.

Firstly, it is recurrently positioned as a second chance, and often second choice, alternative to general, subject-based academic education, thus becoming intertwined with questions of inclusion and widening participation in education. Secondly, it is used as a means of progression to both employment and higher levels of education, and is, therefore, pulled in multiple directions and influenced by stakeholders with different, sometimes conflicting interests (Pring, 2008).

According to Australian Industrial Council, the following represents the characteristics of general vocational curriculum:

- It is critical to preparation for employment;
- It is standard to the kinds of work and work organization developing in a variety of occupations at entry levels within industry rather than being occupation or industry-specific;
- It prepares individuals to partake successfully in extensive series of social settings, including workplaces and adult life, more generally; and
- It includes the application of knowledge and skills (Gibb, 2004).

According to the education policy for TVET colleges, it is progressively understood that the key role of vocational education institutions is to support long-term employability and skills development rather than short-term training for a specific occupation or trade. This speaks to the need for initial vocational education to focus on general vocational programmes which support the development of vocational skills with the extensiveness of knowledge and a solid general education foundation. Linked to this is the role of vocational education and training institutions in supporting knowledge development

contained by occupational programmes, that is, the theoretical learning components of the learnership and apprentice programmes (Education, 2008).

The focus of this study was on Vocational Curriculum Report 191 and how it is preparing students for the world of work. The definition posited by the Scottish Curriculum Authority states that students need to be empowered by a curriculum to become responsible citizens and effective contributors. This is in line with the outcomes and purpose of Vocational Curriculum Report 191.

2.2.1.4 THE PURPOSE OF CURRICULUM

Curricular goals are the general, long-term educational outcomes that the school system anticipates to achieve through its system. Educational goals are the long-term outcomes that the school system intends to accomplish through the entire educational practice over which it has control. According to Hoadley et al., learning areas in curriculum endeavour to link theory and practice, and transmit to all learning in the lives of learners so that they could practice what they learnt in life and work (Hoadley & Jansen, 2009). Raju indicated that the goal of general education curriculum is to afford students with the knowledge, skills and values that will prepare them for active and effective participation in society that is, giving individuals a broad base of knowledge (Raju, 2006)

Both Hoadley (Hoadley & Jansen, 2009) and Raju (Raju, 2006) are pointing to the starting point of learning for students, which is theory transfer. From this base, practice needs to be linked to form one cohesive purpose of curriculum delivery. The curriculum offerings can be separated into academic offerings and vocational offerings.

2.2.2 ACADEMIC CURRICULUM

Raju defines general (academic) education as education that focuses on the individual's state of being educated. Subjects are studied, not for the utility of their content for practical purposes, but rather, for their capacities to train the mind and cultivate the intellect (Raju, 2006).

Academic education curriculum has been associated with personal growth and education for its own sake, but it has also been associated with an importance on abstract theory and generic analytical skills (Umalusi, 2003). Wolf mentions that the general analytical training of broad academic training prepares learners for the world of work, usually at higher levels of workplace hierarchies; it is not just about further study (Wolf, 2002). In addition, these skills are increasingly understood as important in the context of globalization (Allais, 2003).

The skills provided by the academic curriculum are categorized by a high degree of generality in the sense that they are intended to improve the reasoning skills of youth with a low occupational or sectorial concentration, thereby providing the foundation for further more practically focused learning at the work place. While often considered the best way to access higher paid jobs, this type of education endures the risk of being only weakly related to labour market demand. The societal costs of skill mismatch are often more severe than in the other education options due to the long duration and high individual costs of studies and graduates being unwilling to accept jobs below their formal level of education. Furthermore, as academic education curriculum does not impart practical work experience, the initial integration into the labour market might become difficult. Hence, in many countries there is a strong tendency to bring university education closer to applied studies (Eichhorst, 2012).

Academic curriculum involves not only instructional knowledge but also academic skills and literacies (such as quantitative, language-related and information literacies), approaches to study, background or contextual knowledge required in different disciplines, and forms of social capital. The focus here is on its academic dimensions, but it is clearly worsened by the social and cultural transition difficulties that many students experience on entering university (Scott, 2013).

By nature, academic curriculum offered by higher education institutions is based on assumptions about what students know and can do. These assumptions can lose intensity over time owing to changes in the student intake, but often remain embedded

for a range of reasons. The assumptions are about knowledge (for example, Mathematics 1 may assume that entering students have a sound knowledge of calculus), academic skills and literacies (for example, old-fashioned B.A. curriculum is likely to assume that incoming students are able to write a comparative academic essay), and also wider social capital (for example, a B. Comm. curriculum is likely to assume familiarity with basic financial systems such as banking). At tertiary level, assumptions have to be made, but for students for whom these are not appropriate, they are a major obstacle to learning, thereby hindering the development of the academic foundations necessary for successful tertiary study (Scott, 2013).

In contrast with the purpose of the academic curriculum, vocational curricula, such as Vocational Curriculum Report 191, are more focused on the development of theory linked to practical skills.

2.2.3 VOCATIONAL EDUCATION AND TRAINING CURRICULUM

Vocational education and training (VET) plays a key role in training young people for work, thereby developing the skills of adults and responding to the labour-market needs of the economy. In order for countries to compete in the quality of goods and services they provide, they require a well-skilled labour force, with a range of mid-level trade, technical and professional skills alongside those high-level skills associated with university education and an academic curriculum. More often than not, those skills are delivered through vocational programmes informed by vocational curriculums (OECD, 2010).

Vocational education and training (VET) includes education and training programmes intended for, and characteristically leading to, a particular job or type of job. It normally involves practical training as well as the learning of relevant theory. It is distinct from (academic) education. According to Raju, vocational education tends to focus on the desires of society, professional capability should be developed, not as a matter of idle inquisitiveness, but because of its massive significance for the community. He asserted that education should be less reverential about the refinement of the mind and more

concerned with the acquisition of skills that are mandatory for the world of work, production and wealth creation. He further argued that in a context of an industrializing world, the industrialization of society and the concomitant need for skilled labour such as engineers, mechanics and other technical personnel, have demanded that educational curricula embrace vocationalism. He concluded by suggesting that students need to engage in learning that prepares them for real life and real work (Raju, 2006).

According to Mortaki, programs of vocational training are divided into those that are mostly theoretical and those of practical orientation. In any case, emphasis is given in the application of the theoretical knowledge into action and not in its acquirement. The theoretical knowledge delivered, therefore, aims at the acquisition of technical skills and the ability to implement them in certain professions. For that reason, the learning procedure is based on methods such as observation, imitation and self-correction, in addition to the theory provided by textbooks (Mortaki, 2012).

VET systems need mechanisms to ensure that the number of people skilled in different occupations ties with labour market needs. While student preferences on their own do not always sufficiently reflect labour market needs, it is very hard to plan provision to meet labour market needs. Forecasting the exact skills needed in a given labour market is dangerous. Ideally, VET programmes should include an element of workplace training because apart from the learning advantage, employers' preparedness to provide such workplace training reflects labour market demand for the skills acquired in the VET programme. Overall provision needs to balance student preference and employer demand (Field, Hoeckel, Kis, & Kuczera, 2009).

Close partnership between TVET institutions and the local labour market is important in order to align the curricula with skills needs of the labour market. However, most TVET curricula in developing countries are supply-driven and have little input from the labour market. When there is collaboration due to improvements in the TVET system, the labour market does not have enough places to accommodate student trainees,

which causes overcrowding during traineeships (e.g. during the training of medical staff in hospitals). Students end up not getting enough hands-on experience, and supervisors sometimes become impatient when students are slow to learn whereby there is a lot of other work to be done (e.g. in manufacturing industries) (Nuffic, 2010).

The fundamental aim of Vocational Education and Training constitutes the transmission of exploitable knowledge for participation in the labor market. It is connected to the specialization in a certain practical field and takes place in different levels of education. While it is a different category of education, it is conducted in secondary, post-secondary and tertiary level, and it is organized by various organizations. A common feature of all levels which offer VET, is that it prepares the participants for involvement in the professional space. It should be added that the qualities of VET are shaped according to the social changes and the specialties offered, thus aiming to the development and application of knowledge and skills for middle class professions, as stated by the current needs (Mortaki, 2012).

Within VET programmes, a good balance between generic and specific skills is vital. VET graduates need the occupationally specific skills that will allow them to enter skilled jobs without lengthy additional training. They also need generic transferable skills to carry them through their working career, including the ability to adapt to fast-changing workplace requirements (Field, Hoeckel, Kis, & Kuczera, 2009).

Internationally, generic skills are recognized through a number of terms including core skills, key skills, essential skills, basic skills and workplace know-how. In some countries, they are specifically employment-related, while in others, greater emphasis has been placed on the social relevance of generic skills (Gibb, 2004).

In the workplace, generic skills are a key feature of job descriptions and the recruitment process. For new staff, the workplace can use a variety of ways to help train staff so they learn what the organisation anticipates in terms of employability skills, standards of work and the attributes expected of employees. Induction programs, rotation of

tasks, buddy or mentoring approaches, improvement teams, work-based projects, and staff performance management are all ways in which the workplace can encourage the development of employability skills (Gibb, 2004).

In contrast with the general skills stated above, the employability skills defined in the VET sector do not include literacy and numeracy skills. They include: communication skills; teamwork skills; problem-solving skills; self-management; planning and organizing; technology skills; lifelong learning skills; and initiative and enterprise skills. The employability skills of the VET sector, with their focus on work, have been viewed as a subset of the generic attributes of the university sector, which also focus on citizenship, values and ethics and having a world view. This claim could also be made about the general capabilities of the schools sector, which also focuses on the skills and knowledge associated with citizenship, in addition to accounts of the employability skills. The employability skills also include a number of associated personal qualities such as honesty and integrity, which have not been a focus to date. When personal attributes are taken into account, the employability skills of the VET sector become similar to those of the other two education sectors (i.e academic high schools and Universities) (Browman, 2010).

In most developing countries, TVET is restricted in scale, scope, quality and relevance. The programmes are not relevant to the needs of the local labour market, the curricula and syllabi are outdated and the institutions lack the tools and equipment necessary for a practical education. Where present, the equipment in workshops and laboratories is often outdated, bearing little resemblance to the technologies currently used by industry. Insufficient training equipment leads to trainee overcrowding during practical demonstrations, with most of the students only observing the demonstration and not having the opportunity to get some hands-on practice. Due to the fact that the institutions are poorly resourced, education and training remains theoretical, and the graduates are not considered as more skilled than their academic counterparts by the labour market. The institutions thereby acquire a poor image and produce graduates with lower employability (Nuffic, 2010).

Embedded in the VET are three pathways students can follow as discussed below:

2.2.3.1 LEARNING PATHWAYS IN THE VOCATIONAL EDUCATION AND TRAINING CURRICULUM

Young et al. identified the following three pathways in the Vocational Education and Training Curriculum.

- ❖ **General (academic):** This pertains to the academic curriculum students can follow, with no practical component;
- ❖ **General (Vocational):** This is usually offered by colleges rather than schools, and increasingly seen by students as an alternative route to higher education. As a result, the pressure from universities has been for the pathway to have a stronger disciplinary knowledge-base and external examinations as the best guarantee of standards. Biavaschi et al. indicated that vocational education and training combines workplace experience and training with school-based (vocational) education, usually within a particular occupation or sector of work. The provision of dual education is often divided between the public and companies: firms offer and finance the work-place training, and the state provides for the education in vocational colleges. During vocational training, apprentices have a fixed-term employment contract with an employer at a reduced wage level. The aim of the duality is to complement the rather firm-specific technical skills acquired by learning on the job within a training company, with general skills that are transferrable across employers within the occupation. While practical work-experience within the firm is expected to provide higher motivation and higher return for practically oriented youth, standardized curricula and central examinations are used to counteract over-specialization and low levels of transferability. Training standards in firms, as well as the alignment of skills taught in the schools and at the workplace, have to be ensured through collaboration with the employers, unions and educational institutions (Biavaschi, Eichhorst, Giulietti, C, & Kendzia, 2012).

❖ **Apprenticeship (Trade and occupational):** the decrease of employer-led apprenticeships saw the emergence of state-led work-based training programmes of a learnership type as the main route within the occupational pathway in many countries from 1980s (Young & Gambe, 2006). Under an apprenticeship system, vocational education courses tend to play a complementary role to teaching in workplace skills, thus concentrating on relevant theory and often encompassing continuing general education not necessarily related to the apprenticeship occupation. Under a system where vocational courses appear as options within a wider curriculum, they can be of a wide variety, ranging from broad familiarization and general workskills, to discrete courses in particular trades.

There is an attraction in making such courses practical in nature, often including short spells of work experience or workshop practice in order to contrast with an otherwise knowledge-orientated and classroom-based general curriculum. There is also no need to cover general subjects within the vocational courses, as these are accommodated for elsewhere. Under a system of full time vocational education on the other hand, courses are typically organized into a whole self-standing programme incorporating general education; the groupings tend to be fairly broad, but consist of progressive specialization (e.g. in Sweden, there are some 30 'branches' of specialization within the national programmes) (West & Steedman, 2003).

The curricula of apprenticeship training differ from school-based and academic forms of education. The value of the curricula depends on the training company specialization, its size and infrastructure. Quality effects can be observed in wage increases after training; this effect is directly related to the size of the firm. Another result emphasized that it is easier for people taking part in Vocational Education and Training to find a job than for those who do not participate (Lettmayr & Riihimäki, 2011).

Biavashi et al indicated that in countries where traditional or informal apprenticeships are dominant, but mainly restricted to traditional crafts, these apprenticeships should

be articulated better with the schooling system and the formal sector. They should also be opened up to new technologies and occupational change. This, of course, requires some recognition of informal employment as part of the economic and social reality in many countries (Biavaschi, Eichhorst, Giulietti, C, & Kendzia, 2012).

Vocational curricula are offered internationally in countries such as the United States of America, as well as nationally, that is in South Africa.

2.3 INTERNATIONAL AND NATIONAL VOCATIONAL CURRICULUM OFFERINGS

2.3.1 INTERNATIONAL

VET policy development and implementation of curriculum requires engagement with employers and unions. Their involvement helps to ensure that the content of VET i.e. what is imparted in VET schools and at the workplace and how exams are designed, is relevant to the labour market. Typically, this translates to a set of interconnected institutions at national, regional and sectorial levels, with clear responsibilities for different elements in the VET system. Information supports the link between vocational education and training and the labour market. It allows students to see their way through a training programme into the labour market, employers to understand what potential recruits have learnt in a programme, and policy makers and training institutions to see whether their graduates are obtaining relevant work (Field, Hoeckel, Kis, & Kuczera, 2009).

Various countries have developed and implemented vocational curricula.

2.3.1.1 UNITED STATES

Vocational education and training in this country is commonly called 'career and technical education', and has been a national priority in the United States since early in the 20th century when the first federal legislation was endorsed. In the past 85 years, vocational education and training efforts have grown to include a wide variety of programs, providers, participants and purposes. Although the national curriculum trend in secondary schools is de-emphasizing vocational education, it remains a large

component of course-taking and serves a diverse set of students. Indeed, federal funding for vocational education is the single largest source of federal funds dedicated to high school education (Whelts, 2010).

In the United States, the usual term for vocational education and training is Career and Technical Education (CTE). Education and training for some high level professions such as medicine and law meets the definition although not normally described as VET, but CTE.

Initial CTE includes programmes mainly designed for and used by young people (mainly for those under 30) at the commencement of their careers and commonly before entering the labour market. It includes many upper secondary and tertiary programmes. Continuing CTE includes enterprise training of employees and training provided specifically for those who have lost their jobs (Field, Hoeckel, Kis, & Kuczera, 2009).

CTE offer a greater range of occupational programs, and their programs are generally of greater quality. Participation in CTE courses is quite extensively spread. Nearly every graduate takes at least one CTE course, and 90.7% take at least one occupation-specific course.

In Europe, countries such as Italy, Spain and Portugal are also offering vocational curricula (Afonso & Ferreira, 2007).

2.3.1.2 ITALY

The VET system, which falls under the competence of the Regions, is part of the national education and training system, and is organized in two basic pathways, i.e. three-year courses, leading to the award of *Attestato di qualifica di operatore professionale* (Professional operator certificate), Eqf level 3, and four-year courses, leading to a *Diploma professionale di tecnico* (Professional technician diploma), Eqf

level 4. The first two years of study provide guidance for students on vocational specialization in order to raise their awareness about the chosen path.

At the end of three-year and four-year vocational education and training pathways, after passing a final examination in accordance with regional regulations, a Qualification of Professional Operator and a Certificate of Professional Technician are issued. These qualifications can be also gained after an apprenticeship period aimed at a vocational qualification or a certification (Lettmayr & Riihimäki, 2011).

Regions and provinces offer other training activities for young people and adults. With regard to VET, people holding an Upper Secondary or a VET qualification are permitted to enroll in very specific local training courses. Post-Higher Education courses offer an opportunity for those who have completed a University course. These courses are also designed for unemployed young people or adults with previous work experience. Sometimes, initial training courses are exclusively addressed to weak groups (disabled, migrants, Gypsies, special needs youth, etc.) in order to increase the level of work integration (Calleja, 2014).

2.3.1.3 SPAIN

Vocational schools in Spain provide vocational education, which is highly connected to the future job market. The schools themselves are categorized according to 8 job fields, namely: engineering, commerce administration, medical, sanitary, liberal arts, education/social welfare, dressmaking/domestic science and agriculture. The courses are fixed according to these categories. Many classes include practical training. Subjects of the courses are also very different. Unlike universities and junior schools, most attention is focused on work-related training. As vocational school education has such individualities, it is very important to understand which profession to choose in the future. The choice of the vocational school depends on what the student wants to do and what skills the student wants to attain (Lettmayr & Riihimäki, 2011).

According to De Jagger et al., the period of educational courses in vocational schools, generally, is 2 years or more. Students who have attended more than 1 700 class hours can graduate from vocational school with the original Academic Degree called Diploma. Furthermore, they can enroll in university as third-year students (in some cases, second-year students). Graduates of 4 year courses receive an Advanced Diploma (the original Academic Degree) in cases where they studied for 4 years or more and attended more than 3,400 class hours during the educational period. Moreover, they can continue education in graduate school (De Jagger & Vorwerk, 2006).

2.3.1.4 PORTUGAL

The Portuguese vocational education and training system is based on a set of principles whose aim is to guarantee the right to education and training to ensure equal opportunities of access and achievement (Afonso & Ferreira, 2007).

Vocational courses provide a broad range of secondary-level training, their main purpose being to prepare students for the labour market. These courses last for three academic years. They are divided into modules of varying length, which can be combined in different ways and cover three components: socio-cultural, scientific and technical training. The technical component varies from course to course and accounts for almost 52 % of total training hours, of which 13 % are spent training in a work environment. Successful completion of these courses leads to a Level 3 vocational qualification and a diploma in secondary education, allowing students to pursue their studies at a higher level. These courses are provided by a network of State schools run by the Ministry of Education and by vocational schools, most of which are privately run (Afonso & Ferreira, 2007).

Portugal stressed the deficit in VET research, but indicated that individual financial improvement is the main outcome of VET. A result not specific to VET but indicative is that a worker with an upper secondary education certificate usually earns around 60% more than an employee without one. Other significant effects of VET include: a higher

probability of obtaining a full-time contract, on the-job promotion and better work-conditions (Lettmayr & Riihimäki, 2011).

Some countries have similar Vocational curricula such as:

2.1.3.5 SWEDEN, FINLAND AND FRANCE

Countries which have a sizeable and fairly discrete stream of full-time vocational education are Sweden, Finland and France, where distinct three-year programmes are laid down for occupational areas – in Sweden's case, 14 national vocational programmes, and in France, 30 versions of the Bac Pro (Afonso & Ferreira, 2007).

In these countries, the VET sector comprises upper secondary vocational education and training and further vocational training. It is targeted towards both young people ready to enter the labour market and adults already in gainful employment or outside the labour market. In addition to providing students with diverse knowledge, skills and competence required to enter and function in the world of work, vocational education and training prepares students for lifelong learning and self-development. Education and training can be organized diversely both in institutional learning environments and in workplaces as well as using online learning environments (Unknown, 2010).

Programmes leading to upper secondary vocational qualifications are mainly delivered by vocational institutions in accordance with curricula following to the relevant National Core Curricula, and it is possible to incorporate on-the-job learning into these units in a flexible and diversified manner. Upper secondary vocational qualifications can also be completed as competence-based qualifications. The vocational skills requirements are the same regardless of the method of completion (Unknown, 2010).

The National Core Curricula governing different upper secondary vocational qualifications determine the key lifelong learning skills which are included in the vocational skills requirements set for vocational units and core subjects. These key lifelong learning skills include: learning and problem-solving, interaction and co-

operation, occupational ethics, sustainable development, aesthetics, communication and media competence, as well as active citizenship and different cultures (Zirkie & Martin, 2012).

Other countries such as China and Japan also offer vocational curricula.

2.3.1.6 CHINA

Vocational education in China is delivered through vocational higher education institutes, secondary skill schools, vocational high schools, and adult education. In each category, there are a variety of school types. For vocational higher education institutes, there are Worker's Colleges, Peasant's Colleges, and Institutes for Administration, Educational Colleges, Correspondence Colleges, Radio/TV Universities, and other institutions.

In 2009, there were more than two million students enrolled in vocational higher education institutes in China. Initially, graduates from vocational education institutes were not awarded degrees, which was possibly due to the Chinese government's tight control over the scale of higher education. After a series of educational system reforms, graduates from vocational education institutes are now conferred non-degree diplomas. In addition, some vocational education institutes have the capability to award a degree equivalent to a bachelor's degree for four-year program graduates (Maturu, 2011).

In Africa, Swaziland and Ghana offer vocational curricula to empower their students for the world of work. Technical and Vocational Education and Training (TVET) systems in Africa differ from country to country and are delivered at different levels in different types of institutions, including technical and vocational schools, polytechnics, enterprises, and apprenticeship training centers.

2.3.1.7 SWAZILAND

The goal of Vocational Education and Training (VET) in Swaziland is to promote entrepreneurial skills and values as a fundamental element of the VET at all stages, sectors and areas taking into consideration the needs of the economy, society, and the individual. Swaziland still advocates for a curriculum that promotes entrepreneurship skills. This is motivated by the high level of unemployment and the fact that there are children who benefit more from the practical curriculum (Education, 2008).

2.3.1.8 GHANA

Education in Ghana is assumed to be the vehicle for accelerated economic and social growth and development. This has been the philosophy of governments from the colonial era to date. On account of their belief in the benefits of education, successive governments of Ghana have been using education to implement developmental policies and programs. Vocational technical education was emphasized in Ghana's education system since the colonial era. The purpose then was to train the youth in different trades such as catering, needlework, carpentry, masonry, blacksmithing, and others to become skilled craftsmen and useful citizens (Boateng, 2012).

In West Africa, in particular, traditional apprenticeship offers the largest opportunity for the acquisition of employable skills in the informal sector. In Ghana, the informal sector accounts for more than 90 percent of all skills training in the country (DHST, 2007). The pre-vocational type of vocational technical education occurs at the basic school level. The aim here is to expose pupils at the basic education level to a range of practical activities in the vocational field in order to make them familiar with, and stimulate their interest in vocational subjects; this gives pupils at this level equal opportunity to choose their future careers in either the vocational technical or general field. In addition, it equips them with basic occupational skills that will enable those who do not seek further education to enter into gainful paid or self-employment in industry, agriculture and commerce. Graduates from the basic level could also enter the informal sector for apprenticeship training (Boateng, 2012).

2.3.1.9 KENYA

In Kenya, the private sector is the largest employer in Mombasa, as in other urban economies, and firms require the right skills and aptitudes in young people to grow and thrive. However, many young people in Mombasa drop out of education, seeing little value in its continuation, and those that do attend vocational college do not necessarily find themselves at an advantage. Vocational training is driven by an outdated curriculum with little input from the business community, which, encumbered with high infrastructure and regulatory costs, barely engages with anyone beyond itself (Haslam, 2013).

In summary, Biavashi et al. suggested that many countries should strengthen the vocational part of their educational schooling system and bring existing vocational education and training systems closer to the current needs of the labour market so that young people can experience a smoother transition to jobs. He further stated that vocational education provided in the framework of secondary schooling (vocational schools or vocational tracks) should be modernized and complemented with phases of practical work experience, e.g. via internships or passing the final year with an employer. Employers should also be consulted regarding the design of vocational schooling curricula. This requires a systematic coordination with networks or associations of employers. He suggested that in order to avoid a negative perception of vocational education as a dead-end option, transition to further education, including tertiary education, should be facilitated (Biavaschi, Eichhorst, Giulietti, & Kendzia, 2012).

In the light of vocational education and training in other countries, it is clear that initially, it caters for young people. The main aim is to provide them with the employable skills relevant to the labour market. It is also noted that mainly, vocational curriculum is offered at schools.

From an international perspective, the focus now proceeds to a national perspective.

2.3.2 NATIONAL

2.3.2.1 SOUTH AFRICA

Even in good times, according to Field et al., the youth unemployment rate is, on average, two or three times higher than the adult unemployment rate in the Organisation for Economic Cooperation and Development areas like Australia, Germany, Finland and so on. About 30-40% of school-leavers in the OECD are at risk of poor labour market outcomes during their first years in the labour market. In many OECD countries, youths are one of the main target groups of active labour market programmes such as job-search assistance, employment or training programmes. This is particularly the case in Europe where, on average, in the mid-2000s, young people aged 15-24 represented 27% of all participants in active measure while representing only 11% of total employment (Field, Hoeckel, Kis, & Kuczera, 2010).

In the South African context, VET is anticipated to play a dual role. On the one hand, it should contribute to the development of a higher skilled workforce through gearing its technical and vocational training to better articulate with the skills requirements of the global economy. On the other hand, colleges are expected to expand access to the critical mass of learners who have had limited opportunity to develop their knowledge and skills and prepare them to enter the labour market and make further learning a choice. Well-functioning TVET colleges would add much value to the education system by focusing, unequivocally, on their central mission of providing good quality post-school technical and vocational education and training, and in the process, offering educational opportunities for out-of-school youth, catering for mature adults wishing to re-enter formal education, and meeting local community education needs (Scott, 2013).

South African policy frameworks make provision for preparation for self-employment, and there is evidence that TVET colleges in South Africa are already involved in entrepreneurial education that mostly relates to the two types of self-employment.

There is a tradition of enrichment courses such as sewing and pottery, which demonstrates commitment to local community needs. At the same time, Gamble's report on the more recent customization of courses for informal economy entrepreneurship and of Small Medium Enterprise (SME) industrial parks or small business clusters being incorporated into TVET College activities. The first type of offering may be interpreted as a form of skills development for subsistence self-employment, and later, as offering preparation for enterprise self-employment (Gamble, 2003).

The focus of this study is Vocational Curriculum Report 191, therefore, an analysis of the curriculum, as offered in South Africa is needed.

2.3.2.1.1 VOCATIONAL CURRICULUM REPORT 191 (NATED)

The programmes currently offered at TVET Colleges have been designed to be responsive to the skills development needs of South Africa. The Vocational Report 191 programmes cater primarily for those already employed and complement the various apprenticeship initiatives of industry, and this is offered in the form of theory. The Vocational Report 191 programmes at colleges provide post-school vocational training (Nzimande, 2013).

The following instructional programmes or categories are offered by TVET Colleges through Vocational Curriculum Report 191:

- National N Certificates: N1-N6; and
- National N Diplomas.

Entry requirements to these courses are as follows:

Table 1 Entry requirements for NATED courses

Course or level	Entry requirements
N1	Grade 9
N2	N1 or equivalent

N3	N2 or equivalent
N4	N3 or Grade 12
N5	N4
N6	N5

National N certificates are offered through theoretical instructional offerings. The aim of theoretical instructional offerings is to teach the required theoretical knowledge which underlies the future occupation for which the student is being prepared for. The focus of these offerings is to support the apprenticeship pathway. While completion of the National N diploma puts emphasis on acquisition of practical skills.

Programmes at TVET Colleges are classified according to National Qualification Framework (NQF) levels for the purpose of submitting information as required by the South African Qualifications Authority (SAQA). The NQF levels are as follows: National Certificate N1 is at NQF level 2; N2 is at NQF level 3; N3 is NQF level 4; and National Certificate N4 to N6 are at NQF level 5.

A candidate must obtain at least 40 percent in the combination of the term mark and the examination mark at a ratio of 40:60 in order to pass a Report 191 instructional offering, unless otherwise indicated in the instructional programme concerned.

For students to be certified in Engineering Studies, they need to pass a minimum of three instructional offerings or as specified for the particular national instructional programme. Registered apprentices must offer a fourth instructional offering. The candidates have the option to apply for a National Certificate with three instructional offerings; alternatively, a National Certificate with four instructional offerings will be issued to qualifying candidates, while for students to be certified in Business studies, they need to pass four instructional offerings.

For students to be awarded a National N diploma, they need to pass at a minimum of twelve instructional offerings at N4-N6 levels subjects (i.e. N4= 4 subjects, N5 = 4

subjects and N6 = 4 subjects) on a minimum period (i.e. 18 or 24 months) of applicable experience as required for the specific National N Diploma. Proof of such experience must be submitted to the relevant TVET College. This Diploma is awarded by the Quality Council for Trades and Training Occupations, (QCTO). A student who has successfully completed N6 Courses but has not completed 18 months' practical experience qualifies for a National Certificate but not a diploma.

For Business studies, management courses such as Public Management, Marketing Management and Management Assistant are offered as well as finance courses like Financial Management and Business Management. These courses are offered from Introductory to Business Studies up to N6. The main entry requirement in all of these courses is a senior certificate or N3 or relevant qualification. Duration for each level is a semester, meaning that if a student is enrolled at N4, he or she will be expected to complete his/her studies within 18 months.

The students in these programmes write national examinations in each examination circle. For each level that the student passes, he or she qualifies for a National (N) certificate. On completion of the 18 months theory component in the college, students are expected to complete another 18 months in the industry relevant to their field of study to qualify for a National N Diploma, which is a 3 year qualification at NQF level 6. This qualification is supposed to have an advantage for those that complete it since it combines theory and practical skills and allows an easy entrance to the world of work.

All vocational education and training programmes offered at public TVET colleges are quality-assured by Umalusi for N1 to N3, QCTO for N4 to N6 and National N diplomas. The Department of Higher Education and Training (DHET) takes the responsibility for setting examinations for each of the formal vocational subjects offered as part of the vocational qualifications. These are externally examined and moderated by Umalusi and QCTO. Vocational and occupational qualifications offered by TVET colleges at level 5 and above are quality assured by the QCTO. However, the reliability of the assessment systems is the responsibility of the TVET College, guided by the

assessment guidelines from the Department of Higher Education and Training, as well as the assessment policy that has been developed for the relevant TVET College (Education, 2008).

According to Pandor,

At least between 70% and 80% of each public college's student headcount enrolment capacity must focus on programmes that are listed in the register of programmes approved by the Minister of Education. These programmes must ensure vertical and horizontal articulation, cohesion and educational value with practical relevance. In order to realise these ideals, these qualifications must have a high level of centralized quality assurance and external assessment systems. All such programmes will be quality assured and certificated by Umalusi (Education, 2008, p.75).

The N-courses for Engineering Studies initially formed part of a route that could lead to an artisan qualification. Certainly, the National Certificate (NC) N2 was determined as the only recognized theoretical component for accessing the trade test. In addition, however, students could, by means of further study and experience in the workplace, gain access to higher education institutions and/or eventually earn the highly prized Government Engineer Ticket (Matshoba & Burroughs, 2013).

For engineering studies, N1 to N6 courses are offered in courses like Mechanical Engineering, Electrical Engineering, Carpentry, and Civil Engineering. These courses are offered on trimester bases. For N1, the entry requirement is grade 11, whilst for N4, it is a senior certificate or grade 12 or N3. The National N3 qualification can lead to either Artisan, employment or to study further. While the N6 qualification may lead to in-service training. Since this is a trimester programme, students are required to spend 2 years doing in-service training in the fields relevant to their fields of study.

The engineering-specific programmes were planned to support the apprenticeship programmes and were invented to provide meaningful alternatives to the schooling pathway, especially for candidates who did not necessarily excel within the school environment but who did have other talents or interests to pursue. Since the target group that the programmes were intended to deal with were often adolescents who

had left school as soon as their compulsory commitment was over, there is some overlap between providing additional education and preparing them for the workplace. It is this duality of purpose, especially in the first three of the N programmes (i.e. N1 – N3, which are regarded as being parallel to Grades 10 – 12), which creates headaches for a neat demarcation of responsibility for the adolescents (Matshoba & Burroughs, 2013).

2.3.2.1.2 THE NEED FOR THEORY BASE

South African colleges have, traditionally, offered the theory component of apprenticeship in the designated trades. In the field of business studies, a focus on formal concepts and procedures, which are linked to practical assignments, gives students a chance to move from theoretical concepts to practical applications. With NQF alignment, a current requirement and unit standard forming the basis of the curriculum, the tendency may well be to decrease the theoretical component in favour of stronger practical orientation (Gamble, 2003).

Billet added that primarily, colleges offer post-school youth with a strong theoretical foundation in disciplinary knowledge which equips them to enter into higher education to access academic qualification, or the workplace to be further trained towards specialised occupations, including through apprenticeships (Billet, 2003).

There is a need for initial vocational education to focus on general vocational programmes which support the development of vocational skills with a breadth of knowledge and a strong general education foundation. Linked to this is the role of vocational education and training institutions in supporting knowledge-development within occupational programmes, that is, the theoretical learning components of the learnership and apprentice programmes (King, 2011).

The aim of theoretical instructional offerings in Vocational Curriculum Report 191 is to teach the required theoretical knowledge which underlies the future occupation for

which the student is being prepared for. The focus of these offerings is to support the apprenticeship pathway (Nzimande, 2009).

According to Matshoba et al, the Vocational Report 191 students in engineering, for an example, have no practical exposure at all during the trimesters that they spend on their theoretical studies because it is assumed that they receive this experience at work. They added that since the classroom work covers only theoretical concepts over a three-month period, after which the student enters industry, they do not yet know the basics, e.g. use of a test meter (Matshoba & Burroughs, 2013).

King makes the point, however, that a younger generation of independent owner-manufacturers needs to make the transition from the basic fabrication of machines to the manufacturer of high-order machine tools. In order to do so, they need a greater understanding of the technology of these processes, as well as a greater knowledge of electronic systems and of materials science. The process of taking a machine apart in order to understand how it works and then using ingenuity in the adaptation of local materials, in order to make a local and cheaper version of the same thing, is no longer sufficient. Technical capacity that has been learned on-job must be linked to a more formal understanding (i.e. theory as a base) of the actual principles of Mechanical Engineering (King, 2011).

2.3.2.1.3 PROGRAMMES ENTAILED BY VOCATIONAL CURRICULUM REPORT 191

Vocational Curriculum Report 191 policy provides all the permitted programme offerings and pronounces the programme requirements for technical college education. The instructional offerings are based on a common curriculum which was developed by what was known as National Department of Education. It should, however, be noted that not any of these Vocational Curriculum Report 19 programmes were phased out, as it was intended, they still continue at National Certificate (NC): N4 – N6 level (Mgijima & Moeobe, 2012).

One of the major roles of public TVET colleges is to provide artisan and vocational training programmes to youth and adults. These colleges are also expected to foster the acquisition of intermediate to high level skills. In addition, they are also designed to lay the foundation for higher education through articulation of learning programmes as well as to facilitate the transition from school to the world of work. It is prescribed, in the TVET College Act 16 of 2006, that the TVET colleges should permit students to attain knowledge, practical skills, and practical vocational and occupational competence in order to enter employment, a vocation, occupation or trade, or higher education (Mgijima & Moeobe, 2012).

The task of building knowledge and skills at the intermediate level has, for a long time, been the appointed curriculum responsibility of technical (TVET) colleges. For many years, this responsibility and task was part of a system of apprenticeship, which equipped young men and women, from one population group only, for entry into the engineering and hairdressing trades. Later, preparation for various business-related occupations became the focus of many newer colleges, which did not have strong relationships with those industry sectors that supported apprenticeship (Gamble, 2003).

Hence, the colleges are expected to primarily offer two types of qualifications, namely, the National Certificate Vocational (NCV), which is a general vocational qualification at upper secondary level; and Vocational Curriculum Report 191 or 'N' courses, which provide the theoretical and sometimes practical components of apprenticeships and learnerships (Scott, 2013).

2.3.2.1.4 KNOWLEDGE AND SKILLS

Vocational Education and Training qualifications must provide students with the knowledge and skills they need for work, but also ensure that they have sufficient language, literacy and numeracy skills and foundation skills, green skills needed for a sustainable economy and society, technological skills, and the knowledge and skills

they need for further learning as the basis for changes to their existing work and for occupational progression (Wheelahan & Moodie, 2010).

Most successful vocational or occupational learning takes place as a result of and combination of theoretical learning, workshop-based practical learning, and learning in the workplace. Thus, the DHeT places weighty emphasis on workplace-based learning as well as on the promotion of work-integrated learning (Nzimande, 2012).

Unlike general (academic) subjects, which are only shaped by the institution of schooling, vocational subjects have to take into account the occupational sectors they relate to, not just the institutional framework of colleges. Sectors such as engineering, finance, health care and the retail trade are differently organised and make quite different types of knowledge demands on learners. Students currently doing Business English as part of vocational programme in South African TVET colleges are, according to the syllabus, expected to read some short stories, news, or magazine articles and poems (Young & Gamble, 2006).

Communication skills are a fundamental skill for e.g. hairdressers since communicating with their clients is part of their client service. This is a different skill from a car mechanic's skill of communicating with his clients which requires him to explain the maintenance and service of a car in lay terms, which is different again from their skill in communicating with technical precision with other mechanics, suppliers and other specialists (Wheelahan & Moodie, 2011).

'Workplace learning should be an integral part of all vocational programmes. Establishing effective partnerships between education and training systems and employers to provide for workplace training would ensure that skills have real labour market relevance and that young people gain an early appreciation of and exposure to the world of work'. (Nzimande, 2012, p.1)

Workplace-based training remains very diverse with excellent training opportunities in some places. In general, few employers have been willing to take on apprentices and

give students opportunities for workplace training. A wide array of providers, often based in or contracted by workplaces, offers a range of programmes aimed at professional and community development. Many of these providers offer dynamic and responsive programmes (Nzimande, 2012).

Gamble suggested that there is an increasing requirement for workplace experience to develop a strong foundation for future employability. It is, however, clear that work experience should not be seen as a sufficient replacement for practical training, which supports concepts formulation. There is limited access to workshops and laboratories that allow for practical experimentation and problem-solving. As a result, it will be tempting for colleges to try to replace workshop training, offered by the college, with direct work placements that form part of the formal curriculum.

Work experience is deemed crucial for giving students access to practical experience, which the college, with inadequate workshop facilities, cannot provide. Literature is clear though, that work experience is not necessarily the answer to the need for practical training. Work specialization and sub-division of work often results in limited opportunities for gaining work experience. Training also takes second-place in an environment where production or high-quality service is the core function (Gamble, 2003).

There must be a partnership between the colleges and the labour market. The broad aim of this partnership would be to provide work experience to young people up to the age of 30 or 35 for a period of 12 months, and assist them to become employable. Young participants could be exposed during the period of service to extensive vocational training, career counselling, and placement (where possible) in full-time jobs. It would have three components: skills acquisition; service to the community; and internships within industry to provide job seekers with direct work experience. The public service component would include services not currently provided through the state in areas such as adult literacy, green economy campaigns, and rural development (Faulkner, 2011).

According to the Green Paper for TVET Colleges, TVET colleges must develop close ties to workplaces in the public and private sectors, thereby becoming responsive to the needs of the employers in their surrounding communities, and offering tailor-made programmes where possible in addition to their core programmes. In line with National Skills Development Strategy (NSDS III), colleges must develop close ties to SETAs, which will play an increasingly important role in linking colleges with employers (Nzimande, 2012).

2.3.2.1.5 CONTEXTUAL FACTORS

TVET colleges are offering Vocational Curriculum Report 191 to registered students. An assumption can be made that these students will move from the institution of teaching and learning to employment. However, some factors such as the responsiveness to the needs of the economy, relevance of the curriculum offering to the world of work, and challenges experienced by students to gain suitable employment need to be taken into account.

2.3.2.1.6 RESPONSIVENESS

The policy calls for TVET colleges in South Africa is to be responsive to the need for a highly trained, knowledgeable and innovative workforce, which is required for economic growth in the globally competitive world of the twenty-first century. At the same time, it is necessary to be responsive to local needs by providing access to education and training to those historically marginalized and excluded from meaningful economic activity (Gamble, 2003).

The ultimate aim of vocational training is employment. Vocational programmes, therefore, have to be linked to the job market. In that way, the socio-economic relevance of Technical and Vocational Education and Training can be balanced (DHR, 2007).

Pandor argued that to become more responsive, public institutions must engage with stakeholders in the local economy through collecting, analyzing and disseminating labour market data, entering into training agreements with stakeholders, for instance learnership agreements, fermenting entrepreneurship and assisting entrepreneurs to access financial credit. Whilst research activities at the college level should be regarded as important, this should not detract from the importance of developing tools and training programmes at the national and provincial levels to facilitate the college-level work, or from the importance of national and provincial research work (Pandor, 2009).

Combining education and training with workplace experience is seen as important as it helps employers to match potential workers to the workplace. The benefit to the learner is the development of work-related knowledge and skill, including the type of knowledge in and about the workplace that is usually not written down or spoken about. Apprenticeship is viewed as the best-known way of linking formal and workplace knowledge but, in the absence of strong apprenticeship traditions, short and longer periods of work experience are increasingly being included in the formal curriculum at all levels of education and training in many countries (Gamble, 2003).

Since the ultimate objective of the TVET is employability and employment promotion, it is necessary to link training to the needs of the labour market. TVET must be relevant and demand-driven, rather than being supply-driven and a stand-alone activity. In order to do this, data is required on the actual employability of TVET graduates, available job opportunities, and the evolving skills demands on the labour front (DHR, 2007).

Making public institutions responsive is not just a matter of diversifying the range of services offered. The quality of teaching across the board, in practical and theoretical fields, needs to improve. Incentives should be in place to underpin it (Pandor, 2009).

2.3.2.1.7 RELEVANCE

Whatever one's views are on the links between the economy and education and training, it is clear that government has to respond to market trends that include local and global demands when determining policy on education and training. OECD, which promote this change, anticipates, for instance, that consumer demand will play a more important role than national planning in determining the structure of supply. It is argued that attempts to influence learning patterns at a national level will have to deal with both international and locally-based labour supply. While curriculum will remain a national and domestic matter in each country, children and adults will increasingly be aware of international or global trends in knowledge (Gamble, 2003).

The African Union recommended that training institutions can also conduct local labour market surveys in and around their localities. Information gathered and analyzed would then serve as input for the development of new and revised courses and programmes, equipment and learning materials selection, instructor formation, and guidance and counselling of trainees (DHR, 2007).

De Jagger et al. suggested that to reconnect the labour market and the education sector, the following would have to be achieved:

- Labour market needs are collected and collated and include not only projected numbers but also an indication of skills required;
- This information is captured in a career path framework;
- Qualifications and unit standards are developed to reflect the occupational needs;
- Learning programmes are developed and implemented; and
- The outcomes and the impact of education and training interventions are evaluated and assessed (De Jagger & Vorwerk, 2006).

2.3.2.1.8 CHALLENGES

There is a systemic disconnect between education institutions and training programmes, on the one hand, and employer expectations or labour market needs on the other. This disconnect operates at different levels of the system. There is no

systemic feed-forward loop in which labour market needs are collected, collated, and evaluated in order to inform the provider sector. Changing occupational profiles, dying occupations and new or emerging occupations only become apparent in a haphazard and informal way to providers of education and training. Where good relationships exist and where at a local level education and training institutions have an entrepreneurial flair, they may be a fairly quick response to such changes. However, by and large, the education and training system continues to operate without taking such changes into account. This results in many learners being unable to access the labour market or even to acquire the experiential learning required by many occupationally-focused qualifications (De Jagger & Vorwerk, 2006). Gamble and the African Union assert:

- Suitable employability renewed emphasis on education and training as preparation for work. Such an association between education and jobs is often lamented as the beginning of the end for education, as it seems to imply that a narrow vocationalism will drive down curriculum at all levels of educational system. At the curriculum level, preparation for employability requires a stronger rather than a weaker combination of practices and theory. Practical training and experience are deemed crucial, for both employment and self-employment, but not at the expense of theoretical education. It is theoretical education that builds the ability to think beyond well-known and concrete everyday situations, as is demanded by modern technology (Gamble, 2003); and
- The African Union argued that in almost all countries in Africa, large numbers of graduates coming out of the formal school system are unemployed although opportunities for skilled workers do exist in the economy. This situation has brought into sharp focus the mismatch between training and labour market skills demands. Critics argue that the lack of input from prospective employers into curriculum design and training delivery are partly responsible for the mismatch (DHR, 2007).

Literature by Organisation for Economic Co-operation and Development (OECD) poses a sequence of linked proposals to bridge the gulf between learning and jobs, and to connect initial vocational education and training for young people more fully to the needs of the economy. In summary, this means: making sure that provision in vocational programmes reflects fast-changing employer needs, as well as student preferences and the inertia of existing provision; building a foundation of basic and transferable skills into vocational qualifications; renewal of the career guidance profession to deliver active guidance for all young learners, well-informed by knowledge of the labour market and vocational as well as academic pathways; ensuring that teachers and trainers in vocational programmes have up-to-date industry experience; making the fullest use of the workplace as a quality learning environment; better data, especially to show where learning leads to good jobs, and where it does not, and more consistent assessment and qualification frameworks to improve transparency of the system. Above all it means an effective partnership between government, employers and unions to ensure that the world of learning is connected at all levels with the world of work (OECD, 2010).

All VET systems, according to OECD, need mechanisms to make sure that the number of people trained in different occupations matches labour market needs so that the number of trainee plumbers, for example, matches the demand for plumbers. Student preferences are relevant, but such preferences on their own are usually not enough, and while employer needs are important, it is not always easy to establish what those needs are, or how they will evolve. Publicly funded provision needs to serve the interests of the whole society by balancing student preference and employer demand. Ideally, vocational programmes should include an element of workplace training because apart from the learning benefit, employers' willingness to provide such workplace training reflects labour market demand for the skills acquired in the VET programme (OECD, 2010).

Field et al. indicated that the circumstances of an economic downturn and retaining young people in education and training has some potential benefits even though

delaying entry into the labour market is no long-term solution to unemployment. Retaining young people in education and training can, however, cushion the impact of a sharp downturn on the labour market, and, therefore, has some short-term benefits. In particular, it might mitigate the negative effects of early labour market experience in the recession. In addition, the extra time spent in education and training can equip young people with additional skills. To do this, the additional education and training provided should be carefully targeted (Field, Hoeckel, Kis, & Kuczera, 2010).

2.3.2.1.9 COMPARISON OF VOCATIONAL EDUCATION BETWEEN INTERNATIONAL MODEL AND NATIONAL MODEL

In summary, the comparison is tabled to determine the similarities or differences between what is offered as vocational education nationally and internationally.

Table 2 Comparison between National and International Models

Criteria	International	National
Entry requirements	Students must have passed compulsory education	Grade 9
Targeted population group	Young people	Young people
Main objectives of the curriculum	To provide youth with employable skills	To provide young people with the skills relevant to the labour market
Occupational Fields	Entrepreneurial education, apprenticeship, hairdresser etc.	Apprenticeship, engineers, office

		administrators, technicians etc.
Duration of the studies	1 to 3 years	Trimester or Semester
Institutions for Vocational education	Vocational Schools or Colleges	TVET Colleges

2.4 THEORETICAL FRAMEWORK

2.4.1 DEWEY'S PHILOSOPHY OF EXPERIENCE

Dewey describes progressivism as an educational theory that supports active learning. It emphasizes that ideas should be tested by experimentation and that learning is rooted in questions developed by the learner (Johnson, 2008).

Traditional education is focused upon curriculum and cultural heritage for its content, progressive education focused on the learner's interest and impulse and unconstrained by the educator. According to Dewey, neither of these systems is adequate. Traditional education consists of a rigid regimentation and ignores the capacities and interests of the learner. Progressive education allows excessive individualism and spontaneity which Dewey says is "a deceptive index of freedom" (Dewey, 1938).

Dewey's philosophy points out that the strict authoritarian approach of traditional education was overly concerned with delivering pre-ordained knowledge and not focused enough on students' actual learning experiences. He insists that education requires a design that is grounded in a theory of experience. He sides neither with traditional education nor progressive education. Dewey defines traditional education as an educational system that focuses on curriculum and cultural heritage for its content. It consists of a rigid regimentation, ignoring the capacities and interests of the learners. It encourages an attitude of docility, receptivity and obedience among learners. He also defines progressive education as an educational system that focuses on the learner's interests and impulse without constraint from the educator. It allows

excessive individualism and spontaneity among learners and offers growth and expression, free activity, learning through experience, and the acquisition of skills as a means of attaining ends that are vital and appealing to students but with the understanding of how humans have the experiences they do, and how this understanding is necessary when designing effective education (Dewey, 1938).

Experiential education tries to integrate the life experience of students into the curriculum. Examples of experiential education can be found in a variety of settings, including the following types of programs: wilderness-based adventure, community development, advocacy, art and music, service-learning, study abroad, work internship, and youth development. However, the belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally educative. For Dewey, experience and education cannot be equated to each other (Aedo, 2002).

Dewey added that experience does not go on simply inside a person. It influences the formation of attitudes of desire and purpose. However, every genuine experience has an active side which changes, in some degree, the objective conditions under which experiences are had (Aedo, 2002).

Sound educational experience involves both continuity and interaction between the learner and what is learned. Thus, Dewey's philosophy is that experience arises from the interaction of two principles: continuity and interaction. Dewey's principle of continuity states that all experiences (past and present) are carried forward and influence future experiences and decisions and interaction. Dewey's principle of interaction refers to the objective and internal conditions of an experience (Dewey, 1938).

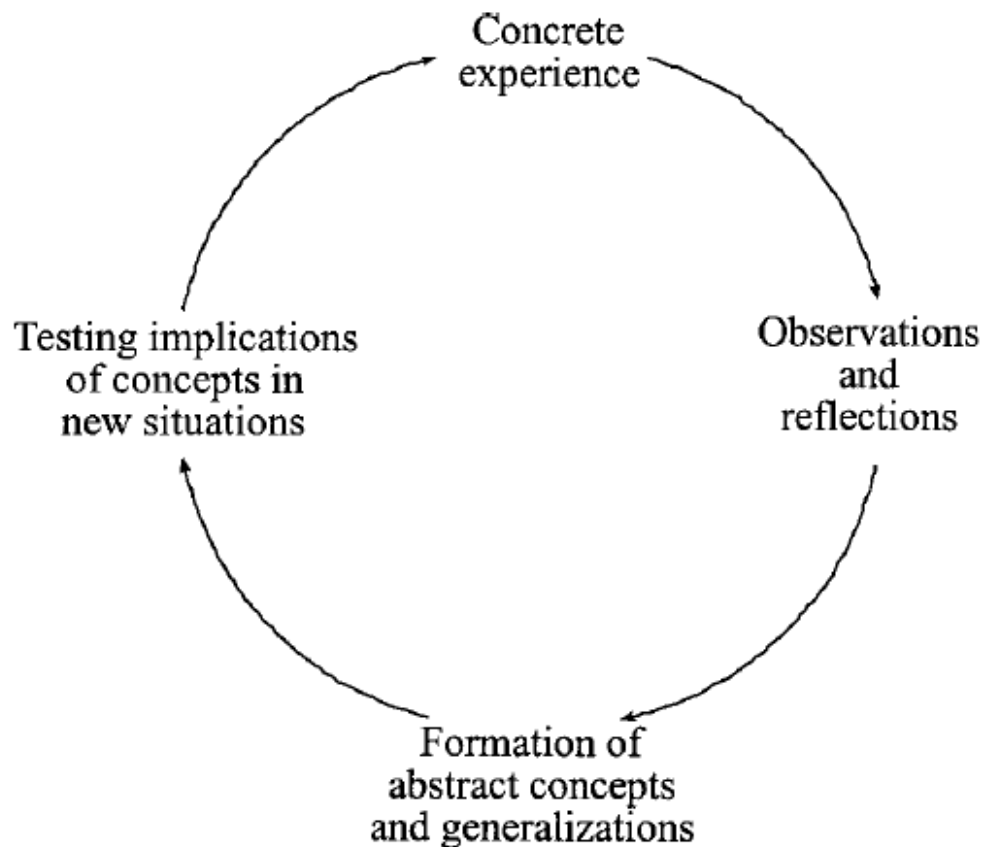
Dewey postulates that experience and education do not directly relate because some experience, such as an experience that prevent or distort growth of further experience, are not educational. The challenge for experience-based education is to provide

learners with quality experiences that will result in growth and creativity in their subsequent experiences. Dewey refers to this principle as the continuity of experience or the experiential continuum, a principle necessary for the philosophy of educative experience (Dewey, 1938).

This study used Dewey's philosophy of experiential learning as its theoretical framework.

2.4.2 Diagrammatic analysis of Dewey's Philosophy of Experiential Learning

Figure 1 Dewey's model of experiential learning



(Kolb, 2006)

2.4.1.1 CONCRETE EXPERIENCE

According to Dewey's diagram of experiential learning, concrete experience is the first stage in experiential learning. Concrete experience occurs when the student's learning

has been fully developed. Vocational Curriculum Report 191 students are able to reach this stage once they enter the world of work for experiential learning. This means that their experience becomes concrete after 3 years of theory and practice, which is only when they apply for their National N Diplomas.

According to Dewey, following the concrete experience, one can be able to make meaningful observations and reflections.

2.4.1.2 OBSERVATION AND REFLECTION

In the diagram above, observation and reflection is the second step. This is a stage where students observe when others are working and reflecting on what they have learned in class as theory. For Vocational Curriculum Report 191 students, they reach this stage when they are on work placement since there are no workshops or simulations rooms in the colleges. They are able to observe, link and reflect on the theory they have as a base to what they are observing.

In addition to what Dewey believed in, Rogers (2006) considered experiential learning “significant” as compared to what he called “meaningless” cognitive learning. In his literature, he stressed that the heart of learning lies in the way we process experience, in particular, our critical reflection of experience. They spoke of learning as a cycle that begins with experience, continues with reflection and later leads to action, which itself becomes a concrete experience for reflection (King, 2011).

From what one has observed, according to Dewey, the student can be able to form concepts and make meaningful generalizations.

2.4.1.3 FORMATION OF CONCEPTS AND GENERALISATION

According to Dewey’s philosophy of experience, as shown in the diagram above, concepts can be formed after observations, and generalisations can be made after the above two steps have been passed. For Vocational Curriculum Report 191, this happens as the first step in students’ learning. They learn concepts in the form of theory

in class, and that theory forms a base for all other steps. Even when they go to the labour market, they relate easily with what they see there, in as much as they cannot do this in their first practical exposure.

For Dewey, after the concepts have been formed, and testing of implications of new concepts can be done.

2.4.1.4 TESTING IMPLICATIONS OF NEW CONCEPTS IN NEW SITUATIONS

This is the very last stage, according to Dewey's diagram, where the concepts that have been formed above are tested into new situations. For Vocational Curriculum Report 191, students are able to put what they have learned into practice once they are on experiential learning. This is during their last 18 months of experiential learning after they have completed their N6. At this stage, they are able to relate well with what they have learned as theory in class and what they will be practicing, because of the base or foundation that was laid by the theory they have learned.

Rogers concurs with Dewey's philosophy of experiential learning as he believed that experiential learning was a far more powerful approach to personal understanding and change than an endeavour resting upon intellectual understanding. He believed that individuals have, within themselves, an actualising tendency and inbuilt proclivity towards growth and fulfilment (Cullata, 2013).

Vocational curriculum needs to incorporate practical training into theory teaching in order to serve its intended purpose. According to Dewey, the learners' experience becomes concrete once they gain all the necessary skills through experiential learning. The presence of a practical component in the curriculum would ensure that students' learning is exciting to them. Vocational education in South Africa is similar to vocational education offered in other countries.

2.5 SUMMARY

Chapter 2 detailed the literature review of Vocational Curriculum internationally as well as Vocational Curriculum Report 191 in South Africa. The next chapter presents the research methodology that was employed in the study.

CHAPTER 3 RESEARCH METHODOLOGY

3.1 INTRODUCTION

Chapter Two captured key concepts and the theoretical framework of the research report. The current chapter is focused on methodology employed in the study and divided into different focus areas. It leads in with the research orientation, followed by the research design and how to ensure research quality. It concludes with the ethical considerations pertaining to the study.

3.2 RESEARCH ORIENTATION: QUALITATIVE

Qualitative research intends to investigate and explore human experience, opinions, motivations, intentions and behaviour. Qualitative research is considered an interactive, inductive, adaptable, holistic and reflexive method of data collection and analysis. Although qualitative research was conventionally limited to participating through observation and interviewing, photographic techniques (including video footage) and historical analysis, the analysis of documentation, text, social drama and ethnological research is seen as an instance of differentiations in the still developing qualitative research field (Berg, 1995).

This study was conducted to investigate whether the Vocational Curriculum Report 191 is relevant, as a curriculum, to the students that choose to study at TVET colleges. It is in such settings that the qualitative approach is most appropriate because qualitative

research endeavors to understand the unique connections in a particular situation such as connections between all stakeholders and the curriculum in this study. This is supported by Bashir, Afzal & Azzem (2008) who are of the view that qualitative research is particularly appropriate for studies in school settings because the active nature of teaching and learning in the classroom setting and subsequent emergence of transformation in behaviour that education and curriculum entail support the qualitative approach to the study of problems or issues pertaining to education.

The following advantages and disadvantages of qualitative research were kept in mind by the researcher throughout the study:

3.2.1 ADVANTAGES

- Facilitates understanding of how and why;
- Enables the researcher to be alert of changes which occur;
- Good at understanding social processes; and
- Consents for complexity and contextual factors.

3.2.2 DISADVANTAGES

- Data collection can be time-consuming;
- Data analysis is challenging and can be complex;
- The researcher has to live with the uncertainty that clear patterns may not emerge; and
- Generally perceived as less credible by 'non researchers'.

Advantages and disadvantages pertaining to this study were kept in mind by the researcher.

3.3 INTERPRETIVISM: THE RESEARCH PARADIGM

Research is generally perceived as a method of describing, interpreting and seeking understanding and possibilities in order to reach a communal meaning. The research study has followed an interpretive paradigm as there were different interpretations of what is real, and no single reality existed, irrespective of individuals. The subject of

interpretivist research is the study of individuals' attitudes, perceptions and interpretation of this study; such perceptions represented the heart of lecturers', students' and former students' conceptions of Vocational Curriculum Report 191 and their understanding and beliefs about the design factors which influence the development of these perceptions.

Interpretivism contends that only through the subjective interpretation of and intervention in reality can that reality be fully understood. The study of phenomena in their natural environment is key to the interpretivist philosophy, together with the acknowledgement that scientists cannot avoid affecting those phenomena that they study. They admit that there may be many interpretations of reality, but maintain that these interpretations are, in themselves, a part of the scientific knowledge they are pursuing (Briggs & Coleman, 2007). Interpretivism was deemed appropriate for this study as all the participants were expected to give rich descriptions of the phenomena based on their different experiences in the Vocational Curriculum Report 191.

Research was perceived as a process of describing, interpreting and seeking understanding of the possibilities in order to reach a shared meaning and not as a search for casual relationships which epitomize positivism. The subject of interpretivist research was the study of individuals' attitudes, perceptions and interpretations which, in this study, represent the essence of students' perceptions of Vocational Curriculum Report 191 as curriculum.

3.4 PHENOMONOLOGY: THE THEORETICAL UNDERPINNING

The researcher has decided to adopt a phenomenological design since the study is about investigating experiences. According to Lester, the purpose of the phenomenological approach is to illuminate the specific and to identify phenomena through how they are perceived by the actors in a situation. In the human sphere, this normally translates into gathering deep information and perceptions through inductive, qualitative methods such as interviews, discussions and participant observations, and representing such information from the perspective of the research participant(s).

Phenomenology is concerned with the study of experience from the perspective of the individual, 'bracketing' taken-for-granted assumptions, and typical ways of perceiving. Epistemologically, phenomenological approaches are based on a paradigm of personal knowledge and subjectivity, and emphasize the importance of personal perspective and interpretation. As such, they are powerful for understanding subjective experience, gaining insights into people's motivations and actions, and cutting through the clutter of taken-for-granted assumptions and conventional wisdom (Lester, 1999).

Descombe describes the key characteristics of the approach of the phenomenologists as its emphasis on describing authentic experiences. He further indicated that rather than directing their attention to explanations and analyses of experiences in an attempt to discover why they occurred, they, instead, focus on trying to depict the relevant experiences in a way that is faithful to the original one as possible (Denscombe, 2003).

For this study, phenomenological approach was used solely because it dealt with things in-depth and did not try to gloss over the subtleties and complications that were essential parts of many possible aspects of the participants' experiences towards Vocational Curriculum Report 191.

With reference to educational research, phenomenography explores how concepts, principles and phenomena are perceived, experienced and understood in specific contexts and is more concerned with the direct exploration of students' experiences of learning (Burton, Brundrett & Jones, 2009). For the purpose of this research, this meant learners had to define Vocational Curriculum Report 191 from their points of view. Lecturers had to also give their own analysis of this curriculum according to their experiences, as well as the college alumni who gave their in-depth analysis of experiences from college as students as well as in the workplace as trainees.

3.5 RESEARCH DESIGN

A research design refers to the plan and structure of the investigation used to obtain evidence to answer the research questions. It provides the procedures for conducting

the study. A research design indicates how the research is set up. It also shows how all parts of the research such as population, sample, methods of collecting data and data analysis strategies are brought together in order to address the research questions (White, 2003).

This study was a case study of the three TVET Colleges in the Eastern Cape where the researcher was looking at the prospects of Vocational Curriculum Report 191 as curriculum. The study was more concerned with outcomes of Vocational Curriculum Report 191, the knowledge and skills that the curriculum entails, how it transfers these skills to the students, as well as the opportunities for employment that these learners have after they have completed their N6 qualification.

3.5.1 CASE STUDY

The case study approach is particularly useful to employ when there is a need to obtain an in-depth appreciation of an issue, event or phenomenon of interest in its natural real-life context (Crowe, 2011). The case study research is aimed at gaining greater insight and understanding of the dynamics of a specific situation. (Nieuwenhuis, 2007)

Shields defines the case study method as a research method which permits in-depth examination of events, phenomena or other observations within the real life context for the purposes of investigating, theory-development and testing, or simply as a tool for learning (Sheilds, 2011). Rule defines a case as a particular instance that refers to the circumstances of situation of a particular person, thing or action (Rule & John, 2011). According to Naele et al, case studies are appropriate when there is a unique or interesting story to be told (Naele, Thaba, & Boyce, 2006).

For the purpose of this study, the researcher has adopted the case study research design in which research methods like questionnaires and interviews were employed in order to determine attitudes, opinions, ideas, values, habits, perceptions, preferences and any other experience that the participants may have that relates to

the Vocational Curriculum Report 191 from the different participants such as lecturers, students and college alumni.

A case study was employed in this study in order to gain a greater insight and dynamics of the Vocational Curriculum Report 191 as curriculum. The researcher used a single case study research strategy to gain an in-depth examination of events, phenomena, or other observations within the real life context for the purposes of investigating, theory-development and testing, of Vocational Curriculum Report 191 as curriculum. The unit of analysis used for the case study was the departments offering Vocational Curriculum report 191 at the three colleges since these are units with distinct boundaries.

Another reason why the researcher chose a case study was that it could be conducted and used for various purposes. Firstly, it can generate an understanding of and insight into a particular instance by providing a thick, rich description of the case, thereby illuminating its relations to its broader contexts. Secondly, it can be used to explore a general problem or issue within a limited and focused setting. Thirdly, it can be used to generate theoretical insights with reference to the case. Fourthly, case studies might also shed light on other similar cases, thus providing a level of generalization or transferability. Lastly, case studies can be used for teaching purposes to illuminate broader theoretical and contextual points (Rule & John, 2011).

According to Mayer, when using case study, it is important to clarify that need should relate to the nature of the problem rather than the ability of the researcher to undertake research with a particular methodology. Within the case study approach, there are a number of disparities. A key feature of the design of case study research is the number of cases included in a study. Generally speaking, it is more valid and generalizable to include multiple cases although there are occasions where a single case is instructive. Exploratory studies are, generally, better served by single cases, that is, in cases where there is no previous theory. A single case can also be used to test an existing,

well-formed theory. Multiple cases are preferable when the purpose of the research is to describe phenomena, to develop and test theories (Mayer, 2011).

Case studies require various data collection methods, whose results hopefully concur in order to establish construct validity. Yin identifies these methods as including:

- direct observation of activities and phenomena and their situation;
 - indirect observation or measurement of process connected phenomena;
 - interviews that can be structured or unstructured;
 - documentation such as written, printed or electronic information about the phenomena; and
 - records and charts about previous use of technology relevant to the case.
- (Yin, 2003)

3.5.2 SELECTION OF CASES

According to Gerring, case study analysis concentrates on a small number of cases that are expected to provide an understanding into a causal relationship across a larger population of cases. In a large-sample, case selection is usually handled by some version of randomization. If a sample consists of a large enough number of independent random draws, the selected cases are likely to be fairly representative of the overall population on any given variables.

He added that if cases in the population are distributed homogeneously across the ranges of the variables, then it is probable that some cases will be included from each important segment of those ranges (Gerring, 2007).

Rule et al. indicated that there are a number of reasons that the researcher should consider when identifying and selecting the case. These include the purpose of the study, the class of cases to which the case belongs, the desired relation between the case and the class of cases, the number of cases to be studied, and practical

considerations such as the accessibility of the site and the availability of data (Rule & John, 2011).

Three TVET Colleges were selected on the basis of convenience on the researcher's side. As stated in Chapter one, time and money were the limitations to this study. Therefore, the researcher found it reasonable to choose the three TVET colleges that would involve the least amount of travelling, the least expenses, and the least difficulty when it comes to access, as the researcher has worked in all the three selected colleges. The following points provide the description of the case:

3.5.2.1 CASE DESCRIPTION

The researcher selected three TVET Colleges in Eastern Cape out of eight that offer Vocational Curriculum Report 191.

3.5.2.1.1 TVET College A

College A has three campuses that offer Vocational Curriculum Report 191 as well as National Certificate Vocational in Business Studies, Engineering as well as Farming Management. The college was formed as a result of a merger between three Technical Colleges in 2000.

3.5.2.1.1.1 ADVANTAGES OF URBAN COLLEGES

- The college is well resourced;
- Easily accessible;
- There are a lot of firms and companies within its proximity;
- They have a better chance of attracting students with better marks;
- Placement of student is not that difficulty; and
- Partnership with the industry and institutions of Higher learning is easy.

3.5.2.1.1.2 DISADVANTAGES OF URBAN COLLEGES

- Accommodation is limited;

- Close relationship with the industry is possible; and
- Lecturing staff turnover is high due to the opportunities that are available for them in other sectors.

3.5.2.1.2 TVET College B

This TVET College is located in an urban area of the Eastern Cape and has four Campuses where Vocational Report 191 is being offered at one campus for both Engineering and Business Studies. It is a well-resourced college and represents the previously advantaged (This is a former white institution).

3.5.2.1.3 TVET College C

TVET College C is located in deep rural areas and has four campuses with one satellite campus. It offers both the National Certificate Vocational and Curriculum Report 191 in all its campuses. It was formed as a result of a merger between two former Technical colleges.

3.5.2.1.3.1 ADVANTAGES OF RURAL COLLEGES

- Staff turnover rate is very low;
- Most of the lecturing staff is experienced;
- There is a manageable number of student in each class; and
- Throughput and retention rate of students is high.

3.5.2.1.3.2 DISADVANTAGES OF RURAL COLLEGES

- Resources are not enough
- Only government departments and small organisations are located within its proximity;
- Access is not easy as some campuses are in deep rural areas; and
- Student placement is not as functional as it should be.

3.5.3 SELECTION OF PARTICIPANTS WITHIN THE CASE

Participants to this study were selected purposefully to give the first-hand experience and meaningful information by using the simple random sampling method. The selection was also influenced by availability and willingness to participate in the study. The choice of respondents was driven by the search to illuminate the constructs being explored rather than to seek representativeness.

The population for this study came from the eight TVET colleges in the Eastern Cape as they all offer Vocational Curriculum Report 191. Sampling of participants came from the Vocational Curriculum Report 191 students, Vocational Curriculum Report 191 lecturers as well as former Vocational Curriculum Report 191 students completing their studies at the workplace in order for them to obtain a National N Diploma.

Out of eight TVET Colleges in Eastern Cape, three TVET Colleges were selected for this study. In each selected TVET College, one campus that offers Vocational Curriculum Report 191 in Business Studies, Engineering Studies or Utility Studies was selected. Within each Vocational Curriculum Report 191 programme selected, three Vocational Curriculum Report 191 students were randomly selected from the official signing register, two Vocational Curriculum Report 191 lecturers were randomly selected from the staff attendance register; two former college students were randomly selected from the college database from each campus. Arrangements with regard to time and venue were made before the interviews.

Vocational Curriculum Report 191 students were selected from the different levels of Vocational Curriculum Report 191 courses, namely, N4, N5 or N6 to represent the interests of the students in those levels. Two former college students were selected from different courses. Experienced staff members were also selected to each give their unique experiences regarding the prospects and dynamics of Vocational Curriculum Report 191 as curriculum.

3.5.4 ADVANTAGES AND DISADVANTAGES OF THE CASE STUDY APPROACH

The following subheadings highlight the advantages and disadvantage of the case study approach in research. Shields (2009) identified the following advantages and disadvantages of a case study:

3.5.4.1 ADVANTAGES

- Provides context-dependent or practical knowledge as opposed to context-independent or theoretical knowledge which social science has difficulty with;
- It is less limiting than other methods (a degree of openness or freedom of movement in the beginning);
- Narrative is easily retained;
- Provides a qualitative leap in the learning process (second only to practical experience); and
- Has emphasis on “learning” vs. “proof”

3.5.4.2 DISADVANTAGES

- Data is often distinctive to the studied event or process;
- It is difficult to establish validity or reliability (although a high degree of conceptual validity is one of the strengths of case studies);
- Case selection might be biased;
- Conclusions are highly subjective; and
- It is general not predictive (Shields, 2009)

The above advantages and disadvantages were kept in mind by the researcher during the study.

3.6 SAMPLING

Mouton defines a sample as a group of subjects or individuals selected from a large group of persons referred to as a *population*. The key aspect of sampling is representativeness (Mouton, 1996). According to White, sampling means to make a selection from the population in order to identify the elements or people to be included in the research. A sample should have approximately the characteristics of the population relevant to the research in question (White, 2004).

The population for this study came from the TVET College students, lecturers, as well as former college students in the Eastern Cape. There are eight TVET Colleges in the Eastern Cape, and for the purpose of this study, three colleges were selected based on the location, as the researcher funded the studies himself. These three TVET Colleges that were selected represented all the eight colleges in the Eastern Cape. In each of the three TVET Colleges selected, one campus was purposively selected based on the researcher's experience in the TVET college sector.

The sampling method that the researcher chose added confidence to findings through a replication strategy which serves to strengthen the precision, validity and stability of the findings. The researcher employed random sampling for the purpose of selecting his sample of participants from the population of lecturers, Vocational Curriculum Report 191 students, and college alumni in each campus.

Random sampling means members are selected at random from the sampling frame. Before this can be done, another important decision has to be taken, that is, how big the sample will be. This determines the sampling fraction, that is, what proportion of the population is to be selected in order to provide a sample of the desired size (Briggs & Coleman, 2007).

The sampling frame that was used to draw the sample from was the class attendance register of Vocational Curriculum Report 191 students, official attendance register of the Vocational Curriculum Report 191 lecturers, as well as the college database of the college alumni. The sample was randomly selected from this sampling frame.

In each TVET College campus, the sample came from three NATED students and was selected from the college attendance register; two NATED lecturers were selected from the official signing register, and two former NATED students (whom have completed their N6) doing their in-service training were selected from the college database.

Sampling of the participants was done as follows:

- The researcher randomly selected the participants from the registers and database of the selected college based on his experience;
- Possible participants were selected after the researcher pre-selected participants according to the numbers required by this study, as explained above; and
- The research study was explained to the prospective participants who were on the shortlist, and they were asked if they wanted to take part in the research.

With the help of the campus management of the selected campus in each college, it was easy for the researcher to gain an access to the official signing register for the staff, the class registers for the current students, as well as the database for the college alumni.

3.7 METHODS OF DATA COLLECTION

3.7.1 QUESTIONNAIRES

According to Mgojo, a questionnaire is an instrument with open or closed questions or statements to which a respondent must respond. He added that a questionnaire is relatively economical, has the same questions for all subjects, can ensure anonymity and contains questions written for a specific purpose (Mgojo, 2013).

The researcher has employed questionnaires in this study because they offer an extremely rapid and confidential means of collecting a large number of fairly detailed responses.

Burton et al., defines a well-structured questionnaire as one where the researcher has done the work so as to reduce the effort on the part of the respondent. They prefer a highly structured questionnaire which restricts the possible responses, speeds up the completion, collation and analysis and makes the whole process much more manageable for all concerned. They suggest that the researcher use open-ended

questions, and if there is a need, the researcher needs to ask questions such as: is there anything else you can tell me that was not covered elsewhere? (Burton, Brundrett & Jones, 2009).

The researcher kept in mind the following guidelines of developing questions, as stated by Denscombe:

- Avoid the use of leading questions;
- Avoid asking the same question twice in a different fashion;
- Make sure the wording is completely clear;
- Be sure to include enough options in the answer;
- Pay attention to the way the questions are numbered;
- Do not make unwarranted presumptions in the questions; and
- Avoid words or phrases which might cause offence (Denscombe, 2003).

In this research, the wording of the questions was clear and unambiguous, and they were arranged in the order they were to appear. The instructions were easy to understand, and the researcher ensured that there were no complex or sensitive questions. The researcher also kept in mind that a well-organized format and appearance of a questionnaire provides a favourable first impression and results in co-operation and serious, conscientious responses (**See appendix B**).

When the researcher was developing questions in each questionnaire, he kept in mind that he needed to ask only those questions which were completely vital for the research. He was rigorous in weeding out any duplication of questions. He also made the task of responding to the questionnaires as straightforward and speedy as possible.

For the purpose of this research, one questionnaire was designed for each group of participants. That means students had their own questionnaire, lecturers had their own and former students had their own. Questionnaires for lecturers and former students were divided into three sections. The first section represented the biographical

information of the respondents. The second section represented the experience they have with the Vocational Report 191 Curriculum. The third section dealt with the actual questions relating to skills in Vocational Curriculum Report 191, employability of students as well as the relevance of the curriculum to the real world.

For the students' questionnaire, there were two sections. The first one represented the biographical details of the students. The second one dealt with the skills they had gained in the curriculum as it is delivered in class, as well as the expectations following completion of their N6.

Denscombe identified the following advantages and disadvantages of questionnaires.

3.7.1.1 ADVANTAGES

- They are inexpensive;
- They are easier to organize; and
- Questionnaires supply standardized answers.

3.7.1.2 DISADVANTAGES

- Pre-coded questions can be frustrating for respondents and thus, deter them from answering;
- Pre-coded questions can bias the findings towards the researcher's, rather than the respondent's way of seeing things; and
- Questionnaires offer little opportunity for the researcher to check the truthfulness of the answers given by the respondents (Denscombe, 2003).

Through the use of questionnaires in this study, all advantages were catered for, however, the researcher experienced difficulties with respondents not answering all the questions.

3.7.2 INTERVIEWS

The researcher employed interviews as qualitative instruments for collecting data from the participants. The reason for using interviews in this study was to gain firsthand information about people's opinions, beliefs and attitudes, as well as possible reactions towards the outcomes of the Vocational Curriculum Report 191 as curriculum. Semi-structured interviews were utilized for this study.

McNamara indicated that interviews are particularly useful for getting the story behind a participant's experiences. The interviewer can pursue in-depth information around the topic (McNamara, 1999).

Interviews for this study took place in the form of semi-structured in-depth interviews. Durance et al. explains in-depth interviews as formal or informal discussions with an individual to gather in-depth information on a specific matter. This instrument of data collection has provided an excellent opportunity to probe, explore and establish personal contact with participants to elicit rich and detailed responses. During in-depth interviews, questions were flexible and were tailored to suit all the participants. Interview questions could be repeated or their meanings explained in case the respondents did not understand what was asked (Durance & Karen, 2005).

Denscombe defines the semi-structured interviews as interviews where the interviewer still has a clear list of issues to be addressed and questions to be answered. However, the interviewer is prepared to be flexible in terms of the order in which the topics are considered, and perhaps more significantly, to let the interviewee develop ideas to speak more widely on the issues raised by the researcher. The answers are open-ended, and there is more emphasis on the interviewee elaborating on points of interest (Denscombe, 2003).

Interviewees were asked open-ended questions during the interview in order for them to give rich and detailed responses and also to allow room for flexibility of the participants. Questions were relevant, simple and the researcher tried by all means to

put the participants at ease. Questions were repeated when need arose to ensure that the participants understood and gave relevant answers.

The same standardized, open-ended questions were posed to all interviewees. This standardization increased the reliability of the information obtained. This approach also facilitated quicker interviews that were more easily analyzed and compared. One of the selection criteria employed in selecting the participants was knowledge, whereby respondents needed to be familiar with the topic.

Field notes were taken during the interviews or immediately afterwards whenever the opportunity arose. The researcher made sure that he recorded the notes on a script. By taking the notes, the researcher ended up with permanent evidence that he used to refer to. Apart from recording the interviews, the researcher recorded any non-verbal communication he observed, and this helped him during the data analysis. As soon as possible after the interview, notes were written up, including the physical context of the interview.

The researcher utilized Denscombe's (2003) guide of interview skills. The aforementioned author maintains that a good interviewer is:

- Attentive;
- Sensitive to the feelings of the informant;
- Able to tolerate silences during the talk, and knows when to shut up and say nothing;
- Adept at using prompts;
- Adept in using probes; and
- Non-judgmental (Denscombe, 2003).

The following steps were followed during the interviews:

- Appointments were made with the campus managers in each campus two weeks before the interviews;

- A separate room on campus away from any disturbance was chosen for interviews;
- Class attendance registers and staff attendance registers were used for sampling and participants were selected on the basis of the researcher's experience and knowledge gained by being personally involved in the Vocational Curriculum Report 191 curriculum;
- In the interview room, a chair and a desk were arranged in a manner that put the participant at ease; and
- Water jugs and glasses were available for the interviewees.

Prior to the interview, the researcher:

- Thanked the participants for their time and willingness to participate in the study;
- Reminded the participants about their guaranteed anonymity and emphasized that they were free to withdraw from the study if they wished to do so;
- Reminded them that the interview will be recorded;
- Informed them that notes would be taken by the researcher during interview; and
- Explained that they should talk freely.

With regards to monitoring progress during the interview, the researcher:

- Identified the main points being stated by each interviewee and the priorities as expressed by the interviewee;
- Looked for the underlying logic of what was being said by the informant. That means the interviewer needed to read between the lines;
- Looked at the inconsistencies in the position being outlined by the respondent;
- Picked up clues about whether the informant's answers involved an element of boasting or are answers intended to please the interviewer;

- Was consistently on the lookout for the kinds of responses that were not asked;
- Got a feel for the context in which the discussions were taking place;
- Kept a suitable level of eye contact throughout the interviews and made note of non-verbal communication to assist with interpretation of the interview talk (Denscombe, 2003).

The interview came to a close in some orderly fashion guided by the interviewer. Having kept an eye on the time and having ensured that most of the required areas for discussion have been covered, the interviewer drew events to a close by making sure that the interviewee was invited to raise any points that they thought still needed to be covered that have not been covered.

The transcriptions of the interviews were printed with large margins and increased line spacing for the researcher to add notes and assign codes to different sections of text in the transcript document. Different coloured pens, highlighters and stickers were available in the process for coding (Rule & John, 2011).

3.7.2.1 ADVANTAGES

The researcher kept in mind the following advantages of interviews as suggested by Woods.

- The primary advantage of in-depth interviews is that they provide much more detailed information than what is available through other data collection methods such as surveys;
- Woods put emphasis on the standardization of at least some of the questions to increase data reliability; and
- They also may provide a more relaxed atmosphere in which to collect information; people may feel more comfortable having a conversation with you as opposed to filling out a survey (Woods, 2011).

3.7.2.2 DISADVANTAGES

- Interviews may be experienced as more intrusive than quantitative approaches;

participants may say more than they intended to say, and later regret having done so;

- Interviews may be more reactive to personalities, moods, and interpersonal dynamics between the interviewer and the interviewee than methods such as surveys;
- Training interviewers and conducting interviews can be expensive and time-consuming because qualitative interviewing requires considerable skill and experience;
- Analyzing and interpreting qualitative interviews is much more time-consuming than analyzing and interpreting quantitative interviews; and
- They are more subjective than quantitative interviews because the evaluator/researcher decides which quotes or specific examples to report. (Sewel, 2005).

During the interviews, the advantages and disadvantages of interviews that are detailed above were kept in mind by the researcher, and it was realized that analyzing and interpreting the interviews was time consuming.

3.8 DATA ANALYSIS

Huberman et al. state that qualitative data analysis involves a systematic process of sifting, charting and sorting materials according to key issues and themes. Most analysis in qualitative research is facilitated through a process of continuous interaction between the researcher and the participants involved in the investigation. The information is interpreted and explained predominantly in terms of words without the use of standardized instrumentation (Huberman & Miles, 2002).

A system of organizing data was developed before data collection began, and using this system during the data collection helped the researcher to manage and monitor the process. Data collected was not reported in raw form; it was analyzed. During data analysis, all the information in the field notes were read and re-read to make sure that no information was left out. During this process, coding of data was also done.

3.8.1 HANDLING DATA MANAGEMENT

The researcher recorded and took field notes during the interviews. Thereafter, the interviews were transcribed to generate a full written version of the interview. This process of transcribing was the first step in qualitative analysis.

The researcher kept in mind that transcribing an interview is very time-consuming.

The following strategies were employed:

- Writer's prose: the researcher kept in mind that the notes were not public documents, so they could be biased and unguarded;
- Inscription and transcription: the researcher included descriptions of events and activities (inscriptions) and records of each informant's own words and dialogues (transcriptions);
- Recalling and ordering: putting things in chronological order, the researcher used the key turning points, significant events, and was systematic in terms of topics of interest;
- Stance: the researcher had to distance himself from his respondents in order to remain neutral;
- Point of view: the researcher needed to decide if the notes will be in the first person (I did this, I saw that) or the third person (She did that, they did that together, he saw this) or a combination of both; and
- Emotions: the researcher included accounts of his own emotions and feelings about the events or about the research in general. These were useful because they mirrored those of the informants, gave analytical leads later, and were used to identify biases and prejudices (Gibbs, 2007).

3.8.2 ANALYSIS AND INTERPRETATION OF DATA

Data analysis is a process of understanding and interpreting the contents of the qualitative data and finding common issues. The process of data analysis and interpretation can be tedious and time-consuming (Gay & Airasian, 2000).

The data came from both the interviews and the questionnaires, meaning that before it was analyzed, it needed to be arranged and organized.

3.8.2.1 INTERVIEWS

Transcripts were typed on A4 pages, and this helped when the material was coded, and stored. When writing field notes, an extra column was provided on the right hand side so that the researcher could add notes next to the relevant words. Each piece of raw material was identified with a unique code for reference purposes. The researcher made a backup copy as well as of all the original material as the data is irreplaceable. During data analysis, the researcher kept in mind the following guidelines as suggested by de Vos et al.

- Transcribe the text in sufficient detail;
- Read and re-read the text in order to become thoroughly familiar with it;
- Critically evaluate the meaning of the words used by the subjects;
- The researcher should be attentive to words and phrases in the participant's own vocabulary that captures the meaning of what they do or say;
- Allow for the discovery of any and all possible meanings;
- Identify the different topics or themes and code those encountered by means of a line-by-line analysis of each interview transcription; and
- The researcher has to look for underlying similarities between the different themes (de Vos, Strydom, Fouche, & Delpont, 2011).

As Groenewalt suggested, the following six stages of generic framework for analyzing data from a qualitative study in phenomenology were used: Bracketing and phenomenological reduction, Delineating units of meaning, Clustering of units of meaning to form themes, Summarizing each interview, validating it and where necessary, modifying it, Extracting general and unique themes from all the interviews

and making composite summaries and lastly, representing and visualizing (Groenewalt, 2004). These stages helped the researcher to extract and present only the data that was relevant to answer the questions that were posed to the study.

The researcher was aware that not all the data gathered during this study could be used, and therefore, he reduced the data to a manageable size. He reduced the data on the basis of what he knows to be important and relevant. Briggs et al. indicated that researchers are entitled to make sense of the data they are handling as they have to account for what they are doing and justify their choices (Briggs & Coleman, 2007). As the data analysis in qualitative study takes place simultaneously with data collection, for this research, it focused on the following:

- Becoming familiar with data and identifying main themes;
- Examining data in-depth to provide a detailed description of the setting, participants and activities;
- Categorizing of data into themes; and
- Interpreting and synthesizing the organized data into general conclusion (White, 2004).

3.8.2.2 QUESTIONNAIRES

Questionnaires were sent to the college alumni three weeks prior the data collection via e-mail. The researcher, however, experienced difficulty in collecting the questionnaires. On receipt of each questionnaire, they were re-typed, and themes were developed. Since in this study, similar questions were posed to all the participants, questionnaires were analyzed in the same way as the interviews.

3.9 RESEARCH QUALITY

3.9.1 VALIDITY

According to Briggs et al., validity determines whether the research truly measures that which it was intended to measure or measures how truthful the research results are.

Validity was used to judge whether the research accurately described the phenomenon that it was intended to describe.

The researcher ensured that the information gathered in this research is truthful, accurate, authentic, genuine and sound. He was fully aware that when it came to phenomenographical approach, it was the analysis of interviews which posed a greater threat to the validity of the data than their conduct. The understanding and interpretation of phenomena was only as incisive as the conceptual map of the researcher.

3.9.1.1 INTERNAL VALIDITY

Internal validity is the quality of an experimental design such that the results obtained are attributed to the manipulation of the independent variable (VanZyl, 2011).

For the solidification of the legitimacy of this study, the researcher was reminded of the following imperative questions:

- Was the research being conducted a true reflection of the intended research?
- To what extent did other researchers test the discovery previously?
- Are the events and settings studied uncontrived and unmodified by the researcher's presence and actions?
- Was the qualitative research paradigm confirmed?
- Did the research epitomizes the substance or an occurrence that was defined as experience seen by all the participants, in relation to the research procedure?; and
- Was the data compilation technique open and accommodating? (Golafshani, 2003)

Triangulation was perceived as a major tool for improving the validity of this study. It was used as a strategy that would help to eliminate bias and at the same time, dismiss the plausible rival explanations about some social phenomena.

Data triangulation refers to the use of more than one data source, and includes the use of more than one individual and more than one time frame. For the purpose of this study, students, former students and lecturers were the source of data. The timeframe for the collection of data was over one semester. Triangulation means comparing various sources of evidence in order to determine the accuracy of information or phenomena. It is another way of cross-checking the evidence or data to establish the extent of its validity.

According to Briggs et al., triangulation refers to the use two or more respondents in the study of some aspects of human behavior. The use of multiple respondents in data collection contrasts with ubiquitous but generally more vulnerable single-method approach that characterizes so much of research in the social science (Briggs & Coleman, 2007).

In this study, triangulation through the use of different respondents, was used in order to enrich the descriptions of students', lecturers', and alumni's perceptions about their experiences of Vocational Curriculum Report 191 which they were learning, taught or practiced, to seek corroboration of the findings with their statements about the phenomena.

Triangulation was used as the principal tool to ensure the internal validity of the study. Internal validity ensured that the researcher and the respondents shared the same understanding in linguistic terms.

3.9.1.2 EXTERNAL VALIDITY

External validity of a case study approach is such that the results can be generalized from the original sample to another sample and then, by extension, to the population from which the sample originated. (VanZyl, 2011)

Validity of the findings was checked using Denscombe's suggested questions below:

- Do the conclusions do justice to the complexity of the phenomenon being investigated and avoid oversimplifications, while also offering internal consistency?
 - Has the researcher's self been recognized as an influence in the research but not a cause of biased and one-sided reporting?
 - Have the instances selected for investigation been chosen on explicit and reasonable grounds as far as the aims of the research are concerned?
 - Have alternatively possible explanations been explored?
 - Have the findings been triangulated with alternative sources as a way of bolstering confidence in their validity?
 - Have the research findings been fed back into informants to get their opinion on the explanation being proposed?
 - How far do the findings and conclusion fit with the existing knowledge on the area, and how far do they translate to other comparable situations?
- (Denscombe, 2003)

3.9.2 RELIABILITY

Reliability refers to the extent to which results are consistent over time, and an accurate representation of the total population under study is referred to as reliability. If the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable (Golafshani, 2003). For this study, reliability refers to random error coupled with careful documentation.

Reliability was tested in research methods to see if a measure provided the same results on two or more occasions when the assumption was made that the object measured had not changed. If a measure or a deed of measures, when repeated, gives a similar result, it will be possible to say that it is reliable. In this case study, the objective of reliability was to make sure that if a later investigator can follow exactly the same procedures as described by an earlier investigator and conducted the same case study all over again, the later investigator should arrive at the same findings and

conclusions. The main aim of reliability was to minimize the errors and biases in the study.

To ensure reliability in qualitative research, examination of trustworthiness is crucial. While establishing good quality studies through reliability and validity in qualitative research, the “trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability” (Bashir, Afzal, & Azeem, 2008).

In this study, the trustworthiness of the data collected was established through credibility, reflectivity, interview techniques, the authority of the researcher and referential adequacy, structural coherence, transferability of data and conformability. The drafted version of the data was read to the participants to increase the trustworthiness of the data.

3.9.3 TRANSFERABILITY

Transferability in qualitative research is the degree to which the results of a research can apply or transfer beyond the bounds of the project or study. Transferability implies that results of the research study can be applicable to similar situations or individuals. The knowledge which obtained in context may be relevant in another research, and investigators who carry out research in another context may be able to utilize certain concepts which were initially developed (Management, 2015).

The researcher adopted Indonesia's suggestions (Indonesia, 2012) on how to transcribe information during the interviews. He suggested that firstly, researchers should provide data identity (e.g. data code & number, data collection date, involved participants and data collection methods). This information enables researchers to easily retrieve the data and allows for tidily organized data management. As exposure to participant's identity is much ethically concerned, a researcher is advised to assign a pseudonym to the participant's name. This ethical issue needs to be spelled out before interview sessions commence.

Secondly, researchers had better leave space for transcription symbols to give the reader with a set of [spoken] conventions for displaying actions and utterances in naturalistic situations. These symbols help the reader to read talking data.

Thirdly, a researcher should structure transcripts into a line-by-line dialogue to show turn-by-turn dialogic interaction between participants and himself.

Furthermore, he added that the names of participants will be coded by one or two letters possibly along with one or two numbers to allow more space for dialogue. If participants and the researcher wish to verify information taken from a transcript, they will easily double-check the information in the original transcript. Moreover, a researcher has to leave space for data feedback, verification, and accuracy when member-checking is done. Thus, the features of a transcript layout assist researchers to better analyze particular information and re-examining this information for further emerging findings. (Indonesia, 2012).

To enhance the reliability of the research, the researcher ensured that the transcriptions he organized do not include any obvious mistakes. He checked the information three times, and this helped him to be familiar with the data although it was time-consuming (Gibbs, 2007).

3.9.4 CONFIRMABILITY

Confirmability refers to the degree to which the research results can be confirmed or corroborated by others. There are a number of strategies for enhancing confirmability. The researcher can document the procedures for checking and re-checking the data throughout the study. Another researcher can take a “devil’s advocate” role with respect to the results, and this process can be documented. The researcher can actively search for and describe negative instances that contradict prior observations. After the study, one can conduct a data audit that examines the data collection and analysis procedures and makes judgements about the potential for bias or distortion (Bashir, Afzal, & Azeem, 2008).

3.10 ETHICAL CONSIDERATIONS

Ethics is rooted in the ancient Greek philosophical inquiry of moral life. It refers to a system of principles which can critically change previous considerations about choices and actions. It is said that ethics is a branch of philosophy which deals with the dynamics of decision-making concerning what is right and wrong (Bashir, Afzal, & Azeem, 2008).

The following points briefly discuss how the researcher considered research ethics in the study.

3.10.1 AUTONOMY AND RESPECT FOR DIGNITY

The issue of confidentiality and anonymity is closely connected with the rights of beneficence, respect for the dignity and fidelity. Anonymity is protected when the subject's identity can be linked with personal responses (Fouka & Mantzorou, 2011). According to Rule et al., this principle embraces the idea that personal autonomy (self-determination) should not be compromised by the research. It translates into the need for the researcher to respect and protect any individual's right to be fully informed, to decide whether to participate or not and to choose to withdraw from the study.

He further translated these principles into the following guidelines for research practice:

- Ensuring participants' privacy, confidentiality and anonymity;
- Gaining permission from the gatekeepers and informed consent from participants; and
- Not using deception to secure participation (Rule & John, 2011).

The researcher kept in mind that dignity and worth of participants should be considered and respected at all times during the study. Ethical consideration was applied throughout the study and not only during the interviews.

3.10.2 CONFIDENTIALITY

The researcher had to put in place means of ensuring that all records from the research study remained confidential. All records of the research were kept confidential, and only the researcher knew who had taken part in the study. All participants were given a number or alphabet, and those were only known by the researcher. Nothing was written in the final report that could, in any way, identify a particular participant.

Confidentiality was ensured in the following ways:

- Private data identifying the participants was not reported;
- For publication of any information potentially recognizable to others, permission from the participant was obtained;
- The researcher made it clear to the participants, before interviewing them, who would have access to the information after completion of the study; and
- Interviews were not published but were only utilized in data presentation.

3.10.3 INFORMED CONSENT

According to Fouka et al., consent involves the procedure by which an individual may choose whether or not to participate in a study. Informed consent is the major ethical issue in conducting research. It means that a person knowingly, voluntarily and intelligently, and in a clear and manifest way, gives his consent. It seeks to incorporate the rights of autonomous individuals through self-determination. It also seeks to prevent assaults on the integrity of the participant and protect personal liberty and veracity. Of course, individuals can make informed decisions in order to participate in research voluntarily only if they have information on the possible risks and benefits of the research. Free and informed consent needs to incorporate an introduction to the study and its purpose as well as an explanation about the selection of the research subjects and the procedures that will be followed. It is essential to describe any physical harm or discomfort, any invasion of privacy and any threat to dignity as well as how the subjects will be compensated in that case (Fouka & Mantzorou, 2011).

The researcher gave his informants information about the research that is relevant to their decisions to assist him; he conducted the research in a language that they were familiar with (without being too technical). He had to obtain a written consent, and for participants who were not competent (minor), he obtained consent by proxy (Gibbs, 2007).

The researcher's task was to ensure that participants had a complete understanding of the purpose and methods to be used in the study, the risks involved, and the demands placed upon them as participants. The participants were also made to understand that they have a right to withdraw from the study at any time.

The nature of the study was fully disclosed and explained to the informants. Self-determination depends on full disclosure. The explanation included the research question, aim and purpose of this study, and these were discussed with the participants who agreed to participate. The nature of the study, time, commitment and involvement of the informants were explained.

3.10.4 JUSTICE

According to Gomm et al., the principle of justice is based upon the duty of universal fairness or equity; the duty to treat people as ends – never simply as a means to an end; the duty to avoid discrimination, abuse, or exploitation of people on grounds of race, age, sexual orientation, class, gender, or religion (Gomm, 2000).

The principle of justice requires of the researcher that any personal rule of action that he or she uses should, in principle, be capable of being universalized for all people. All participants were treated fairly, including individuals who declined to participate in or withdraw from the study.

3.10.5 BENEFICENCE

The principle of beneficence (or non-maleficence) is based upon the duty to do well and avoid doing harm to others (Gomm, 2000).

The Belmont Report outlined the following principles of beneficence:

- Do no harm;
- Maximize benefits/minimize risks; and
- Do no act of kindness or charity, but a concrete obligation (De Landa, 2009).

The researcher employed the principle of reciprocity that says, 'do unto others as you would have them do unto you', in ensuring that all the participants were protected and were free from any harm.

Although physical harm was not possible for this study, psychological harm was possible in the sense that if the participants were not prepared for the fact that they could be interviewed more than once or, where there is a need, and requested to clarify certain issues in the information they had given, this could harm them psychologically. The researcher had to ensure that at every stage in the research process, the research participants, their organizations and communities were not harmed in any way. He needed to meet the research obligations such as providing feedback, follow-up or intervention if this was negotiated (Rule & John, 2011).

3.10.6 BRACKETING

Bracketing is a method used by some researchers to mitigate the potential deleterious effects of unacknowledged preconceptions related to the research and, thereby, to increase the rigor of the project. Given the sometimes close relationship between the researcher and the research topic that may both precede and develop during the process of qualitative research, bracketing is also a method to protect the researcher from the cumulative effects of examining what may be emotionally challenging material. A lengthy research endeavor on an emotionally challenging topic can infuse the researcher with its inherent challenges, render continuing research an arduous endeavor and, in turn, skew the results and interpretations. While bracketing can mitigate adverse effects of the research endeavor, importantly, it also facilitates the process of the researcher reaching deeper levels of reflection across all stages of

qualitative research, namely: selecting a topic and population, designing the interview, collecting and interpreting data, and reporting findings. The opportunity for sustained in-depth reflection may enhance the acuity of the research and facilitate more profound and multifaceted analysis and results (Tufford & Newman, 2010).

The researcher bracketed all the information he knew about Vocational Curriculum Report 191 since he had been lecturing in TVET colleges, as well as all that he learnt from the literature. Information from each participant was also bracketed as the researcher interviewed other participants. Bracketing was implemented throughout the study, and each phase of the research process was approached carefully using bracketing and intuition in order to avoid bias, and approach the phenomenon with an open mind.

3.11 SUMMARY

A qualitative case study design was employed to carry out the investigation into the gap between Vocational Curriculum Report 191 and the needs of the labour market. The methodology adopted in this study was highlighted in this chapter. The research approach was described and supported by theoretical overview, and research questions provided motivation for the study. Data from the questionnaires and interviews were checked against the literature reviewed in Chapter Two. In Chapter Four, data analysis is presented.

CHAPTER 4

DATA PRESENTATION

4.1 INTRODUCTION

Chapter 3 detailed the research methods that were employed in this study. In this Chapter, the data that was collected according to the data collecting methods mentioned in Chapter 3, is presented, analyzed and discussed. This Chapter presents the data that the researcher collected in order to understand Vocational Curriculum Report 191 as curriculum in three Eastern Cape TVET Colleges. The researcher presents and analyses the data collected from the questionnaires that were sent to the former students in each college, interviews of lecturers and students of the three TVET Colleges.

4.2 DEMOGRAPHIC CHARACTERISTICS OF ALL PARTICIPANTS

The demographic information that was used in this study was the course, occupation, gender, semester of study, as well as the number of years in employment. This

biographical information is key to this study because it gives a clear picture of the experience that the respondents have regarding the answers they give to this study. Interviews were conducted in all the three colleges where lecturers and students to get in-depth information on the questions as they appear in the questionnaires. Section 4.2.1 to 4.2.3 represents the biographical information of the respondents that were interviewed in this study per college, whilst 4.2.4 to 4.2.6 presents the biographical information of participants that were sent questionnaires.

4.2.1 TVET COLLEGE

Table 3: College A Lecturers

Lecturer	Age	Gender	Course	Lecturing experience
Number 1	33	Male	Financial Accounting	3 Years
Number 2	27	Female	Labour Relations	6 Years

Two lecturers were interviewed in this college, one male and one female. They both teach Vocational Curriculum Report 191 in different fields. Lecturer 1 is a male, 33 years old, has lectured Financial Accounting in Financial Management programme for 3 years at the college. Lecturer B is a female lecturer, 27 years old and has lectured Labour Relations in Human Resources Management programme for 6 years at the college. The participants in this college are experienced lecturers.

Table 4: College A Students

Student	Age	Gender	Course	Level
Number 1	28	Female	Human Resources	N6
Number 2	23	Male	Financial Management	N6
Number 3	23	Female	Business Management	N6

Three Report 191 students, two females and one male were interviewed in this college. Student 1 was a female student aged 28 years, registered for Human Resources Management N6. Student 2 was a male student, 23 years old doing Financial Management N6. Lastly, student 3 was also a female student, 23 years old and was doing Business Management N6.

All students who participated from this college are doing N6.

4.2.2 TVET COLLEGE B

Table 5: College B Lecturers

Lecturer	Age	Gender	Course	Lecturing experience
Number 1	34	Male	Mechanical Engineering	5 Years
Number 2	31	Male	Civil Engineering	2 Years

In this college, two male lecturers were interviewed, and both teach in Vocational Curriculum Report 191. Lecturer 1 was 34 years old, lecturing in Mechanical Engineering for 5 years, while lecturer 2 was a 31-year-old lecturer of Civil Engineering for 2 years.

In this college, all engineering lecturers were males. There was a gap of 3 years in terms of lecturing experience between these lecturers.

Table 6: College B Students

Students	Age	Gender	Course	Level
Number 1	21	Male	Civil Engineering	N6
Number 2	26	Female	Electrical Engineering	N5
Number 3	25	Female	Civil Engineering	N6

Three students were interviewed - two females and one male. Student 1 was a 21-year-old male registered for Civil Engineering N6. Student 2 was a 26-year-old female student registered for Electrical Engineering N5, whilst the third student was also a female of 25 years old - civil engineering N6 student.

4.2.3 TVET COLLEGE C

Table 7: College C Lecturers

Lecturer	Age	Gender	Course	Lecturing experience
Number 1	27	Male	Financial Accounting	6 Years
Number 2	32	Female	Computer Practice	3 Years

One male and one female lecturer were interviewed in this college for the purpose of this study. Lecturer 1 was a 27 year old male lecturer offering Financial Accounting in the Financial Management program for 6 years. Lecturer 2 was a 32 year old female offering Computer Practice and has lectured for 3 years.

Table 8: College C Students

Student	Age	Gender	Course	Level
Number 1	25	Female	Management Assistant	N6
Number 2	27	Male	Financial Management	N6
Number 3	22	Female	Human Resources	N6

Three students, 2 males and 1 female were interviewed. Student 1 was a 25-year-old female student registered for Management Assistant N6. Student 2 was a 27-year-old male registered for Financial Management N6. Student 3 was a 22-year-old female registered for Human Resources Management N6.

Three questionnaires were developed, one for lecturers, one for students, and the other one for the former students that are currently in the workplace. There were two sections in each of the three questionnaires where the first one was for biographical information, and the second one was for quantitative information (**See appendix B**). College alumni were sent questionnaires in each of the college that participated in this study. The following section presents the biographical information of the college alumni that were sent questionnaires.

4.2.4 TVET COLLEGE A

Table 9: College A Alumni

Alumni	Age	Gender	Course	Working Experience
Number 1	34	Male	Financial Accounting	4 Years
Number 2	31	male	Management Assistant	4 Years

Two college alumni were sent questionnaires, both males. Alumnus 1 is 34 years old, studied Financial Management and has 4 years' working experience in the relevant field. Alumnus 2 is 31-year-old male and has worked for 4 years in the relevant field of Management Assistant.

4.2.5 TVET COLLEGE B

Table 10: College B Alumni

Alumni	Age	Gender	Course	Working experience
Number 1	36	Female	Business Management	3 Months
Number 2	27	Female	Financial Management	5 Years

Two college alumni were sent questionnaires. Alumnus1 was a female aged 36, has graduated in Business Management and is three months in training. Alumnus number 2 was a female student, graduated in Financial Management and has worked for 5 years in the relevant field.

4.2.6 TVET COLLEGE C

Table 11: College C Alumni

Alumni	Age	Gender	Course	Working experience
Number 1	26	Male	Human Resources	2 years
Number 2	24	Female	Human Resources	3 years

One male alumnus aged 26 and one female alumnus aged 24, who both graduated in Human Resources Management, were sent questionnaires. There was a gap of one

year between the respondents' working experience, as respondent one has two years' and respondent two has three years' working experience.

4.2.7 CODING PER INSTITUTION

4.2.7.1 QUALITATIVE: INTERVIEWS

The researcher read through all the transcripts several times, then developed matrices with several categories. Several very large sheets of paper that have been squared were used for the matrices. Codes for respondents were inscribed vertically, and institutions were labelled College A, B and C, and respondents were assigned numerical numbers. For each institution, a data set was developed. Answers were indicated next to the corresponding squares on the sheets of paper. Quotes were also inserted in the squares, thus linking the quotes to identified categories. Once the researcher was done with the collection of all data, themes were developed.

4.2.7.2 QUESTIONNAIRES

Questionnaires were sent to the college alumni via e-mail and by hand. They were given three weeks to respond and return them back to the researcher although the respondents took more time to return them and had to be reminded. The same codes that were given in each institution were used, but each respondent was given a unique code as Alumni 1 or Alumni 2. Once questionnaires were returned, the researcher again highlighted themes, and the responses were coded for easier presentation.

The following discussion presents the main themes and sub-themes as they were formulated in the data.

4.3 VOCATIONAL CURRICULUM REPORT 191 AIMS TO PROMOTE EMPLOYABILITY THROUGH EXPERIENTIAL LEARNING

In this study, Dewey's philosophy of experience and education was used to provide a theoretical frame (Aedo, 2002). Dewey pointed out that the strict authoritarian approach of traditional education was overly concerned with delivering pre-ordained knowledge, and not focused enough on students' actual learning experiences.

He indicated that the challenge for experience-based education is to provide learners with quality experiences that will result in growth and creativity in their subsequent experiences. Dewey refers to this principle as the continuity of experience, or the experiential continuum, a principle necessary for the philosophy of educative experience.

He cited the following examples of experiential education where students, upon completing the theory in class, can choose to gain experiential training: community development, work internship, service learning etc.

This can be linked to Roger's philosophy of experience (Cullata, 2013) in which he points out that the key to the distinction between cognitive and experiential learning is that experiential learning addresses the needs and wants of the learner. Rogers listed these qualities as benefits of experiential learning: personal involvement, self-initiated, evaluated by learner, and pervasive effects on learner. All of these benefits were alluded to by respondents.

Young & Gamble (2006) also argued that vocational curriculum needs both conceptual and practical knowledge where theory cannot be offered without practical experiences. They further highlighted two features that distinguish TVET from the compulsory phase of schooling in all countries. They said it represents the beginning of specialization for learners, and is a dual purpose system because it prepares learners for higher education and the labour market. Vocational Curriculum Report 191 aims to promote the employability of its graduates by offering the foundation of the skills. Employability was mentioned by respondents in their responses as follows:

4.3.1 THE CURRICULUM OFFERS A FOUNDATION OR BASIS FOR EMPLOYMENT

Lecturers in all the colleges that were interviewed agreed that Vocational Curriculum Report 191 offers the basis of knowledge and skills, with the assumption that further learning will take place in the workplace, thus making students employable.

In college B, lecturer 1 indicated that they train students in the class. He added that:

'The curriculum also requires the students to undergo an experiential training of 24 months. It is the training that prepares the students to be able to enter the world of work'.

Lecturer 1 in college A confidently said:

'Again, it's the background. It is the background information, knowing, the concepts and how they work together. So it provides the basis, so that at least when, these things are introduced to them practically the background information is forming a blue print so as to base the actual practical skills'.

Lecturer 2 in College A added:

'As I have indicated, the curricular does provide the basis to what the learner would learn in the industry, and it ends there with the basis and the key concepts. The perception is that further learning will occur during the 18 months experiential training'.

This is in line with Dewey's continuity of experience (Aedo, 2002) where the theory underpins practical knowledge acquisition, meaning students do get the theoretical input in class but still lack practical experiential learning.

Mgijima & Moebe (2012) agreed with the views of the respondents. They highlighted that in Vocational Curriculum Report 191 courses, subjects are based on a theoretical component only. The practical experience is assumed to be acquired in real workplace environments. Practical experience entails different skills as mentioned by respondents, namely, students can be prepared for self-employment through Vocational Curriculum Report 191.

4.3.2 VOCATIONAL CURRICULUM REPORT 191 PREPARES STUDENTS FOR SELF-EMPLOYMENT

According to Nzimande, the college community must expand its horizons and see the world; they must understand that their broad goal is to develop the economy in a way that responds to the needs of all South Africans. In his view, TVETs need to provide training programmes that are needed in the real world in order to sustain livelihoods for the many unemployed (Nzimande, 2013).

In TVET college A, the response given by lecturer 1 on the question of whether the curriculum prepares for self-employment,

'I would not say that they (students) are ready to be self-employed in Human Resources Management when they come out of the college. They will only be ready these students, in fact any student that is coming from any educational institution, will be ready once they do have a feel of the actual organizations, how things work in the actual organization. So.... They will need to do these things practically in a work situation for them to be able to.....have their own private practice. The curriculum itself does not have that provision, but it just gives that background information and some foundations'.

The importance of self-employment was emphasized by these respondents. This can be linked to the African Union (DHR, 2007) which suggests that Vocational Education in Africa should help develop indigenous skills associated with the manufacture of traditional artefacts and crafts. As employment opportunities shrink, the acquisition of Business Management and Entrepreneurial skills for self-employment becomes a major imperative in the design of vocational training programs.

Lecturer 1 in TVET College B focused on the practicality, not only as an entrepreneurial mechanism, but also as skills needed in a different environment. The lecturer offers the view that the curriculum offering can be of practical value to students, albeit in the informal sector:

'The syllabus itself shows you the practicality of the content. Example, it will tell you how to use a water pump. Although it is difficult for the students to be self-employed after graduating, they can be able to assist at homes, with the fundamental information that they have'.

This indicates a new application of Vocational Curriculum Report 191, namely: it might support citizens to be responsible home owners and community members.

The following responses indicated that Vocational Curriculum Report 191 does prepare the students to be self-employed, offering both theory and practical skills. These

responses can be tied in with the opinion of Hoadley & Jansen (2009) since they state that learning areas in curriculum must attempt to link theory and practice.

Lecturer 1 of TVET College C said,

'Entrepreneurship, as I have indicated, we give them theory on how to open up a business, drawing up business plans etc. It is up to then a student how to apply the theory that he has gained, that is of a quality'.

Lecturer 2 in TVET College B's response,

'I have mentioned earlier, that with the skills that they have gained, students will be able to start their own businesses, although it confines them in building only. They cannot go on structural road construction or stadiums'.

In TVET college B student 2 said,

'With the skills that I have gained, only after I have done my practical, I would be able to go and do my own business, repair some faulty electrical appliances, etc.'

In the same college, student 1 positively responded by saying,

'Yes, because I like now know what is expected of me in the building industry, for my work to look good. For example, from the beginning, choosing the site, building it, completing it, and all that, including the workers how to treat them, to know your rights as a builder in the contract. All that, I have learned from this course'.

Student 2 in TVET College A replied,

'I think. If you know how to plan, you can come upon with a strategy, to know exactly what you want, and then you plan it correctly, then you know how to manage your time. Then I think if you want to start maybe your own business you can be successful'.

Gamble (2003) confirmed that the South African policy frameworks make provision for both forms of preparation for employment and self-employment, and that there is evidence that TVET colleges in South Africa are already involved in entrepreneurial education that broadly relates to self-employment.

Some of the respondents agreed that the curriculum does prepare for self-employment through the skills that are transferred to its students. Although some indicated that

there is a gap, since students learn theory as theory and find the transfer to practice very difficult, they believed that it becomes difficult for them to be self-employed. However, they suggested that students should go for in-service training first, before being self-employed, in order for the actual skill to be transferred. The relevance of the skills entailed in Vocational Curriculum Report 191 will be analyzed next.

4.3.3 RELEVANCE OF THE SKILLS ENTAILED IN VOCATIONAL CURRICULUM REPORT 191 TO THE WORLD OF WORK

Scott (2013) states that the theoretical and practical components of apprenticeships and learnerships must be offered by vocational programmes to meet the demands of the workplace. Respondents offered their opinions in the following way:

In TVET College A, this is what lecturer 1 said,

‘Some of them are not relevant because of the syllabus that is outdated. But more than anything, when you have the foundation is much better than not having it at all. In overall, they are relevant, but you just need a couple of months in training to align yourself with what was taught in classes’.

Lecturer 2 in TVET College A indicated that,

‘I can say 60% of the curriculum is relevant whilst 40% is irrelevant. The problem is that the curriculum was not revised since 1995. 50% of the Financial Management course as a whole I can say is irrelevant, whilst the other 50% is relevant. All in all, the Financial Management curriculum needs to be revised to include Tax, Auditing, procurement etc’.

The report of the ministerial task team confirmed that some of the NATED-courses are being faulted for a lack of relevance to current technology and industry practice. They added that many NATED courses have not been reviewed for decades, with the result that some of their content is now obsolete while other material that is important for today’s industry has yet to be included (Duncan, 2012). Both respondents cited above agreed with the task team, as emphasized by the third respondent below.

According to lecturer 1 in TVET College C,

'These skills are relevant, because there is still a shortage of Chartered Accountants and bookkeepers in South Africa. There is a variety of funding for small entrepreneurs, so students can also be able to open their own businesses. Some of the courses are outdated, for example, in Financial Accounting, and the syllabus requires learners to prepare books for the Close Corporation, although it does not exist in the real world. As a result, I strongly recommend that the syllabus be revised somewhere somehow'.

Gamble opined that the policy call for TVET colleges in South Africa is to be responsive to the need for a highly trained, knowledgeable and innovative workforce, which is required for economic growth in the globally competitive world of the twenty-first century. At the same time, it is necessary to be responsive to local needs by providing access to education and training to those historically marginalized and excluded from meaningful economic activity (Gamble, 2003).

In TVET College B, lecturer 2 disagreed with the above statements by indicating that the skills in his course are very relevant, especially in the building environment. He said,

'Because there will be always a building more especially where the RDP houses are concerned.' 'Because this course concentrate mostly in housing, not big houses, not like structural hotels, or stadiums. So it is relevant because there will always be growth in South Africa as far as houses are concerned.'

All the students that were interviewed feel that the curriculum gives them the skills that are relevant.

Student 1 in TVET College A recalled,

'I think for instance when we are doing Computerized Financial Systems, we ought to make a payroll for employees. In Financial Accounting as well we are able to do debtor's collection, when the information is given. You are able to estimate the amount that you will receive from debtors. You are also able to see if the business is making profit or loss through the Income Statement and to determine the financial position of the business. You are also able to see the cash inflows and outflows of the business. All in all, the curriculum in this course is practical'.

Student 2 in the same college responded by saying,

'I think, I do not expect it to be different (curriculum), like if I can do my in-service training in any organization that deal with debtors I will know how to deal with debtors, I know how to calculate everything, so I am expecting to be relating to what I am doing. So basically what I am doing here at the college is what I am expecting to do in my in-service training'

Student 3 in TVET College A said,

'I think is quite relevant because I was thinking of advertising and promotions. So Sales Management is relevant. Basically, I am supposed to be doing Marketing if not Financial Management'

West and Steedman (2003) pointed out that the main purpose of Vocational Curriculum is to offer a wide range of options. They made reference to the apprenticeship system where Vocational Education courses tend to play a complementary role to instruction in workplace skills, thereby concentrating on relevant theory and often encompassing continuing general education not necessarily related to the apprenticeship occupation. Therefore, they are in agreement with what the respondents said in the above responses.

Lecturers were divided in their opinion that somehow, the curriculum is relevant in some instances, but also irrelevant in others. All the students agreed that the curriculum is relevant, thus making it to be applicable to the labour market.

4.3.4 APPLICABILITY OF THE CURRICULUM TO THE LABOUR MARKET

Vocational Curriculum Report 191 must be applicable to the local labour market to meet its outcomes. People need new competencies for the current knowledge economy, including various relevant skills such as problem-solving (Wheelahan & Moodle, 2011). Respondents referred to limited skills that students are offered by Vocational Report 191:

In TVET College A, lecturer 1's response was that,

'When we talk of Vocational Education, we talk of skill. Curriculum on its own give the learner a skill. That makes them to be the priority than someone who comes from the University with no knowledge of how to do. The majority of our students are considered for learnerships in order to complete the 18 months training experience'.

Whilst the second lecturer in the same college responded by saying,

'They are very important these skills because the Labour Relations is a very important part in Human Resources. It is very important even in the organization's, because if we look at South Africa general we see many strikes that are happening, which is somewhere somehow there is a breakdown in the relationship between the employee and the employer, which needs to be fixed by these policies and procedures and collective agreements that the learners learn. So they are very important to avoid the labour disputes and strikes'.

Lecturer 1 in TVET College C added that,

'In entrepreneurship, as I have indicated, we give them theory on how to open up a business, drawing up business plans etc. It is up to them a student on how to apply the theory that he has gained, which is of a quality. But I think the Report 191 curriculum needs to be revised, because comparing to NCV, NCV curriculum has been revised from time to time'.

Pandor argued that to become more responsive, public institutions must, themselves, engage with stakeholders in the local economy through collecting, analyzing and disseminating labour market data and entering into training agreements with stakeholders, for instance learnership agreements, fomenting entrepreneurship and assisting entrepreneurs to access financial credit (Pandor, 2009).

Students feel that the curriculum is applicable.

Student 2 in TVET college A responded by saying,

'I can say it is applicable in the sense that, I am not in any employment currently, but I have seen that what we are doing here, is what is done in the workplace. Because my husband is working and when I am studying, I always take him and study with him. I will, for example, read something from my book, and refer to him, expecting him to apply it, according to how he is applying that in his workplace. So that means..... I think what we are doing here is what we they are also doing in the workplace. Because when I ask him some questions, he is able to give me some answers that are relevant to those in my book, using his own experience.

This is in line with what Pandor said. She emphasized that more education and training must occur in skills areas that are of greater relevance to the labour market (Pandor, 2009).

In TVET College A, the third student also confirmed this by confidently saying,

‘Yes it is applicable, because I think I can approach the clients. I can even..... cause in N4 I did Management Communication, so I can even sit in the front desk’.

The researcher acknowledged the applicability mentioned by the respondent but wanted to know the applicability in terms of Business Management course as a whole.

The respondent then indicated that,

‘There is a last part in the Business Management that is stock controlling, as well as ratios or financial analysis that are applicable. Also in terms of conflict solving.’

Gamble (2003) confirmed what is said by student 3 in college A, that even the policy call TVET colleges in South Africa is to be responsive to the need for a highly trained, knowledgeable and innovative workforce, which is required for economic growth in the globally competitive world of the twenty-first century. He added that at the same time, it is necessary to be responsive to local needs by providing access to education and training to the historically disadvantaged.

Most of the respondents agreed that the skills entailed in this curriculum are applicable to the world of work. In other words, this curriculum entails skills as mentioned, and these skills are relevant. Each respondent indicated how applicable the skill entailed by his or her course is, as well as their ability to apply it in the world of work whilst some respondents faulted the curriculum for being outdated, saying that the skills are not applicable anymore.

Work experience is deemed crucial for giving students access to practical experience which the college, with inadequate workshop facilities, cannot provide (Gamble, 2003). This puts a question mark on skills transfer from theory to practice.

4.4 THE RELEVANCY OF VOCATIONAL CURRICULUM REPORT 191 IN ENSURING NEEDED KNOWLEDGE AND SKILLS TRANSFER

Roger's philosophy of learning (Cullata, 2013) differentiated between two types of learning, cognitive and significant learning. The major difference he spotted is that experiential learning addresses the needs and wants of the learners. In his literature, he cited Mezirow et al., wherein they spoke of learning as a cycle that begins with experience, continues with reflection and later leads to action, which itself become a concrete experience for reflection (Cullata, 2013).

Rogers highlighted that the acquisition of skills through experiential learning lies in the knowledge and skills transfer.

4.4.1 TRANSFERABILITY OF KNOWLEDGE AND SKILLS IN THE CURRICULUM

According to Mgijima et al, the National Certificate: N2 and National Certificate: N3 subjects are based on a theoretical component only. The practical experience is assumed to be acquired in real workplace environments, at least for those indentured in apprenticeships. Those who are not in workplaces have the option of going to a training centre where they acquire workplace experience in simulation workshops, which are supposed to provide a simulated learning context similar to that of the NC (V). However, it is generally understood that the focus at the training centres is more on coaching for the trade test than providing practical experience (Mgijima & Moeobe, 2012).

Literature by Organisation for Economic Co-operation and Development (OECD) also highlighted that vocational curriculum means building a foundation of basic and transferable skills into vocational qualifications to reflect a world of career flux and development rather than one job for life (OECD, 2010).

This is how, in college B, skills are transferred according to lecturer 1,

'We transfer the skills using theory. We explain the concepts theoretically. Sometimes we make sure that we bring these models using the internet, we download them. Sometimes we take our students to the workshops. The challenge there is that they do not get a chance to be involved practically because the time is limited. So they can only see the picture.'

In TVET College A, lecturer 1 said,

'It's a problem to transfer a skill itself, but they do get the background, they do get the background knowledge through the lecturing and through studying the textbook. But the actual skill, where we will say the learner is able to know what to do when he/she is negotiating, or is able to develop a policy so that we can see it. Then there is a bit of a challenge there. I will say that the first challenge is time constraints, but we are trying though, through the assignments, that the learner must know the policy, and how does it look like, and procedure, but then to actually do it, the student themselves, we have a limited time to do the actual practical. It would be better if there could be some links with the industry that could be established by the college, so that students can go and see these things happen. So things like that we do not have'.

Nzimande stressed the fact that workplace learning should be an integral part of all vocational programs. He added that most successful vocational or occupational learning takes place as a result of an integration of theoretical learning, workshop-based practical learning, and learning in the workplace (Nzimande, 2012).

In TVET College B, lecturer 2 added that,

'We take them to the workplaces in order for them to see what they learn in class. What Report 191 offers is itself practical, in the sense that, when the student reach the world of employment, he/she just need to apply the theory from the book. To add more, the students in this college are taken to the workplace for vast experience.'

Literature reveals that vocational programmes should include an element of workplace training because apart from the learning benefit, employers' willingness to provide such workplace training reflects labour market demand for the skills acquired in the VET programme. (OECD, 2010)

Whilst in TVET College C, lecturer 1 highlighted that in Vocational Curriculum Report 191,

'The curriculum needs a practical, but unfortunately in Financial Management there is no practical at all,'

He added that,

'The theory that we give to our students is just a foundation. They still need to go for experiential learning in order to gain the skills that relates to what they have studied. Although the college is working on the placement of the students after they have completed N6, I would suggest that it should also have simulation rooms in order for the students to be able to access practical whilst they are at the college'.

The above statements agree with Rogers's philosophy of experiential learning where he put emphasis on the fact that experiential learning addresses the needs of learners (Cullata, 2013). The absence of such experience could be detrimental to the learning experience of the student, meaning no application of skills acquired can be made.

4.4.2 SKILLS ENTAILED IN VOCATIONAL CURRICULUM REPORT 191

Wheelahan and Moodie (2011) mentioned in their literature that communication skills are a core skill for hairdressers since communicating with their clients is part of their client service. This is a different skill from the car mechanic's skill of communicating with his clients, which requires mechanics to explain the maintenance and service of a car in lay terms; this is different from their skill in communicating with technical precision with other mechanics, suppliers and other specialists. This is exemplified by the World Bank which argues that people need new competencies for the knowledge economy. These include cognitive skills (such as skills in language, communication, logistical and mathematical thought); cognitive problem-solving skills; self-learning and self-knowledge; social skills (such as team-working, negotiation skills, self-confidence, and developing social networks) and motivation for work (including initiative, responsibility, commitment, and interest).

In line with these statements, respondents to this study mentioned the following skills as the skills entailed in Vocational Report 191, for example, surveyor, bookkeeper, accounting clerk etc.

In TVET College B, lecturer 1 indicated the following skill as one of the skills that is entailed by the course that he is lecturing:

'Students can become technicians, in other words students should be able to work with all the mechanical related machines, and also be able to supervise in the mechanical related jobs'.

Lecturer 2 in TVET College B added that,

'After completing this course the student will know how to do surveying, know how to build a house from scratch, know how to start and end a project. All those skills will enable the student to open up his/her own company'.

Both Lecturers 1 in colleges A and in TVET College C agreed to these skills as the skills that the student in the Finance field, bookkeeper, accounting clerk, junior accountant, tax consultant will acquire; they are also able to process transactions in the Computerized Financial Systems. This was also confirmed by the alumnus 1 in college A where he mentioned Bookkeeping skills, Financial Management skills, Cash Flow Management skills and Business Management skills as the skills that he obtained from the course. Students agreed to these skills as the skills that they obtained in financial management.

Student 1 in TVET College A said,

'Computer skills, I know how to work with Microsoft word. I did excel advance, I did Pastel Partner to prepare invoices and pay the suppliers. I did the payroll. In Entrepreneurship I have learned on how to start my own business. In Accounting, I have learned how to prepare financial statements. So accounting they say it's an internal tool that is used within an organization in order to communicate'.

Lecturer 2 of TVET College A highlighted that,

'The subjects that I am teaching specifically is labour relations skills, so they learn about policies of the organization, the procedures of the organisations, they also learn about collective bargaining and

negotiations, i.e. how you do it. They also learn about negotiations in general, collective agreements, they learn about law itself, specifically about the two legislations, i.e. Basic Conditions of Employment Act, and Labour Relations Act’.

Green (2010) also confirmed that Vocational Curriculum entailed the following skills which are the key skills to employability: Communication skills, initiative and enterprise skills, planning and organizing skills, technology skills as well as personal attribute skills.

Student 2 in TVET College A was in agreement with Green, mentioning the following skills as the skills that she obtained in Human Resources Management,

‘Communication skills, interpersonal skills to understand people and their backgrounds, to be able to stand in front and present whatever is asked for you to present without fear. I have also learned multitasking and problem solving skills without help from anyone, as well as studying skills’.

Student 3 in TVET College A highlighted the following skills,

‘Conflict-solving, how to approach clients, and my physical appearance in the workplace’.

Student 1 in TVET College C said,

‘Communication skills. Now I even know that when I am going to the campus manager’s office, I have to start at the front office. I am also mastering the computer skills’.

Afeti agreed that Vocational Education entails skills. He highlighted that the important factor of Technical Vocational Education and Training is its orientation towards the world of work and the emphasis of the curriculum on the acquisition of employable skills (Afeti, 2007).

This is in line with Dewey’s theory of experience, where he mentioned skills such as communication skills, as the skills that learners should acquire in learning for experience.

It is clear that Vocational Curriculum Report 191 entails skills in all the courses that it offers. All the respondents agreed with the statement by mentioning more than one skill that relates to his or her field.

All the lecturers confirmed that Vocational Curriculum Report 191 offers foundation or basis of knowledge and skill, with the assumption that further training will take place during experiential learning of 18 or 24 months. All the students confidently responded by saying that the skills they have gained are relevant and will help them to be employed and to be self-employed. Dewey's theory of experience highlighted that one can be self-employed only if they have gained skills through experiential learning.

4.5 THE WAYS IN WHICH VOCATIONAL CURRICULUM REPORT 191 SUPPORTS THE MARKETABILITY OF STUDENTS

According to the Minister of Higher Education and Training (Nzimande, 2010, p.8), workplace learning should be an integral part of all vocational educational programs. Establishing effective partnerships between education and training systems and employers to provide for workplace training would ensure that skills have real labour market relevance and that young people gain an early appreciation of and exposure to the world of work.

4.5.1 WORK PLACEMENT OF TVET COLLEGE GRADUATES

According to Nzimande, the public service should be a training space. It has the potential to absorb large number of young people for learnerships, internships, as well as providing work experience for TVET graduates. This should be assisted by government department's payment of the skills levy and the strengthening of the Public Services SETA (Nzimande, 2012).

In TVET college A, lecturer 1's response agreed with the above statement, where he said,

'To be honest, 70% to 80% of finance students are placed, because their course is in demand, and because of the vast skills that they possess, the majority of them are placed. Example, here, the college takes them. Sometime last year, an auditing firm did place

some of the students. However, the main problem I have is that, some of them are taken and not placed directly to the relevant field. They are misplaced. How I so wish that, finance students do not go to the Human Resources Office, but go straight to the office that talks to the course’.

Lecturer 1 of TVET College A shared his views by saying,

‘Most of the student that I keep in touch with, who were part of my class with N6, they are placed and at some government departments. But my concern is, which is my major concern is that they never get placed in the private sector.’

The researcher probed more by asking: what is the impact of the placement of the students in public sector? He continued:

‘Firstly the curriculum is designed for a person that will be working in the private sector. It is not fully in the public sector, it is on law, as well as practices for private institution, so it will be better for them to be placed in the private sector. But it is useful in the public sector, but that’s not what I would recommend, as well as if they want to open their practices, they cannot be using government practices to open their own practices.’

However, the following respondents shared their challenges with regards to the work placement of college graduates:

Lecturer 1 in TVET College B indicated that,

‘The main challenge is that there are few companies around the city that relates to my course, as a result students have to wait till he/she gets a chance. The college can try to place these students, but there are no companies at all, so it will always be difficult to place civil engineering students.’

Lecturer 2 of the same college highlighted that,

‘Student Support Services (S.S.S.) caters so much for electrical students, because there are companies around that want artisans, but as far as civil engineering is concerned, there are no companies that are looking for artisans. In fact, locally there are no companies that are looking for civil engineering artisans.’ He stressed that, *‘As a result, I would suggest that once students complete their studies, they should go to Universities to further their studies, because really, there are no construction companies around that are looking for our students. In fact, our curriculum just gives a base, so in order*

for a student to advance his or her knowledge, he/she will need to further his/her studies at higher institution’.

The Green Paper for TVET colleges recommends that TVET colleges must develop close ties to workplaces in the public and private sectors, thus becoming responsive to the needs of the employers in their surrounding communities, and offering tailor-made programmes where possible in addition to their core programmes. In line with National Skills Development Strategy III (NSDS III), colleges must develop close ties to SETAs, which will play an increasingly important role in linking colleges with employers (Nzimande, 2012).

Lecturer 1 in TVET College C acknowledged that there is a challenge when it comes to placement of college graduates. He said,

‘The main challenge is that we as lecturers do not know the criteria that is being used to place the students. Students that graduated their N6 long time ago are disadvantaged as they are not placed, since this placement has started last year.’

The above response is not in line with what Mgijima et al. stressed, where they said that the ETDP SETA, in positioning itself as a critical partner with the TVET colleges, must align themselves with the call made by the Minister in the Foreword to the National Skills Development Strategy (NSDS III), where he says that SETAs must ensure that they are backed by employers, and workers are acknowledged, as credible and authoritative voices on skills, to create interventions and shape solutions that address skills needs within their sectors (Mgijima & Morobe, 2012).

The other challenge that respondents identified is that there is a disconnect between what Vocational Curriculum entails and what the world of work prefers.

4.5.2 DISCONNECT BETWEEN THE VOCATIONAL CURRICULUM REPORT 191 AND THE WORLD OF WORK

There is a systemic disconnect (no balance) between education institutions and training programmes, on the one hand, and employer expectations or labour market needs on the other (DE Jagger & Vorwerk, 2006).

In TVET College B, lecturer 1 confirmed that there is disconnection because the Vocational Curriculum Report 191 is still stating what was stated earlier in the 90's. Therefore, it does not make any provision for the current world of work.

Lecturer 2 in the same college agreed with Lecturer 1 that there is no balance at all. He said,

'There is no balance at all between what we teach and what the real world wants. What we teach is totally different to what is happening in the real world. The curriculum is not updated. Few of the techniques are still used in construction but in surveying, most of them that are used are the ones that we teach. So it's there, the technical background is there, but the functionality of it on the site is not there. Usually, the stuff that they use on the site is seriously way updated than what we teach. So the curriculum does not bridge the gap.'

Alumni 1 in TVET College A agreed with the above statements by saying,

'The gap that I have identified is that Financial Accounting differs from the government accounting.'

Alumni 1 in TVET College B highlighted,

'In the organizations they use their own systems which a trainee needs to learn and is not provided by the curriculum, as there is no exposure at all.'

According to Field et al., within VET programmes, a good balance between generic and specific skills is important. VET graduates need occupationally specific skills that will allow them to enter skilled jobs without lengthy additional training. They also need generic transferable skills to carry them through their working career, including the ability to adapt to fast-changing workplace requirements (Field, Hoeckel, Kis, & Kuczera, 2009).

Although lecturer 1 in TVET College A is convinced that, somehow, there is a balance, he is still sure that the curriculum itself is not updated.

'Some of these courses, are revised, but not all of them, like Entrepreneurship is still Entrepreneurship, and I would strongly

recommend a review of the syllabus. There is a link in Income Tax Textbook and syllabus, because the textbook that is being used is the one that is being used by the Honor's students. But the syllabus was never updated. It is only this year for next year that Financial Accounting is being reviewed'.

It is clear from the respondents that there is no balance at all between what the curriculum offers and what the world of employment wants.

4.5.3 VOCATIONAL CURRICULUM REPORT 191 IS OUTDATED

Biavaschi et al. (2012) mention the importance of curricula to be open to new technologies and occupational change. In contrast, lecturers were vociferous in their opinion regarding the 'outdatedness' of Vocational Curriculum Report 191 or parts of it.

Lecturer 1 in TVET College B confirmed that the curriculum is outdated. He added,

'But you can say it is a layout that is outdated, because the content is not so outdated. Example, some of the machines have been upgraded. But the textbook is still using the old machines.' In the same college, another lecturer confirmed this irrelevance and said, *'as I have said it's like history'*.

The response of TVET College B lecturer 1 was that,

'Some of the content is relevant, and some is irrelevant due to the syllabus that is outdated. So it is backdated and outdated. But what we usually do in class is to teach them, and tell them look, this was done (in realistic) back in days, but this is what is done now. So in that way we are able to give them the skills that will help them. Otherwise our curriculum is a history lesson'.

The second lecturer in TVET College A agreed with the above statements and said,

'The syllabus.....firstly....is quite outdated, so there would be a challenge in terms of preparing for the labour market because the information most of it is good, but then there are new developments in the field, which are not catered for in the curriculum itself. There is basic information that is there, you understand, so....they do not have an idea, but the syllabus itself has got quite some glitches in terms of being outdated, and in terms of not covering some work that real world needs, especially if you talking about the students

going out and working the private sector, so they will experience some challenges’.

Literature confirmed that many NATED courses have not been reviewed for decades, with the result that some of their content is now obsolete while other material that is important for today’s industry has yet to be included (Duncan, 2012).

In TVET College C, lecturer 1 suggested that,

‘I think the Report 191 curriculum needs to be revised, because comparing to NCV, NCV curriculum has been revised from time to time and the industry need to part of that revision’.

Cuddy et al. argues that curricula must be based upon the national standards, and Vocational Education and Training providers must ensure that curricula are kept up-to-date in line with industry requirements. In practice, training tends to follow, rather than lead, innovative practices in industry (Cuddy & Leney, 2005).

This section highlights tension between the education system, as practiced in South Africa, and the main stakeholders, i.e. industry. Innovative practices in industry will ensure a growing economy. However, if industry is expected to lead education, meaning practice is leading theory, a slow growth in industry and thus the economy is to be expected. With very little growth in the economy, financial investment in education such as vocational programmes will also be negatively influenced. The emphasis on theory in Vocational Curriculum Report 191 is highlighted below.

4.5.4 VOCATIONAL CURRICULUM REPORT 191 OFFERS THEORY IN CLASS WITHOUT PRACTICAL APPLICATION

It is commonly acknowledged according to Gamble et al., that problems are being experienced with regard to theory as it is currently taught in colleges. The problems do not stem from the lack of immediate applicability of such knowledge, as is often assumed, or from extensive use of prescribed textbooks. They arise because many students who are currently undertaking college studies do so without access to practical work. Without access to practical work, these students learn theory as theory, mainly for examination purposes and for access to further study. (Gamble & Young, 2006)

The above statement confirms what lecturer 1 of TVET College B said,

'Not that much (practical). But sometimes students prefer the practical, so it would be better if in class you can teach theory, then soon after that the students goes to practice, instead of waiting for to complete N6. Because taking them to workshops is disadvantaging them as they can only see, and not do. That alone (taking them to workshops), happens maybe two times in a trimester and it is not enough. If the curriculum can be revised, and linked with the practical, and allow students to access it at any time, it would be better'.

According Lecturer 1 in TVET College A they take their learners to the workplaces during learning, since they are not exposed in any practical.

'We take them to the workplaces in order for them to see what they learn in class. What Report 191 offers is itself theory without practical, in the sense that, when the student reach the world of employment, he/she just need to apply the theory from the book. To add more, the students in this college are taken to the workplace for vast experience'.

Matshoba et al (Matshoba & Burroughs, 2013) confirmed that many learners are doing the N-courses without being in a workplace at all. According to him, evaluators of the curriculum are of the opinion that since the classroom work covers only theoretical concepts over a three-month period (for engineering), after which the learner enters the industry, they do not yet know the basics, for example, use of a test meter.

All the respondents confirmed that the curriculum lacks practical in class, students learn theory as theory.

According to Gamble (2009), preparation for employability requires a stronger rather than a weaker combination of practices and theory. He added that practical training and experience are deemed crucial for both employment and self-employment. (Gamble, 2009)

Although it is stated (Matshoba & Burroughs, 2013) that Vocational Curriculum Report 191 offers theory as theory, with the expectation that training will take place later, the respondents feels that the practical should be incorporated with theory, since not all

students are able to gain access to training. They also have fear that when the student goes to training after semester or trimester, they have already forgotten the theory that they learned in class.

4.5.5 TVET COLLEGE LECTURERS LACKS PRACTICAL EXPOSURE IN THEIR RESPECTIVE FIELDS

TVET college lecturers are tasked to train students in theory and the practical application of the theory. They therefore need to be versed in both components of the prescribed curriculum. Based on the responses of the some respondents, it is clear that some lecturers only have theoretical knowledge and lack the practical application of theory.

Lecturer 1 in TVET College A and lecturers 1 and 2 in TVET college B do have the practical experience in their respective fields. The ones that have the practical exposure said the experience is helping them a lot in classes, because they are able to relate the theory to the real world scenario by making practical examples.

Lecturer 1 in TVET College A said,

‘The experience is helping me in class, I am able to explain to my students that when you get to the real world, this is what will be expected. I am also able to take them through the practical expects of my field. Example, in Financial Accounting we teach them a module in Internal Auditing, now I am able to tell the student that if you (as a student) go to the business, the practical steps that they need to follow when they are conducting an audit in the real world. In theory the students does not really unpack things. For a lecturer to have practical, he/she is able to unpack everything. Theory is giving students practical, but never enough’.

Lecturer 2 in TVET College B showed some excitement and expressed himself by saying,

‘Of course I have got a lot of workplace experience. The experience helps me because when I teach something relevant to what happens on site, I teach, then make a reference to what I was doing whilst I was on site. So I am able to make practical examples. If I did not have the practical experience I was going to face a challenge of not being able to relate what I am teaching to the real life situations. The only thing that I would know is a module, so work experience is very important’.

On the other hand, those lecturers that do not have practical experience are facing some challenges in their classes, of teaching theory as theory. Lecturer 2 in TVET College A highlighted that,

‘Since he (as a lecturer) do not have the practical examples, it makes it difficult to prepare a lesson that is attractive because sometimes you refers a lot to what you read, not to what you know. But you, as a lecturer also have to do a research, and try to re-create the environment yourself in your mind, but the reality is you were not there.’

Lecturer 1 in TVET College C said that he would be glad to gain entrance to the world of employment in order to gain experience. Most lecturers do not have any work experience in industry, and they all indicated that they are interested in gaining experience and also highlighted the way that could help them in their lessons. The few that have the workplace experience were excited and shared how their experience is helping them to create interesting lessons relating their experience to the old and outdated curriculum.

4.5.6 VOCATIONAL CURRICULUM REPORT 191 OFFERS DUAL PURPOSE

Young & Gamble (2006) identified two features that distinguish TVET from the compulsory phase of schooling in all countries, where the first one is the beginning of specialization, and the other one is to prepare learners for higher education.

Student 1 in TVET College A indicated that,

‘From January, because I have proved myself that I have the ability to do so much better, so I am intending to go to University, although I do not have funds to do so. So that will then force me to do my in-service training in order to complete a diploma’.

Student 3 in TVET College A preference was,

‘I am thinking of going to a varsity and complete a degree. Because as you study, studying becomes exciting, you want to know more. The researcher wanted to know when the candidate will be intending to obtain a diploma, she said, ‘I was thinking of doing my experiential learning, then further my studies part-time’.

Student 2 in TVET College B,

'My expectations now, I applied for University, at the same time I applied for Apprenticeship. So, I have two choices, either to further my studies or go for apprenticeship in January next year'.

Student 3 in TVET College B,

'Now I have got broader expectations because now from the 3rd of November 2014, I will be starting a course that is called Autocat. The course will help me to develop the building drawings using computer. When I researched about it, I became interested. As I told you that at home, we were building, there was a plan that was developed by an architect. So, getting to understand those small drawings on the plan, fascinated me. That is why now I want to be an architect'.

Some students indicated that they wanted to be employed, while some want to further their studies. As Gamble indicated in his literature, Vocational Education offers a dual purpose. Most of the students that participated in this study share the common expectations. They want to either be employed, while a few wanted to further their studies (Gamble, 2009).

According to Young, vocational curriculum differs from the compulsory phase of schooling in all countries. The main difference is that it represents the beginning of specialization for learners because it prepares learners for higher education and the labour market. Less openly acknowledged, it also serves to keep learners off the labour market and thus limits youth unemployment (Young & Gamble, 2006).

4.6 SUMMARY

At institutional level, awareness of the roles of Vocational Curriculum Report191 has been indicated, for example, to promote employability, prepare students for self-employment, linking skills attained and the world-of-work, transferability of knowledge and skills, and so on. Gaps such as lack of practical knowledge and skills of lecturers, disconnect between theory and practice, non-placement of students for practical experience have been identified.

The main findings of the study are to be discussed in-depth in Chapter Five.

CHAPTER FIVE DISCUSSIONS OF THE FINDINGS

5.1 INTRODUCTION

Chapter 4 detailed the findings of the questions that were posed by this study in chapter 1. In this chapter, the researcher discusses the findings, as they appeared in the previous chapter.

5.2 VOCATIONAL CURRICULUM REPORT 191 PROMOTES THE EMPLOYABILITY OF ITS STUDENTS

It was confirmed in this study that Vocational Curriculum Report 191 promotes employability of its students in various ways. Those various ways or methods that are employed by the curriculum are explained below.

5.2.1 VOCATIONAL CURRICULUM PROMOTES EMPLOYMENT THROUGH THEORY AS

A FOUNDATION

Theory is a body of knowledge that can be linked to practical examples. It is this theory, coupled with practical experience that students need to be employable.

Gamble (2013) confirmed that NATED N-courses were initially aimed at offering the foundation or theory for apprentices, and for mainly those that were employed in their field of their specialization. Those that were not employed were required to attend workshops in order to access the practical aspect. Students were only certified upon completion of practical experience. N-courses are courses offered in the Vocational Curriculum Report 191; they are also called NATED courses.

This study confirmed that it is better to have a foundation or base, as it is offered in the form of theory in the colleges, than not to have it at all. When the students go for practical training, it is easy for them to apply the concepts they have and put them into reality. Building knowledge from the known to unknown is always better in any learning situation. The base that the students get in class gives them a clear picture of what to expect in the real world. It orientates them towards their relevant careers.

Despite the call from the Minister of Higher Education and Training (Nzimande, 2010) to encourage the colleges to develop partnerships with the industry so that the industry can turn every workplace into a training space, TVET College graduates are still battling to enter the world of work. This confirms that Vocational Curriculum Report 191 does little to create partnership with the industry to prepare placement for its students.

This is contradicting with what Afeti (2010) suggests that Vocational programmes have to be linked to the job market, so that the socio-economic relevance of Technical and Vocational Education and Training can be balanced and valued by both industry and education sectors. With this clear disjuncture between education and industry, where do students find themselves?

Firstly, they will apply for employment in the workplace, to find themselves falling short when they are required to apply their acquired skills. In the world of work, the perception is that qualified Vocational Curriculum Report 191 students do have a good theoretical base linked to a practical component, as prescribed in the curriculum. This perception is supported by the certification students receive when graduating. Not only are students disadvantaged by the theoretical offering at qualification level, but according to Gentry (2010), their entire career is founded on an 'incomplete' curriculum that is exclusively theory-based.

Secondly, graduates find it difficult to link the concepts and terminology they already know with the new concepts they will be learning in a workplace since their lecturers are not there to remind them. This speaks to the concept of textbook learning, with no practical application. The theoretical 'body of knowledge' has not been translated into practical experience which students can relate to regarding the experiences they are encountering in the workplace. This is supported by Rogers' view on practical experiences (Miettinen, 2010).

Rogers indicated that all learning involves experience of some sort, prior and/or current (Miettinen, 2010). Respondents highlighted that if Vocational Curriculum Report 191 can be incorporated with practical experience, it can promote employment of its students better.

Rogers (Miettinen, 2010) speaks to experience that needs to be coupled with learning, and in the case of Vocational Curriculum Report 191, it refers to the practical experience of students being coupled with the theory they have gained. Based on the views of Rogers (cited in Miettinen, 2010), this indicates a definite gap in the offering of the curriculum and its attendant content. Most respondents pointed to a theory-driven offering, whilst the nature of the course, as indicated in its policy documents, is theory supported by practice. Employers in the economy of the day are very aware of a balanced offering by employees, and if students cannot marry theory with practice, it puts them at a disadvantage in the world of work.

Some of the benefits of incorporating theory with practice during lessons, according to Rogers (Miettinen, 2010), is that the learning allows the learners to be doers, not the listeners. They become more interested in their learning as they develop a mind map or an idea of where the learning is leading them to. The learning process allows them to learn through experience so that when they graduate, their skills would be fully developed, thus creating higher chances of them getting employed.

Linking the promotion of employability through an offered theory-base to Dewey's four stage model of experiential learning (Kolb, 2006), it becomes clear that the formation of abstract concepts and generalizations has been catered for through the offering of Vocational Curriculum Report 191. However, conceptualization can only be of benefit to the student once the first two steps of Dewey's model are in place; these are concrete experience, followed by observation and reflection. The concrete experience is not in place in the Vocational Curriculum Report 191 offering, therefore, the student does not move from doing to internalizing to forming a clear concept in his mind, and apply it to the general world of work out there. On the surface, theory is offered, but the manner in which it is offered makes it a stand-alone element of the curriculum. The discussion now proceeds to the question: what skills are entailed in Vocational Curriculum Report 191?

5.2.2 THE CURRICULUM ENTAILS SOME RELEVANT SKILLS

Rogers (Fignalo, 2015) acknowledged the fact that employability is complex, and further suggested core skills as the relevant skills for employability. The question that one should ask is: are the skills that are mentioned by both the respondents and the literature relevant core skills needed to address the issue of unemployment?

Dewey (Kolb, 2006) believed that if theory is combined with practice, students will be at an advantage of acquiring the required relevant skill immediately, instead of postponing this until after graduation, thereby making the training design to be different from the formal academic curriculum training.

This study has revealed that the skills mentioned by the respondents are the basic skills that are relevant to the labour market. It is an advantage of the Vocational Curriculum Report 191 that it makes provision that during the experiential learning, the skills will actually be re-shaped and practically transferred to students. In this way, TVET college graduates will be marketable in terms of the skills they possess than the formal education students.

However, to address the question asked above, reference needs to be made to the kind of employment qualified students will seek, and the job descriptions students will have to be paired with. First, invariably, qualified students will seek employment in the specialization they have favoured as qualification. The employment opportunities will entail a practical component since they have been trained in the applicable theory and practice. However, students only possess theoretical skills, and this puts them, from the onset, in a precarious position as employees. As employees, they can offer ‘theoretical-practical’ skills, but given the competitive job market of today, this might not ensure employability.

Second, the issue of unemployment needs to be addressed. Based on the fact that students possess skills that are ‘theoretical-practical’ skills, where does this position a student in the workplace? The competitive workplace of today needs skilled workers. If such workers show lack of training in their work, the tendency is to replace such non-compliant workers. Students enter the workplace qualified with a certain specialization and are expected to be able to perform the job requirements without further training. Since students do not possess the necessary practical skills, they will have to undergo ‘on-the-job’ training. This has cost implications for the company. Given the scenario of students, qualified, but not qualified, the curriculum might add to unemployment, and not alleviate it.

The above statements confirm that the curriculum, as it stands, is somehow serving its intended purpose, which is to impart knowledge and skills to its students so that they can be employed in the labour market.

Dewey (Kolb, 2006) refers to experiential learning as starting with concrete learning. The study showed that this step in the learning of students is missing from the offering of Vocational Curriculum Report 191. Thus, the complete process, as posited by Dewey that is concrete learning, observation and reflection, formation of abstract concepts and lastly, testing implications of concepts in new situations, is incomplete in the case of vocational students. It alludes to students' learning experience lacking in the necessary opportunities to acquire the necessary skills to make them employable.

5.2.3 THERE IS A MISMATCH BETWEEN TRAINING AND LABOUR

It was confirmed in this study that the curriculum, as it is offered currently, is outdated and has not been revised since 1995. This is challenging the offerings by the TVET Colleges, and it can be argued that there is a mismatch between what the Vocational Curriculum Report 191 entails and what the workplace wants.

Dewey (1997) pointed out the importance of involving labour expertise in the learning experiment process since they are the ones that possess updated information regarding the needs of labour market wants. Their involvement will ensure that colleges, as they train learners, are training them on the relevant skills that are on demand, thereby making the vocational learning process to be demand driven. Links between local colleges and the industry are viewed as an effective way of making education to be more relevant. These links have an influence in tailoring the programmes that are offered by each college. In practice, it means that each college will be demand-led instead of supply-led as they will be offering only programmes needed by the industry.

Two issues need to be attended to, namely: the implications of the outdated curriculum and the knowledge-level of lecturers. The curriculum, as it is offered currently, has little impact with regard to the current skills needs of the labour market due to the curriculum that is outdated. The curriculum, as it stands now, addresses the needs that date back as far as 1995 as it has not been revised since then. A lot of changes and developments have occurred in the 21st century due to economic and social factors.

As expressed by a lecturer 1 in TVET College A, in Financial Accounting, the way the financial statements are prepared currently in the labour market is totally different from what is in the current curriculum:

There is no balance at all between what we teach and what the real world wants. What we teach is totally different to what is happening in the real world. The curriculum is not updated. Few of the technics are still used in construction but in surveying, most of them that are used are the ones that we teach. So it's there, the technical background is there, but the functionality of it on the site is not there. Usually the stuff that they use on the site now are seriously way updated than what we teach. So the curriculum does not bridge the gap'.

This situation has brought into sharp focus the mismatch between training and labour market skills demands. Critics argue that the lack of input from prospective employers into curriculum design and training delivery are partly responsible for the mismatch (DHR, 2007).

It is confirmed in this study that the TVET colleges view the industry as a separate entity, and it has no contribution to make in the curriculum delivery. The very nature of the curriculum offerings must speak to the workplace demands students will have to face once they enter the employment field. This makes it imperative for the curriculum to work hand-in-glove with industry and its ever-changing demands. The current implementation of the curriculum points to a curriculum devised by higher education based on demands of policy makers and then implemented as part of a qualification mix. However, if the link between industry and curriculum is to inform the curriculum at development level, then industry should be consulted at the very inception stage of the curriculum. At the moment, the link between industry and curriculum is, indeed, tenuous, therefore, an outdated curriculum, in terms of industry requirements, is problematic since it has a bearing on the employability prospects of students.

Another problematic area highlighted by the study is the level of practical knowledge of lecturers. Lecturers, themselves, are not aware of what the labour market wants.

They have been trained in theory only and cannot link the outdated curriculum with the expectations of the real world. This problem is two-fold: due to a lack of training in practice, lecturers are theory-driven in their teaching and lack of knowledge of what is required by the labour market.

Above, two areas of mismatch in the offering of Vocational Curriculum Report 191 have been highlighted. First, is the outdated version of Vocational Curriculum Report 191 still being taught, and secondly, it is the lack of practical knowledge of lecturers. Developing new technologies has been a demand of the current world of work in its endeavor to keep up with the economic demands of the world.

Dewey (Kolb, 2006) describes a dynamic process in his experiential learning model. This dynamic process needs to take place in a context which takes current technological developments into consideration. Learning must be positioned and contextualized in the theory and practice in order for students to be able to connect with the current practices they will encounter once they are placed in experiential work positions. The content of Vocational Curriculum Report 191 has to be adjusted to keep up with the latest trends in industry. This will enable students to apply their concepts - moving from the third step in Dewey's experiential learning model to the fourth step - and testing it in new current situations.

The second mismatch is that of lecturers lacking experience, and this speaks directly to Dewey's experiential learning model (Kolb, 2006). The knowledge of lecturers can be situated in the third step of formation of abstract concepts and generalizations. The all-important first two steps: concrete experience and observations of practice, coupled with in-depth reflections of practice, are absent. The question arises: Why lecturers deem themselves to be qualified to teach, yet missing these two vital steps? Could that be not the reason for them not demanding the implementation of the practical component of Vocational Curriculum Report 191?

5.2.4 THE CURRICULUM PROMOTES EMPLOYMENT THROUGH SELF-EMPLOYMENT

One other aspect of employability through Vocational Curriculum Report 191 is self-employment. The decline in the youth employment rate can be opposed by promotion of self-employment.

The curriculum itself was initiated to develop more artisans so that they can either be employed or self-employed. Self-employment is realistic in a situation where a student has gained vast experience in what he or she wishes to practice as a sustainable venture. For Vocational Curriculum Report 191 to be able to promote self-employment, it has to incorporate practical experience during learning so that when learners exit the college, they are able to open their own business ventures with the experience they have gained.

The study has confirmed that it is impossible for the students to be self-employed after they have completed their NATED N6 certificate since they are not exposed in any form of practical experience during their studies. This means that graduates are not able to put what they have studied into reality, and that makes it impossible for them to be self-employed. All the respondents strongly agreed that students cannot be self-employed after they have completed their studies until they complete the experiential learning.

This means that the curriculum is then limiting the opportunities of its students by only preparing them for formal employment rather than informal employment. Formal employment requires formal education wherein students have been trained through theory to become specialists in certain fields like Human Resources, Business Management, and some engineering courses, to name a few. Informal employment requires students with skills like plumbing, electrical wiring, artisans and so on. These skills can be imparted through informal education or through formal education that will incorporate theory and practical knowledge. It can also be argued that self-employment is suitable only for students that have gained an in-depth experience in their respective fields through the combination of a relevant qualification and experience. If Vocational Curriculum Report 191 offers formal qualifications through theory only, it is clear that it

only leads to the formal employment of its students, thereby neglecting its main purpose of promoting informal employment and self-employment. However, that is not in line with what literature (Education, 2008) suggests, which is that Vocational Curriculum Report 191 should be helping communities to acquire entrepreneurial skills that will help them to be self-employed as chances of employability shrink.

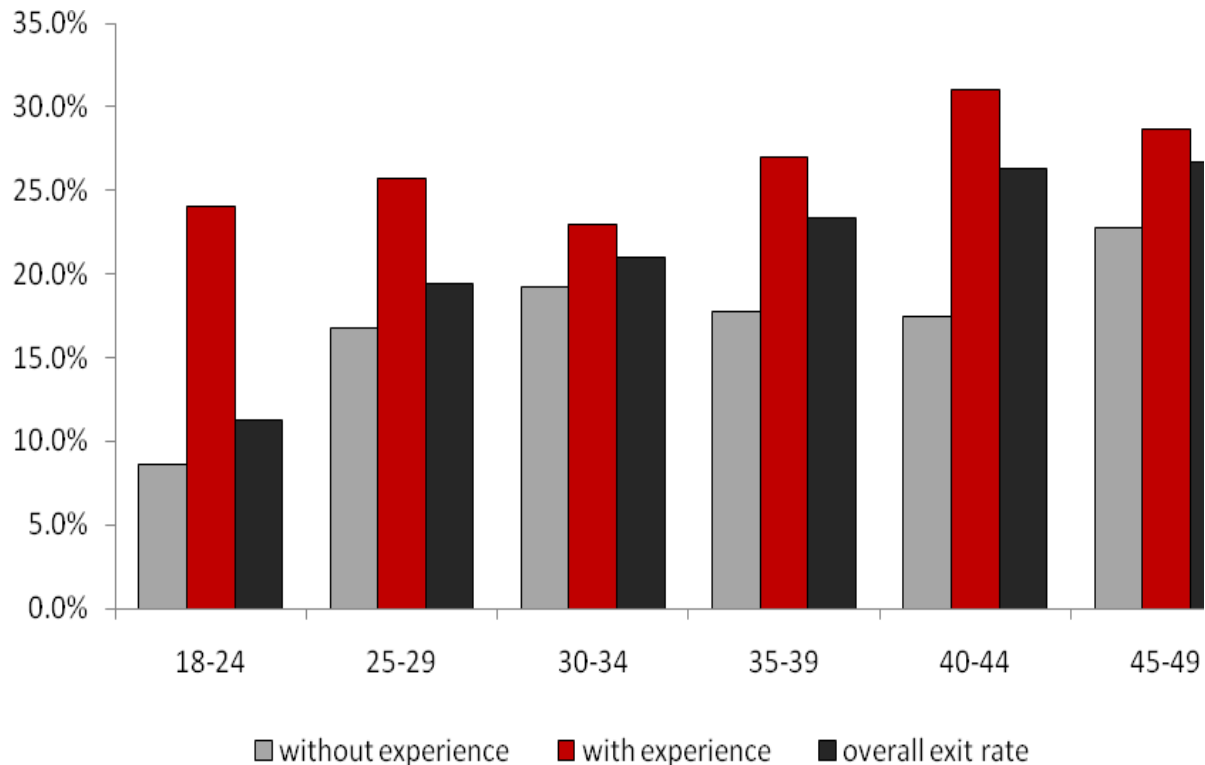
According to Gamble, at the level of curriculum, the gap between preparation for employment and self-employment seems to be narrowing and converging in a more general notion of employability, which could lead to either employment or self-employment. While this refers to enterprise or development of self-employment, rather than to survivalist mode, it enables colleges to conceptualize preparation for self-employment in the same terms as the rest of the curriculum, instead of viewing it as something totally different or separate from the offered curriculum (Gamble, 2003).

Self-employment is one of the keys to Vocational Curriculum Report 191 since its main aim is to impart skills to its learners. If the curriculum itself does not cater for self-employment, it means that it promotes one element of successful employment that is the theory part exclusively.

For the Vocational Curriculum Report 191 learners to be prioritized in the labour market, potential employers prefer students that have gained experience so that they do not spend more money in training the student further. Since the practical component is not embedded in the curriculum, students are struggling to penetrate the labour market, and they do not get preference, although the curriculum policy clearly states that the students must be exposed to practical experience during learning.

If Vocational Curriculum Report 191 can incorporate theory into practice, students would not struggle to enter the labour market. Employment preference is given to those with experience rather than those without experience. The table below represents this graphically.

Figure 2 Exit rates from unemployment with and without experience



(Statistics SA, 2012)

The above graph clearly shows that the youth aged between 18-24 years with experience are likely to get employment rather than those of the same age without experience. This number of inexperienced youth includes the TVET college graduates that are struggling to get into the labour market.

According to Rogers (Miettinen, 2010), students, if they are to be effective, need four different kinds of abilities: concrete experience abilities, reactive observation abilities, abstract conceptualizing abilities and active experimentation abilities. This implies that they must be able to involve themselves fully, openly and without bias in new experiences. They must be able to react on and observe their experiences from many perspectives. They must also be able to create concepts that integrate their observations into logically sound theories and must be able to use these theories to make decisions and solve problems (Miettinen, 2010).

In line with Rogers' views, the study has highlighted a new application of the curriculum such as the curriculum empowering students to be responsible citizens, for example, maintaining their homes once they complete their studies. This means that the curriculum also contributes meaningfully to the needs of the society with the skills that it entails, and in a way, makes its students to be responsible citizens. This is what Vocational Curriculum Report 191 is supposed to do to expand the opportunities of its students, albeit in the informal sector.

The following table shows a summary of what the curriculum was intended to do as per education policy (Education, 1995), versus what the study has identified as gaps in offering.

Table 3 Summary of the gaps identified by the study in the curriculum

Initial purpose of Vocational Curriculum Report 191	Gaps Identified in this study
To: 1. Prepare students for occupational fields	The curriculum focuses on formal theoretical qualifications rather than practical occupational qualifications
2. Form the basis for effective participation in the world of work	The curriculum allows the students to do experiential learning in the world of work, however, this does not guarantee effective participation in the world of work.
3. Form a foundation for further learning.	Theory forms a foundation for either employment or further learning, although it is questionable whether higher learning institutions do recognize

	the credits obtained by students towards a further qualification.
4. Prepare students for responsible citizenship.	This is done through limited practical skill transfer to students in some of the courses.
5. Increase employment opportunities for graduates and poverty alleviation.	Methods are employed by the curriculum to address the issue of unemployment such as: experiential learning, self-employment, and skills transfer. In all these methods, more gaps have been identified, and it can be confirmed that less is done by the colleges to exhaust these methods fully to develop students to their full potential.
6. Be responsive to the needs of the community.	Colleges are offering the same courses as stipulated by the Department of Higher Education across, and these are not adjusted to the needs of their communities. Cognizance of community needs is not taken.
7. Ensure vertical and horizontal articulation, cohesion and educational value with practical relevance.	Educational value with practical experience is not meeting the purpose of the curriculum, i.e. to prepare students for the world of work
8. Focus on concept formation that builds technological capability,	The curriculum lacks focus on immediate practical skills acquisition during learning.

reinforced by practical training and periods of work placement.	
9. Lead to full-time or part-time employment in intermediate positions.	Full-time and part-time positions are offered to students but to a limited extent.
10. Promote entrepreneurial self-employment in growth sectors of the economy.	Does not promote entrepreneurial self-employment

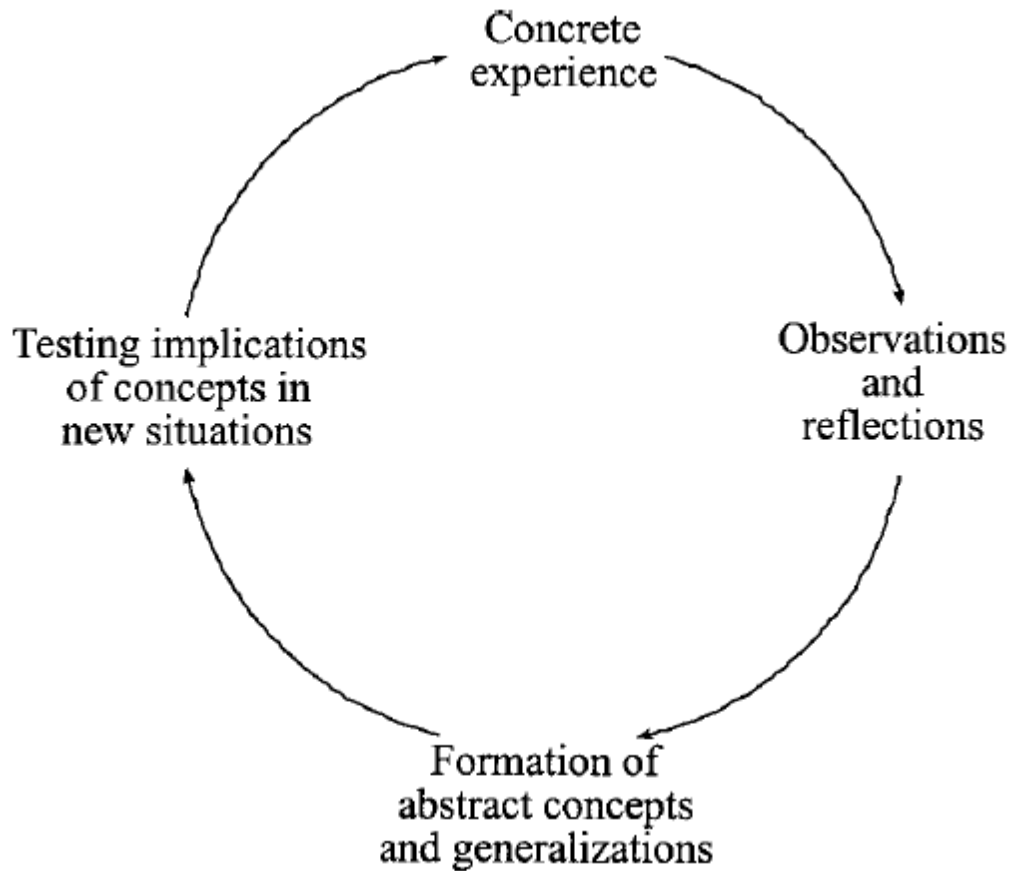
5.3 VOCATIONAL CURRICULUM REPORT 191 ENSURES THE TRANSFER OF RELEVANT KNOWLEDGE AND SKILLS NEEDED BY ITS STUDENTS

The skills transfer will ensure that learners are fully equipped with the relevant skills when they exit colleges. Below are the various ways in which Vocational Curriculum Report 191 transfers skills to its students.

5.3.1 EXPERIENTIAL LEARNING AS PART OF SKILLS TRANSFER

For the Vocational Curriculum Report 191 students to be able to graduate, they need to undergo experiential learning in order to acquire relevant skills as they learn only theory in class. The figure below represents the four stage-model of experiential learning according to Dewey.

Figure 3 Dewey's four stage model of experiential learning



(Kolb, 2006)

The above figure explains that students who have undergone the experiential learning route will have concrete experience. In order for them to gain the concrete experience, they need to have the formation of concepts and generalization. They will use these new concepts to test their applications to the new situations, and then they can observe and reflect on the whole experience. In this way, they will have a full understanding of what the real world wants. In a way, they will easily gain the access to the labour market through the experience that they have gained during the experiential learning.

According to Dewey, as an individual passes from one situation to another, his world and his environment expands or contracts. He does not find himself living in another world, but in a different part or aspect of one and the same world. This means that what he has learned in the way of knowledge and skills in one situation becomes an

instrument of understanding and a way to deal effectively with situations which follows (experiential learning) (Kolb, 2006).

5.3.1.1 CONCRETE EXPERIENCE

This is a stage where the student's knowledge and practical skill has fully developed. The assumption is that students can observe and reflect, internalize abstract concepts and generalize these to the world of work. Lastly, they may move from the known to the unknown, that is, applying concepts to new situations and be able to deal with either positive or negative implications of their application.

The student's experience in this stage is concrete and sound, and he or she is ready to proceed to the world of work. The application of all the concepts that the learner has abstracted during the learning and the observation stages are real; the student can demonstrate practical competence in all areas of his or her field. In the light of the colleges' lack of capacity to equip learners to cope with specialized equipment and machinery, employers have the task of training students after graduation from college. This on-the-job training is aimed at reshaping and sharpening skills to suit their companies.

Vocational Curriculum Report 191 students only reach this stage once they complete either 18 or 24 months of experiential learning in their relevant organisations. This is a stage where the concepts they have learned in class are fully developed as they now have not only theory, but practical skills have been shaped as well. The student at this stage is ready to penetrate the world of work. In fact, this stage is very crucial to the students as some of them are being absorbed by the same organisations that trained them.

Participants in this study highlighted that it will always be better for the curriculum to prepare its learners for employment during learning at colleges through incorporating theory with practical components to ensure that their experience is concrete, rather than to wait until they graduate. The main disadvantage here is that college graduates

are struggling to penetrate the labour market once they complete their studies since they exit without any kind of practical experience. As a result, they end up adding to the high number of youth that is not employed.

5.3.1.2 OBSERVATION AND REFLECTIONS

This is a stage of experiential learning where the students observe when employees are working in the workplace, keeping in mind what they already know and have learned as theory in class. At this stage, they are not in a position of doing or putting theory into practice as they are still trying to adjust and familiarizing themselves with the real work environment. Their mentors help them to understand all the processes that are being followed to fulfill a given task or job. Once they understand the practicality of what they have learned as theory, they will incorporate it into the foundational knowledge that they have gained in the TVET College.

According to Dewey, experiential learning begins with an initial focus of the student, followed by an initial experience. After the experience, students reflect on their observations and then formulate generalizations. Using those generalizations, students subsequently experience the phenomenon again by testing the generalizations with experimentation. Following experimentation, students further reflect and refine the generalizations, thus leading to further experimentation. The experiential learning process is on-going in a spiral-like pattern (cited in Kolb, 2006).

The learning experience for students, thus, starts with a theoretical underpinning that is consolidated when students visit simulation rooms and laboratories. Thereafter, students engage in reflections. Observations and reflections, as suggested by Dewey as part of the learning process, are thus in place, thereby empowering students to move on to the next element of learning, namely formation of abstract concepts and generalizations.

5.3.1.3 FORMATION OF ABSTRACT CONCEPTS AND GENERALIZATIONS

Once the student is able to reflect on his prior knowledge, he will be able to abstract new concepts, thus adding to the concepts he or she already possess. This is a stage where new information is acquired to advance or complement the existing knowledge that the student already knows. As Dewey has stated above, when a learner passes from one scenery to another, his knowledge is either expanding or contrasting. These new concepts will help the student when he or she reaches the next level of putting what he or she knows into practice.

The National Certificate NATED N1 – N3 learners in engineering have no practical exposure at all during the trimesters that they spend on their theoretical studies because it is assumed that they receive this experience at work. There are, however, many learners who study the NATED courses without being in a workplace at all. The Vocational Curriculum Report 191 lecturers are of the opinion that since the classroom work covers only theoretical concepts over a three-month period, after which the learner enters industry, they do not yet know the basics such as use of a test meter, (Matshoba & Burroughs, 2013). Therefore, the experiential learning will help them acquire the basic skills that relate to their fields, as well as advancing what they already know.

Students get the opportunity to form abstract concepts through building on their observations and reflections. However, the consolidation of conceptualizations must be linked to generalizations. This can only be done if the theory is supported by practical experiences, thereby helping students to move from the specific core concept to the general application in practice. Since practical experience component is lacking during the forming of abstract concepts, students do not have a practical base to anchor their theory. The implications for students are that they do not have the grounding to test concepts in new situations.

5.3.1.4 TESTING IMPLICATIONS OF CONCEPTS IN NEW SITUATIONS

This is an important stage of the experiential learning. Students are given an opportunity to test the concepts they have learned in class and the ones they have

abstracted during their observation period in new practical scenarios. Learners are given a chance to put the theory they have as a base into real new situations. Their observations are also tested to see if they will be able to do what was done in front of them during the observation stage. The main advantage that the students have in this stage is that they might have confidence since they will know and be sure of what they are doing, unlike when they reach this stage straight after graduation.

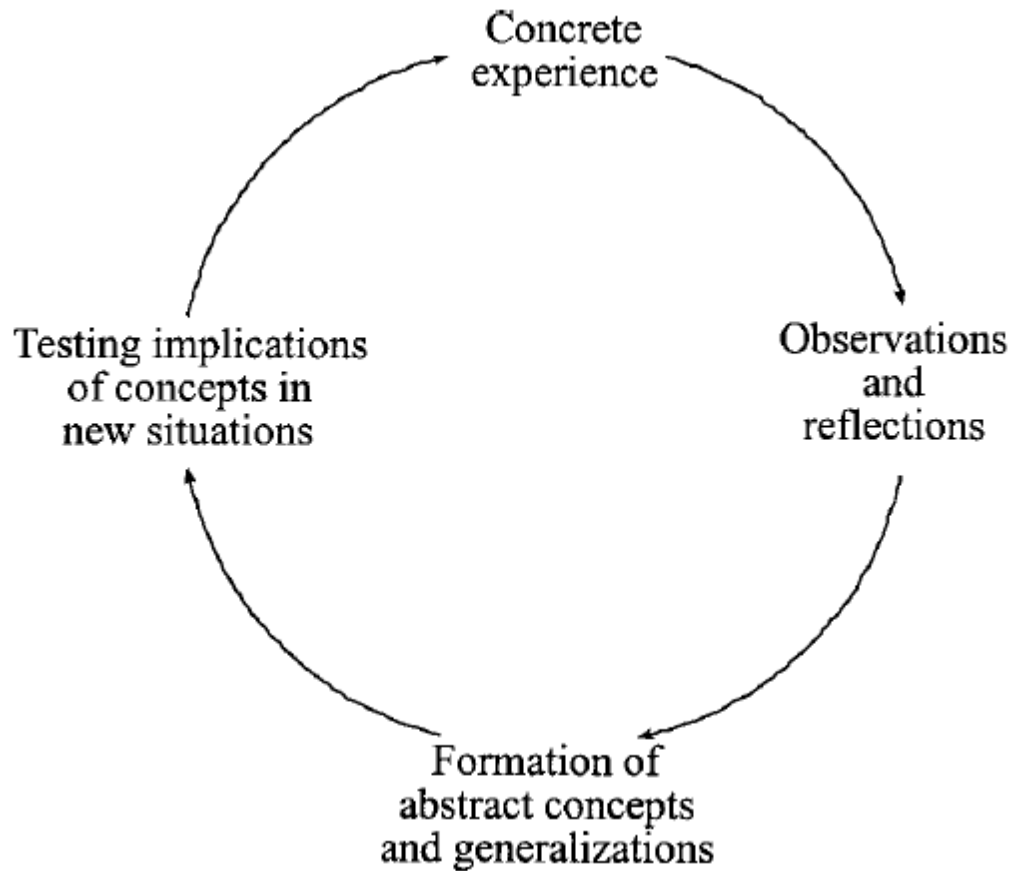
The study has revealed the fact that some of the students are misplaced. They are placed in the organizations or sections that do not relate to their qualifications. This means that some of the Vocational Curriculum Report 191 students are not able to test the concepts they have learned in class due to the new and totally different situations they find themselves in during the experiential learning. Instead of testing the theoretical concepts they already know, they end up learning totally new concepts. At the end, they will be disadvantaged because they will not be able to apply for their N-diplomas after completing the experiential learning.

One respondent offered an example of Labour Relations students whereby they are mostly placed at government institutions although the relevance of the curriculum in the said subject is on the private sector. This respondent focused on a very narrow application of the curriculum, meaning that the element of gaining abstract concepts and being able to put these in practice, such as in government offices, has not been grasped.

There are different reasons for this misplacement of students. Firstly, the shortage of firms that relate to some of the qualifications that the students do at some of the colleges results to misplacement since colleges are offering the same curriculum across the board. Secondly, colleges do not have proper ties with the industry to ensure smooth placement of its learners. Thirdly, academics are not involved in the placement process as this responsibility lies on the student support services section in each college, and that creates a problem as students end up being misplaced by the placement officers.

There is a gap between what was found in this study and Dewey's model of experiential learning as used in this study as a theoretical framework. Thus, this study is suggesting the following as adjustments to Dewey's model of experiential learning. This is presented in figure 4 below.

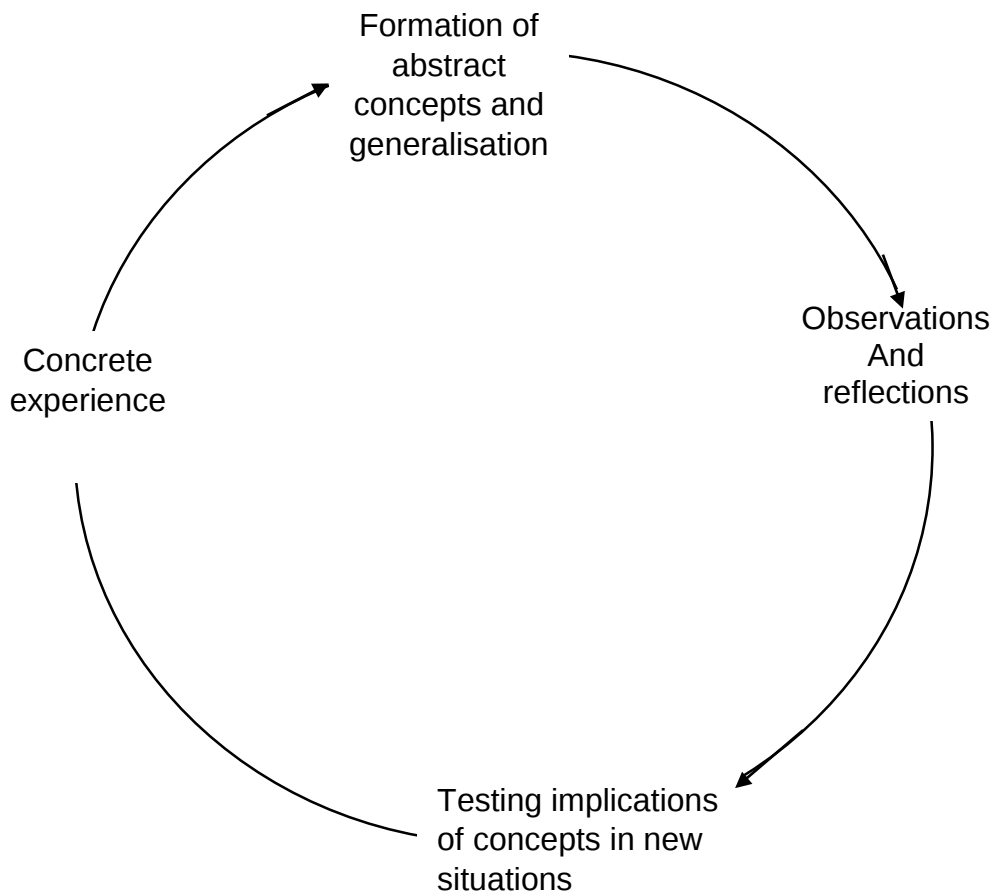
Figure 4 Dewey's original diagram of four stage model of experiential learning



(Kolb, 2006)

From the original Dewey's diagram of four stage model of experiential learning, as shown above, the study suggests that Concrete Experience must be moved to be the last step in experiential learning since according to this study, this is supposed to take place at the end. It is clear from this study that Vocational Curriculum Report 191 students do not reach the concrete stage whilst they are studying. It happens, to some, when they have completed their in-service training, but not for the majority. See figure 5 below.

Figure 5 Adjusted Dewey's four stage model of experiential learning.



Formation of concepts and generalizations has been moved to be the first step in the process. This happens in class where students are introduced to new concepts and are expected to make generalizations. They are being introduced to the concepts that relate to their field of study, so that when they enter the world of work, they do have the theoretical background. It was noted in this study that the theory that the students learned in class gives them the foundation so that when further learning takes place, they are able to relate theory to practice. However, this is just a theoretical foundation.

Observations and reflections have been moved to the second step. Before students can observe, they need to first have the background information of what they will be observing so that they can be able to relate and make sound meaning of the concepts.

In case of Vocational Curriculum Report 191, the background is the theory. This is supposed to take place during learning. However, the study has revealed that almost all the colleges did not have simulation rooms or workshops that can be used by the lecturers during teaching and learning for students to go and observe in order for them to be able to attain meaningful learning.

Testing implications of concepts in new situations has been moved to the third step. The reason is that students need to learn the theory first, then they need observe before they can be able to test the implications of concepts they know in new situations. This, again, was intended to take place during learning to allow students to move from known to unknown. In the absence of workshops and simulation rooms, this is not happening.

Work placement helps the learners to gain a deep understanding of the practical aspect that relates to their field of study. They get a chance of putting the theory into practice under the guidance of a specialist in the field. New knowledge is being imparted during the placement process, thus building on what they have learned in class as a base. Some of the students are absorbed by the companies that are training them, and once they complete their training, this creates better employment opportunities for them.

Dewey made reference that internships, as a form of experiential learning, meet most criteria easily, that is, participative, interactive, contact with environment, and variability/uncertainty. Given that most interns have at least completed their junior year, a theoretical base of sorts should have been presented. Similarly, in order to get credit for the internship, most students must provide a written evaluation of the experience. The two criteria presenting problems are the structured exercise and feedback components. Since the internship takes place completely outside the university or college environment, it is nearly impossible to structure the experience for the student. Consequently, the internship experience tends to vary greatly, from one that actually has negative learning (poor work attitudes, for example) to extremely positive

experiences (Miettinen, 2010). This has implications for the quality of students' qualifications as well as the quality of their practical experience.

According to Mgijima and Morobe, those students who are not engaged in formal experiential learning in industry have the option of going to a training center where they can acquire workplace experience in simulation workshops; these training centres are meant to provide a simulated learning context similar to that of the NC (V), but it is generally understood that the focus at the training centers is more on coaching for trade tests than providing practical experience (Mgijima & Morobe, 2012).

It was noted during the course of the study that all the colleges that participated in this study did not have any workshops in their campuses although courses like Mechanical Engineering demand a simulation workshop for students. The situation burdens the learners since they cannot immediately relate to what they learn in class with what is happening in the real world. Some of the equipment that the Mechanical Engineering syllabus refers to is outdated, hence, the respondents mentioned that they would love to have workshops in their colleges.

Respondents to this study also highlighted that in the absence of workshops at colleges, they take students on an educational tour or workshops for experience purposes, although this is not effective. They mentioned time as the major limiting factor since they only take them once in a semester or trimester. When the students get to these workshops, they cannot attempt to use the machines practically, since these act as information sessions wherein they are informed about the operation of this machinery given a demonstration by a workshop instructor. This confirms that this curriculum offers only theory although it is supposed to incorporate theory and practice.

In his earlier work, Dewey (1997) spent considerable effort in postulating about how people make sense of the world around them. He used the term "reflective thought" to describe the process by which people learned from observations of their experiences. He outlined five distinct steps through which people progress during the learning

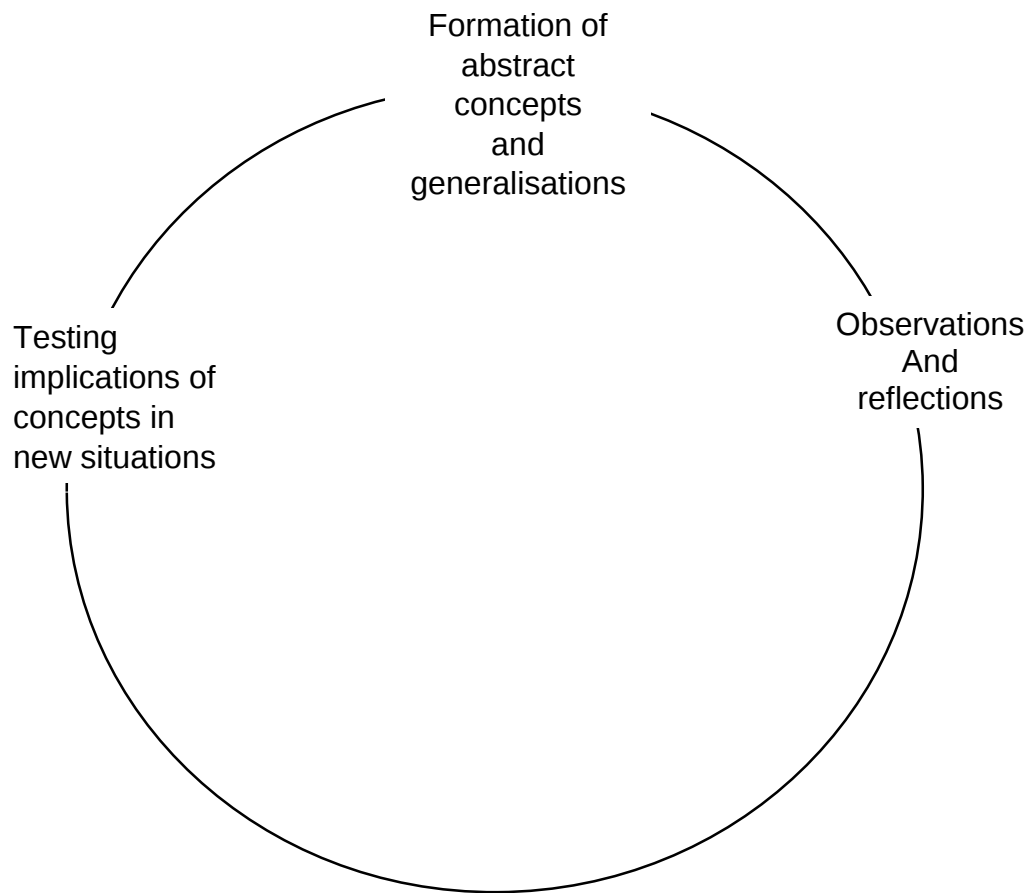
process: “(1) a felt difficulty (2) its location and difficulty (3) suggestion of possible solution (4) development by reasoning of the bearings of the suggestion and (5) further observation and experiment leading to its acceptance or rejection”. Dewey asserted that it was no coincidence his theory of how people learn and the scientific method were analogous.

In the light of the colleges’ lack of capacity to equip learners to cope with specialized equipment and machinery, employers have the task of training learners after graduation from college. This on-the-job training is aimed at reshaping and sharpening skills to suit their companies. Therefore, if employees are forced to train the learners in machines and equipment to suit their company’s needs, training in the colleges is not complete. There are companies that are accredited, that also offer theory and practical courses that are NQF aligned in their sites. This puts more challenge on colleges to deliver according to the labour demands, otherwise learners might opt for those accredited organizations.

Concrete experience has been moved to the last step. This is a point, according to Vocational Curriculum Report 191, where the student is exiting the college. Students are supposed to be fully equipped with theory and practical knowledge at this stage. If the above steps were realistic during learning, students would exit the college and enter the world of work without any difficulties. It was, however, noted in this study that students do not have any access to practical training during their learning since they learn theory only at the college. This means that when they leave the college, their experience is not concrete.

In the light of the study’s findings, a possible diagrammatic presentation of the findings can be presented in figure 6 below. In this diagram, the first step in the original Dewey’s diagram, which is concrete experience was taken out since it was clear from this study that students do not reach this stage. There are only three steps, as shown below, that the study believed are possible in Vocational Curriculum Report 191.

Figure 6 Possible diagrammatic presentation of the findings



Section 5.3.1.5 to 5.3.1.6 refer to the above diagramme according to the findings of the study.

5.3.1.5 FORMATION OF ABSTRACT CONCEPTS AND GENERALISATIONS

- Vocational Curriculum Report 191 offers theory as a basis of skills or foundation of knowledge;
- Further Practical learning to take place during the experiential learning; and
- Students at this stage are able to abstract basic concepts and make generalisations based on what they have learned as theory.

5.3.1.6 OBSERVATIONS AND REFLECTIONS

- Students are sometimes taken to the workshops to observe how to operate the machines;
- The practical component is not incorporated in the curriculum;
- There are neither workshops nor simulation rooms catered for Vocational Curriculum Report 191 students in the colleges; and
- Observations during learning are not real.

5.3.1.7 TESTING IMPLICATIONS OF CONCEPTS IN NEW SITUATIONS

- The curriculum allows the students to do experiential learning once they complete the theory part of learning;
- Students might be able, at this stage, to put what they have learned as theory in class into practice, and testing these into new situations once they are placed;
- Basic skills that these students possess are not reshaped and sharpened during learning;
- Placement officers do play a role although there are some challenges regarding the placement process to ensure that most students are placed;
- Colleges have failed to make links with the industry to ensure placement of students; and
- Articulation of students is not clear at all.

It was clear in this study that college students are not able to reach the concrete experience stage due to the fact that they do not have access to practical exposure during learning. What they learn in class as theory does not correlate with what they are required to do in the world of work, as it was highlighted the syllabus has not been revised. Hence, in the new diagram, concrete experience was taken out.

5.4 THE CHALLENGES OF VOCATIONAL CURRICULUM REPORT 191

The following two challenges were identified in this study:

One gap that was identified by this study, with reference to the placement of students, was that some of the students that are placed are misplaced, meaning that they are not placed in their relevant fields of study. Lecturer B in TVET College B indicated that:

‘Student Support Services (S.S.S.) caters so much for electrical students, because there are companies around that want artisans, but as far as civil engineering is concerned, there are no companies that are looking for artisans. In fact, locally there are no companies that are looking for civil engineering artisans.’

This explains why most TVET college graduates are not employable due to the placement focus on some programmes, whilst some are neglected due to various reasons. One of the reasons is that colleges are currently offering what is given to them by the DHET, not what is needed by their communities. As the above respondent has made a reference to the fact that there are no companies around his college that are looking for Civil Engineering artisans, the question is then: why is the college offering Civil Engineering? What is the college’s plan regarding the placement of the Civil Engineering students? The answer to these questions would be: the students are left on their own once they graduate since the college cannot assist them in anyway. This, alone, confirms that somehow, the colleges are not marketing their students to the world of work, and relating programmes to the needs of surrounding communities.

Another challenge that is revealed by this study is that there is a disconnect or mismatch between what the curriculum entails on one hand, and what the labour market wants on the other hand. This is caused, according to the respondents, by the curriculum that is outdated and has not been revised since 1995. This implies that the curriculum still drives the employability skills of the past. If this is the case, then the curriculum is not marketing its students to gain priority in the labour market.

Respondents did not express confidence in the curriculum offered by TVET colleges. They questioned the job prospects of their students and believed that only a small number would acquire a job after graduation. These feelings show that there is a problem with the existing curriculum, and this has a negative impact on students. The researcher is of the opinion that to boost the morale of both students and educators, companies should play a greater part in the colleges. Colleges should organize

functions such as symposia where companies showcase and give talks to students on prospective careers.

The research report concludes with Chapter 6. A summary of all the chapters will be presented, as well as a final conclusion and recommendation for further study.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter represents the summary of the main ideas that were drawn in this study. Recommendations on the key issues, as discussed in the previous chapter, will be tabled. The first section of this chapter will cover an overview of all the previous chapters, followed by the conclusion, ending with recommendations as posited by the research study.

6.2 MAIN IDEAS OF THE STUDY

In the first chapter, the full background of the study was given, followed by the problem statement. Aims, benefits, limitations and significance of the study were tabled and discussed. Three questions were raised in this study to find out if Vocational Curriculum Report 191 is still relevant as curriculum in terms of addressing the issue of skills, marketing and employability of its students. This chapter served as the map of this study because it gave directions as to how this study will be conducted. A short literature review was done in two sections. The first section of the review was conducted to see the how Vocational Curricula works as curriculum internationally, and the last part of the review was on how it works in South Africa.

In chapter two, the curriculum was analyzed and discussed using the existing literature. The difference between the academic curriculum and vocational curriculum was highlighted. Vocational Curriculum, its policies and the way it relates to employability were fully discussed in detail, starting at international level and proceeding to South Africa. Again, in the literature review, Vocational Curriculum Report 191 was analyzed fully, highlighting its purpose, benefits, contribution to the labour force, as well its shortcomings, as discussed in the existing literature.

In the same chapter, Dewey's theory was used to build the theoretical framework of this study. Dewey, the father of the experiential learning theory, was used in this chapter to underpin the link between Education and Experience. According to Dewey,

for learning to become meaningful and to be student centred instead of teacher centred, it must involve practical experience. Experiential education tries to integrate the life experience of students into the curriculum. Experience is not simply centred in a person; it is the result of influences the formation of attitudes of desire and purpose have on a person. However, every genuine experience has an active side which changes, in some degree, the objective conditions under which experiences are had. For Dewey, experience and education cannot be equated to each other (Aedo, 2002).

The study has moved from chapter 1, where the introduction and background of the study was given and chapter 2, where literature was reviewed, to chapter three, to detail the research design of the study in order to carry out the research. Chapter Three presented the methodology of the study, starting with an in-depth look into interpretivism as the research orientation. This forms the philosophical basis of the research paradigm, extending to the research design and methodological areas of the study. The research questions led the researcher to design a case study. The case study design allowed the researcher to investigate Vocational Curriculum Report 191 (NATED), as a curriculum. Semi-structured interviews were used for data collection. This instrument was fully discussed and its appropriateness was justified. In this chapter, attention was also given to the quality of the research conducted. The ethical stance of the researcher in relation to the study was discussed, with special reference to his position in the study.

Questionnaires were also used as an instrument of data collection in this study. They were fully discussed, indicating the guidelines that the researcher bore in mind when he developing the questions, as well as the advantages and disadvantages of using it as a data collection method.

Using all the methods that were detailed in chapter three, data was collected and discussed. Data presentation was presented in Chapter Four. Since the study is qualitative, a short discussion accompanied the data presentation. The chapter started with the demographic details of participants of the study per college, followed by the

presentation of data. The first three sections of the data presentation presented data per question. There were three questions that were posed in this study, meaning that 4.3 represented question one, 4.4 represented question two whilst 4.5 represented question three. The last part, which is 4.6 presented the challenges of Vocational Curriculum Report 191 as highlighted in this study.

In order to clarify the data presented in Chapter Four, an in-depth discussion was presented in Chapter Five. It was confirmed in this study that Vocational Curriculum Report 191 is offered through theory as a base, and it was argued that it is better to have the base or foundation than not to have it at all. Although it is evident that if practical experience can be incorporated into the theory that is being offered at colleges, the curriculum can be highly beneficial to students. Another issue that was raised by the study was that there is a mismatch between what the colleges offer as curriculum and what the labour market wants and needs. This mismatch answers the question as to why the unemployment rate of youth in South Africa is so high, since the colleges are supply-driven rather than being demand driven.

It is clear from the study that Vocational Curriculum Report 191 promotes the employment of its students in formal employment only since the absence of practical experience while students are still at the college suppresses the chance of self-employment and employment in the informal sector. The curriculum has not been revised for a very long time, meaning that at some stage, it not relevant to the labour market that is changing constantly.

The issue of articulation of the college graduates was also discussed in this chapter; the discussion was that it is unfair for college students not to gain credits for the courses they have passed at institutions of higher learning. Many gaps were also identified and discussed around the issue of placement of students. Where colleges are offering some courses, there are no relevant companies around where the college is located to ensure placement of those students once they qualify. It is also evident that colleges

have failed to create links with the labour market and the institutions of higher learning to allow smooth articulation of its students.

Chapter Six represents the last chapter of the research report. It highlights a summary of the findings in relation to the research questions and conclusions that were drawn by the study. Recommendations of the study per issue are tabled and issues of further study and limitations conclude this chapter.

6.3 CONCLUSIONS

The study has drawn the conclusions based on the findings that Vocational Curriculum Report 191 offers theory without practice and does not do enough to promote informal employment and self-employment of its students, thereby leaving a number of graduates unemployed. The curriculum itself is outdated and has not been revised for decades, meaning that the content in some subjects, and some of the skills that it entails, as well as some of the ways in which those skills are transferred, are no longer relevant to the labour market. College students do not get priority in the labour market because they do not possess practical and current skills.

6.4 POTENTIAL CONTRIBUTION OF THE STUDY

This study has highlighted and underpinned many issues that revolve around Vocational Curriculum Report 191 as curriculum with reference to employment, articulation, relevance of skills that it poses and so on. Department of Higher Education and Training (DHeT) is responsible for the curriculum review since Curriculum Report 191 is a national curriculum. When it is time for Vocational Curriculum Report 191 to be reviewed, this study will make a meaningful contribution. Colleges will also benefit as they are the ones that need to form partnerships with the stakeholders around them to ensure the placement of their students.

6.5 RECOMMENDATIONS

Based on findings of this study, as tabled in chapter four and discussed in chapter five, the following is recommended for Vocational Curriculum Report 191 in order to close all the gaps that were identified by the study

- On revision of Vocational Curriculum Report 191, the curriculum should clearly detail each learning outcome, the type of skill that must be imparted to the learners, and the methods of imparting those skills using workshops or simulation rooms at the college. In this way, both TVET College lecturers and students will have a clear understanding of their roles in the skills acquisition during the curriculum delivery.
- Colleges should form some linkages with the labour market for students to be placed for training during their learning period and for the purposes of incorporating learning with practice where colleges do not have workshops or simulation rooms.
- To keep up with the demands of the changing world, Vocational Curriculum report 191 should be reviewed every 3 years in order for it to be able to serve its intended purpose.
- Involvement of the labour market in the review is strongly recommended by this study. This will help the colleges to be able to contribute meaningfully in addressing the skills shortage in the country, as they will be offering a curriculum that is applicable to the labour market throughout.
- The study recommends that TVET Colleges should not only be looking at the placement of college graduates only, but ensure lecturers have theoretical as well as practical knowledge before appointment them.

6.6 ISSUES OF FURTHER RESEARCH

The study recommends the following for further research:

- A study could be conducted to investigate competences that a lecturer requires to deliver Vocational Curricula; and
- A study could be undertaken to determine what support systems must be in place for students to become fully qualified.

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APPENDICES
APPENDIX A

To follow.



To whom it may concern:

This document certifies that the dissertation whose title appears below has been edited for proper English language, grammar, punctuation, spelling, and overall style by Rose Masha, a member of the Professional Editors' Group whose qualifications are listed in the footer of this certificate.

Title:

**VOCATIONAL CURRICULUM REPORT 191 (NATED) AS A
CURRICULUM: A CASE STUDY OF THE EASTERN CAPE TVET
COLLEGES**

Author:

Siyabonga Prince Sixabayi

Date Edited:

13 November 2015

Signed:

A handwritten signature in black ink, appearing to read "R. Masha", enclosed within a faint, light-grey rectangular border.

Rose Khanyisile Masha

082 770 8892

INTERVIEW

APPENDIX B

SECTION A: STUDENTS

STUDENT BIOGRAPHICAL INFORMATION

1. AGE _____
2. GENDER _____
3. COURSE REGISTERED _____
4. SEMESTER OF CURRENT STUDY _____

QUALITATIVE QUESTIONS

SECTION B:

1. Why did you register for the course you are doing?

2. What challenges are you experiencing in your course work?

3. How applicable is the theory you are studying?

4. How applicable is the theory that you are studying to the practical work that you expect to do after completing N6?

5. What were your expectations when you registered for Vocational Curriculum Report 191?

6. What are your expectations now after completing a section of the course?

7. What skills have you gained so far?

8. In your opinion, what skills (that you have gained) are applicable to the industry?

9. Will the skills you have gained enable you to be self-employed?

10. Based on your knowledge of the course, what is missing, in other words, what gaps can you identify?

INTERVIEW

APPENDIX C

SECTION A: LECTURER

LECTURER BIOGRAPHICAL INFORMATION

1. AGE _____
2. GENDER _____
3. COURSE THAT YOU TEACH _____
4. NO. OF YEARS IN LECTURING _____

SECTION B: LECTURERS

1. What skills does the course that you are lecturing possess?

2. How relevant are these skills to the labour market?

3. How does the Vocational Curriculum Report 191 ensure transferability of those skills to its students?

4. How does the Curriculum ensure that TVET college students receive priority in the labour market with regards to skills?

5. In which ways does the curriculum ensure self-employment of its students?

6. In which ways does the curriculum prepare its students to enter the world of employment?

7. How relevant is the curriculum to the changing world?

8. Are the methods of delivering the lessons in this curriculum still relevant?

9. Which provision does the curriculum have to ensure the balance between what the students prefer and what the labour market wants?

10. Do you have any workplace experience? If no, what effect does that have in delivering your lessons in this curriculum? If yes, how did you gain entrance, and how did that help you in delivering your lessons?

11. What are the main challenges regarding work placement of graduates in this college?

QUESTIONNAIRE

APPENDIX D

SECTION A: ALUMNI

ALUMNI'S BIOGRAPHICAL INFORMATION

1. AGE _____
2. GENDER _____
3. COURSE YOU WERE DOING _____
4. NO. OF YEARS IN THE LABOUR MARKET _____

Section B

1. What were your expectations after completing the course that you have studied?

2. Were your expectations realised after completing the course?

3. What are the skills and knowledge that you have gained in the course that you have completed?

4. How applicable are those skills to the work that you are doing in your work place?

5. What gaps have you identified between what you have learned at the college and what you are doing at your workplace?

6. What were the challenges that you have experienced when you wanted to be placed for your work-based training?

7. What were the challenges, if any, that you, as a TVET College graduate experienced when you first entered the world of work?

8. How did the course that you studied promote self-employment for students?

9. In your opinion, how relevant is the course that you have studied to the workplace?

10. Since you have both theory and practical knowledge in the field of your study, what would you recommend to the curriculum?

APPENDIX E

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Dear Sir

REQUEST FOR PERMISSION TO CARRY OUR RESEARCH AT YOUR CAMPUS

I am doing my Master's Degree in Education under the supervision of Dr. Van der Walt at University of Fort Hare in East London Campus. The title of my research is: **Vocational Curriculum Report 191 (NATED) as a curriculum: A case study of three Eastern Cape TVET Colleges.**

I am requesting your permission to use your campus as a research site. This study is based on Vocational Curriculum Report 191, and I will be thankful if you can grant me access to ALL Report 191 lecturers, Report 191 students, as well as Report 191 former students that are now in the labour market.

I am also requesting to have access to the Report 191 lecturers, Report 191 students, as well as the college graduates that are working in your campus. I will select a sample of only three students, two lecturers as well as two college alumni.

I would like to visit your campus on the [REDACTED] I will be glad if you can organize for me a venue to use for the interviews.

The data that will be collected from this study will be used for academic purposes only, and is not intended to bring disrepute to the participants nor the campus or college.

I am looking forward to your positive response.

Yours Truly,

.....
Siyabonga Prince Sixabayi

APPENDIX F (To follow)



University of Fort Hare
Together in Excellence

ETHICAL CLEARANCE CERTIFICATE

Certificate Reference Number: VAN051SSIX01

Project title: **Vocational Curriculum Report 191 (NATED) as Curriculum: A case study of the three Eastern Cape FET Colleges.**

Nature of Project: Masters

Principal Researcher: Siyabonga Prince Sixabayi

Supervisor: Dr M Van Der Walt

Co-supervisor:

On behalf of the University of Fort Hare's Research Ethics Committee (UREC) I hereby give ethical approval in respect of the undertakings contained in the above-mentioned project and research instrument(s). Should any other instruments be used, these require separate authorization. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above.

Please note that the UREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the document
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

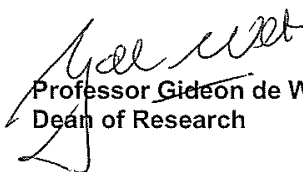
The Principal Researcher must report to the UREC in the prescribed format, where applicable, annually, and at the end of the project, in respect of ethical compliance.

The UREC retains the right to

- Withdraw or amend this Ethical Clearance Certificate if
 - Any unethical principal or practices are revealed or suspected
 - Relevant information has been withheld or misrepresented
 - Regulatory changes of whatsoever nature so require
 - The conditions contained in the Certificate have not been adhered to
- Request access to any information or data at any time during the course or after completion of the project.
- In addition to the need to comply with the highest level of ethical conduct principle investigators must report back annually as an evaluation and monitoring mechanism on the progress being made by the research. Such a report must be sent to the Dean of Research's office

The Ethics Committee wished you well in your research.

Yours sincerely


Professor Gideon de Wet
Dean of Research

03 December 2015