

COPYRIGHT AND CITATION CONSIDERATIONS FOR THIS THESIS/ DISSERTATION



- Attribution You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
- NonCommercial You may not use the material for commercial purposes.
- ShareAlike If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.

How to cite this thesis

Surname, Initial(s). (2012). Title of the thesis or dissertation (Doctoral Thesis / Master's Dissertation). Johannesburg: University of Johannesburg. Available from: http://hdl.handle.net/102000/0002 (Accessed: 22 August 2017).

SOCIAL INEQUALITIES THROUGH THE NATIONAL CERTIFICATE VOCATIONAL (NCV) CURRICULUM: A CASE STUDY OF A TVET COLLEGE

By

PRETTY GUGU MAHLANGU

Minor Dissertation

Submitted in partial fulfillment of the requirements for the degree

MAGISTER EDUCATIONIS

in

CURRICULUM AND POLICY EVALUATION

in the

FACULTY OF EDUCATION

at the

UNIVERSITY OF JOHANNESBURG

SUPERVISOR: Prof. M. Modiba

Co-SUPERVISOR: Prof J. Divala

OCTOBER 2019

Acknowledgements

My sincere gratitude towards various individuals, who supported me throughout the completion of this mini-dissertation:

- My family for the patience and continuous support they gave me.
- My study leaders, Prof Maropeng Modiba and Prof Joseph Divala, for their guidance and support.
- My colleagues from the TVET College sector and the graduates who participated in the study.



Abstract

The study examined how the jobs occupied by the National Certificate Vocational (NCV) graduates in South Africa affected their social mobility. Questionnaires were used to collect data on both the NCV curriculum and how students were assisted to obtain employment by the institution. The NCV Level 4 graduates who were employed in various sectors also completed a questionnaire on the positions they occupied, the expectations of the jobs and the rewards of being employed. The argument in the study is that the opportunities for employment that the graduates could access were continuing inequalities that were historically characteristic of the South African society. Even though there were changes and improvements in the graduates' lives, the low status employment they occupied still impeded their social mobility. The slow career progression reinforced the social inequalities in their lives. The conclusion in the study is that unless TVET education is comparable to university education, its impact on social stratification will remain unchanged.

UNIVERSITY ______OF ______ JOHANNESBURG

Declaration

I, Pretty Gugu Mahlangu, do hereby declare that this minor dissertation, which is submitted to the University of Johannesburg for the degree of Masters in Education, has not been previously submitted by me for a degree at any other university and that all the sources I have used or quoted have been indicated and acknowledged by means of a complete bibliography.

Pretty Gugu Mahlangu

Supervisor: Prof M. Modiba

Co-supervisor: Prof J. Divala

UNIVERSITY OF JOHANNESBURG

Acronyms

TVET: Technical Vocational Education and Training

NCV: National Certificate (Vocational)

NATED (Report 191): National Technical Diploma

NPC: National Planning Commission

VET: Vocational Education and Training

FET: Further Education and Training

DHET: Department of Higher Education and Training

FE: Further Education

BIS: Business Innovation and Skills

DOE: Department of Education

NQF: National Qualifications Framework

NVQ: National Vocational Qualification

NSFAS: National Student Financial Aid Scheme

HCT: Human Capital Theory

RoR: Rate of Return

- CAD: Computer Aided Drawing
- CNC: Computer Numerical Control
- SETAs: Skills Education Training Authorities
- NSF: National Skills Fund
- AET: Adult Education and Training
- SAQA: South African Qualifications Authority

Table of contents

	TENTS	
	owledgements	
	act	
	aration	
Acror	nyms	. v
Table	e of contents	. vi
CHAR	PTER 1	. 1
1.1.	Introduction: background of the study	
1.2.	Technical and Vocational Education & Training: Historical background	. 6
1.3.	The NCV curriculum	
1.4.	Problem Statement	10
1.5	Research Questions	13
1.6	The aim of the study	
1.7	Rationale of the Study	
1.8	Conceptual Framework	
1.9	Research Methodology	20
	Research Design	
	Research Approach	
1.9.3	Sampling	21
	Data Collection	
	Data Management and Analysis	
	Ethical considerations	
1.10	Short Outline of Chapters	24
	PTER 2	
2.1	Introduction	26
2.2	Vocational Education and Employment	28
2.3	Vocational Education and Social Mobility	29
2.4	The NCV and access to the labour market	30
2.5	Implications for the NCV L4	32
2.6	Conclusion	34
CHAR	PTER 3	35
3.1	Introduction	35
3.2	Research Paradigm	35
3.3	Research Design	36
3.4	Research Approach	36
3.5	Sampling	37

3.6 Data Collection: tools and process	11		
3.7 The data collection process	12		
3.8 Data Analysis	12		
3.9 Ethical considerations	13		
3.10 Reliability and validity	14		
3.11 Transferability	14		
3.12 Trustworthiness	14		
3.13 Conclusion	45		
CHAPTER 4			
4.1 Introduction	16		
4.2 The degree to which relevant knowledge and skills are taught in the NCV programme			
4.3 NCV curriculum and the graduate occupation status			
4.3.1 Family life after graduation			
4.3.2 The NCV curriculum as a post school career pathway			
4.4 Why NCV?			
4.4.1 Getting the first job			
4.4.2 Number of months it took to find the first job			
4.4.3 Has NCV qualification put you at an advantage			
4.5 Discussion			
CHAPTER 5			
5.1 Introduction	73		
5.2 Summary of findings and conclusions	73		
5.3 The significance of the theory to the findings			
5.4 Reflections on the methodology	76		
5.5 Limitations of the study	76		
5.6 Recommendations	77		
References	30		
Appendix A – Questionnaire			
Appendix B – Questionnaire Analysis			

CHAPTER 1

The National Certificate Vocational (NCV) at TVET colleges in South Africa

1.1. Introduction: background of the study

The chapter discusses the contextual and historical background of the NCV programme that is offered at TVET colleges in South Africa in order to highlight the rationale for its introduction, organisation and how it was intended to address historical, social and economic inequalities within the society. The problem statement, research questions, aim and objectives of the study are also outlined. This is followed by the rationale for the study, a brief review of relevant literature and concepts that underpin the study. Finally, an overview of the research methodology and a summary of how the study is organised is presented.

Since the advent of a democratic government in 1994, South Africa has been building a new education and training system to meet the needs of the newly envisaged society. There is a belief that without changes to the education system, society will not fulfil its potential with regard to social and cultural development (DHET, 2013). However, the transition from apartheid to a postapartheid democratic system in South Africa also coincided broadly with the 'collapse' of the Soviet Union and the ushering in of a new global order of capitalist economic dominance often referred to as the 'unipolar' world system. This order reflected a large-scale global capitalist restructuring which pressured many developing countries to embrace neoliberal economic policy reforms. Workers needed well-developed problem-solving skills and are able to continually adapt their knowledge and skills to changing environments. Institutions had to address national needs by equipping society to participate in the rapidly changing and competitive global contexts. Debates in academic and policy circles focused on how the growing inequality within and amongst countries could be dealt with.

In essence, higher education institutions worldwide are being called upon to become more responsive to the needs of the knowledge economy (Ogude, Nel & Oosthuizen, 2005). Productivity and competitiveness are viewed as depending on the ability to produce highly skilled and adaptive knowledge workers, who can manage and manipulate knowledge and information and adjust to volatile and unpredictable global markets. Ogude *et al.* (2005) suggest that the involvement of government in enticing, for example, higher education out of its ivory tower is indisputably part of a global trend.

To translate individual benefits into national economic growth, the effects of educational investment had to appear at the level of firms and economic sectors. For example, in South Africa, globalisation ushered in wide-scale reforms of public policies, amongst which, were those governing the country's education and training system (McGrath, Badroodien, Kraak & Unwin, 2004). The policies were aimed at democratising the education system, overcoming unfair discrimination, expanding access to education and training opportunities and improving the quality of education, training and research (DHET, 2013) as a way of achieving social justice for all. The 1997 White Paper on Higher Education (DoE, 1997), expected it (higher education) to increase its responsiveness to the increasingly technologically oriented economy by providing the requisite research and highly trained people and knowledge. Curricula had to be relevant, economically responsive and produce graduates who could meet resource needs within the county and enable it to participate in the 21st century economy (Griesel, 2002).

To redress, amongst other factors, the historical imbalances created by apartheid's radicalized education system and labour market, which had resulted in what McGrath *et al.* (2004) have characterised as a 'low skills regime' amongst the majority of the Black population, a key challenge facing the new democratic government was to develop policies that could redress the historical imbalances while overseeing the integration of the economy into a

global capitalist economic system. Amongst others, Motala, Vally and Spreen (2010) have argued that 'at the end of the apartheid era there was a real expectation that the death of a racist, fragmented, incoherent, yet planned education and training system together with its policies and practices – the manufactured bureaucracies that spawned to make manifest the intentions of apartheid ideologues and political leaders - and its deleterious outcomes, would be terminated once and for all'.

In general, the concern in post-apartheid South Africa has been with qualifying people for jobs and building a new life for all. For example, The White Paper for Post School Education and Training (2013) states that most of Black people are still poor and exposed to lower-quality public services and institutions (including public educational institutions) than the well-off. Therefore, the hope is that changes in education will promote equitable access to quality education to all sections of the population and help eradicate poverty. Importantly, widespread and good quality education and training are expected to facilitate rapid economic, social and cultural development for society as a whole.

Vocational education is promoted as the preferred solution for increasing the supply of human capital for the economy. TVET colleges are regarded as core institutions to drive this national development strategy and, post-school education is crucial to help break the intergenerational cycle of poverty by increasing young people's employability and earning potential (Branson, Hofmeyer, Papier & Needham, 2015). According to the Further Education and Training (FET) Act of 2006, the aim of colleges is to provide post-compulsory general education with a focus on vocational training, while preparing students for occupational fields and increasing employment opportunities (Act No. 16 of 2006). It is for this reason that the design of training systems, including curricula, requires close cooperation between education and training providers and employers – especially in those programme providing vocational training (DHET, 2013).

The NCV programmes have to respond directly to the priority skills' demands of the South African economy by developing the students' advanced skills and knowledge (DHET, 2009, pp.5). As a result, FET college programmes need continuous adaptation to respond to the changing needs in the labour market. The programmes are also expected to help address the higher rates of unemployment amongst the youth (DHET, 2012a; National Planning Committe, 2011a). The assumption is that unemployment is caused by a lack of skills and the programmes have to equip the youth with the necessary and basic skills for employment. TVET is thus mainly associated with the development of human capital through the development of skills that are necessary for employment in the labour market (Baatjes, Baduza & Sibiya, 2014; Wedekind, 2014). To realise this development, the government has invested in transforming the vocational education system.

FE colleges are viewed as potential instruments for up-skilling young people and adults. The South African FET policy draws heavily, though almost always implicitly, from the dominant neoliberal discourse about college transformation. The international argument that public providers are not delivering against the human capital development goals has informed this policy which proposes ways of making providers more efficient and more responsive to the needs of industry (McGrath, 2004c). However, FE colleges tend to attract individuals from lower socio-economic backgrounds, as well as adults that are returning to learning for instance (Crawford, Johnson, Machin & Vignoles, 2011). The colleges also offer, according to Crawford *et al.* (2011), some of the lower level qualifications (such as the NVQ 2) that do not meaningfully improve individuals' labour market prospects. For example, a key challenge articulated by Business, Innovation and Skills (BIS) is to ensure that FE students acquire skills and qualifications that are genuinely valued by the labour market, and thus stand a chance of improving social mobility (Crawford *et al.*, 2011).

Baatjes and Hamilton (2012) have warned against the implications of a narrowing orientation of vocational education as technical training which,

amongst others, teaches and produces skills that limit the type of employment accessible to youth. Their criticism highlights the 'warehousing effect', resulting from technocratic accountability and the rational control model of vocational education, on the working-class. Their argument is that the warehousing of thousands of youth, particularly working-class youth, has resulted in a struggle to access employment in the formal labour market. South African youth, like their counterparts in countries such as Portugal, Spain, Greece and Italy where youth unemployment is estimated to be as high as 52%, need a progressive and democratic vocational education system that affords training, dignity, adequate remuneration and socially useful employment (McKinsey, 2012).

Arguments in favour of a progressive vocational education system were important to consider in this study. If the role of vocational education was to respond to who Pampallis (2012), has argued are disadvantaged South Africans (who are the predominantly Black working class largely excluded by the formal economy and its limited absorptive capacity), who had to be the main beneficiaries of vocational education because of being previously disadvantaged. The argument is supported by critics of the dominant instrumental approach to skills development. They are highly critical of the limits of placing working-class youth on vocational tracks where they are trained for low-status and low-paid jobs. Pointing out that as an instrumentalist focus on vocational education increases, the historic 'race'/class inequities are likely to be reproduced.

A closer examination of the literature (Chisholm, 1984; Kraak, 2002, Badroodien, 2004) on the evolution of vocational education in South Africa suggests that it is reproduced for a subordinated working-class under changing economic policies. For example, Badroodien (2004) argues that even when it was solely reserved for whites, TVET was stigmatized as preparation for 'kaffir work' and disparaged by white workers as degrading and unacceptable. This was partly because the main and predominant focus of TVET provision before 1900 was on the African and 'coloured' workers as part of colonial ideology.

The TVET that today's FET colleges provide was used for rehabilitative and ameliorative purposes for poor white males as far back as 1910 and for decades after that, too. Because of this, all races have long viewed vocational education as inferior in quality to university study. Unfortunately, this stigma still haunts these institutions today (Ntlatleng, 2012).

1.2. Technical and Vocational Education & Training: Historical background

According to Badroodien (2004), the term 'technical and vocational education and training' (TVET) have come to encompass a wide variety of practices in South Africa. Its content and meaning have shifted and changed many times. This historical context of TVET has thus shaped its nature, range and scope of provision for different social classes and social groups.

The 19th and 20th centuries saw the establishment of technical colleges and formal apprenticeship training in response to the rapidly-growing needs of South Africa's mining industry, railways and other industries emerging at the time. The main focus was on artisan training, but these opportunities were largely reserved for white South Africans. In response to a growing and increasingly diversified industrial base, a number of industrial schools were established early in the 20th century. These fell under the national Department of Education but were transferred in 1968 to the provincial education departments and incorporated into a differentiated school system as technical, agricultural or home economics schools. A major differentiating characteristic in this system was the quality and extent of provision of vocational education for whites compared to that for other race groups, which was much inferior. As a result, the intention to build and maintain white superiority seriously distorted the economy, bringing about excessive capital intensiveness in high-skill white enclaves alongside low-skilled African labour.

Education and training resources were heavily biased towards furthering white progress, and the logic of apartheid required the multiplication of educational administrations and institutions that were racially segmented. The college sector became tightly aligned with the needs of industry in a racially defined model (McGrath, 2004c) and the deliberate under skilling of Africans proved untenable over time. By the 1960s, a significant shift of white labour into management and service employment led to growing pressure on the colour bar in the workplace, and on the technical college sector (Chisholm, 1992). Chisholm (1992), shows how a set of leading metropolitan colleges were allowed to begin to move into the tertiary sector in the late 1960s through the Advanced Technical Education Act of 1967, resulting in the emergence of technikons. By the early 1970s, the upward movement of the colour bar and 'white flight' from craft work led to growing corporate investment in technical training for blacks. However, prior to the Manpower Training Act of 1981, Africans were excluded from apprenticeship. In addition, numbers of black apprentices never became large and colleges remained racially segregated. Cloete (2009), observes that in 2002, whites were just over twice as likely to be enrolled in the university rather than a college, compared to Africans.

NIVERSITY

The emphasis of the apartheid government on work and labour in the education of blacks and the academic orientation in the education of whites did much to stigmatise vocationally-oriented education and vocational education amongst black South Africans. Early vocational education was thus driven by a philosophy of fitting people to their probable destinies (see Hanford, 2014). Children from poor families were trained for low-skilled employment while those in universities were to be the intelligentsia. As a result, in the late 1990s, vocational education had a major image problem and was viewed as a dumping ground for learners who were not succeeding in the traditional academic environment. Predominantly these were previously disadvantaged or marginalised learners. According to Wedekind (2014), the National Certificate (Vocational) (NCV), which had initially been called the FET Certificate, was envisaged as a full-time qualification on three levels of the NQF that essentially provided for an alternative pathway to the schooling system. It was not designed as an apprenticeship linked curriculum. It was a completely new type of offering, incorporating both subject specialization in a vocational field as well as generic training in communication, mathematics and life skills. The intention was that learners would exit the college system with a good general vocational education, some specialization and significant practical experience as part of the programme of college-based workshops and exposure to workplaces.

The aims of the NCV, as articulated by the Department of Education ten years after the publication of the 1998 Green Paper, are aligned to the overall focus of the vocational education sector: It 'aims to solve the problem of poor quality programmes, lack of relevance to the needs of the economy, as well as low technical and cognitive skills of the FET college graduates' (DoE, 2008).

On paper, the NCV seemed to be addressing the critical problems that had been identified by various role players. However, the public understanding was weak and there had been no advocacy campaign to promote the qualification. While there had been some consultation, there was a lack of understanding amongst employers as to the nature of the qualification. Because its introduction was linked to the phasing out of the N-courses, there was an assumption that the NCV was replacing the N-courses. This was not the intention. New skills courses linked to learnerships were supposed to replace the N-courses, while the NCV represented a completely new orientation of colleges to full time general vocational education. Principals of high schools actively advised their academically less able pupils to transfer to colleges, reinforcing a stigma about the colleges, but also creating a huge problem with students who could not cope with formal schooling and continued to struggle academically. For this reason, vocationalism and job training do not appear to

be the preference of youth in South African society. They seem to continue to favour university-based higher education and are likely to continue to do so given their aspirations and the seemingly inferior status of vocational education (Baatjes, Baduza and Sibiya, 2014). This is the case because South Africa's vocational education and training (VET) system are profoundly shaped by the history of colonisation by the British and the subsequent enshrinement of racism at the centre of social and economic policies under apartheid (Akoojee, Gewer and McGrath, 2005).

The result has been a polarised and inequitable educational and economic legacy with which the new government has been grappling for the past decade. The broad transformational challenge for colleges is based on a need to respond primarily to the pressures of globalisation through greater national competitiveness and better skills development. As indicated earlier, they had an important role to play in providing second- chance, so to speak, and non-traditional access routes to higher education (McGrath, 2010).

To summarize, the NCV was originally designed as an alternative to the academic grades 10, 11 and 12 – the idea being that these students could then leave colleges for vocational employment at the age of 18 years, thus the entry requirement for NCV L2 is Grade 9. However, there has been an outcry from numerous students that, although they enrol for the NCV programme and aspire to get employment after completing the three-year course, most employers are not aware of it (the NCV programme). This poses a great challenge to the young hopefuls who have already spent three years at the college. As the NCV progressed the demographics of the enrolment shifted. Increasingly students were opting for it after completing their Grade 12. This became a concern as this meant that they were not progressing in terms of NQF Levels. Overlaps between the school curriculum and the NCV constituted wasted resources as students were repeating much of the same material.

1.3. The NCV curriculum

TVET colleges have been stigmatized as second best to universities, because a significant number of students who enroll at these colleges for an NCV qualification do so because of limited access to universities or other options to higher post school education, often due to the socio-economic background or poor grades. As a result, sometimes it is assumed that after completing nine years of schooling, a student can progress to TVET for three years then another four years at university, especially if they come from a poor background.

The NCV qualification is a three year approved qualification which was implemented in public FET (now known as TVET) colleges in January 2007 at Level 2. According to the National Qualifications Framework (NQF), in order for a student to enroll for the NCV, they should have completed NQF Level 1 which is equivalent to Grade 9 or Adult Education and Training (AET) Level 4. NCV levels 3 and 4 followed consecutively in the two subsequent years. Students sat for the first Level 4 exam in November 2009. Once qualified at Level 4, graduates can either further their studies or seek employment.

1.4. Problem Statement JOHANNESBURG

Despite the magnitude and pace of the transformations and the official intentions to radically increase participation in the FET college sector, very little is understood about the workings of FET colleges and the implications that they have for the lives of students. In particular, little is known about the long term effects of the curriculum in TVET programmes as regards the intended eradication of poverty and the social challenges that are a result of youth unemployment. Powell (2013), has argued that very little research has been devoted to TVET colleges in South Africa, in particular, the long term effects of the social construction that are considered as a solution to youth unemployment and the eradication of poverty. In her view (Powell, 2013), fewer than ten

masters' and doctoral theses have been produced that have the FET colleges as their subject area and examine the curriculum offered at such institutions.

Furthermore, although the curriculum in TVET colleges has faced much criticism from employers and other stakeholders (see OECD, 2014 study 'A Skills beyond School Review of South Africa'), very little research has also been produced on skills development and, even less on TVET colleges. In general, quantitative literature on FET colleges' highlighted three characteristics. The first is that the majority of FET college learners came from 'poverty-stricken family environments (Gewer, 2009). The poverty experienced by many; their limited social, economic and educational resources; and the social stratifying effects of the academic-vocational divide, were all equally important as determinants of future prospects after completing education and subsequent position in society. Qualitative studies focused on the history of industrial and vocational education (Badroodien, 2001), the changing discourses in education and training (McGrath, 1996), the repositioning of technical colleges (Van Der Merwe, 2000) and the strategies required to implement the FET Act of 1998, such as student support services and learning content (Powell, 2013). Exceptions are, for example, research on South African further education and training colleges (Powell, 2013), employability, responsiveness and the reform of the college sector (Wedekind, 2014) as well as transformative pedagogy in Vocational Education (Baatjes, Baduza & Sibiya, 2014). For example, Wedekind (2014), pointed out that the NCV was introduced as an alternative for the academic grades 10, 11 and 12 – the idea being that students would leave colleges for vocational employment at the age of 18 years (Baatjes et al., 2014). Therefore, given this evidence, this study wished to address the void in the body of literature that has largely ignored and excluded student voices, offer an antidote to stereotypical and over-structured conceptions of the students and the ways in which the thought TVET have had an impact in their society. There was a need to employ students' voices in investigating the NCV curriculum which has been recently implemented in college X to establish how it equipped (or not) its graduates with the skills they required for employment and to help eradicate historical social and economic inequalities. Specifically, it was crucial

to explore the relationship between their socio-economic background when they enrolled for the NCV Level 4 programme and their occupation after graduation, in particular, what the students thought of this relationship. The hope was that an examination of this relationship could meaningfully contribute to a better understanding of the role of TVET colleges, the impact of vocational education and possibly provide insights into how the government could use the NCV to promote students' social mobility and reduce the historical inequality between the marginalised and wealthy individuals in South African communities.



1.5 Research Questions

The overarching question of the research was:

What is the relationship, if any, between the NCV programme at college X and the occupational status of its graduates?

The following sub- questions were addressed:

- a) What is curriculum content in the NCV programme offered at college X?
- b) What careers do NCV graduates of college X occupy?
- c) How does the NCV curriculum at college X affect the occupational status of its graduates?
- 1.6 The aim of the study

The aim of this study was to examine how the NCV curriculum affected the socioeconomic status of its graduates. To achieve this aim the following were the objectives of the study:

UNIVERSITY

- To identify the knowledge and skills that are taught in the NCV programme
- To examine the knowledge and skills that are taught in the NCV programme
- To explore the relevance of the NCV curriculum and post qualification occupations of its graduates
- To explore the link, if any, between the NCV curriculum and the students' occupational status upon completion
- To establish, if any, a relationship between the employment progression pathways of the graduates of the NCV L4 programme and their entry level socio-economic status.

1.7 Rationale of the Study

The promulgation of the Further Education and Training Colleges Act, No 16 of 2006, envisaged a considerably broad role for TVET colleges, which included enabling students to acquire the necessary knowledge; practical skills and applied vocational and occupational competence; and providing students with the necessary attributes required for employment, entry to a particular vocation, occupation or trade, or entry into a higher education institution (Mashongoane, 2015). However, Cosser, McGrath, Badroodien and Maja (2003) have pointed out that the overall picture of post-qualification placements remains negative. Their argument is that this negative picture needs to be understood in the context of the massive South African youth unemployment and international failing rates for college to employment transition. For example, between 1999 and 2001, only 34% (1226 from a total of 3503 respondents) of FET college graduates in South Africa reported being either employed or self-employed (whether full-time or parttime) after graduation. In terms of occupation, 45% were in jobs that were inappropriate to their qualification; 38% took jobs because they could not find employment better suited to their level of education and 36% self-employed because they were unable to find jobs in the fields in which they were qualified. By 2001, 35% were involved in further studies while 31% were unemployed or economically inactive for other reasons. There was, therefore, a need for a study that investigated the outcomes that seemed to be a persistent feature of the education system in post-apartheid South Africa (Branson & Zuze, 2012). The ways in which TVET colleges' qualifications continued to influence employment opportunities of the graduates had to be probed to provide insights that clarified what needs to occur to achieve more equal outcomes for all regardless of education history, demographics or socio-economic background.

Powell and McGrath (2014), has argued that although the TVET college system was designed to create opportunities for youth and adults to acquire skills, knowledge and values for employment and employability and the curriculum,

particularly the NCV curriculum, had to address the needs of the students, industry and community to meet the economic skills demand of the country. Albeit, the studies referred to an earlier point to a significant gap in knowledge regarding the effects of the NCV in educating TVET students as future workers whose occupations will construct a different society (DHET, 2011 and White Paper for Post School Education, 2013). The NCV curriculum was studied to develop a deeper understanding of its impact on the social and economic stratification in the country.

Structural inequality has been identified as the bias that is built into the structure of organizations, institutions, governments or, social networks (Liao, 2009). It occurs when the fabric of organizations, institutions, governments or social networks contain an embedded bias that provides advantages for some members and marginalizes or produces disadvantages for other members. This can involve property rights, status, or unequal access to health care, housing, education and other physical or financial resources or opportunities. Therefore, conducting comprehensive cost-benefit analyses of various educational programmes in TVET colleges of South Africa could improve the quality of the information available for decision makers concerning the kind of education that should be offered as well as where, when and in what quantity. Considering the vast amount of funding and marketing of TVET Colleges in South Africa by government, it was important to investigate the impact of the NCV curriculum and determine whether and how it contributes to tracking (Oakes, 1986) students into a particular social structure thus perpetuating to social inequalities. Thus, further research, of the kind conducted in this study, could provide such insights that have far-reaching implications in eradicating the bias that has been historically characteristic of education provision within the country.

Internationally, the benefits of investment in VET for firms have been the object of several studies, including Blundell, Dearden, Meghir and Sianesi (1999) and Wilson and Briscoe (2004). Over the past few years, analyses have emphasized the importance of investing in skills, future economic growth, innovation and business performance. For example, as early as 1917 the Smith-Hughes Act, a law that first authorised federal funding for vocational education in American schools, explicitly described vocational education as preparation for careers not requiring a bachelor's degree. According to Jim Stone, director of the National Research Centre for Career and Technical Education in the USA, 'Vocational training facilitated a form of segregation, such that the less academically able were encouraged to train for low-skilled work, while the more academic students pursued university qualifications' (Hanford, 2014). For this reason, this type of education had its critics. Chief among them John Dewey, the educational philosopher and social progressive, opposed it because he thought it was building a class distinction right into the design of public education.

In South Africa, according to Powell (2013), the FET (now known as TVET) colleges that were established as part of the broader struggle to resolve the economic, political and social contradictions inherent in the tension between social redress and economic growth remain locked at crossroads between compulsory education, higher education and the world of work. Conceived as critical drivers for responding to the skill needs of the economy, they were conceptualised as providing the intermediate to higher-level skills required for 'economic growth' and for the country to 'compete effectively in the global economy' (Skills Development Act 97 of 1998). Simultaneously, they were to respond to the social disparities of apartheid by providing access to high-quality and relevant education and training that provides the skills and attitudes required for employability. In the context of insufficient jobs in the formal economy, this included training for entrepreneurship (Badroodien and Kraak, 2006) and for the informal economy (King and McGrath, 1999). The concept of tracking that is implied here continues to create social disparities through the provision of education (Oakes, 1986). For example, in South Africa, if a student has completed matric/grade 12 and enters into the TVET system through the NCV programme, by the end of the three years s/he receives a qualification that is at the exact level that s/he had when entering the programme. As put by, amongst others, Grob (2003, pp. 193), "depending on how early students are separated into these tracks, determines the difficulty in changing from one track to another".

Yet, the government has taken the decision to increase funding for TVET colleges to make them first choice institutions of higher learning for some South African youths. For this reason, it is important to consider the implications of the kind of society that is being built for the future, in particular, when previously disadvantaged youths are encouraged to attend TVET colleges rather than universities which were historically the preserve of advantaged communities. Since very little research has been devoted to the impact of vocational education and training on to the future stratification of society and the possible long term effects of the organisation that will result from of obtaining an NCV level 4 qualification, the qualification had to be examined to establish whether or not it provided the youth with the requisite skills to compete with university graduates in opportunities for employment. In short, the study examined the implications of prioritising TVET colleges as institutions to eradicate social inequalities. The NCV curriculum according to the Government offers an alternative to academic higher education especially to learners who cannot meet the admission requirements of universities (Green paper for post school education, 2012). Examining whether or not students who have completed the NCV programme realize this policy aim with regards to occupational status was thus of interest in this study.

UNIVERSITY

Mincer (1958), Schultz (1961) and Becker (1975), have argued that time and money spent on education builds human capital and it should be possible to estimate the rate of return (RoR) on such investment in a way similar to an investment in physical capital. For example, the Mincer (1974), model assumes that the number of chosen years in schooling maximizes the value of future income. If the rate of return to education is greater than the market rate of interest, more education is a justified investment on the individual. In addition, Mincer (1991), also found very high rates of return for training on the job, much higher than the rate of return for investment in primary schooling. In short, this Human Capital Theory (HTC) states that a person's education is an investment (involves costs), in terms of direct spending on education and the opportunity costs of student time, human capital (akin to investment by a firm in physical capital). The investment makes the individual more productive and secures for him/her a future stream of benefits (superior productivity, higher wages and other non-monetary benefits to the individual and the society). According to Psacharopoulos and Patrinos (2004a, pp. 1), the HCT has its roots in the works of classical authors such as Adam Smith and Alfred Marshall. The former concluded that "a man educated at the expense of much labour and time to any of those employments which require extraordinary dexterity and skill, may be compared to one of those expensive machines. The work which he learns to perform, it must be expected, over and above the usual wages of common labour, will replace to him the whole expense of his education, with at least the ordinary profits of an equally valuable capital". Based on such views, in South Africa, the government promoted and encouraged students to register for the NCV programme by granting them free NSFAS bursaries for three years. The industrial training provided was considered as 'a national investment' (Alfred Marshall ([1890] (1991)) and the government expected some form of return on the investment. Therefore, it was interesting to investigate the returns that resulted from this investment by studying the occupations of the graduates of an NCV programme and socio-economic status in which they were placed by these occupations.

Conceptual Framework OF

1.8

A formal theory of social mobility represents a direct approach to the investigation of the consequences of occupational mobility for occupational distribution. It may be extended and applied to problems of assessment of consequences of occupational mobility for other variables (Matras, 2011). Figure 1 demonstrates how the social mobility theory views factors that define the student, qualification and occupational status as inter-linked.

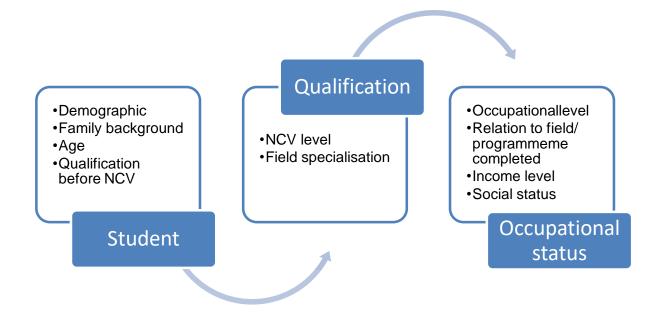


Diagram 1 - Conceptual framework of the intended study.

The conceptual framework for this paper was thus drawn from globalization, social mobility and vocational education perspectives. Globalization however defined has many and varied implications for the educational policies, pedagogies, and politics of nation-states (Singh, Kenway & Apple, 2005). Singh *et al.* (2005) note that the driving force of globalization is the all-powerful relationship between global capital, markets, and digital technology and their associated colonizing imperatives. At the economic level, because globalization affects employment, it touches upon one of the primary traditional goals of education: preparation for work (Burbules & Torres, 2000).

According to Koshkin and Graham (2013), globalization has the potential to increase social mobility and give people anywhere in the world more opportunities to climb the economic ladder from the bottom to the top. Since the end of apartheid, South Africa has seen some upward social mobility among previously disadvantaged population groups (Girdwood & Leibbrandt, 2009). However, Fleisch (2008) and Spaull (2013), argue that this upward trend in education has not translated into increased employment or a positive change in the type of employment that people take up. Interestingly, there has been no national graduate tracer study of either the South African Technical Vocational

Education Training (TVET) or higher education sector to date that provides evidence of longitudinal trends to analyze the relationships between, inter alia, study choices and labour market outcomes (Rogan, 2016). Vally and Motala (2014) observe that in South Africa and elsewhere there exists a resurgent and unquestioning acceptance of simplistic claims related to the link between education and economic growth and that more and better education and training will automatically lead to employment. For example, relevant to this study is the general assumption that students who enroll in NCV programmes will be eligible for employment once they have completed the programme. Little attention is paid into how the NCV Level qualification is measured in the National Qualifications Framework (NQF) which in-turn has a direct influence on determining occupational status and salary level when they enter the labour market even though South Africa has historically been ranked as one of the most unequal societies in the world. While the country has experienced sustained positive economic growth since 1994, the impact of this growth on poverty and particularly inequality has been disappointing (Bhorat, van der Westhuizen & Jacobs, 2009). An analysis using data from the 1995 and 2000 Income and Expenditure Surveys has found, for example, a significant increase in income inequality over the period and, further, that this increase in inequality eroded any significant povertyreduction gains from higher economic growth (Bhorat et al., 2009). These issues constituted a focus for data generation, collection and analysis in the study.

1.9 Research Methodology

The study was mainly qualitative with certain quantitative elements included. The following is a summary of the research methodology in this study. A more indepth discussion is provided in Chapter Four.

1.9.1 Research Design

An exploratory case study was conducted. According to Cohen, Manion and Morrison (2011), a case study seeks to portray, analyse and interpret the uniqueness of real individuals and situations through accessible accounts. As a

research design, it enables the researcher to use multiple sources of data and a variety of research methods to explore the research questions which, in turn, foster the validation of data through triangulation (Denscombe, 1998). It can blend numerical and qualitative data and is a prototypical instance of mixed methods research that can be used to explain, describe and enlighten (Yin, 2009). Therefore, it does not aim to provide final and conclusive answers to research questions but merely explores the research topic with varying levels of depth, tackling new problems on which little or no previous research has been done (Brown, 2006). According to Singh (2007), it can also assist in identifying the sampling methodology and data collection method. It is for this reason that Robson (2002, pp. 59) argues that it intends to explore "what is happening; to seek new insights; to ask questions and to assess the phenomena in a new light". It is valuable particularly when there is very little information known about the phenomenon. In this study, a prescriptive, exploratory and qualitative research design was used to identify the inequalities reproduced in society by a qualification and occupations associated with it employing different research tools and methods. The latter was useful to explore an area for which there are very few studies conducted in South Africa.

1.9.2 Research Approach

The study used a naturalistic enquiry (Gonzales, Brown & Slate 2008) to collect data on, for example, the employment of NCV graduates and how they thought the curriculum had contributed to their jobs in order to establish whether or not it eradicated historical social and economic inequalities. The research participants were required to explain how the NCV qualification contributed to them, securing employment and how their lives subsequently changed.

1.9.3 Sampling

The sampling was purposive. According to Merriam (1998), purposive sampling is based on the assumption that if the researcher wants to understand a phenomenon, s/he must purposefully select participants who are rich in information regarding the phenomenon. Purposive sampling was thus well-suited for this small-scale and in-depth study (Ritchie, Lewis & Gillian 2003). Using purposive and snowballing techniques ensured that participants were suitable for the purpose of the study and in a position to provide useful answers to the research questions.

Non-probability sampling was used to identify the graduates. Since this sampling deliberately avoids representing the wider population and seeks only to represent a particular group, this explains why a particular named section of the wider graduate population was targeted. Level 4 graduates of the college who were in employment were selected through this sampling. According to Bailey (1994) where such sampling is used, the sample needed has to reflect the population value of a particular variable and depends both on the size of the population and heterogeneity in the population. To date, a total of 404 students have graduated at this campus between the years 2012 to 2015.

The campus has an alumni database of graduates in the NCV programme. With its permission, the researcher emailed the students and requested them to be part of the study. A quarter, (25%), was identified amongst graduates who were willing to be part of the study. In selecting these participants the researcher ensured equal representation of gender, age and academic achievement.

JOHANNESBURG

1.9.4 Data Collection

Le Compte and Preissle (1993, pp. 158) states that the most common categories of data collection used by qualitative researchers are observation, interviews, questionnaires and content or document analysis. In this study, semi-structured interviews were conducted with participants who are in key positions at the TVET College, particularly those dealing with student recruitment, career guidance and job placement of students. As Dawson (2002) argued, that interviews helped in pre-establishing a set of questions needed to elicit adequate relevant information about the NCV curriculum and identify new issues that were not originally part of the questions to be answered in this study. The flexibility allowed by this interview type enabled the researcher to add, remove or rephrase questions in the

questionnaire informed by the responses obtained from each interview. These interviews also facilitated the collection of more details on the NCV curriculum documents that were studied. As explained by Denscombe (1998), they fostered the validation of studying these documents through triangulation.

A questionnaire was used to collect data from the random sampled (n=101) graduates in employment. It was convenient to reach individuals working far away from the college and the campus. From the responses received, a semi-structured interview schedule was developed for a smaller group selected randomly to seek more clarity on commonly grouped responses

1.9.5 Data Management and Analysis

A major feature of qualitative data analysis is coding and content analysis (Strauss and Corbin, 1990). Coding has been defined by Kerlinger (1970) as the translation of question responses and responded information into specific categories for the purpose of analysis. Gibbs (2007) catches the nature of a code neatly when he writes that the same code is given to an item of text that says the same thing or is about the same thing. Cohen *et al.* (2011) describe it as the content analysis, the process of summarizing and reporting on written data.

Data on the NCV curriculum, interviews from participants in key positions at the college, questionnaires and interviews with graduates were coded and categories identified from which themes used to structure the analysis were generated. For easy analysis, data was presented in the form of tables and graphs.

1.9.6 Ethical considerations

According to Cohen *et al.* (2011), it is necessary to obtain informed consent and cooperation of subjects who are to assist in the investigation and organisations

providing the research facilities. Consent protects and respects the right of selfdetermination and places some responsibility on the participant should anything go wrong in the research. In planning for the study, the researcher thus considered the advice of Bell (1991) and gained permission early on. Full informed consent was granted after indicating to participants the possible profits of the research.

In the process of analysing and disseminating the data, the research has an ethical obligation to reflect on the principles of non-maleficence, loyalty and beneficence and to ensure that the principle of *primum non cere* is addressed – do no harm to participants. (Cohen *et al.*, 2011). As good ethical practice, the findings and recommendations were shared with the college and education community at large before finalising the study and submitting it for examination.

1.10 Short Outline of Chapters

The organisation of the study is as follows:

Chapter 1 provides the background, problem statement, research questions as well as the aim of the study; additionally, the literature review, a brief conceptual framework and the methodology section are discussed in this chapter.

Chapter 2 (Literature Review) provides a detailed account of the general theory and research literature in the field of technical vocational education and training to highlight the concepts and principles that underpin studies of this nature. From this discussion implied concepts and principles are used to identify an appropriate conceptual framework for the study. The framework is discussed, relevant concepts and principles inferred to clarify the epistemological basis of the research methodology that was adopted for the study. Chapter 3 discusses the research methodology, namely the research design, approach, sampling, data collection tools and methods, research process, data management and analysis employed in the study.

Chapter 4 presents and analyses the data collected based on the themes identified and appropriate to the conceptual framework adopted for the study.

Chapter 5 provides a summary of findings, reflection on the conceptual framework and research methodology, limitations of the study and recommendations. The findings in the study are summarised and reflected upon in relation to the conceptual framework and research methodology to highlight limitations and the reasons for them. Finally, recommendations for further research and suggestions regarding the TVET system in South Africa are made.



CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Mjelde (2016) argues that vocational education was developed with the sole purpose of preparing the learner that will go directly into the workplace to perform a particular occupation. In her view, developments and changes in the labour market and ideology over the past decades have led to profound changes in the training of the labour through vocational courses in vocational schools and apprenticeships for the manual labour market and for work (Mjelde 2016). For example, since the emergence of vocational education in schools is linked to industrialization, its aim and the main focus are learning to work or labour. As a result, this type of education has its own pedagogical model and its own work modes (Mjelde 1987, 1993, 2006). The practical aspects of the pedagogy focus on real life work examples to prepare individuals with industry specific skills that would enable them to perform a specific function. The preparation occurs without consideration of how the individual will adapt when the labour market no longer requires his/her services/capabilities or because s/he simply becomes redundant or replaced by technology.

JOHANNESBURG

This industrialization is linked to the evolution of social stratification systems from ascription by birth to personal achievement (Hoogvelt, 1978). For this reason, stratification and status attainment are closely interrelated. For example, **Bowles and Gintis (2002)** argued that to investigate this relationship, a suitable measure of socio-economic status must be found. We can measure this status either by using discrete categories, such as membership in hierarchically ordered classes, or continuously, using earnings, income or wealth. However, given what we know about the substantial effects of social origin on the education and economic outcomes of learners (Oakes, 2005) there has been a strong international tradition of linking VET to the production of inequality (Lewis, 1997). The poverty experienced by many vocational learners; their limited social, economic and educational resources; and the social stratifying effects of the academic-

vocational divide are all viewed as important. For this reason, Grusky & Cumberworth (2010) also suggest that occupation is another measure used in researching mobility. It usually involves both quantitative and qualitative analysis of data although other studies may concentrate on social class.

Numerous concepts regularly come up when investigating vocational education in relation to social inequalities such as the social mobility theory, industrialization, globalization, human capital, neoliberalism or 'productivisim'. 'Productivism' is explained by Anderson (2009) on the basis of two interrelated assumptions. First, that "training leads to productivity, [which] leads to economic growth (training-for-growth)" and second, that "skills lead to employability [which] lead to jobs (skills-for-work)" and consequently training reduces poverty and unemployment (see also McGrath, 2012a). Therefore, one way to attempt to understand the relationship between education and jobs is through what has been called transition studies (Allais & Nathan, 2012). These are studies that attempt to describe the 'connection between an educational programme and its destinations, mediated by a set of institutional arrangements that include qualification systems, curriculum content, labour market arrangements and information and advice systems' (Sweet 2001, pp. 11). In other words, to understand linkages between vocational education and labour one has to also look at the systems that support vocational education pathways.

This chapter provides an account of the general theory literature and research in the field of TVET to highlight the concepts and principles that underpin the opportunities it creates for employment and social mobility. From this discussion concepts and principles that underpin the discussion are identified and used to develop the theoretical/conceptual stance that is used in the study. Finally, based on the discussion, the concept on which the research design and approach that are used in the study are indicated and its relevance to the research question(s) explained briefly.

2.2 Vocational Education and Employment

Choices that are generally rooted in the discrimination and classification of education places into a hierarchical order lead working-class people to less prestigious (higher) institutions (Reay, Crozier & Clayton, 2005). The academic–vocational divide of institutions, curricula and qualifications plays a key role in reproducing inequalities by diverting working-class people onto lower-status vocational tracks (Becker & Hecken, 2008, 2009a, b). For this reason, social mobility studies generally reference education in terms of the degrees that define individuals' positions in societies. Debates on how much education facilitates such mobility are thus closely related to studies on the relationship between social inequalities and education.

Studies by, for instance, Papier (2017), Boka (2017), Rogan and Reynolds (2016) and Branson and Leibbrandt (2013) look at education-to-work transitions to explain where students end up after completing their qualifications, that is, their transition into the labour market. Data was collected on aspects such as the socio-economic background, reasons for choosing the type of qualification, kind of employment after graduation and wage or salary comparison. In general, findings of low social inequalities support education's contribution to social mobility in education and of large social inequalities refute education's contribution (Kupfer, 2015).

In general, social inequality is viewed as related to the uneven distribution of resources in a given society that is often based on socially defined categories of persons as norms of allocation. As a result, factors such as power, religion, kinship, prestige, race, ethnicity, gender, age, sexual orientation and class inform the differentiation of access to social goods in a society. In this context, social rights will thus include, amongst others, political representation and participation, access to education, the labour market and a source of income (Wade, 2014).

2.3 Vocational Education and Social Mobility

Crawford *et al.* (2011) describe social mobility as 'the ability of individuals from disadvantaged backgrounds to move up in the world, akin to the notion of equality of opportunity'. Goldthorpe (1987), similarly, though rather more broadly, asserts that mobility is associated with a tendency towards greater equality of access, for individuals of all social origins, to positions differently located within the social division of labour.

Social mobility policies are thus directed towards reducing disadvantage, which is usually defined with reference to some concept of socio-economic status (SES) or social class. The opportunity to be able to reach your full potential, regardless of your background, is fundamental in creating a progressive and stable society (LETR, 2013).

In South Africa, the NCV qualification is designed to prepare skilled personnel at lower levels of qualification for one or a group of occupations, trades or jobs. Its curriculum prioritizes national economic development. Therefore it is crucial to understand the labour market challenges that influence employment patterns, especially with regard to the pool of skills and knowledge available in the country. Upon completion of the NCV qualification, according to the White Paper (2013) for post school education, it is expected that TVET graduates possess skills, knowledge and attitudes that enable them to enter the employment market within the particular field in which they have received training. The National Development Plan (NDP), the New Growth Path and other key policy documents of government have set out important strategies and priorities for this development, with an emphasis on inclusive growth and employment generation. The achievement of these goals has to, respectively, enable the expansion of the key economic focus areas and equip young people for work (White paper, 2013). Therefore, given the high levels of unemployment and the large numbers of young people who are not in any kind of education, training or employment, the Youth Multidimensional Poverty Index (MPI) includes economic opportunities

as a fourth dimension. This Youth MPI consists of two indicators that broadly reflect a young person's connection to the labour market and education system. The first indicator, household adult employment, identifies a young person as deprived if he or she is living in a household where no working-age adults (age 18-64) are employed (Frame, De Lannoy & Leibbrandt 2016). The second indicator looks at employment status as well as attendance at an educational institution. A young person who is neither in education, employment nor training (NEET) is considered deprived.

In South Africa, youth face significant barriers in accessing either post-school education or employment (Branson, Hofmeyer, Papier & Needham, 2015). Due to the relationship between education and wages, policy-makers think of education as an efficient instrument to reduce unemployment, especially by improving job opportunities and social positions of the least skilled. However, possible channels of interaction between the job level, education and wage distribution have hardly been investigated so far. The existing literature on TVET colleges is limited and mainly focused on the curriculum that is offered. Therefore, there are compelling reasons that research should be conducted to determine if South Africa is on the correct path with regards to capacitating youth with skills to compete with other higher education graduates in opportunities for employment and minimize if not eradicate the social economic inequalities within the different classes within society.

2.4 The NCV and access to the labour market

Since 1993, economic growth in South Africa has slowly recovered to reach an average of 3% over the past few years (Landman 2003, pp. 8). The numbers for employment also grew. The growth included both the formal and informal economy. Akoojee and McGrath (2005, pp. 15) thus see part of the explanation for the high unemployment rate as related to economic growth that had not been high enough over the last 30 years. Whereas growth had averaged more than 4, 5% per annum between 1945 and the early 1970s, the period from the mid-

seventies to the beginning of the nineties saw growth average only about 1, 5% per annum (McGrath, 2005).

Mashongoane (2015) surveyed learners who passed an exit level 4 to determine whether the purpose of the NCV programme had been achieved. The findings indicate that the NCV graduates were faced with competing demands and needs of the economy. The National Business Initiative undertaken by JET Education Services on behalf of DHET (2016), 'Transition of NCV Students from TVET colleges to the Labour Market', also found that the unemployment among respondents who did NCV at TVET colleges was high. An average of 39% was employed and 70% of that employment emanated from private companies (DHET 2016). The study also found that the gross earnings of the NCV graduates also appeared to be very low where the largest proportion earned less than R3000.00 a month.

The NCV L4, according to the NQF levels, is equivalent to matriculation; thus the earnings of a student who has completed the NCV will be categorised similarly to those with a matriculation qualification, while their peer group of university graduates will receive a higher income. For instance, an individual pursuing and completing an Engineering diploma at a university of technology will receive a higher starting salary than the individual pursuing a L4 NCV Engineering certificate at a TVET college despite both having completed matriculation at the same time, being in the same age group and also similar as regards social and economic background. Social inequalities between the two would be dependent on the level of qualification, Therefore, if the majority of learners in colleges are black, it is reasonable to assume that the black population will continue to be disadvantaged in the future society and the gap between the rich and poor will continue to increase.

2.5 Implications for the NCV L4

The NCV was only introduced in 2007. The concepts of vocational pedagogy and vocational didactics are therefore new to the field of educational studies.

Globalisation has substantially changed the nature of the development process for less developed countries through increasing the importance of economic growth in technology, trade and foreign investment. The changes also signal the increasing importance of skills for growth (Green, 1997). Consequently, globalization and the new emerging economic and social order demand new policies and strategies for developing and maintaining educational processes. To this effect, the educational and training reforms have to be based on the market needs and assessment conducted through appropriate market research.

The development and changes in the manual labour market over the past years have led to profound changes in the development of labour power usually trained through vocational educational courses in vocational schools (Mjelde, 2009). As a result, conceptions of vocational pedagogy and vocational didactics are new in educational theory. They have developed in relation to an understanding of teaching/learning processes where workshop learning in schools and learning in working life is important (Nilsson, 2000). Schools and other educational institutions have to reconsider their mission in light of changing job markets in a post-Fordist work environment, new skills and the flexibility to adapt to changing job demands and for that matter changing jobs during a lifetime and dealing with an increasingly competitive international labour pool have become crucial (Burbules & Torres 2000).

At the economic level, because globalization affects employment, it touches upon one of the primary traditional goals of education, namely, preparation for work (Sungoh, 2006). Once a student completes their education, in this instance, the vocational education learning period, students need to possess skills that will enable them to be seen as competitive in the labour market. This clarifies how vocational education is about enabling people to learn how to do things to a standard set by experts from the occupation into which they are progressing. Therefore, a theory of vocational education would be a set of reasoned beliefs about the goals, policies, organization, curriculum, and approaches of teaching and learning for a programme designed to produce occupational competence (Broudy, 1981).

Dewey theorized that learning should be relevant and practical, not just passive and theoretical and this notion formed the foundation pedagogy of vocational education citation. Although according to Snedden, the primary purpose of vocational education was meeting labour force needs and preparing students with assumed limited intellectual capacities for immediate employment in industry (cited in Gordon, 1999). Thus, his social efficiency vocational education framework contains the Social Darwinian assumption that inherently disparate individual characteristics invariably produce an economically stratified society (Hyslop-Margison, 1999). Dewey was the most vocal opponent of Snedden's social efficiency framework, warning it would validate class stratification by accepting an educational philosophy of social predestination: "Any scheme of vocational education which takes as its point of departure from the industrial regime that now exists, is likely to assume and perpetuate its divisions and weaknesses, and thus become an instrument in accomplishing the feudal dogma of social predestination" (Dewey, 1916, pp. 318). Dewey rejected the image of students as passive individuals controlled by market economy forces, and existentially limited by inherently proscribed intellectual capacities.

Another approach to character development in career education that respects the reasoning dimension of intellectual virtue is found in the work of MacIntyre (1984). His version of virtue ethics successfully illuminates the concrete connections between qualities such as honesty, courage, trust and justice, and actual workplace situations (Hyslop-Margison, 2005). Hyslop-Margison (2005) further notes that MacIntyre's (1984), theory of virtue links moral evaluation and explanation in characteristically Aristotelian fashion since virtues are understood on the basis of why certain character dispositions or traits are desirable. Rather than portraying desirable behaviours as abstract technical or employability skills, Macintyre's theory requires that occupational virtues are justified through reflective deliberation or practical wisdom. The NCV curriculum in South Africa can thus be reasonably considered to be an attempt to merge the theories by Snedden and Dewey and thus reflecting a notion of the curriculum as theory and practice. The idea is central to Carr's (2006) view of theory and practice is inextricably linked in the curriculum. Therefore, unless this link was clarified it would be difficult to understand why NCV graduates occupied particular jobs. As Carr (2006) would explain these jobs could be understood as reflecting the theoretical assumptions or theories-in-use that underpinned the purpose of the NCV as a qualification. They constituted a context within which the purpose of this curriculum had to be understood as part of the South African government's strategy to improve levels of employment and the social positions of the students who mere attracted to TVET qualifications.

2.6 Conclusion

At the end of NCV level 4 students are expected to have basic knowledge of numeracy, literacy, life skills and vocational capability in a particular field. Which makes them rather more competitive than a learner with merely a matriculation certificate. They study four occupation specific subjects and three that include English, Mathematics or Mathematical Literacy and Life Orientation. It is for this reason that this study examines how vocational education, in particular, the NCV, promotes the employability and social mobility of its graduates. The programme is considered to be the most effective instrument for meeting economic globalization demands in South Africa. Therefore, by investigating the transition of NCV L4 students into the labour market and their income, it was possible to establish whether or not their chosen pathways promote/d their social mobility. The methodology that was used for this investigation id discussed in the next chapter.

CHAPTER 3

THE RESEARCH DESIGN

3.1 Introduction

The knowledge and skills that are taught in an NCV programme and the type of employment to which they facilitated access were of special interest in this study. Graduates' career and socio- economic and career mobility were understood as linked to the jobs they occupied after qualifying. To examine the significance of these jobs as a reflection of the link between the NCV curriculum and the graduates' occupational status was thus crucial. This curriculum was viewed as reflecting a praxis that linked the government's reasons for introducing the NCV (as theory), and what it resulted in practice in terms of the graduates' occupations. In particular, the graduates' career pathways, clarified the nature of this praxis. This chapter discusses the research methodology, design, approach, sampling, data collection tools and methods, research process, data management and analysis employed to examine and explain this link.

3.2 Research Paradigm JOHANNESBURG

The study employed an interpretivist research paradigm which applied the critical theory. According to Cohen *et al.*, (2011), interpretive paradigms strive to understand and interpret the world in terms of its actors. In this instance the actors were the graduates who completed the NCV L4 qualification. Critical theory is explicitly prescriptive and normative, entailing a view of what behaviour in a social democracy should entail (Fay, 1987 and Morrison, 1995a). Cohen *et al.* (2011) further explain that the intention of critical theory is not merely to give an account of society and behaviour but to realize a society that is based on equality and democracy for all its members. Its purpose is not merely to understand situations and phenomena but to change them. To be explicit it seeks to emancipate the disempowered, to redress inequality and to promote individual

freedoms within a democratic society. Critical theory and critical educational research were used in this study because of their substantive agenda. By examining and interrogating the relationships between the NCV curriculum and the jobs occupied by its graduates, it was possible to provide insights about how the qualification programme perpetuated or reduced inequality in the area in which the college that was selected for the study was located.

3.3 Research Design

An exploratory case study of a TVET college was conducted to identify how the theoretical knowledge and skills in the NCV curriculum was linked to the jobs that were occupied by the students who graduated from the qualification. To portray 'what it is like' to be exposed to this curriculum as the close-up reality and develop 'thick descriptions' (Geertz, 1973) of it, graduates' lived experiences, thoughts about and feelings for the qualification had to be probed. It was crucial to look at the NCV curriculum and occupations of its graduates as a case or phenomenon in a real-life context and collect many types of data (Robson, 2002).

JNIVERSITY

As a case, the college provided a unique context or setting for practising the NCV curriculum. Therefore, by examining its curriculum and the graduates' views of it, in particular, how they related it to their occupations, it became possible to understand how it (the curriculum) predisposed them to certain occupations. This rendered a more profound insight than simply presenting and making sense of any link on the basis of abstract theories or principles (Cohen *et al.*, 2011). Furthermore, the views collected helped to clarify the significance of the graduates' economic status in real employment contexts to the NCV curriculum.

3.4 Research Approach

A research approach is essentially divided into two categories namely, an approach to data collection and approach to data analysis (Chetty, 2016). It is a

plan and procedure that consists of steps that are based on theoretical assumptions and detailed methods of data collection, analysis and interpretation. It is, therefore, based on the nature of the research problem being addressed.

Interpretivist research approach used for this enquiry allowed me to provide an in-depth, intricate and detailed understanding of meanings graduates bestowed on the link between the NCV curriculum (its content and teaching) and the jobs they were occupying. Graduate's views and attitudes towards these jobs were also of particular interest. The approach thus made it possible for rich data to be collected on the real experiences of the graduates as students within the programme and later on, employees.

3.5 Sampling

The sampling was purposive. According to Merriam (1998), purposive sampling is based on the assumption that if the researcher wants to understand a phenomenon, s/he must purposefully select participants who are rich in information regarding the phenomenon. A purposive approach is thus well-suited to small-scale and in-depth studies (Ritchie *et al.*, 2003). Onwuegbuzie and Leech (2007) also suggest that in qualitative research, the sample size should be large enough to generate 'thick descriptions' (Geertz, 1973, pp. 16) and rich data. It should be not so large as to prevent the generation of rich data due to data overload or moves towards generalizability and not so small as to prevent theoretical saturation from being achieved.

Using purposive and snowballing techniques in the study ensured that the participants were suitable for the purpose of the study. In purposive sampling researchers hand-pick the cases to be included in the sample based on their judgment of meeting certain characteristics such as those mentioned in Table 1. The snowballing effect assisted because those identified were able to also refer others that were suitable to participate in the study (Cohen *et al.*, 2011).

A list of alumni students was collected from the student liaison officer who is responsible for postgraduate student support. The liaison officer keeps records of all the students who have graduated from the college and is also responsible for securing partnerships with potential employers who provide internship opportunities or some form of placement after the students finish their NCV qualification. There is the added possibility of students being permanently employed by the host company or perhaps just engaging in a process to gather experience for future employment applications.

The college has an alumni database of graduates in the NCV programme and it granted permission to the researcher to email the students and request them to be part of the study. I particularly focused on those who were employed from the group that had just graduated. As Cohen (2011) explains, such a quota sample seeks to give proportional weighting to selected factors which reflect the weighting that can be found in the wider population.

To date, a total of 450 students have graduated from college X. A key role player in identifying the majority of the graduates was the Student Liaison Officer. He is responsible for placing students for employment or any other form of post qualification support such as internships and learnerships. A tenth of the graduates, n=45, were identified and were willing to be part of the study. Specifically, non-probability sampling was used to identify graduates. A non-probability sample derives from the researcher targeting a particular group (Cohen, 2011), in this case, the employed graduates of the TVET College, with full knowledge that they may not necessarily represent the wider population. For the purpose of the study which was a relatively small scale, focus on this sampling deliberately avoids representing the wider population and seeks only to represent a particular group, in this specific case, students who were employed after completing their qualification at the college, formed the particular section of the wider graduate population that was targeted. They were well positioned to

provide useful data on their real life experience about how their qualifications could be linked to NCV curriculum and their socio-economic status.

In addition, only students who graduated between 2013 and 2017 at the college were targeted because of its proximity and the researcher's familiarity with the environment. In some instances, the graduates do not find employment immediately after completing their qualification; therefore, focusing on the period between 2013 and 2017 ensured that the research population included students who were currently employed and those who had been for some significant time. In addition, these graduates could also explain how much their lives had been transformed since completing the course and being employed. The researcher is currently employed at the college and this makes the sampling also convenient because of easy access to the campus data.

Level 4 NCV graduates of the college who are in employment were selected. As is the practice in convenience sampling, these were nearest individuals and were chosen to serve as respondents. The graduates were also known to be employed because they had been placed in different industries through college partnerships. This made the sampling less complicated in setting up, considerably less expensive and it proved perfectly adequate as the researcher did not intend to generalize the findings beyond the sample in question (Cohen *et al.*, 2011). As soon as these former students were contacted, invited to participate and given information about the study, they shared it with some of their former classmates with whom they still had contact and who were also employed.

Bailey (1994) has argued that where convenient sampling is used, the sample needed has to reflect the population value of a particular variable both in the size and heterogeneity of the population. Since factors such as expense, time and accessibility frequently prevent researchers from gaining information from the whole population, they often need to be able to obtain data from a smaller group or subset of the total population in such a way that the knowledge which is gained

is representative of the total population under study (Cohen *et. al*, 2011). Based on this guidance, even though the researcher could only locate 45 students who were employed from the 450 students who had completed the NCV qualification between 2013 and 2014, their employment profiles were based on variables that made it possible to collect diverse and rich data on the research question. From a list of 450 students, a total of 45 were identified that met the criteria set in Table 1 and their contact details were obtained.

Student profile that included the following variables:
1. Studied NCV at the college
2. Completed NCV L4
3. Employed or previously employed
4. Availability and consent to participate in the research

Table 1: Respondent criteria

JOHANNESBURG

A smaller sample thus enabled me to spend time with respondents and obtain in-depth accounts of how they linked their qualifications with the jobs they did and how the latter facilitated their socio-economic mobility and status. Focusing on this particular group within the wider population of the NCV graduates also proved useful for the study as it enabled me to explore in greater depth the significance of the NCV curriculum to the social mobility of students, identify crucial factors related to it and provide insights that were used to clarify the link amongst these aspects.

3.6 Data Collection: tools and process

Le Compte and Preissle (1993) states that the most common categories of data collection used by qualitative researchers are observation, interviews, questionnaires and content or document analysis. For this study, a questionnaire and interviews were used. The questionnaire is a widely used and useful instrument for collecting survey information, providing structured, often numerical data, which makes it straightforward to analyse (Wilson & McLean, 1994).

The use of the interview in research marks a move away from seeing human subjects as simply manipulated and data as somehow external to individuals, and towards regarding knowledge as generated between humans, often through conversations (Kvale, 1996). Semi-structured interviews were thus conducted with participants who are in key positions at the college, particularly those dealing with student recruitment, career guidance and job placement of students. The interviews focused on questions that explored what the students had been doing since completing their studies at the college and how their lives had changed. As Dawson (2002) argued, these interviews were to help pre-identify a set of questions needed for student graduates, gather more information about the NCV curriculum and hopefully identify new issues that were not originally part of the questions to be answered in this study. The flexibility allowed by this interview type enabled the researcher to add, remove or rephrase questions in the questionnaire informed by the responses obtained from each interview. In short, the interviews enabled a process through which it was possible to collect more details on the NCV curriculum documents used in the study. As advised by Denscombe (1998) this fosters the validation of the study of these documents through triangulation.

In the questionnaire administered to the graduates who are employed, the following aspects were addressed: the first set of questions required biographical information, the second, needed a description of the knowledge and skills that are taught in the NCV programme and the third sought an explanation of the link,

if any, between the NCV curriculum and the students' occupation status upon completion of the programme. The fourth set of questions attempted to collect data on the relevance of the NCV curriculum as preparation for a post-school education career pathway. (See Appendix A)

3.7 The data collection process

Appointments were made for the graduates to complete a survey questionnaire and return it to the researcher. Their responses were important and enabled the researcher to establish whether or not their employment could be linked to the social inequalities witnessed among the college X graduates. (See Appendix B)

3.8 Data Analysis

A major feature of qualitative data analysis is coding and content analysis (Strauss & Corbin, 1990). Coding has been defined by Kerlinger (1970) as the translation of question responses and responded information to specific texts or words for the purpose of analysis. For Gibbs (2007), coding is classifying like data items together while Cohen (2011), conceives of it as an analytical activity, involving summary and reporting.

Data on the NCV curriculum, interviews from participants in key positions at the college, questionnaires and interviews with graduates were coded, categories identified from the responses of the participants and themes developed. Four main themes were generated and used to organise the presentation and analysis of the data collected. For instance, the questionnaire collected biographical information on the participants and codes that are related to job descriptions could be identified and categorised to reflect the social-economic profile of the participants. The categories generated enabled the researcher to create themes related to, in turn, the social inequalities discussed in the literature that is referred to in the study. The themes were used to address the sub-questions in the study

and subsequently answer the research question. An example of how this was done is given below,

Theme	Category	Code
Occupation status	Knowledge and skills	Job Description (Internship/ Part-time / Permanent)
Employment rank and the NCV qualification	Administrator, Intern, Assistant, Officer	Occupation level (Entry-level, Manager/Supervisor, Executive Manager)
Socio-economic status and the NCV qualification	Upper Class – Elite. Upper Middle Class. Lower Middle Class. Working Class. Poor	Socio-economic profile (Financial Responsibilities)

Table 2: organisation of themes, category and codes



3.9 Ethical considerations

According to Creswell (2011), educational researchers have an ethical mandate to produce research that is of high quality, and in reporting their results convey basic assumptions they are making. This also means that research should not sit unpublished. Researchers should openly share their findings (Brown & Hedges, 2009).

Copies of the completed study were also made available to all those who participated in the study and any other persons who had an interest in the topic and were implicated in the study directly or otherwise.

3.10 Reliability and validity

With regards to reliability and validity, of note is Yin's (2009) call for a "chain of evidence" to be provided, such that an external researcher could track through every step of the case study from its inception to its research questions. Transcripts from the completed questionnaires are appended to the study (See Appendix B)

3.11 Transferability

According to Trochim (2006) transferability refers to the degree to which the results of qualitative research can be generalized or transferred to other contexts or settings. From a qualitative perspective, transferability is primarily the responsibility of the one doing the generalizing. The qualitative researcher can enhance transferability by doing a thorough job of describing the research context and the assumptions that were central to the research. The person who wishes to "transfer" the results to a different context is then responsible for making the judgment of how sensible the transfer is. Although the study focused on one TVET college, students who have also completed the NCV L4 programme in other colleges will recognize similarities in their own situation when it comes to the socio-economic status upon completion of the NCV programme and the transition from college to the labour force.

3.12 Trustworthiness

Issues of respect, trust, honesty, justice, privacy and confidentiality were respected (Merriam, 1998). Participation in the study from the respondents was anonymous as they did not have to fill in their personal details in the questionnaire that was used to collect data and this exercise was also voluntary

which encouraged more willingness from them to participate without the worry of what they said being traced back to them.

3.13 Conclusion

In this chapter, the research methods, data collection, data analysis and ethical matters have been outlined. Questionnaires were used by the researcher to collect data from the participants. In Chapter 4, data gathered from the questionnaire is presented, analyzed and interpreted based on the literature review provided and conceptual stance that is used in the study.



CHAPTER 4

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

According to Maree (2007, pp. 99) qualitative data analysis tries to establish how participants make meaning of a specific phenomenon by analysing their perceptions, attitudes, understanding, knowledge, values, feelings and experiences in an effort to approximate the construction of the phenomenon. The aim of this study was to clarify how a TVET college NCV qualification provides "intermediate-to-high level skills required, in a changing global and national economic environment" (Fisher, Jaff, Powell & Hall 2003, pp. 327) to ensure the supply of sustainable and critical skills that are central to economic growth and development in South Africa. The post-schooling sector is also responsible for an equitable Human Resource Development Strategy. Therefore, amongst others, the purpose of the NCV programme is to equip its leaners with sufficient knowledge and skills to function in the workplace environment. The programme is essentially meant to increase their chances of being employed.

The presentation of the research findings is based on the research questions and describes how the graduates responded to them. The following were the questions that were posed in this study:

The main research question was: 'What is the relationship, if any, between the NCV programme graduates and their occupational status upon completion of the programme?"

The following sub-questions had to be addressed in responding to this main question:

- a) What is in the NCV curriculum?
- b) What careers do NCV graduates occupy?

c) How does the NCV curriculum affect the occupational status of its graduates?

Data collected about the knowledge and skills of graduates of various NCV programme at X College indicated the following:

4.2 The degree to which relevant knowledge and skills are taught in the NCV programme.

In responding to the question: "In your current or previous occupation were/are you using the skills & knowledge taught in your qualification?" and "How often are you using/ have used the knowledge gained during your studies?

All (100%) of the participants indicated that they are using the knowledge and skills specific to their chosen field of study at their workplace. Graduates have to complete four vocational subjects which are linked to a particular specialised field in the NCV programme; for instance, Office Administration students have subjects such as Office Practice, Business Practice, Office Data Processing and New Venture Creation. The knowledge and skills taught allowed them to work in a wide range of spheres to do with office administration. When, for example, they were employed as interns in different office environments, they used part of the knowledge and skills that they had learned and not necessarily all. Hence, their responses indicated that they used knowledge and skills occasionally. For example, those who completed NCV L4 in Office Administration mentioned how they used the knowledge and skills learnt to answer the phone in a professional environment, write formal emails, take minutes during meetings, welcome visitors and respond to client enquiries.

Accordingly, graduates 8, 9, 10, 11, 13, 14, and 15 explained that:

....they are using skills such as how to manage filing, data capturing and retrieving information...

...plan and coordinate meetings and events in the office environment as well as scheduling techniques, time management and work prioritisation, to plan and monitor work....

...Gain trust and support from colleagues through appropriate professional manners and provide feedback that leads to positive working relationships...

....ensuring customer satisfaction and managing customer complaints...

...they can apply skills in answering the phone and direct calls to the different offices in the building...

....they are able to now use a computer because of subjects such as Life Orientation Computer and Office Data Processing where they were taught things like Word, Excel and Outlook which they are now currently using to complete their duties...

From the Office Administration programme, 17 graduates participated in the study. A total of 6 from the 17 indicated that they use their knowledge occasionally and that it could be because they were not necessarily working at the front desk reception but were rather placed in some form of administration. As a result, not all the knowledge learnt about how to work as a receptionist was fully utilised.

Graduate 8 explained that "I'm employed at the college as classroom administration assistant and there are skills I acquired from subjects like Business Practice and New Venture Creation which mostly focus on how to work in a corporate business environment; but I'm not in that environment and the skills don't always apply in the government sector especially at the college" The NCV L4 Engineering programme graduates (Engineering and Related Design) indicated that they are using the software programme known as CAD (Computer Aided Drawing) to draft plans for the pipes that have to be installed in plant operations. For instance, graduates 17 and 18 said ... *We are being trained to be future draughtswomen and we were taught how to use the CAD programme at the college*....The Engineering and Related Design students also indicated that they use their knowledge occasionally because there are aspects such as the manufacturing of tools, machines, and engines that they have learned but that they are not currently putting into practice any of that knowledge. Students who completed NCV L4 Mechatronics indicated how they used CNC (Computer Numerical Control) machines to manufacture materials that would later be used in underground mining operations.

For instance, graduates 5, 6 and 7 said that:

...they are involved in a process of assembling mechatronic systems that are being used in gold mine underground operations...

All the Mechatronics graduates indicated that they use their knowledge occasionally because they were not practising other vocational knowledge activities such as performing maintenance work according to correct procedures or doing fault finding and rectifying problems.

JOHANNESBURG

Graduate 5 said that "We were taught how to use CNC machines in a workshop at the college and always thought that after completing we will work in (a) mechatronics workshop but instead we are assistants in underground gold mine operation and we are not allowed to perform some of the activities such as fault finding on the machines because we are just assisting and not accountable for the performance of the machines"

Graduate 6 said "We learned how to draw from doing Manual Manufacturing subject but we are not working in that department and not applying that skill"

Graduate 7 also added that "We were also taught how to install control circuit(s) but where we are working they provide us with the control circuit already installed"

Figure 1 below provides a consolidated graphical illustration of these responses.

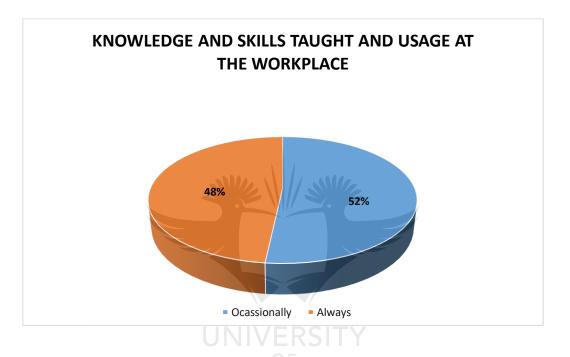


Figure 1: Knowledge and skills taught and usage at the workplace

From the evidence provided, it is clear that the graduates had extensive knowledge of their vocational fields and understood the duties in their occupational environment. Employment in the sectors investigated exists in three modes, namely, permanent, part-time or internship, and it became clear from their responses that 93% were in an internship programme that ranged from 1 month up to more than 25 months for some graduates. Only 7% were employed permanently. There were none in part-time employment (see Figure 2).

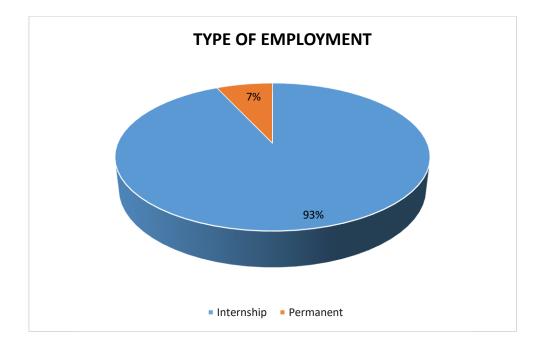


Figure 2: Type of employment

Since the majority of the graduates who participated in the study were interns, they received a monthly stipend/salary of R3000 to R5000 to assist them to pay for monthly expenses of transport and certain other needs. They could not clearly clarify the relevance of the programme to their jobs especially in terms of remuneration. They also mentioned that although they had completed different NCV programme, they were all receiving the same salary/stipend. This affected them (graduates) adversely by positioning them with a lower socio-economic status. While 93% only received the standard stipend salary with no benefits, the 7% employed permanently were doing better, because, in addition to their salaries, they were receiving additional benefits such as medical aid, pension fund and certain other allowances.

Based on the reasons the graduates provided in this study as to why they chose to do the NCV qualification one can conclude that the NCV qualification gave them hope for social mobility. They hoped to find employment and become independent. However, their responses suggest that the manner in which the link between the NCV curriculum and occupation status of the graduates was understood was primarily dependent on employment and remuneration rather than, as illustrated below, occupation status.

4.3 NCV curriculum and the graduate occupation status

The income the graduates were receiving made social mobility extremely difficult. Even though in the final year of their studies the graduates from the TVET College were involved in a number of activities which intensified their preparation for employment, it seemed impossible for them to move from their social class based on their occupation status and income. For instance, the college organized two workshops in the beginning and just before their final examinations on job preparedness where external stakeholders such as potential employers were invited to address the graduates on the employer's expectations when they eventually join the labour market. The students were also involved in the WBE programme throughout the college holidays. This involvement was intensified in their final year to strengthen the partnerships with the companies that would potentially absorb them upon completion of their studies should they have positions available. Two important issues were thus probed, namely, the type of employment that the graduates occupied and how their family lives were transformed since completing the programme and being involved in the labour market.

In response to the question about how the college prepared them for their first job, 82% of the respondents indicated that they were well prepared and 18% said that the preparation was average (see Figure 3).

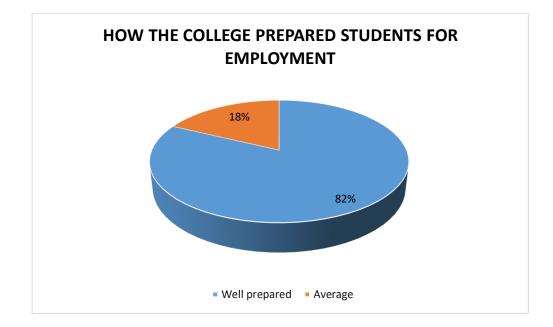


Figure 3: How college prepared them for employment

In support of this finding, according to an NCV tracer study done by SSACI, JET Education services and NBI, respondents also seemed happy with the role colleges played in preparing them for the workplace. Colleges were rated as excellent by 58.2% of respondents in teaching them how to apply what they had learnt (Akoobhai & Schindler, 2016).

UNIVERSITY

In investigating the employment rank that is linked to the programme each respondent was involved in, on the questionnaire they had to indicate the specific programme field and their current position. For 62% of the graduates who had completed the Office Administration programme, their positions varied among office clerk, office administrator intern, receptionist, classroom assistant and photocopy machine operator. The others indicated that they were employed as assistants in various departments such as Academic Support Unit at the college, Career and Job Placement Unit, Assets and Fleet Management Unit. Overall, the majority were occupying a below entry-level position. Figure 4 illustrates the different programme of the graduates that participated in the study and the majority were Office Administration graduates.

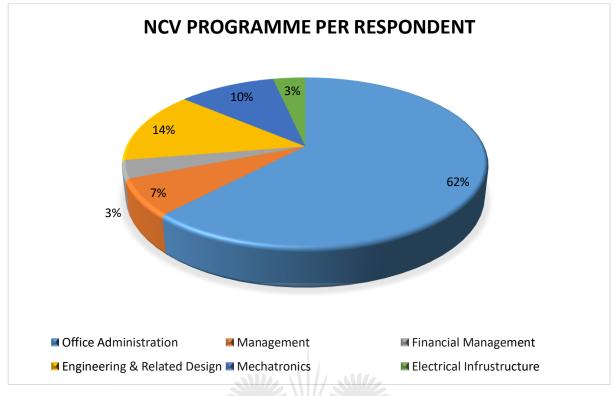


Figure 4: NCV Programme respondent

Given what we know about the substantial effects of social origin on the education and economic outcomes of learners (Oakes, 2005), a strong international tradition links VET to the reproduction of inequality (Lewis, 1997). The poverty experienced by many vocational learners; their limited social, economic and educational resources; and the social stratifying effects of the academic-vocational divide are all important (Powell & McGrath, 2013). As Kliebard (1986) pointed out, Dewey argued that separate curricula, as we have them today, "result in a typically 'bookish' education for one group and narrow trade training for the other". Consequently, the separate vocational and academic programmes further divided the social classes, a situation that Herrick (1996) has called "undemocratic". Therefore, considering the graduates' poor socioeconomic background and employment in low skilled occupations, it is reasonable to argue that the NCV qualification reproduces inequality even though they (graduates) seemed happy that they were involved in something constructive rather than sitting at home with the rest of the many unemployed youths.

Work-based vocational education training has the key advantage of integrating practice into the learning process and thus ensuring close correspondence between the acquired skills and the actual requirements of firms. Thereby, it smooths the school-to-work transition (Wolter & Ryan, 2011). Vocational training reduces the risk of unemployment and downwards social mobility, but may also limit the likelihood of entry into the upper-middle class and upwards social mobility (Breen & Goldthorpe, 1997). TVET colleges, particularly in the case of college X, do help in finding a job at the end of studies. The college's career and job placement unit is responsible for forming relationships with industry so that learners are linked to occupations that are relevant to their field of study and ensure appropriate experience and workplace placement at the end of their studies. However, the literature (Powell, 2012) points to a perception that poorer people may be drawn to accept any job, even below their skill level in order to provide a source of income. In such instances, poverty suppresses the concept of choice and makes career guidance relevant only for those perceived to have choices (see also Watts & Fretwell 2004). Therefore, the evidence provided here appears to indicate that graduates of the TVET College are employed in positions that do not fully capitalise on their skills.

In contrast, the tracer study that was conducted by Boka (2017) through the JET education services unit revealed that a majority of the students that are employed upon completing their NCV qualification do get employment that is related to their field of study. Diagram 2 represents the different programme and the percentage of graduates who were employed in sectors that were related to each qualification at the time the study was conducted.

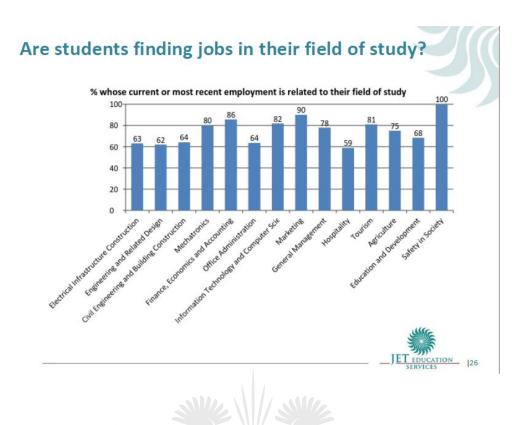
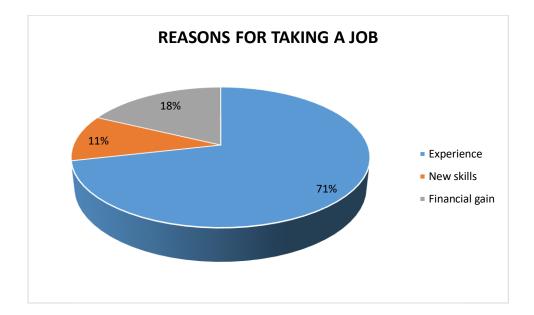


Diagram 2: Are students finding jobs in their field of study? (*Jet Education Services*, 2016)

In the questionnaire that was completed by the respondents, they had to choose from a range of four pre-populated options indicating why individuals choose to occupy certain employment. These options were "to learn new skills", "financial gain", "to gain experience" and "change career". 71% indicated that they took the job to gain experience in the chosen career field, 18% for financial gain and 11% cited they were interested in learning new skills (see Figure 5).





Note: The choices indicated here influenced the graduates' personal and family lives.

In the new democratic South Africa, the government policies strive to create an equitable society. Various strategies and plans have been introduced to improve the lives of, in particular, the previously disadvantaged communities. According to Nambo (2016), as regards social class, South Africa is divided into three parts, the rich, middle class and the poor and; remains an unequal society. Therefore, apart from graduates of the universities, young people completing formal, post-school education programme include graduates of public TVET colleges and private colleges who aspire for social mobility. There is a belief that future occupational status will directly affect the social class. However, the labour market is unkind to these young school and college graduates. University graduates have substantially better opportunities to find jobs relative to their peers emerging from the TVET colleges. How their families are affected by these aspects sis discussed below.

4.3.1 Family life after graduation

The study found that 76% of the graduates' family lives had improved upon completing their qualification and being in some form of employment. Although

the income they received was not enough when viewed in relation to the skills they possessed, they still indicated that they were, at least, able to do some things at their homes and for themselves. However, for Graduate 3 "... life has not changed because I come from a family of 6 siblings and maintaining them is difficult as I am the only one working". In contrast, Graduate 1 indicated that life had improved because of her/him"... (Had) not been sitting at home for the six months or not working since completing NCV".

Graduate 4 also said life has improved "because now I can complete my toolbox since I need it to complete my tasks".

Graduate 19 said too "because now I'm working and I apply my L4 qualification.... I'm contributing at home also".

The remaining 24% indicated that their family life was still the same. The responses are captured in Diagram 6.

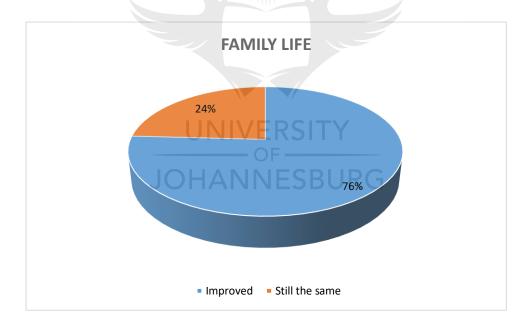


Figure 6: Family life

The reasons provided thus made it interesting to investigate why students choose the NCV programme as a career pathway.

4.3.2 The NCV curriculum as a post school career pathway

The following discussion focuses on the reasons graduates chose the NCV programme. Special attention is paid to their experiences of getting their first job and how long it took to get that job and whether having the NCV qualification has put them at an advantage as regards occupational environment.

4.4 Why NCV?

In explaining why, they registered for the NCV programme, the respondents cited the following reasons:

• Graduates 1, 2, 4, 5, 7, 8, 12, 20, 22, 23 and 26 indicated that the qualification provided both theory and practical experience in a particular vocational field. The practical component of the study is offered in a simulated workplace environment and students had the opportunity to experience work situations during the period of study thus enhancing their skills for when they eventually enter the job market.

Graduate 1 said they chose NCV with the intention "To obtain skills and knowledge through practical and theoretical training"

Graduate 2 said "To gain practical and theoretical knowledge about mechanical engineering"

Graduate 4 said, "Because you get a chance to do things practically than be strong theoretical..."

Graduate 5 "I chose to do the NCV programme because they also offer practicals"

Graduate 7 said "To learn the practical theory in College and apply it on the work place"

Graduate 8 said "To gain more practical experience on how to work in the workplace"

Graduate 12 said "I wanted to gain more knowledge as well as practical aspects of engineering field"

Graduate 20 said "Because it teaches you theory, then also gives practical training about being in the workplace"

Graduate 22 said "NCV curriculum is the best because it combines both practical and theory, also to gain skills"

Graduate 23 said "In the NCV we do practical's more than the theory"

Graduate 26 said "They learn theory and practical so that I gain experience"

Graduate 28 said "Because of practical"

• Graduates 3, 10, 11, 13, 16, 21 and 24 pointed out that they expected the programme to assist them significantly in getting employment upon completion of the programme.

Graduate 3 "I wanted a qualification that I could use to gain entrance in the working industry" JOHANNESBURG

Graduate 10 "Because I learnt that the NCV programme provides (sic) us with the necessary skills needed in the workplaces"

Graduate 11 "Because to me working in an office or working with people is what I love and enjoy"

Graduate 13 "To improve myself so that it could be easy for me to get a job"

Graduate 16 "To improve the level of my employment and gain more knowledge"

Graduate 21 "Because I needed to gain relevant working experience of at least 12 months and gain more work place ethics and skills" Graduate 24 "Because I love working in the office so the programme was relevant"

• Graduate 9 indicated that registering for the NCV qualification was an alternative after s/he had failed to complete matric. Graduates 19 and 29 also said that they could not go to university and as an alternative registered at the college instead.

Graduate 9 said *"I didn't finish my matric"*

Graduate 19 said "It's because I wanted to further my studies and could not go to university because of low marks"

Graduate 29 said "I always had an interest and my secondary school teacher encouraged me to go to TVET because there are bursaries to help me further my studies since my family cannot afford to take me to university"

According to Graduate 17, the choice was to do NCV rather than sit at home because parents could not afford to send them to university.

Graduate 17 explained that they missed the registration window for National Accredited Technical Education Diploma courses and consequently settled for the NCV programme: "I initially wanted to study NATED Courses but I was late for registrations which then caused me to opt for NCV so that I wouldn't have to sit at home and do nothing"

• For graduates 6, 14, 15, 18 and 25 this was the pathway to further their studies after they had completed school as the programme provided an opportunity to gain more theoretical knowledge and practical experience whilst studying.

Graduate 6 "Because of the vast ground of software programming and process manufacturing"

Graduate 14 "I wanted to study full time so that I can gain even better experience"

Graduate 15 "To improve myself so that I get knowledge and skills"

• Graduate 29 indicated that s/he was informed that they would receive a bursary to complete the qualification and this was the best option for her/him.

Graduate 29 said "I always had an interest and my secondary school teacher encouraged me to go to TVET because there are bursaries to help me further my studies since my family cannot afford to take me to university"

What the researcher could also gather when speaking to the graduates was that completing this qualification and being able to be involved in some form of employment boosted their confidence and gave them a sense of hope for a better future.

Graduate 18 added that:

.... I chose it because I needed time to improve my mathematics and work on it, the other subjects and practicals were more reason to continue with the NCV programme...

Graduate 5 also indicated that:

...First job was a lifetime experience because now I am exposed to a new life. Like getting into an industry....

According to Powell and McGrath (2013), college students are real people with real needs and aspirations. Many have been affected by poverty, have made poor choices or have not realised their full educational and human potential. They are, as mapped by Bynner, Ferri and Shepherd (1977), "getting on [and] getting

by" and only the future will tell if they are getting somewhere or "going nowhere". However, they have made choices, often in thoughtful and principled ways, and do have life plans. Regardless of the reasons they chose the NCV programme, once they were involved in the programme, the common factor became acquiring practical skills that would lead to employment. Getting that first job was a big step in ensuring that they were on track on their way to a better life.

The college played a significant role in linking the students with their future employers long before they even completed the programme by building partnerships through the work based experience that took place during the college recess. The next section explains how the graduates got their first form of employment.

4.4.1 Getting the first job

When the respondents were asked how they got their first job, 62% indicated that they had acquired the employment through the college. This meant that they either saw an advert on the college social media page where previous graduates are encouraged to apply for internship positions that are facilitated by the college or they came across the advert on the college notice boards. The college has partnered with companies as well as SETAs that provide funding for internships. In addition, it (the college) looks for host companies that will accommodate graduates for a specific period usually 12 months. The interns received a monthly income from the funding provided by the SETAs to the college.

For example, graduates 3 and 4 said:

...I hand delivered my CV at the College after finding out about the post on the College Facebook account... while the other saidthere was an advertisement on social media stating that there are vacant posts at the College and I applied...

The other 28% of respondents indicated that they got their first employment opportunity by either applying or physically approaching the employer personally.

Graduates 23 and 25 said:

They approached the company directly

However, during a discussion with the job placement officer at the college, it was indicated that some companies were sceptical of partnering with the college for various reasons. When approached to host graduates, they declined but if the students approached them directly then they were willing to accommodate them. Seemingly they preferred to work with individuals rather than committing to partner with the college. Therefore, as Gewer (2010), pointed out, because of limited links between VET graduates and relevant places of employment, students relied on personal contacts, family relations and newspaper advertisements to find jobs.

In the engineering field, some employers have raised concerns about the health and safety practices that they have to adhere to which makes it difficult for them to expose graduates to their particular environments. They worried about suffering damages in the event of workplace injuries. In addition, as Allais and Nathan (2014), have also argued that prospective employers were uncertain about the marginal productivity of potential employees and unable to clearly ascertain what knowledge and skills they possessed, let alone how these aspects would enhance or otherwise affect productivity. In Allais and Nathan's (2014) view, the employers' unfamiliarity with NCV programmes was also responsible for the extended length of time it took for graduates to get their first jobs. Failure to secure employment in a short time after graduation thus had a negative influence on the confidence to wait for a suitable appointment. Graduates lost interest in specialising in a particular field and ended up looking for any employment that enabled them to make a living. A protracted employment search also resulted in the learnt knowledge and skills becoming less current in the fast changing and developing economic environment. The next section looks at how long, on average, it took graduates to find employment and how this affected their future prospects as employees.

4.4.2 Number of months it took to find the first job

South Africa, in general, has a relatively high unemployment rate for various reasons, such as skills mismatch, inadequate opportunities and the rapid urbanisation of people moving into cities and towns. The quicker graduates found employment, the more efficient they were because all the knowledge gained while completing their studies was still fresh in their minds. The longer it took, the more challenging it was to transition and cope in the labour market. Harambee (2014) indicates that if a young work-seeker in South Africa finds and keeps a job for more than one year, they are highly likely to remain in sustained employment. Prior work experience is the determining factor in how likely a person is to gain formal employment, which means millions of youth are now caught in the vicious cycle of not having experience and unable to gain experience.

The respondents were asked to indicate in terms of months, how long it took them to find their first job. Of the 29 graduates that qualified between the years 2014 to 2017 in this study, 31% found employment between 1 to 6 months after graduation, 35% between 7 to 12 months, and 15% took 13 to 18 months while 8% found employment after 19 to 24 months. The remaining 12% of graduates indicated that it took longer than 25 months for them to find employment.

In a study by Engelbrecht (2017), the majority of graduates (81%) did not find work immediately after graduating from NCV Level 4 Tourism. This had an impact on their socio-economic position, making it more difficult financially to look for a job. Also, most of the respondents in the Tracer Study of the Transition of NCV Students from TVET Colleges to the Labour Market (Akoobhai & Schindler, 2016) (81%) found their first job within 6 months; while a further (19%) of them found a job between 7 and twelve months. The trends for the college graduates, as indicted in Table 1 were longer. The bars represent a total percentage of n graduates and how long it took to get employment after completing studies.

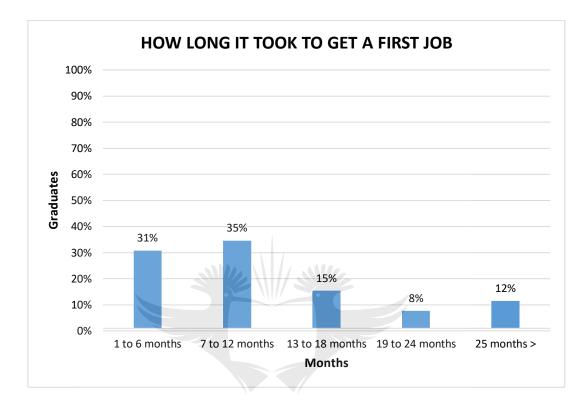


Figure 7: How long it took to get the first job.

Although there is an assumed association between VET and employability, empirical studies evaluating returns to VET are limited (Powell, 2012), for instance studies that focus on the socio-economic benefits of vocational education and training in South Africa or perhaps transition studies that evaluate the career pathway for vocational education graduates, highlight the difficulty to calculate the potential return on investment of vocational education in the long term. This could be because the vocational education pathway in the country is relatively new and due to the lack of comprehensive data, the government's attempts to maximise its potential in responding to the high youth unemployment rate which was at 54% in the year 2013, is still unclear.

The vocational curriculum has been promoted to young school leavers as most likely to transform in their lives in a few years. Thus, the need to gather such information from the graduates themselves about how the NCV qualification has put them at an advantage in the labour market. The data presented in the next section deals with the issue in greater detail and more depth.

4.4.3 Has NCV qualification put you at an advantage

All (100%) of the respondents answered this question with a yes meaning all of them felt they were advantaged when it came to getting employment. The viewpoints expressed indicated that NCV qualifications contributed positively to the self-esteem and confidence that had developed after completing the programme. For instance, the graduates pointed out that they had acquired significant knowledge and skills on how to prepare for job interviews. The latter was part of their curricula and, in their view, this was not the case for students transitioning directly into employment from high schools.

Graduate 22 said that:

....It is because when you do have the qualification it opens doors for you...

Graduates 4, 20 and 23 added that:

... The job required people who had the NCV qualification which put them at an advantage...

Graduate 4 expanded, saying "Because the skills that I have obtained will help me with everything that is required for the job including my qualification"

Graduate 20 likewise added "Because the companies also take people who have NCV qualification. I have the advantage of finding a job"

Graduate 23 also explained further that "They mostly want qualified people and I do fit, so it does work in my advantage" Then graduates 2, 3, 5, 18 and 27 further added that:

...the knowledge and skills that they had acquired in the process of completing their qualification they were familiar with the job description and the employer did not have to offer much induction as they were already familiar with the job they had to execute...

Graduate 2 explained that "Because I have more knowledge and skills that are needed now"

Graduate 3 said "The skills that I have acquired makes my job easy as I am familiar with the job description"

Graduate 5 said "Now I am in a field and practicing some of the practical's I've learned from the College"

Graduate 18 said "The Company was aware that we did practical's and that was a plus for them because it wasn't starting from scratch"

Graduate 27 said "Because I get to put into practice, what I've learnt from the college, therefore, I gain experience for a year"

JNIVERSITY

When further probed and asked to explain their qualification advantage, the graduates indicated that they had practical knowledge of the chosen study field. For instance, throughout their NCV programme they completed a number of practical assessments that tested their knowledge on some of the duties that they are involved in now.

Graduate 1 indicated that:

... Through the training I got from the NCV, I was able to answer the questions in the interview....

Graduate 21 also added that:

...with my current job it's been an advantage because I wouldn't be working at the Department of Education as an Admin Clerk if it wasn't for this qualification...

They also indicated that the college had placed them in a WBE (work based experience) programme where during the school holidays from L2 to L4 they were engaged in different companies where they were exposed to the occupational environment and were able to form some partnerships with the industry. As a result, when they completed their studies, they were able to go back to these industries to inform the company that they completed their studies and were available to take up some form of employment. At least two of the respondents indicated that they got the employment they were currently occupying through direct contact with the employer.

For example, graduates 23 and 25 said:

...I went to the company personally....and another saidI applied directly to the company.....

Leathwood and Archer (2004) argue that young people tend to present schooling as a positive influence in their lives. Together with self-belief, it is crucial to their self-realisation, as was the case in this study. This highlights how graduates are unaware of how the opportunities they are exposed to perpetuated socioeconomic inequality.

4.5 Discussion

The argument that education was 'the most important single determinant' of economic growth was initially advanced through the work of human capital theorists, Gary Becker and Theodor Schultz in the 1960s and 1970s (Baatjes, Baduza & Sibiya, 2014). They reduced human behaviour to 'calculational rationality' and viewed human beings as purposeful and goal-oriented individuals

who will invest in education in order to maximise their opportunities. The Human Capital Theory (HCT) model, therefore, suggests the following: (a) education should be regarded as a private good that is a tradable commodity in the market place for money and status; (b) the private return on human capital investment (education) provides an incentive to progress to further education; (c) further education should be oriented towards the labour market (supply and demand); and (d) more education can be translated into higher productivity which results in higher earnings. Based on these aspects, Baptiste (2001, pp. 185) explains human capital as 'knowledge, attitudes, and skills that are developed and valued primarily for their economically productive potential'. Human capital learning trumps democratic learning because it maximises 'returns on investment' as it supposedly provides students and workers with the necessary skills and knowledge for economic success within the prevailing labour market (Hyslop-Margison & Sears, 2010, pp. 3).

In South Africa, the Department of Higher Education and Training (DHET) has predicted high participation rate targets for 2030. Over the three years subsequent to 2015 roughly R640 billion was the planned investment towards basic education. It is encouraging that the South African government and DHET have also shown a strong commitment to boosting VET. Shavit, Arum, and Gamoran (2007), define this expansion as one of the most important social transformations of the second half of the twentieth century, holding out the promise of opening up access for disadvantaged groups to higher levels of education and enhancing overall life chances. However, a key question that has been a focus for research into widening access to HE, is whether expansion reduces or conversely maintains and produces new forms of inequality (Bathmaker, Ingram, Abrahams, Hoare, Waller, and Bradley 2016; Mayhew, Deer, & Dua 2004; Osborne, Gallacher, and Crossan 2007; Teichler 2007, 2008; Vignoles & Crawford 2010). In general, the argument for these authors is that there is a strong and positive correlation between socio-economic status, choice of educational institution and field of study. Students with higher socio-economic status have a greater ability to exercise choice and to map out career trajectories. The findings of this study suggest clearly that the qualification has social

inequality implications. For example, out of the 28 respondents, only two were hired on a permanent contract with benefits while the rest were interns on contracts that were to expire, on average, after 12 months; leaving them uncertain about their future and how they will move up the social class ladder.

Vocational education was seen as supporting the social mobility of NCV graduates. Their lives had changed but not significantly. Comparing what were their current earnings, financial commitments and responsibilities created a bleak picture. Their chances of moving to higher social classes were unlikely. Yet, they still viewed their lives as different because they now had an opportunity to contribute to the labour market. Even though they were not paid what made a significant impact on their lives, moving from being interns to more permanent assistants seemed appreciated. It is thus reasonable to conclude that the views expressed by the graduates, could be a reflection of their educational socialisation. Those who taught them, wittingly or not, could have been industrial academics who tended to shy away from the desired intellectual and social understandings, and "use[d] vocational education as an instrument for perpetuating the existing industrial regime instead of operating as a means for its transformation" (Gregson, 1997). As Dewey (1916), noted "the influences which educate some into masters, educate others into slaves" are evident here.

JOHANNESBURG

4.6 Conclusion

Vocational education history has been viewed as located within a framework of serving the interests of an avaricious capitalist market economy driven by the desire to maximise profits (Chisholm, 1984). In simple terms, 'the more you learn, the more you earn'. In general, in South Africa, according to the NQF structure, the NCV graduates are considered low-level skilled workers while their university counterparts are rated higher. The structure under which the NCV graduates fall rates them as in possession of low-level skills and unless they study further to enter a higher NQF level, they are likely to continue receiving incomes that are considered appropriate to their level of education and be bound to a social class

with very little social mobility. Their NQF level is responsible for determining the salary scales. Therefore, the vicious cycle of financial disadvantage and academic underperformance among students from previously disadvantaged groups appears to continue and be viewed as unproblematic. Its origins are colonial, were reinforced under apartheid and continue to hold sway (Baldry, 2016). VET may provide useful skills for an occupational field at the time of training and thereby ease entry into the labour market. Yet it is an open question as to whether these same skills are still valuable when workers are in their midforties and older.



CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter summarises the findings in chapter four, reflects on the concept used to frame the study and methodology in order to clarify how these aspects facilitated the collection and analysis of the data. The significance of the theory used is also highlighted and limitations to the study outlined. Finally, based on the conclusions drawn recommendations that would improve TVET are made.

5.2 Summary of findings and conclusions

This study focused on the lives of graduates of the NCV L4 qualification and how they had been changed by their occupational status. What was revealed in the study was that the graduates valued the training they received and felt that it prepared them adequately for the labour environment. However, they seemed unaware of how the curriculum was strategically stratifying them to serve in lowincome employment.

IOHANNESBURG

Based on the collected biographical data, a considerable number of the graduates' backgrounds were disadvantaged. They lived with many other family members in informal dwellings and were expected to assist significantly with household expenses once they started working. The widely held and confounded expectation was that to be employed meant receipt of high incomes that would enable them to be independent. It was erroneously believed that employment would affect social mobility, allowing for the acquisition of their own houses and the means to travel conveniently and discontinue d use of public transport. As these conditions did not materialise, movement into what was described as a higher social position was slow.

In general, the level of knowledge and skills acquired in the NCV programme enabled the graduates to transition into the labour market with ease. In some instances, students were able to secure employment on their own. However, even though they hoped for higher economic returns, the wages or financial returns were concerning. Graduates were paid low wages and this affected their socio-economic well-being. Their social mobility was slow because their qualifications made it difficult for them to be employed in higher income positions. As a result, their remuneration perpetuated and reproduced social inequalities in their communities. They could not, for instance, afford items such as a house or a car which would be considered, in their communities, as items that people in a higher social class possess.

The study also established that the NCV curriculum was attractive to the majority of the graduates because it provided both theoretical and practical experience. The graduates believed that the college prepared them adequately for work in terms of both knowledge and skills and was confident about their knowledge, skills and ability. Exposure to theory and practice in the NCV programme made them competitive in the labour market. They also indicated how the curriculum enabled them to answer the interview questions. The experience gained from workplace-based activities was highly regarded, viewed as preparing them for work and helping them to get a job. The graduates indicated that little to no induction was necessary by the employer once they had been employed, implying they were well prepared for the job. This was the case because they already knew what the duties of the positions occupied entailed and were able to respond to the expectations of the employer. The study found that 52% of the graduates used the skills and knowledge they had been taught on a regular basis. However, despite the positive attitudes of the graduates, the study found that the majority occupied low-level positions that did not require the skills and knowledge they had acquired through the NCV programme. 93% were employed as interns for specific periods with no indication of whether or not they would be absorbed permanently once the contract ended. They assumed the situation would be temporary, confined to the contract period and that they would be later absorbed in the companies on a permanent basis with improved salaries. When

asked to indicate reasons for taking the job, 71% indicated they wanted to gain more experience while 11% said they wanted to learn new skills and the remaining 18% indicated they took the job for financial gain. Given the meagre remuneration for internships, those indicating this last category will probably have been disappointed.

5.3 The significance of the theory to the findings

Gamble's (2003), work predates the introduction of the NCV curriculum and underscores the need to examine how curricula affected the graduates' status once qualified. To summarise, her argument is that studies have shown that the human capital pedagogy or approach would increase rather than decrease social equality. She thus highlights the fact that since social groups do not come to the educational market as equals, it cannot be expected that having a vocational qualification means automatic economic success, or being able to afford basic commodities such as property and transportation resources. Inequality of income prevents people from being able to take up opportunities for a better quality of life. The study found this to be true as the graduates were found to be employed on a contract basis and in low level positions, meaning they were paid minimum wage that would not allow the acquisition of basic economic commodities.

OHANNESBURG

The study adopted human capital theory from the work of theorists such as Gary Becker (1962) and Theodor Schultz (Sibiya & Nyembezi, 2018) as a theoretical lens to examine the impact of vocational education particularly the NCV curriculum. The human capital theory assumes, for instance, that education develops skills, that these skills increase a worker's capacity to be productive and the increased productivity leads to higher wages (Baptiste, 2001). Therefore, the assumption in this study was that the NCV programme would positively affect the socio-economic status of its graduates since South African TVET is supposed to maximise opportunities to gain employment (Brown *et al.*, 2000) and improve economic and social of the employed. Therefore, the graduates involved in the study chose the NCV qualification with hopes of being employable after they completed, but once employed, are disappointed by their positions as

interns and lack of prospects of earning higher wages. An NCV qualification continued their social inequality.

Brown's (1999) views that new economies needed highly skilled and qualified personnel were thus helpful in explaining the weaknesses of the NCV qualification in relation to human development and social mobility. The NCV L4 graduate's economic returns could not facilitate their upward mobility.

5.4 Reflections on the methodology

The study employed a combination of research tools. The interviews clarified the context in which and conditions under which the NCV programme was offered. The manner in which official in college X spoke about it, helped the researcher make sense of its curriculum content and organisation. The questionnaire enabled the respondents to share their views and personal experience of the qualification as lived experience in employment. Their insiders' views of how the different vocational fields affected their occupational status and lives clarified the significance of the NCV programme on their social status.

5.5 Limitations of the studyOHANNESBURG

Pursuing research in the field of vocational education in South Africa proved challenging. The field is under researched and relatively new since the NCV programme was only introduced in 2007. As a result, there were no traditions to draw on in collecting and analysing and making sense of the data.

Methodologically, even though there were plans to conduct a focus group interview with the graduates that completed the questionnaires to get more details and clarify some of the responses provided, unfortunately, that could not take place because of time and logistical arrangements. The respondents worked for different companies, and were in full time employment and resided in different areas. This made it inconvenient for them to meet at the college after work. Many relied on public transport and could not afford an additional trip to the college because of their meagre wages. In addition, they were hired on an internship basis, had limited leave days were limited and could not risk losing money for being absent from work. As a result, the focus group interviews could not take place. Another limitation of the study was that I was not able to get the views of the employers. Due to the busy schedule of the employers, they could not commit to a meeting which would not be of evident, immediate benefit to their business. Thus, the meetings to allow for further investigation could also not take place. It would have been interesting to find out what the employers thought about the qualifications, in particular, whether they addressed the skills gap that is often reported on. Fitz and Haplin (1994), have explained the gatekeeping that occurs when researching individuals in power such as supervisors or executives of an organisation. As they argued, the lack of access to employers is likely to have limited views on the importance of the NCV qualifications in the workplace.

5.6 Recommendations

Education has become an instrument for economic progress. Views about it have shifted from its original role of providing a context for human development (Kromydas, 2017). In South Africa, the changes and expansion of TVET were thus primarily meant to alleviate social and income inequalities (McGrath, 2005). Better articulation between the different parts of the education and training system is required to enhance the chances for previously disadvantaged students to exercise social mobility through the VET programme. For example, Sibiya and Nyembezi (2018), pointed out that employers do not seem to agree that unemployment is caused by job scarcity; instead, they consider skills mismatch as the real reason. Therefore, it might be helpful to solicit employers' views when designing vocational curricula. If there is to be systematic coordination with networks or associations of employers and for the government to successfully achieve its targets, there needs to be increased employer engagement. The labour market should be involved in curriculum design to ensure that when students join the labour market, they are able to advance to higher-income employment based on this qualification. The opportunities will

transform their lives with salaries will be sufficient to advance to higher social classes. This will work towards the eradication of poverty in their communities.

Furthermore, vocational education and training need to be adapted to local economic conditions and thus labour market institutions for it to benefit communities. This requires an assessment of existing conditions and experiences so that better vocational training can be built upon and be responsive to these conditions. However, currently, curriculum development processes seem not to be based on investigations of the contexts in which institutions are located. As a result, opportunities or spaces for innovation and responsiveness to both a nationally and locally defined curriculum structure are lost. Poor understanding of local needs when developing curricula within vocational institutions reflects a significant weakness of the education offered. As a result, TVET colleges have faced legislative difficulties in placing NCV students into the workplace, as they do not qualify to be employees of particular companies,). The government needs to intervene and promote a system that will foster a strong relationship between vocational education and the labour market to ensure that graduates who enter the labour market as interns or apprentices have appropriate knowledge and skills for the work to be done.

NIVERSII

Another recommendation is that SAQA must review the NCV curriculum and possibly upgrade its NQF level. Equating it to Matric/ Grade 12 makes it a general qualification and not field specific. It is necessary for SAQA to review the level of this qualification focusing on the curriculum content that is currently offered. The NCV should be considered as above the Grade 12/Matric level because it allows students a pathway that focuses on a particular field of expertise; from the lowest level to further education and up to university level. This would encourage the labour market to pay better and graduates to move from a poor working class to a middle income class.

In addition, extensive research needs to be conducted to further study the impact of curriculum studies concepts in the TVET sector. Despite perceptions of increased opportunity and scope for individual agency, the apprenticeship pathway has proven that the manner in which skills development systems within the vocational education sector occur, can re-establish 'familiar patterns of socioeconomic inequality ...' (Furlong 2009, pp. 344).

There are many opportunities for further areas of work to be pursued in this field as the South African government is keen to make the field more attractive to the youth, those that just completed Matric, those that did not complete high school and those in the employment sector that are looking for means to improve their skills and upgrade their economic returns. It is thus necessary for researchers to explore the development of the sector as the government has made it a priority for addressing unemployment, poverty and social inequalities.



References

Akoobhai, B. and Schindler, J. (2016). *Tracer study of the transition of National Certificate Vocational students from TVET Colleges to the labour market. TVET College Times Journal*, 45:36-39, June.

Akoojee, S. and McGrath, S. (2005). *Post-Basic Education and Training and Poverty Reduction in South Africa - Working Paper Series -* Nº2: Progress to 2004 and Vision to 2014. Center for African Studies. The University of Edinburg. Edingburg.

Akoojee, S. Gewer, A. and McGrath, S. (2005) *South Africa: skills development as a tool for social and economic development.* In: Akoojee, S. Gewer, A. & McGrath, S. (eds). *Vocational education and training in southern Africa: a comparative study.* Cape Town: HSRC Press. 99-117

Allais, S.M. and Nathan, O. (2012). *Skills, What skills? Jobs, What jobs? Overview of studies examining relationships between education and training and labour markets.* Department of Higher Education and Training: Labour Market Intelligence Partnership. South Africa.

Allais, S.M. and Nathan, O. (2014). *Skills? What Skills? Jobs? What Jobs? An Overview of Research into Education Labour Market Relationships.* In *Knowledge, Economy and Society* edited by Vally S and Motala E. Unisa Press. Pretoria.

Anderson, D. (2009). "Productivism and ecologism: Changing dis/courses in TVET". In Learning and Sustainable Development: Opportunities and Challenges, edited by Fien, J. R. Macleanand M. Park. 35-59. Bonn, Germany: Springer.

Baatjes B.and Hamilton S. (2012). Blade's Paper Fails to Make the Cut. Available from https://mg.co.za/article/2012-01-20-blades-paper-fails-to-make-the-cut

Baatjes, I. Baduza, U and Sibiya, A. (2014). *Building a Transformative Pedagogy in Vocational Education*: In Knowledge, Economy and Society edited by Vally.S and Motala E. Unisa Press. Pretoria.

Badroodien, A. (2001). A history of the Ottery School of Industries in Cape Town: Issues of race, welfare and social order in the period 1937 to 1968. Unpublished Ph.D. thesis, University of the Western Cape.

Badroodien, A. (2004). *Skills Development and Education in South Africa: Understanding key issues and needs with regard to human resource development (HRD)*. Paper presented at the 'HRSC-Iran Research collaboration series', Shahid Beheshty University, Tehran, Iran.

Badroodien, A. & Kraak, A. (2006). *Building FET college responsiveness: the role of linkages and programmes units*. HSRC Press. Pretoria.

Bailey, K. D. (1994). *Methods of Social Research* (Fourth Edition). New York: The Free Press.

Baldry, K. (2016). *Graduate unemployment in South Africa: social inequality reproduced*, Journal of Education and Work, 29:7, 788-812.

Baptiste, I. (2001). *Educating lone wolves: Pedagogical implications of human capital theory*', Adult Education Quarterly 3(55), 184–201.

Bathmaker, A. M. I. Ingram, J. Abrahams, T. Hoare, R. Waller, and H. Bradley. (2016). *Higher Education, Social Class and Social* Mobility: *The Degree Generation*. London: Palgrave Macmillan.

Becker, G. (1962). *Investment in Human Capital: A Theoratical Analysis.*" NBER Special Conference 15, supplement Journal of Political Economy 70, Issue 5, part 2: 9-49.

Becker, G. (1964). *Human Capital*.2nd edition. Columbia University Press, New York.

Becker, G. (1975). Human Capital and the personal distribution of income: An analytical approach. In Human Capital; a theoretical and empirical analysis, with special reference to education (2ed.) New York: National Bureau of Economic Research.

Becker, R. and Hecken A.E. (2009b). *Why are working class children diverted from University*? European Sociological Review,25(2), 233-50.

Becker, R. and Hecken, A. (2008). *Warum werden Arbeiter vom Studium an Universitaeten abgelenkt? Eine empirische Ueberpruefung der 'Ablenkungsthese' von* Mueller and Pollak (2007) und ihre Erweiterung durch Hilmert and Jacob (2003). Kolner Zeitschrift fur Soziologie and Sozialpsychologie, 60, 3-29.

Becker, R. and Hecken, A.E. (2009a). *Higher education or Vocational education? The rational action model of educational choices* suggested by Breen and Goldthorpe (1997) and Esser (1999). Acta Sociologica, 52(1), 25-45.

Bell, J. (1991). *Doing Your Research Project* (2nd Edition). Milton Keynes: Open University Press.

Bhorat, H. van der Westhuizen, C. and Jacobs, T. (2009). *Income and non-income inequality in post-apartheid South Africa: What are the drivers and possible policy interventions?* Trade and industrial policy strategies: Development Policy Research Unit. University of Cape Town.

Blundell, R. Dearden, L. Meghir ,C. and Sianesi, B. (1999). *Human capital investment: the returns from education and training to the individual, the firm and the economy.* Fiscal studies, Vol. 20, No 1, p. 1-23.

Boka, K. (2017). Understanding pathways taken by TVET college NCV students through college and beyond: NCV Tracer study. JET Education Services

Bowles, S. and Gintis, H., (2002). *The inheritance of inequality*. Journal of Economic Perspectives 16 (3), 3—30.

Branson, N. and Zuze, T.L. (2012). *Education, the great equaliser: Improving access to quality education*. In Hall, K. Woolard, I. Lake L. and Smith, C (eds). *South African child gauge*. Cape Town, South Africa: Children's Institute, University of Cape Town.

Branson, N. and Leibbrandt, M. (2013). *Educational attainment and labour market outcomes in South Africa, 1994–2010*. Technical report, OECD Publishing.

Branson, N. Hofmeyer, C. Papier, J. and Needham, S. (2015). *Post-school education: Broadening alternative pathways from school to work*. In De Lannoy A. Swartz, S.

Lake, L and Smith, C. (Eds.), *South African Child Gauge 2015*. Cape Town: Children's Institute, University of Cape Town.

Breen, R. and Goldthorpe, J. H. (1997). *Explaining educational differentials: towards a formal rational action theory*. Rationality and Society, 9(3), 275–305.

Broudy, H.S. (1981). *Toward a Theory of Vocational Education Occasional Paper No.*73. Ohio State University.

Brown R.B. (2006). *Doing Your Dissertation in Business and Management: The Reality of Research and Writing*. London: Sage Publications.

Brown, B. L. and Hedges, D. (2009). Use and misuse of quantitative methods. In Mertens D. M. and Ginsberg P. E. (eds). *The handbook of social research ethics*. (pp. 373-390). Thousand Oaks, CA: Sage Publications.

Brown, P. Green, and Lauder, H. (2000). *High skills: Globalization, competitiveness and skill formation*, Oxford University Press, New York.

Burbules, N.C and Torres, CA (2000). *Globalisation and Education*: An Introduction. In Burbules, N.C and Torres, CA (eds) *Globalisation and Education Critical Perspectives*. London and New York: Routledge.

Bynner, J. Ferri, E. and Shepherd, P. (Eds.). (1977). *Twenty-Something in the 1990s*. Aldershot: Ashgate.

Carr, W. (2006). Philosophy, Methodology and Action Research. *Journal of Philosophy of Education,* Vol. 40 (4), 421-435.

Chetty, P. (2016). *Importance of research approach in a research*. Available from: <u>https://www.projectguru.in/publications/selecting-research-approach-business-studies/</u>

Chisholm, L. (1984). '*Redefining skills: Black education in South Africa in the 1980s*', in P. Kallaway (ed.), *Apartheid and education*, pp. 387–409, Ravan Press, Johannesburg.

Chisholm, L. (1992). *South African technical colleges: Policy options*. Education Policy Unit University of the Witwatersand, Johannesburg.

Cloete (ed) (2009). *Post School Youth: Exploring the scope of the problem*. Cape Town: CHET-FETI.ogo108

Cohen, L. Manion, L. and Morrison, K (2011). *Research Methods in Education* (7th ed.). London: Routledge Publishers.

Cosser M. McGrath S. Badroodien A. and Maja B. (2003). *Technical College Responsiveness*. Cape Town. HSRC Publishers.

Crawford, C. Johnson P. Machin S. and Vignoles A. (2011). Social Mobility: A Literature Review. London: Department for Business, Innovation and Skills. http://www.bis.gov.uk/assets/biscore/economics-andstatistics/docs/s/11-750-socialmobility-literature-review

Creswell, J.W. (2011). *Educational research: planning, conducting and evaluating quantitative and qualitative research*, 4th edition. University of Nebraska - Lincoln: Pearson Publications.

Dawson, C. (2002). Practical Research Methods, New Delhi. UBS Publishers' Distributors.

Denscombe, M. (1998). *The Good Research Guide*. Buckingham. Open University Press.

Department of Higher Education and Training. (2011). National Skills Development Strategy 2011-2016. Government Printers. Pretoria.

Department of Higher Education and Training (DHET), (2013), White Paper for Post-School Education and Training – Building and expanded, effective and integrated postschool system. Pretoria

Department of Higher Education and Training-Republic of South Africa (DHET) (2012a) *Green Paper for Post-School Education and Training*. Pretoria.

Dewey, J. (1916). Democracy and education. New York: The Free Press.

Engelbrecht, M. (2017). The relevance of the National Certificate Vocational at Technical Vocational Education and Training colleges for the South African tourism industry. Thesis MTech. Tourism and Hospitality Management --Cape Peninsula University of Technology.

Fay, B. (1987). Critical Social Science. New York: Cornel University Press.

Fisher, G. Jaff, R. Powell, L. and Hall, G. (2003). *Public further education and training*. In HSRC Human resources development review 2003: *education, employment and skills in South Africa*. Cape Town: HSRC Press.

Fitz, J. and Haplin, D. (1994). *Ministers and mandarins: educational research in elite settings*. In G. Walford (ed). *Researching the powerful in education*. London: UCL Press, 32-50.

Fleisch, B. (2008). *Primary Education in Crisis: Why South African schoolchildren underachieve in reading and mathematics*. Cape Town: Juta.

Frame E., De Lannoy, A., and Leibbrandt, M. (2016). *Measuring multidimensional poverty among youth in South Africa at the sub-national level.* A Southern Africa Labour and Development Research Unit Working Paper Number 169. Cape Town: SALDRU, University of Cape Town.

Furlong, A. (2009). "*Revisiting Transitional Metaphors: Reproducing Social Inequalities under the Conditions of Late Modernity.*" Journal of Education and Work 22 (5): 343–353.

Gamble, J. (2003) *Curriculum Responsiveness in FET Colleges*. Cape Town: HSRC Press.

Geertz, C. (1973). The Interpretation of Cultures. New York: Basic Books.

Gewer, A. (2009). *Features of social capital that enhance the employment outcomes of FET college learners*. Ph.D. thesis submitted to the Faculty of Humanities, University of the Witwatersrand. Johannesburg: University of Witwatersrand.

Gewer, A., (2010). *Choices and chances: FET colleges and the transition from school to work*, Report commissioned by the HRD Support Unit through funding from the

Employment Promotion Programme at the UCT's Development Policy Research Unit, National Business Initiative, Johannesburg.

Gibbs, G. (2007). Analyzing Qualitative Data. London: Sage Publications.

Girdwood, S. and M. Leibbrandt, (2009). "*Intergenerational Mobility*," National Income Dynamics Discussion Paper, Number 10, SALDRU: Cape Town.

Goldthorpe, J. H. (1987). *Social Mobility and Class Structure in Modern Britain*. 2nd ed. Oxford, Clarendon Press.

Gonzales, L., Brown, M. S. and Slate, J. R. (2008). *Teachers who left the teaching professions: a qualitative understanding*. Qualitative Report, 13 (1), 1-11.

Gordon, H. R. D. (1999). *The history and growth of vocational education in America*. Boston: Allyn and Bacon.

Green, A. (1997) *Education, Globalisation and the Nation State*, Basingstoke: MacMillan.

Gregson, J. A. (1997). *A critical response to Grubb*. Journal of Vocational Education Research , 22(2), 123-132.

Griesel, H. (2002). *Universities and the world of work: A case study on graduate attributes.* Paper presented at the CHE Colloquium on 27 and 28 June: Building Relationships between Higher Education and the Private and Public Sectors and Contributing to their Higher Level Person Power and Knowledge Needs.

Grob, M. (2003)."*Educational systems and perceived social inequality*". European Societies 5 (2): 193.

Grusky, David B. and Erin Cumberworth (2010). A National Protocol for Measuring Intergenerational Mobility. Workshop on Advancing Social Science Theory: The Importance of Common Metrics. Washington, D.C: National Academy of Science.

Hanford E, (2014). *The troubled history of vocational education*. Retrieved from http://www.americanradioworks.org/segments/the-troubled-history-of-vocational-education/ Accessed on 6 June 2016.

Harambee. (2014). *A mismatch between labour supply and demand in South Africa.* http://durbanchamber.co.za/profiles/blogs/harambee-youth-accelerator-an-answerto-a-mismatch-between-labour [14 August 2014].

Herrick M. J. (1996). Assessment of student achievement and learning, what would Dewey say? A 'recent' interview with John Dewey. Journal of Career and Technical Education: Eau Claire, Wisconsin.

Hoogvelt, A.M., (1978). The Sociology of Developing Societies. Macmillan, London.

Hyslop-Margison, E.J. and Sears, A. (2010) *Neo-liberalism, globalization and human capital learning: Reclaiming education for democratic citizenship*, Springer, Dordrecht.

Hyslop-Margison, E.J. (1999). *An Assessment of the Historical Arguments in Vocational Education Reform*. Educational Resources Information Center (ERIC).

Hyslop-Margison, E.J. (2005). *Liberalizing Vocational Study: Democratic Approaches to Career Education*. University Press of America.

JET Education Services. (2016). *Tracer Study of the Transition of NCV Students from TVET Colleges to the Labour Market-NSA Funding: Report on the 2010 FET Research Study*. Commissioned by the National Business Initiative on behalf of the Department of Higher Education and Training. Programme at the Development Policy Research Unit, University of Cape Town. Cape Town

Kerlinger, F. N. (1970). *Foundations of Behavioral Research*. New York: Holt, Rinehart and Winston.

Kliebard, H. M. (1986). *The Struggle for the American Curriculum*: 1893-1958. Boston: Routledge & Kegan Paul.

Kraak, A. (2002). Discursive shifts and structural continuities in South African vocational education and training 1981- 1999. In P. Kallaway (Ed) The history of education under apartheid 1948- 1994: The doors of learning and culture shall be opened. Cape Town: Maskew Millar Longman.

Kromydas, T. (2017). *Rethinking higher education and its relationship with social inequalities: past knowledge, present state and future potential.* Palgrave Communications.

Kvale, S. (1996) Interviews. London: Sage.

Landman, J. (2003). *Breaking the grip of poverty and inequality in South Africa: 2004-2014* Retrieved from <u>http://www.sarpn.org/documents/d0000649/P661-</u> <u>Povertyreport3b.pdf</u>

Le Compte, M.D and Preissle, J (1993). *Ethnography Qualitative Design in Educational Research*, 2nd edition. California: Academic Press.

Leathwood C. and Archer L. (2004). *Social Class and Educational Inequalities: The local and the global*. London Metropolitan University: United Kingdom.

Lewis, T. (1997). *Towards a Liberal Vocational Education*. Journal of Philosophy of Education. 31 (3) 477-489.

Liao, T. (2009). Conceptualizing and measuring structural inequality: Working paper.

MacIntyre, A. (1984). *After Virtue: A Study in Moral Theology, 2nd Edition*. Notre Dame: University of Notre Dame Press ERSITY

Maree, K. (2007). First Steps in Research. Van Schaik, Pretoria

Mashongoane, T.S., (2015). The impact of national certificate (vocational) on the continued learning: patterns and destination of the FET Colleges engineering graduates in the North West Province Doctoral Thesis, University of South Africa.

Matras, J. (2011). Comparison of intergenerational occupational mobility patterns: An application of the formal theory of social mobility. Population Studies, 15:187-97

Mayhew, K. Deer, C and M. Dua. (2004). "The Move to Mass Higher Education in the UK: Many Questions and Some Answers." Oxford Review of Education 30 (1): 65–82.

McGrath, S. (1996). *Learning to work? Changing discourses on education and training in South Africa, 1976-96.* Unpublished Ph.D. thesis, University of Edinburgh. McGrath, S. (2004c). *The state of the South African further education and training college sector*, in McGrath, S., Badroodien, A., Kraak, A., Unwin, L., (Eds) (2004). *Shifting Understanding of Skill*. HSRC Press. Cape Town.

McGrath, S. (2012a). "Building new approaches to thinking about vocational education and training and development: Policy, theory and evidence". International Journal of Educational Development. (32): 619-622.

McGrath, S., Badroodien, A., Kraak, A., Unwin, L., (Eds) (2004). *Shifting Understanding of Skill*. HSRC Press. Cape Town.

McKinsey Center for Government. (2012). *Education to Employment: Designing a System that Works*. New York

Merriam, S.B. (1998). Qualitative Research and Case Study Applications in Education. Revised and Expanded from Case Study Research in Education. San Francisco: Jossey-Bass Publishers.

Mincer, J. (1958). *Investment in Human Capital and Personal Income Distribution*. Journal of Political Economy.66 (4): 281-302.

Mincer, J. (1974). *Schooling, Experience and Earnings*. New York: National Bureau of Economic Research.

Mincer, J. (1991). *Human Capital, Technology and the Wage Structure:" What Do Time Series Show?*" NBER WP 3581, published as Chapter 13 in Jacob Mincer Studies in Human Capital, Aldershot, United Kingdom.

Mjelde, L. (1987). "*From Hand to Mind*". In Livingstone, David (Ed.) Critical Pedagogy and Cultural Power. Mass: Bergin& Garvey Publishers, University of Joensuu Press.

Mjelde, L. (1993). *Apprenticeship: From Practice to Theory and Back Again*. Joensuu: University of Joensuu Press.

Mjelde, L. (2006). The Magical Properties of Workshop Learning. Bern: Peter Lang.

Mjelde, L. (2009). New Challenges in Social Organization of Knowledge in Vocational Education: Unity and Diversity in Vocational Didactics in relation to the Identity of *Specific Trades and Professions*. In Weil, M., L. Koski and L. Mjelde (eds) *Knowing Work: The Social Relations of Working and Knowing.* Studies in Vocational and Continuing Education, Vol. 8. Bern: Peter Lang.

Mjelde, L. (2016). *Working Knowledge in Vocational Education*; Hands-on Activities as the Rotation Point for Learning. In Bulletin *of Technology and Vocational Education*. Nagoya: Nagoya University

Morrison, K. R. B. (1995a). *Habermas and the School Curriculum*. Unpublished Ph.D. thesis, School of Education, University of Durham.

Motala, E. and Treat, J. (2014). Education and jobs don't add up: Market driven skills policies limit potential of social development,

Motala, E. Vally, S. and Spreen, C. A. (2010). *Reconstituting power and privilege or transforming education and training*? In Bond, Maharaj, & Desai (Eds.), *Zuma's Own Goal: Losing SA's War on Poverty* Asmara: Africa World Press.

Nambo, T. (2016). Race, Class, Gender in an unequal South Africa. News24 Website.

National Planning Commission (NPC-South Africa). (2011). *Diagnostic Overview: National Planning Commission*. Pretoria: Government Printers.

Ntlatleng H. (2012). FET colleges will raise their game. Mail & Guardian Online Newspaper.

Oakes, J. (1986). Tracking. New Haven, CT: Yale University Press.

Oakes, J. (2005). *Keeping Track: How Schools Structure Inequality*. United States of America: Yale University Press.

OECD (2014). A Skills beyond School Review of South Africa. OECD Publishing, Paris.

OECD (2001). *The well-being of nations*: the role of human capital and social capital Paris.

Ogude, N. Nel, H. and Oosthuizen, M. (2005). *The challenge of curriculum responsiveness in South African higher education*: Council on Higher Education. Pretoria.

Onwuegbuzie, A. J. and Leech, N. L. (2007). *Sampling designs in qualitative research: making the sampling process more public*. Qualitative Report, 12 (2), p. 238-54.

Osborne, M., J. Gallacher, and B. Crossan, eds. (2007). *Researching Widening Access to Lifelong Learning. Issues and Approaches in International Research.* Abingdon: Routledge.

Pampallis, J. (2012). *Green paper 'not merely meeting the needs of business'*. Mail & Guardian Online Newspaper.

Papier J. (2017). *Improving college-to-work transitions through enhanced training for employment*. Research in Post-Compulsory Education 22 (1), 38-48

Powell, L. (2012). *Reimagining the purpose of VET – Expanding the capability to aspire in South African Further Education and Training students*. International Journal of Educational Development 32 (2012) 643–653.

Powell, L. (2013). A critical assessment of research on South African further education and training colleges. Southern African Review of Education, 19(1): 59-81.

Powell, L. and McGrath G. (2013). *Why students enrol in TVET – The Voices of South African FET College Students*. Paper presented at the Journal of Vocational Education and Training (JVET) Conference, Oxford, London.

Powell, L. & McGrath, S. (2014). *Exploring the value of the capability approach for vocational education and training evaluation*: Reflections from South Africa. In G. Carbonnier, M. Carton & K. King (Eds), *Education, Learning, Training: Critical Issues for Development* (pp. 126 – 148). Boston: Brill-Nijhoff.

Psacharopoulos, G. and H. Patrinos (2004a) "*Human capital and rates of return*", Chapter 1 in Johnes, G. and J. Johnes (eds.) International Handbook on the *Economics of Education*. Edward Elgar. Reay, D., Crozier, G. and Clayton, J. (2005). 'Strangers in paradise'? Working-class students in elite universities, Sociology.

Ritchie, J. Lewis, J. and Elam, G. (2003). *Designing and selecting samples*. In Jane Ritchie & Jane Lewis (Eds.), *Qualitative research practice. A guide for social science students and researchers* (pp.77-108) Thousand Oaks, CA: Sage Publications.

Robson, C. (2002). *Real World Research: A Resource for Social Scientists and Practitioner Researchers*. Oxford: Blackwell. Routledge.

Rogan, M.K. and Reynolds, J. (2016). Schooling inequality, higher education and the labour market: Evidence from a graduate tracer study in the Eastern Cape, South Africa.

Schultz, T.W. (1961). *Investment in Human Capital*: The American Economic Review. 51, 1-17.

Shavit, Y. Arum, R. and Gamoran, A. (Eds.), (2007). *Stratification in Higher Education:* A Comparative Study. Stanford: Stanford University Press.

Sibiya, A.T. and Nyembezi, N. (2018). '*Examining factors that shape Technical Vocational Education and Training engineering students' understanding of their career choices*', Transformation in Higher Education 3(0), a33. AOSIS Publishing

Singh M, Kenway J. and Apple M.W (2005). *Globalizing education: Perspectives from above and below*. In Apple, M.W, Kenway J and Singh, M. (eds). *Globalizing education. Policies, pedagogies & politics*. New York: Peter Lang.

Singh, K, (2007), Quantitative Social Research Methods, Sage Publications.

Spaull, N. (2013). South Africa's Education Crisis: The quality of education in South Africa 1994-2011. Report Commissioned by Center for Development Enterprise (CDE).

Strauss, A. L. and Corbin, J, (1990). Basics of Qualitative Research. Newbury Park, CA: Sage Publications.

Sungoh, S.M. (2006). *Impact of Globalization on Education*. Shipra Pub. Delhi. 383-386.

Sweet, R. (2001), Career information, guidance and counselling services: policy perspectives. *Australian Journal of Career Development*, 10(2), 11–14.

Teichler, U. (2007). *Higher Education Systems: Conceptual Frameworks, Comparative Perspectives, Empirical Findings*. Rotterdam: Sense Publishers.

Teichler, U. (2008). "The End of Alternatives to Universities or New Opportunities?" In Non-University Higher Education in Europe, edited by J. S. Taylor, J. Brites Ferreira, M. de Lourdes Machado and R. Santiago, 1–13. Wiesbaden: Springer.

Trochim, W. (2006). Research Methods Knowledge Base. Web center for social research methods. Cornell University: New York

Vally, S. and E. Motala. (2014). *Education, economy and society*. UNISA Press: Pretoria.

Van der Merwe, T. (2000). *Repositioning of technical colleges within the transformation of education in South Africa*. Unpublished Ph.D. thesis, University of the Witwatersrand.

Vignoles, A. and C. Crawford. (2010). "Access, Participation and Diversity Questions in Relation to Different forms of Post-compulsory Further and Higher education. The Importance of Prior Educational Experiences." In Improving Learning by Widening Participation in Higher Education, edited by M. David, 47–61. London:

Wade, R. H. (2014). "*The Piketty phenomenon and the future of inequality*". Real World Economics Review (69–7): 2–17

Watts, A. G.and Fretwell. D. (2004). *Public Policies for Career Development: Case Studies and Emerging Issues for Designing Career Information and Guidance Systems in Developing and Transitioning Economies.* Washington, DC: World Bank.

Wedekind, V. (2014). *Going around in circles: Employability, responsiveness and the reform of the College Sector.* In Vally S. and Motala E. (eds), Education, Economy & Society (pp. 57- 81). UNISA Press: Pretoria

Wilson, N. and McLean, S. (1994) *Questionnaire Design: A Practical Introduction*. Newtown Abbey, Co. Antrim: University of Ulster Press. Wilson, R.A. and Briscoe, G. (2004). *The impact of human capital on economic growth*.
In: Cedefop, Descy, P. Tessaring, M. (eds). *Impact of education and training: third report on vocational training research in Europe: background report*. Luxembourg: Publications Office of the European Union (Cedefop reference series, No 54).

Wolter, S. C. and Ryan, P. (2011). Handbook on the economics of education In Hanushek, R. Machin, S. and Woessman, L. (eds) Handbook of Economics of Education, 3rd edition. Elsevier, Amsterdam

Yin, R. K. (2009) Case Study Research: Design and Methods (fourth edition). Thousands Oaks, CA: Sage



Appendix A – Questionnaire

Questionnaire: Social inequalities through The National Certificate Vocational (NCV) curriculum: A case study of a TVET College

1. **BIOGRAPHICAL INFORMATION**

1.1 Age:	
4.0.101/	
1.2 NCV programme:	
1.3 Year NCV L4 completed:	
4.4 Norma of Examination	
1.4 Name of Employer:	
1.5. What is your position in the company?	
1.5 What is your position in the company?	
1.6 How long have you been with your	
1.0 How forig have you been with your	
current employer?	

2. Knowledge and skills that are taught in the NCV programme

2.1 In your current or previous occupation were/are you using the skills & knowledge taught in your qualification?

Yes	No

2.2 On a scale of 1 to 3. How often are you using/ have used the knowledge gained during your studies? Please select/ tick one option.

1 = Not at all	2 = Occasionally	3 = Always

3. <u>To explore the link, if any, between the NCV curriculum and the students'</u> <u>occupation status upon completion of the programme</u>

3.1 What kind of employment are (if currently employed/were (for last job if currently unemployed) you in?

Permanent	
Part-time	
Internship	

3.2 How has your life/family life changed since completing NCV? Please explain.

Improved	
Still the same	
Worse than before	

- 4. <u>To explore the relevance of the NCV curriculum as preparation for a post</u> <u>school education career pathway</u>
- 4.1 Why did you choose to do the NCV programme?

.....

.....

4.2 How did you go about finding your FIRST job?

.....

.....

- 4.3 How long did it take to find your FIRST job? Years/months
- 4.4 Do you think having the NCV L4 qualification put you at an advantage in obtaining your previous or current job? How? Please explain

Yes	No	

4.5 If your qualification is not relevant to your CURRENT job (if currently employed) or last job (if currently unemployed), why did you take the job?

To learn new skills	
Financial gain	
Experience	
Change career	

4.6 Rate the college in terms of preparing you for your first job and give reasons for your response.

1 = prepared	Well	2 = Average	3 = Not prepared	
			VERSITY — OF MINIESBURG	

.

Appendix B – Questionnaire Analysis

			BIOGF	RAPHICAL INFORMAT	ION	
RESEAR CH RESULTS	A ge	NCV Programme	Year Compl eted	Employer	Position	Experience
		Financial	2015			
GR1	26	Management	0040	TN Panelbeaters	Office Clerk	6 Months
GR2	24	Engineering & Related Design	2016	TNI Depelheatore	Denal beating assistant	5 Months
GRZ	24	Related Design	2017	TN Panelbeaters Govan Mbeki	Panel beating assistant	5 IVIONINS
GR3	25	Management	2017	Municiplity	Clerk in Supply Chain	6 Months
GR4	28	Electrical Infrastructure	2016	Govan Mbeki Municiplity	Electrician	6 Months
GR5	26	Mechatronics	2015	Evander Gold Mine	Process Instrumentation	5 Months
GR6	24	Mechatronics	2017	Evander Gold Mine	Process Instrumentation	5 Months
			2017			
GR7	24	Mechatronics		Evander Gold Mine	Process Instrumentation	5 Months
GR8	24	Office Administration	2017	Gert Sibande TVET College	Classroom assistant	4 Months
GR9	27	Office Administration	2015	Gert Sibande TVET College	Classroom assistant	19 Months
		Office	2016	Gert Sibande TVET		
GR10	27	Administration		College	Photocopy operator	2 Months
GR11	24	Office Administration	2016	Gert Sibande TVET College	Financial Aid Officer	3 Months
GR12	32	Engineering & Related Design	2014	Gert Sibande TVET College	Workshop Assistant	9 Months
GR13	25	Office Administration	2016	Gert Sibande TVET College	Receptionist	4 Months
GR14	27	Office Administration	2014	Gert Sibande TVET College	Career guidance & job placement intern	4 Months
		Office	2015	Gert Sibande TVET	Academic support	
GR15	26	Administration			assistant	24 Months
GR16	23	Office Administration	2017	Gert Sibande TVET College	Asset and fleet intern	4 Months
GR17	24	Engineering & Related Design	2016	Plant Design and Project Setvices	CAD operator	15 Months
GR18	23	Engineering & Related Design	2016	Plant Design and Project Setvices	CAD operator	15 Months
GR19	29	Office Administration	2016	KS Med Suppliers	Supervisor	1 Month
GR20	23	Office Administration	2016	Vukuzithathe Primary School	Admin Clerk	10 Months
GR21	24	Office Administration	2016	Department of Education	Office Administrator	10 Months
	24	Office	2010			
GR22	23	Administration	2016	M&S Projects	Admin Assistant	9 Months
RESEAR CH RESULTS	A ge	NCV Programme	Year Compl eted	Employer	Position	Experience
GR23	26	Office Administration	2016	M&S Projects	Admin Assistant	9 Months
GR24	29	Office Administration	2015	M&S Projects	Admin Assistant	9 Months

		Office				
GR25	27	Administration	2015	M&S Projects	Admin Assistant	9 Months
		Office				
GR26	35	Administration	2016	M&S Projects	Admin Assistant	9 Months
GR27	26	Management	2016	M&S Projects	Admin Assistant	9 Months
		Office		Emdibini Combined		
GR28	28	Administration	2015	School	Admin Clerk	9 Months
		Office		Thistle Grove		
GR29	28	Administration	2014	Combined School	Admin Clerk	10 Months



KNOWLEDGE AND SKILLS				
	Are you using skills taught	How often using knowledge taught		
GR1	yes	occasionally		
GR2	yes	occasionally		
GR3	yes	always		
GR4	yes	always		
GR5	yes	occasionally		
GR6	yes	ocassionally		
GR7	yes	ocassionally		
GR8	yes	ocassionally		
GR9	yes	ocassionally		
GR10	yes	ocassionally		
GR11	yes	always		
GR12	yes	ocassionally		
GR13	yes	always		
GR14	yes	always		
GR15	yes	always		
GR16	yes	always		
GR17	yes	ocassionally		
GR18	yes	ocassionally		
GR19	yes	always		
GR20	yes	ocassionally		
GR21	yes	always		
GR22	yes	ocassionally		
GR23	yes JOHAI	ocassionally		
GR24	yes	always		
GR25	yes	always		
GR26	yes	always		
GR27	yes	ocassionally		
GR28	yes	always		
GR29	yes	always		

LINK TO OCCUPATIONS					
	Type of employment	Family life changed			
GR1	Internship	Improved			
GR2	Internship	Still the same			
GR3	Internship	Still the same			
GR4	Internship	Improved			
GR5	Internship	Still the same			
GR6	Internship	Still the same			
GR7	Internship	Improved			
GR8	Internship	Improved			
GR9	Internship	Improved			
GR10	Internship	Improved			
GR11	Internship	Still the same			
GR12	Internship	Improved			
GR13	Internship	Improved			
GR14	Internship	Still the same			
GR15	Internship	Improved			
GR16	Internship	Improved			
GR17	Permanent	Improved			
GR18	Permanent	Improved			
GR19	Internship IINIIVEDCIT	Improved			
GR20	Internship	Improved			
GR21	Internship	Improved			
GR22	Internship	Improved			
GR23	Internship	Improved			
GR24	Internship	Improved			
GR25	Internship	Improved			
GR26	Internship	Improved			
GR27	Internship	Still the same			
GR28	Internship	Improved			
GR29	Internship	Improved			
	27	22			
	2	7			
Internship	93%				
Permanent	7%				
	76%				
Still the same	24%				

	NCV RELEVANCE						
	Why NCV?	How did you get first job?	How long it took to get first job?	Has NCV qualificatio n put you in an advantage?	If job not relevant to NCV programm e why did you take it?	How did the college prepare you for first job?	
GR1	To obtain skills and knowledge through practical and theoretical training.	I applied for the post then was called for interview	6 month s	Yes	To learn new skills	Average	
	To gain practical and theoretical knowledge about mechanical	By the help of	3 Month	Ma	Financial		
GR2 GR3	I wanted a qualification that I could use to gain entrance in the working industry.	I hand delivered my CV at GS College after finding out about the post on GS College Facebook account	s 2 Month s	Yes	gain To learn new skills	Average Well prepare d	
GR4	Because you get a chance to do things practically than be strong theoretical and not knowing.	The was an advertisement on social media stating that they are vacant at GS College and I applied First job was a	OF	BURG	Experience	Well prepare d	
GR5	I chose to do NCV programme, because they also offer practicals.	lifetime experience Because now I am exposed to a new life. Like getting into an industry	12 month s	Yes	Experience	Well prepare d	
GR6	Because of the vast ground of software programming and process	I submit my CV and qualification at my College Student Support	3 Month s	Yes	Experience	Average	

	manufacturin					
	g					
	-					
	To learn the practical theory in					
GR7	College and apply it on the work place	Apply at the school	3 Month s	Yes	Experience	Well prepare d
	To gain more		•			<u>~</u>
	practical					
	experience		•			
	on how to work in	I applied for a post that was	2 Month		Financial	Well
GR8	workplace	advertised	S	Yes	gain	prepare d
	I didn't finish		BLAN	100	gani	G
GR9	my matric	BLANK	K	BLANK	BLANK	BLANK
	Because I					
	learnt that the NCV					
	programme	I saw an advert in		110-		
	provides us	the notice board				
	with the	after completing				
	necessary	my N4 studies	0			14/-11
GR1	skills needed in the	and in the middle of my N5 then I	8 Month		Financial	Well
	workplaces	was called	S	Yes	gain	prepare d
	Because to				- 9 0	
	me working					
	in an office	Job hunting like	'ERS	TY		
	or working with people	dropping my CVs everywhere I see	Few			Well
GR1	is was I love	that I can grow	month	RURG		prepare
1	& enjoy	with the company	S	Yes	Experience	d
	I wanted to gain more knowledge as well as practical	I applied on the				
	aspects of	post advertised	24			Well
GR1	engineering	on the college	Month	Vee	Financial	prepare
2	field To improve	notice board	S	Yes	gain	d
	my self so that it could		40			
GR1	be easy for me to get a	college notice board, word of	12 month			Well
3	job	mouth	S	Yes	Experience	prepare d
	,	Checking posts	-			
	I wanted to	through internet				
GR1	study full time so that I	and going door to door on	36 Month			Well
4	can gain	companies	S	Yes	Experience	prepare d
·	- Serie		-			-

	even better					1
	experience					
	Taimprova					
	To improve					
	myself so					
	that I get					Well
GR1	knowledge	The college itself	1			prepare
5	and skills	find it for me	Month	Yes	Experience	d
	To improve				•	
	level of my					
	employment					
	and gain					
	•	Callara				
0.04	more	College				Well
GR1	knowledge	Facebook page	1			prepare
6	and skills	and notices	Month	Yes	Experience	d
	I initially					
	wanted to					
	study Nated	I received a call				
	Courses but I	from the college				
	was late for	telling me that				
	registrations	there was an				
	which then	opportunity at		11.		
	caused me	PDPS and that I				
	opt for NCV	should email				
	so that I	them my CV, I				
	wouldn't	did then shortly				
	have to sit at	after I was called	10			Well
GR1	home and do	to come for	Month			prepare
7	nothing	interview	S	Yes	Experience	d
	I chose it				-	
	because I			TV		
	needed time	UNIV	LIND			
	to imrpove		OF —			
	my		NEC			
	mathematics	JUTAN	INES	DUKG		
	and work on					
	it, the other					
	subjects and	I was asked to	1	1	1	
	· · ·					
	practicals	come to student				
	practicals were more	support to submit				
1	were more reason to					
	were more	support to submit	12			Well
GR1	were more reason to	support to submit my CV after	12 Month			Well prepare
GR1 8	were more reason to continue with the NCV	support to submit my CV after asking me what I		Yes	Experience	
	were more reason to continue with	support to submit my CV after asking me what I was doing that	Month	Yes	Experience	prepare
	were more reason to continue with the NCV programme Its because I	support to submit my CV after asking me what I was doing that year A friend reffered	Month s	Yes	Experience	prepare d
8	were more reason to continue with the NCV programme Its because I wanted to	support to submit my CV after asking me what I was doing that year A friend reffered me to my	Month s 15	Yes		prepare d Well
8 GR1	were more reason to continue with the NCV programme Its because I wanted to further my	support to submit my CV after asking me what I was doing that year A friend reffered me to my previous	Month s 15 Month		Financial	prepare d Well prepare
8	were more reason to continue with the NCV programme Its because I wanted to further my studies	support to submit my CV after asking me what I was doing that year A friend reffered me to my	Month s 15	Yes		prepare d Well
8 GR1	were more reason to continue with the NCV programme Its because I wanted to further my studies Because it	support to submit my CV after asking me what I was doing that year A friend reffered me to my previous employer	Month s 15 Month		Financial	prepare d Well prepare
8 GR1	were more reason to continue with the NCV programme Its because I wanted to further my studies Because it teaches you	support to submit my CV after asking me what I was doing that year A friend reffered me to my previous employer I placed my NCV	Month s 15 Month		Financial	prepare d Well prepare
8 GR1	were more reason to continue with the NCV programme Its because I wanted to further my studies Because it teaches you theory, then	support to submit my CV after asking me what I was doing that year A friend reffered me to my previous employer I placed my NCV at the college,	Month s 15 Month s		Financial	prepare d Well prepare d
8 GR1 9	were more reason to continue with the NCV programme Its because I wanted to further my studies Because it teaches you theory, then also gives	support to submit my CV after asking me what I was doing that year A friend reffered me to my previous employer I placed my NCV at the college, then the college	Month s 15 Month s 16		Financial	prepare d Well prepare d Well
8 GR1	were more reason to continue with the NCV programme Its because I wanted to further my studies Because it teaches you theory, then	support to submit my CV after asking me what I was doing that year A friend reffered me to my previous employer I placed my NCV at the college,	Month s 15 Month s		Financial	prepare d Well prepare d

	about being in the					
	workplace					
	Because I					
	needed to gain relevant					
	working	It werent easy to				
	experience of atleast 12	be job seeking,				
	months and	until I decided to went for				
	gain more	internshio that I	10			Well
GR2	work place	applied for and	Month	Maa		prepare
1	ethics NCV	currently	S	Yes	Experience	d
	curriculum is					
	the best because it					
	combines	lt was not east				
	both practical	but I tried to				
GR2	and theory, also to gain	apply for jobs and I got the part	10 Month	110		
2	skills	time jobs	s	Yes	Experience	Average
	In the NCV					
	we do practicals		10			Well
GR2	more than	I applied directly	Month			prepare
3	the theory	to the company	S	Yes	Experience	d
	Because I love working					
	in the office	I submit my CV	'ERS	TY		
GR2	SO Drogrommo	and qualification at my College	29 Month			Well
4	programme was relevant	Student Support	s	Yes RG	Experience	prepare d
	Because I					
	want to upgrade my					
	studies and	I went to the	20			
GR2	have more	company	Month	Vee	Experience	Avorana
5	knowledge They learn	personally	S	Yes	Experience	Average
	theory and					
	practical so that the I	I submit my CV and gualification	17			Well
GR2	gain	at my College	Month			prepare
6	experience	Student Support	S	Yes	Experience	d
	Gain more knowldedge	I submit my CV				
	and master	and qualification	17			Well
GR2	leardership	at my College	Month			prepare
7	skills	Student Support	S	Yes	Experience	d

GR2 8	Because of practicals	I submit my CV and qualification at my College Student Support	27 Month s	Yes	Experience	Well prepare d
GR2	I always had an interest and my secondary school teacher encouraged me to go to TVET because there are bursaries to help me further my	I submit my CV and qualification at my College	10 Month		To learn	Well prepare
9	studies	Student Support	S	Yes	new skills	d

