

FEATURES OF SOCIAL CAPITAL THAT ENHANCE THE EMPLOYMENT OUTCOMES OF FET COLLEGE LEARNERS

Anthony Gewer

**A thesis submitted to the Faculty of Humanities, University of the
Witwatersrand, Johannesburg, in fulfilment of the academic
requirements of the degree of Doctor of Philosophy**

May 2009

ABSTRACT

Job creation remains a critical challenge for South Africa. Despite strong achievements in macro-economic stability and increases in employment, the growing labour force has outstripped the capacity of the labour market to absorb young people. The state of the country's skills base, rendered inadequate by the legacy of apartheid, contributes to sustained inequalities in the labour market. This impacts on the capacity of the economy to grow in an increasingly competitive global environment. In this context, Vocational Education and Training (VET) is viewed as an important mechanism for building the necessary intermediate technical skills to support key sectors of the economy. However, international experience demonstrates that expanding the VET system and developing human capital more broadly will not in itself lead to increased job creation. The alignment of skills supply and demand can only be achieved through a well-developed understanding of the factors that support or inhibit the transition of young people into the labour market. This study investigates these factors through the lens of social capital theory. Through tracing 1,532 individuals who graduated from FET Colleges in the Gauteng province in 1999, the study interrogates the role of bonding and bridging social capital in supporting the transition into colleges and from colleges into the labour market. The findings show support for the three hypotheses: 1) Poor socio-economic family contexts appear to offer little information from which to make effective educational choices. Young people generally make such choices on the basis of perceived long-term value of post-school education rather than short-term economic considerations. 2) FET colleges are ineffective agents of bridging social capital and therefore have

limited impact on the rate of employment, in particular the rate of relevant employment. 3) Personal networks are critical, but in impoverished environments are ineffective for finding meaningful employment on initial entry into the labour market. Therefore, restricted social networks have the potential to further entrench social inequality. The study contributes to a greater understanding of the challenges facing youth in navigating through the transition from school to work and the implications for FET policy in pressurising colleges to create access to effective social networks for their students and thereby meaningfully contribute to job creation.

Keywords: Further Education and Training, social capital, intermediate skills, School to Work Transitions, youth employment

DECLARATION

I declare that this thesis is my own original work. It is submitted for the degree of Doctor of Philosophy in the University of the Witwatersrand, Johannesburg. It has not been submitted previously for any other degree or examination in any other university.

Anthony Gewer

_____ day of _____ 2009

ACKNOWLEDGEMENTS

This thesis has travelled a long road and had to be brought back to life a number of times. To my wife, Glenda, who has endured my constant delays in completing this work and who constantly inspires me to do better. This work is dedicated to her.

I am grateful to my supervisor, Professor Brahm Fleisch, for persevering and providing the necessary balance of pressure and support. His input has been invaluable for guiding me through my various iterations and challenging me to push the work further.

I am also grateful to Dr Nick Taylor from JET Education Services for providing the initial support to the project that generated the necessary data as well as the additional data collection that followed. My thanks also to Carla Pereira from JET for valuable support in the data collection and analysis. In addition, I would like to thank Dr André Kraak and the team at the HSRC for initiating the initial project and providing easy access to the data.

Finally, my thanks to the Spencer Foundation for their initial financial support and in providing the wealth of intellectual input that I was able to derive from the various seminars and colloquiums.

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ABBREVIATIONS

AsgiSA – Accelerated and Shared Growth Initiative for South Africa

COTT – Central Organisation for Trade Testing

FET – Further Education and Training

GDP – Gross Domestic Product

GPG – Gauteng Provincial Government

HCT – Human Capital Theory

HE – Higher Education

HRD – Human Resource Development

HSRC – Human Sciences Research Council

ITB – Industry Training Board

JIPSA – Joint Initiative for Priority Skills Acquisition

NLTT – National Landscape Task Team

NQF – National Qualifications Framework

NTB – National Training Board

NTSI – National Training Strategy Initiative

SAQA – South African Qualifications Authority

SMME – Small, Medium and Micro Enterprises

SSA – Sub-Saharan Africa

VET – Vocational Education and Training

CHAPTER ONE: INTRODUCTION

1.1 Introduction

Job creation continues to be a critical challenge in South Africa. In 2003, government and its social partners, through the Growth and Development Summit (GDS), came to an agreement on critical targets that needed to be achieved during the second decade of democratic rule in order to reach meaningful levels of economic prosperity for all citizens. A resounding outcome was an agreement that all constituencies (government, business and labour) would work to halve unemployment from 30% to 15% by 2014. While it was agreed that a strong foundation for macro-economic growth had been laid, accelerated implementation was needed to overcome joblessness and poverty. Despite the increase in the number of jobs being created in the economy since the onset of democracy in 1994, this growth in employment has not kept pace with the growth in the labour force (Bhorat & Oosthuizen, 2008).

A key feature of this labour force, however, is that it lacks adequate skills to support the technological demands of the economy. As the economy develops, the effects of bantu education under the apartheid regime and continued weaknesses in the education system are increasingly evident. Erasmus (2002) points out that the majority of the South African labour force is low-skilled, with low levels of education, and almost half of those employed are in the elementary occupations. Bhorat and Oosthuizen (2008) refer to an

increasing skills bias in the economy. Employment trend data since 1994 also demonstrates the negative impact of South Africa's entry into the global economy on the African workforce (McCord & Bhorat, 2003). In addition, African labour market entrants find it more difficult to find employment than their white and coloured compatriots (Poswell, 2002). Therefore, access to labour market opportunities for historically disadvantaged members of the society will continue to be a challenge, particularly if they have not had access to effective post-school education and training opportunities.

Vocational Education and Training (VET), offered through public Further Education and Training Colleges (FET Colleges, formerly technical colleges), is an important instrument for addressing intermediate skills demands. The role of FET Colleges in expanding post-school learning opportunities for young people provides a mechanism for offsetting some of the shortcomings of the education system by providing an alternative learning pathway while also increasing the employability of youth in challenging labour market conditions. FET Colleges are expected to offer a combination of generic and vocational skills in an integrated manner, and prepare largely young people who have not yet made career choices for further studies or for the labour market (Departments of Education and Labour, 2003).

VET has been used internationally by governments as an instrument for controlling the supply of skills into the economy, in line with employment conditions in the country concerned (Gill, Dar & Fluitman, 2000). States have tended to exploit VET either in times of high unemployment to release the

pressure of supply from higher education or to increase supply where high economic growth manifests.

“Governments often expect their vocational education and training (VET) systems to perform feats that they would not expect from other systems such as general education.”

(Gill et al., 2000, p. 1)

Despite government reliance internationally on VET to address many of the tensions created by supply and demand disequilibria in the labour market, the results have often been disappointing (ibid.). Gill et al. suggest that the unreasonable expectations placed on the VET system, combined with the over-involvement of government in determining the role of the system, have been the main factor behind the disappointing results.

The pressure for a skills strategy that aligns supply to skills demands emerges from the need to find national responses to global competition that will allow for the realisation of equitable benefits for the population as a whole (Brown, 2001). In the face of increased global market pressures, nation-states are expected to develop appropriate strategies to enhance national competitiveness by ensuring that equal access to appropriate education and training is achieved (Ashton & Green, 1996; Carnoy, 2001; Brown, 2001). For the individual, the pressure is to ensure he or she is adequately skilled to cope with the impact of technological change on the labour market, and thereby remains employable in the longer-term.

At the same time, Brown (2001) argues that intensive investment in the development of human resources will not by itself result in enhanced economic opportunities. This is evidenced by continued reliance on low-skilled labour in many industrialised countries, despite increases in skills levels. Furthermore, individual requirements from the VET system will not necessarily match with government's expectations or the expectations of the market. Despite any attempts by government to incentivise and drive VET provision towards certain types of skills, young learners are increasingly making more rational choices about their learning pathways (Wolf, 2002). Thus, in the context of development, a strategy for economic growth through human resource development will be undermined by a disjuncture between the new skills created and labour market opportunities.

In the South African context, VET is expected to play a dual role. On the one hand it should contribute to the development of a higher skilled workforce through gearing its technical and vocational training to better articulate with the skills requirements of the global economy. On the other hand, colleges are expected to expand access to the critical mass of learners who have had limited opportunity to develop their knowledge and skills, and prepare them to enter the labour market and make further learning choices. A strategy for FET Colleges must address this disjuncture where employers will demand flexible skills with adaptability to changing work contexts at the high end and a focus on sound basic skills with high levels of 'trainability' at the lower end (Gamble, 2002).

The process of creating adequate alignment is a critical imperative, considering the labour market context outlined above. It is clear that manipulation of the VET system will not in itself contribute to enhanced job creation. Innovative engagement between education and the economy within the broader socio-economic context is needed to ensure greater alignment and more scope for labour market opportunities. A broader understanding of the factors that potentially add value to alignment and create more conducive conditions for successful job creation in relation to VET is the concern of this thesis. In this way, the knowledge generated can contribute to policy development around VET and its link to job creation that takes these broader factors into account.

1.2 Problem Statement

Social capital has emerged as a useful concept for understanding complexities in transactions in social contexts. Its particular value is that it allows for the incorporation of contextual factors into mainstream economic viewpoints and provides for an understanding of the relationships within these contexts that underlie and facilitate economic transactions. Social capital goes beyond the narrow confines of human capital theory which places skills formation in the hands of the individual and which asserts the notion of individual choice above all else as a key driver in decisions to invest in education, with no regard for the unique social factors that interplay across

different societal and economic contexts. (Ashton & Green, 1996; Brown 2001)

Social capital is built primarily in the family and advanced and sustained through institutions of learning, communities and firms (OECD, 2001). It is through the latter that the true value of social capital for economic growth is realised as individuals are exposed to, and engage with, broader networks in society. As such Putnam (2000) and Narayan (1999) distinguish between “bonding” and “bridging” social capital. The first provides the foundation for growth and development but can also restrict mobility and reinforce social stratification. Through the forging of cross-cutting ties (bridging social capital), individuals gain access to a wider range of information and resources and thereby open new opportunities for economic gain. Cross-cutting ties also contribute to societal cohesion by promoting interaction between groups.

It is important, however, to locate notions of bonding and bridging social capital with particular economic contexts. Although there is a range of literature demonstrating the value of bridging social capital for employment outcomes, there is also strong evidence for the importance of personal networks for finding employment in situations where conditions of inequality exist. In particular, the literature indicates the strong reliance on personal networks for groups who have lower levels of education (Wahba & Zenou, 2005), who are ethnic minorities (Battu, Seaman & Zenou, 2004), in conditions of political conflict (Leonard, 2004) and poor urban environments (Reingold, 1999). All of these studies point to the ineffectiveness of bonding

social capital for economic mobility. However, because of the conditions of inequality, such groups are largely unable to create or access bridging social capital.

This study seeks to problematise the notions of bonding and bridging social capital in the South African context and understand how social capital operates for young people who pass through the FET College system. Considering the structural inequalities in the South African society, this analysis will assist to better understand the interaction between vocational education and the economy in a developing context and thereby explore the factors that enhance the employment outcomes of young people.

The particular research question that emerges from this is as follows:

What are the features of social capital that enhance the employment outcomes of FET college learners in the South African context?

In order to answer this question, the focus of this study is on the relative role of “bonding” and “bridging” social capital in determining post-school pathways to the world of work. Three hypotheses emerge from this.

Hypothesis one: Young people from poor socio-economic family contexts will have limited access to information within the family network and educational choices will be made on primarily on basis of short-term economic considerations.

The study focuses initially on pre-existing factors (bonding social capital) that influence the decision of young people to study in a FET College and what they expected to get out of it. This initial focus assists to understand the link between socio-economic conditions and decision-making around post-school pathways. The role of family in this choice-making is critical, but socio-economic conditions and class may be a powerful influencing factor and this may undermine effective consideration of choices (see Reay & Ball, 1997 and 1998; Croll, 2004). This also creates a context for understanding how bonding social capital prior to entry into a post-school learning institution influences access to social capital later on, when young people need to make further decisions around entry to the labour market.

Hypothesis Two: FET Colleges are ineffective agents of bridging social capital and thereby play an insignificant role in facilitating access to employment opportunities.

The study looks at the role of the colleges themselves and seeks to understand the role that these institutions play in facilitating access to the labour market for young students. Their historical alignment with the labour market, particularly through the apprenticeship system and technical training, should place colleges in a favourable position to facilitate access to workplaces, either for experiential learning or work placements. As such it would be expected that colleges, particularly those situated in densely urban geographic regions, would provide bridging social capital from which young

people could draw to gain access to broader employment networks. However, analysis of changes in technical training and the relationships between colleges and employers over the last three decades, suggest that FET Colleges have largely lost touch with the labour market and their impact on job creation is therefore limited (see McGrath, 2004b). As such, FET Colleges are not providing the necessary bridging social capital to enable access to broader networks.

Hypothesis Three: In the face of limited access to broader networks, African youth in dense urban environments will be reliant on dense ties to create access to employment

International literature suggests that societal inequalities will impact on the ability of disadvantaged groups to have access to broad networks that can provide bridging social capital (Wahba & Zenou, 2005; Battu et al., 2004; Reingold, 1999). In these circumstances, young people will rely on narrow, personal networks or a weak *individualised system of social capital* (Raffo & Reeves, 2000) which limits the scope for meaningful and relevant employment. By virtue of poor access to broader networks for youth in dense urban environments in South Africa, young college leavers will rely on personal networks (bonding social capital) to access employment. As a result their chance of finding employment that is related to their studies is limited.

1.3 Value of the Study

This study seeks to explore the relationship between vocational education and training and job creation in the South African context. In so doing, the study seeks to advance the empirical basis for conceptualising youth transitions from school to work in a developing context. The findings can thereby add value to policy development in the following ways:

- Providing a knowledge base from which to develop policy around the role of FET Colleges and other related institutions in supporting young people in their transitions from school to work
- Developing an understanding of the complexities involved in linking FET Colleges to the labour market in a way that can result in meaningful employment and thereby promote social equity and economic growth

1.4 Structure of the thesis

This thesis is structured as follows:

Chapter Two provides an overview of relevant literature that has informed the shift from a mainstream economic focus on education and training to one which incorporates the social context in which education and training is operating. While human capital theory has provided an important analytical tool for debates on the value of education and training for economic growth,

strong support has emerged more recently for recognizing that this value can only be realised if the necessary social conditions exist, i.e. social networks those that promote effective transactions. These conditions exist within various societal institutions and impact on choices of and access to opportunities for young people en route to the labour market. This literature sets the tone for the particular focus of this study on social networks as a key resource in realizing the value of education and training for economic growth in a developing context.

Chapter Three contextualizes the study within international trends and within its evolution in South Africa over the last century. It illustrates how historical socio-political conditions have determined the challenges facing the VET system in effectively contributing to economic growth in a post-apartheid South Africa. Human resource development was deliberately aligned to apartheid policies and the shift to a more equitable and broad-based system has necessitated significant changes in all aspects of college governance and operations. This study operates within the ongoing transformation process.

Considering the process of transformation, this study deliberately sought to adopt a research design and methodology that will provide large-scale empirical data that can contribute to theoretical debate and inform policy. Chapter Four presents the research design and indicates how the data collection and analysis was conceived and applied to answer the research question.

The findings of the secondary and primary data collection are presented in detail in Chapter Five. Data collected from two cohorts of Gauteng FET College students through tracer studies and an in-college survey is presented to illustrate the factors that informed educational choice and contributed to or inhibited labour market entry for these students. These factors are then examined in relation to employment status which provides a basis for analyzing the elements of social capital that contribute to successful employment outcomes.

On the basis of these findings, Chapter Six draws on the theoretical framework to analyse the extent to which the findings support or refute the central hypotheses. The chapter analyses the experiences of the young people in the study and, using the literature, describes the relative role of bonding and bridging social capital in the transition from school to the labour market. This analysis is located within the South African context which is characterized by high unemployment and poverty and indicates how this particular context informs the role of social capital in supporting transitions.

Chapter Seven provides a summary of the conclusions reached and explores the contribution that the study makes to research into social capital and education and training. The chapter also outlines the limitations of the study and the implications for further research.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The literature review traces the debates around the relationship between education and economic development. It explores the shift from the orthodox human capital approach, which typically dominates debates around economic growth, towards a contextualised approach which incorporates societal relationships and the manifestations thereof. The emerging body of work around social capital and education is critically discussed to provide a theoretical base for the current study, which explores the role of social capital in enhancing employment outcomes from VET.

2.2 Neo-liberal orthodoxy and the search for global truths

A discussion on the relationship between education and economic growth will invariably be concerned with issues of measurement. For economists, the concern is primarily measuring the impact of skills supply on increases in productivity and economic growth. In the search for a single formula for measuring the relationship between education and the economy, mainstream economists have generated an extensive body of literature over the last few decades focused on how to measure returns on investment in education and training, using human capital theory (HCT) as a primary point of reference (Brown, 2001).

Becker (1964) pioneered the development of an over-arching theory of investment in human capital. He sought to demonstrate an empirical relationship between investment in education and training and changes in earnings, employment and the economy. As a result he generated a theoretical base for estimating returns for different groups and for different levels of the education system.

For human capital theorists, investments in workers represent the shift from a homogenous perspective of the role of labour. Productivity and growth are viewed as driven by a focus on quality and the upgrading of skills in line with the requirements of post-industrial society. In particular, such investments are required to meet the burgeoning numbers of technical, professional and managerial workers required in society (Brown, 2001).

In essence, human capital denotes a “valuation of people’s skills.....the value of a person’s productive, marketable skills.” (Hartog, 2000, p. 7). It informs decisions, both at the level of the individual and the company, of how much to invest in education and training in order to realise “...economic gain sufficiently large at least to offset the costs of the investment.” (Ashton & Green, 1996, p. 45). For individuals, the incentive is more marketable skills in the future that potentially lead to a greater range of choices in a competitive labour market and increased lifetime wealth. For companies, the return on investment is continuously enhanced competitive edge with a sufficient supply of intermediate and high skilled workers within the firm to provide an

exponential increase in productivity within the context of a knowledge-driven economy.

From a policy perspective, there is increasing emphasis on the capacity of government to effectively measure its skills base. The pressures of globalization are evident in increasing emphasis on national human resource development as a key measure of global competitiveness. The level of competence in the nation-state's labour force is an indicator of its ability to compete (Rizvi & Lingard, 2000). As the influences of global forces continue to take hold, the imperatives of nation-states begin to converge and each nation-state is therefore subject to "global politics of comparison that has do with supranational forms of agenda-setting." (Taylor & Henry, 2000, p. 500). It also has the tendency to entrench policy-borrowing as reform in education and training gradually takes on universal trends (ibid.; Young, 2001).

In light of economic globalisation, HCT has become an important policy tool for nation-states, due to the need to create a world-class labour force and thereby attract investment and demand for services. Therefore, the relationship between state and the individual is located at the nexus of skills formation, whereby government's role is to supply opportunities for education and training, while the individual, who is the recipient of such opportunities, is responsible for ensuring they are continuously employed. If such a premise is accepted, then Brown (2001) argues that global policy convergence is inevitable as governments increasingly succumb to the pressure of global competitiveness.

2.3 Applying the human capital model

2.3.1 Investments in human capital

Becker (1964) used on-the-job training to illustrate the relationships between investment in human capital and changes in earnings and employment. In doing so, Becker sets out a range of conditions in which such investments may take place and how these different conditions would affect returns on the investment in terms of future productivity and profitability. Two key issues emerge: who pays for the training and what form the training takes.

For Becker, firms will more likely benefit from investment in human capital by paying for specific training rather than general training. General training refers to training which increases productivity across a number of firms, while specific training increases productivity in a particular firm.

Specific training is more likely to increase productivity in specific firms and can be of mutual benefit to both employers and employees. Employees who have benefited from such investments are both less likely to quit and get laid off in times of economic downturn. Employers share the costs of training with the worker and are more likely to pay higher wages to the individual who has received specific training. Thus the employee benefits from the returns and

this incentivizes him or her to remain with the firm, thereby allowing the firm to realize its returns.

General training is beneficial to employees, as it enhances their marketability. As general training is beneficial across a number of firms, employers are unlikely to invest in general training as there is limited competitive benefit for them. Rather such training places a financial burden on employers who have to pay a market-related wage to recruit and retain such employees. The costs of general training will be carried by the individual, implying that they will be required to take a lower wage initially to cover this cost. The expectation is that this investment will realize returns as they progress through their career path (Becker, 1964).

The split between general and specific training is not, however, necessarily helpful, as it is not always clear to whom the benefits of training accrue (Machin & Vignoles, 2001). Firstly, there is often an overlap between generic and specific training (Becker, 1962). Secondly, despite the investment in training, retention of employees will be dependent on the level of flexibility within the internal labour market (Groot & van den Brink, 2000) so that promotion and internal mobility opportunities are made available. Thirdly, firms will invariably be incentivized or forced to invest in general training where labour market conditions make such investments attractive and where it can result in the company having the necessary quality and quantity of skills needed to ensure growth (Machin & Vignoles, 2001).

2.3.2 *Benefits for Individuals*

Most evidence of returns to investments in education and training is located at the level of the individual (Machin & Vignoles, 2001; Wolf, 2002). These benefits are most commonly measured through changes in income and the general finding is that more education and training increases levels of income (Wolf, 2002; Ashton & Green, 1996). This evidence is stronger for returns to schooling and post-school education than for training. Sustained employment will also be a more likely outcome for more highly educated people (Wolf, 2002).

However, such measures have been also been found to be crude because they do not take account of the costs of training (Machin & Vignoles, 2001). More critically, measures of the returns to investment should allow for the direct costs involved as well as the income that has been lost while training is underway (Wolf, 2002). In addition, using income as a measure is complicated by the fact that people from different socio-economic conditions may access different occupational categories and therefore derive relatively different returns in income (Ashton & Green, 1996). From a training perspective, any observed increase in wages should take into account the agreement between the employee and employer with respect to payment for training and the conditions associated with this (Dearden et al., 2000). The degree of labour market competitiveness also informs the extent to which employees can assume a share of returns as the employer may restrict wage increases while experiencing heightened productivity.

Machin and Vignoles (2001) state that the evidence suggests that both on-the-job and off-the-job training has a positive impact on earnings and employment opportunities. However, formal company-sponsored training is likely to be more beneficial than training prior to employment (Ashton & Green, 1996). Machin and Vignoles (2001) refer to Youth Training Schemes, and, based on evidence, suggest that while such schemes may have a positive effect on employment opportunities they have no effect on wages. In addition, where such an effect has been found, the findings suggest that such impact is negative. In contrast, Denny and Harmon (2000) found that post-school vocational training schemes do in fact have high returns with respect to earnings and employment, provided the individuals have acquired the highest level of schooling prior to entering into these programmes, as opposed to having entered such programmes at an early age and with insufficient general schooling. Through a review of longitudinal data in the US, Marcotte (1999) found that post-school training can have equal returns for those who have a high school qualification or were dropouts, and those who have some form of post-secondary education, although the participation rates of the former is significantly lower than that of the latter.

Machin and Vignoles (2001) assert that there is no point separating out the effects of education and training, especially once the time invested in achieving qualifications have been factored into the returns. This is confirmed by Deardon, Reed and Van Heerden (2000) who demonstrate through analysis of multiple datasets that, although academic qualifications appear to

provide higher returns, when the time associated with completing the academic qualification is factored in, the difference between returns to academic and vocational qualifications becomes small and both are beneficial for the individual.

2.3.2 *Benefits for Firms*

Ashton and Green (1996) and Machin and Vignoles (2001) highlight that a lack of data has prevented any meaningful investigation into the impact of training on company profits. The focus of evaluation in this regard has been primarily on changes in behaviour rather than productivity or profits. Research suggests that few firms measure the full costs of training and many do not evaluate their training. However, Ashton and Green (1996) state that there is a body of evidence that strongly suggests that training does raise productivity.

Most importantly, however, Machin and Vignoles (2001) provide evidence of a general under-investment in training on the part of firms in the United Kingdom, due to constraints on financial resources available, the fear of poaching and the lack of information about training. While employers feel that training does add to productivity, there is a lack of empirical evidence to support this belief because the emphasis for such training is placed on the individual rather than the firm as a whole. In addition, there is evidence that employers' decisions to invest in training may be linked to periods where the

company is performing badly, rather than on an ongoing basis. (Dearden et al., 2000)

Prais (1995) conducted a study of 160 companies in Britain, Germany, France and the Netherlands over an eight-year period. The study demonstrated significant differences in productivity between Britain and the European countries. In a comparison of matched samples of plants across four economic sectors, the study found that Britain performed significantly lower than European counterparts in measures of productivity. Two major causes were attributed to this difference: machinery and the level of skills of workers. In relation to the machinery, when further analysed a large part of the difference was attributed not to the quality of the machinery, but to the lack of skills needed to maintain them.

When examining the qualifications of workers and their levels of responsibility, the study found a significant factor was the high level of vocational qualifications in the workforce when compared to the British workers. Further, in German plants supervisory positions are filled by individuals with *Meister* qualifications – a person with advanced technical and managerial training. In Britain such supervisors, while technically advanced, had acquired their skills purely through on-the-job experience. Prais concludes that the primary contributing factor to productivity is the opportunities provided for achieving vocational qualifications, which combines formal training with on-the-job training. This implies a combination of both general skills, as acquired in

formal training, combined with complementary technical skills provides the competitive advantage to the companies concerned.

A study by Barret and O'Connell (2001) of 215 Irish enterprises elicited more specific results about the nature of training that makes the most impact on productivity. This investigation followed on from a study by Lynch and Black (1995) which found that training off-the-job had a higher effect on productivity in manufacturing firms, although this effect was not significant. In non-manufacturing there were particular areas of training, such as computer skills, that made a difference to productivity. Barrett and O'Connell sought to investigate the effects of general and specific training on productivity.

The findings emanating from the investigation by Barrett and O'Connell found that general training had statistically significant effects on productivity over a three-year period while specific training had no effect on productivity. The authors were able to control for other organisational factors (including the size of the firm and the education levels as well as investment in capital and employment growth) that may influence productivity and still found general training to be a robust factor. The authors' interpretation of the findings focuses on the assumption that employees are more incentivised to invest in general training because of the greater personal benefit. However, the authors state that investments in general training are also more likely to produce higher levels of human capital than equivalent investments in specific training, and this results in heightened productivity. At the same time, productivity may be boosted where employers are willing to contribute to

general training as employees see this as a sign of commitment and confidence in the employee's contribution to the firm and the employee may therefore be willing to put in more effort as a result. This may also manifest in the employee feeling more attached to the firm and less willing to leave. The authors suggest that more investigation should be conducted around the impact of such training on wages post-training to determine the relative investment of the employer.

In a study of a panel of British industries over a 13-year period using surveys and industry-level data, Deardon et al. (2000) found that there is a statistically significant effect of training on productivity. The findings also suggest that off-the-job training has a larger impact on productivity than on-the-job training. The authors conclude that the effects of training on productivity are larger than the effects on wages, implying that change in wages is not a suitable measure of productivity. The authors also found that skill-intensive sectors are more likely to invest in training and also have higher productivity. This may be related to the rapid changes in technology which would lead to greater investment in training, whereas in other sectors firms may only invest when they deem such investment is needed.

2.4 Contextualising skills formation – Introducing social capital

Concerns over HCT have manifested in a number of areas. Ashton and Green (1996) highlight that HCT is limited in its focus on human capital as a commodity, as it ignores the social contexts of skills. Further, in HCT

education and training is viewed as output driven, with little focus on process, and this is particularly concerning to educationalists.

Furthermore, Brown (2001, p. 13) states that, from the supply side, HCT effectively views individual workers as comprising a “bundle of technical skills that are fed into the economy.” This provides a narrow view of the nature of investment in individuals, especially in the context of a knowledge economy where elements of motivation, identity and social contexts, especially within organisational frameworks, are critical to productivity and competitiveness.

Vandenberghe (1999) also critiques HCT’s treatment of education supply as unproblematic. The author raises concerns about HCT’s neglect in not interrogating differences in quality and delivery approaches that may impact on the value of the education being delivered. This undermines any analysis of the effect of education on economic growth as the returns will be masked by these variations in the supply. Attempts to overcome this weakness by using production-function or input/output measures have not yielded the desired level of analysis as the use of expenditure and class size still does not effectively explain differences in quality. Vandenberghe calls for more sophisticated measures of intra-school efficiencies and social inputs to better explain these differences.

On the demand side, Brown (2001) questions the assumption that investment in human capital will create its own demand for higher skills. Brown refers to the continued reliance on a low-skill and low wage labour force, despite the

shift from manufacturing to services. By extension, therefore, it cannot be assumed that an increase in education and training will necessarily result in an increase in earnings across the board, as returns to investment need to be better disaggregated by institutional context and understood in the light of pervasive unequal opportunities. While individuals are being liberated from low-skill work, there are not necessarily sufficient jobs to absorb them. (Crouch, Finegold & Sako, 1999)

Finally, Ashton and Green (1996) question the narrow interpretation of skills within HCT. In particular, the emphasis on individual skills detracts from the status of the national economy in relation to its skills base. Considering the varying pace of skills formation in different economic contexts, the focus on the number of individuals moving through the education and training system (output) ignores the nature of skills being created and their relation to the developmental context of the country concerned.

Social capital's distinction from human capital is its focus on relationships amongst groups rather than on individuals. While HCT contends that an individual's investment in knowledge and skills will increase his or her earnings and productivity, and by extension the earnings and productivity of the society in general, social capital focus on the role of social cohesion and the networks that support or inhibit economic growth. (Schuller, 2001)

Schuller contends that the inclusion of social capital highlights the obvious fact that individual human capital does not exist separately from the social

context, in that the context determines the manner in which skills are acquired and utilised. Furthermore, while human capital focuses on singular measures such as qualifications, social capital is measured more broadly, thereby allowing more focus on informal and other forms of learning acquired through networks and relationships. While human capital is measured at the level of income or productivity, social capital can be measured at multiple levels and thus enhance the understanding of economic growth. Investments in training may therefore be providing a greater social benefit than increasing productivity.

At the same time, Coleman (1988) argues that social capital is instrumental in the development of human capital, both within the family and within the community. Where strong relations exist within the family, Coleman argues that the child will have access to, and benefit from, the parent's human capital which impacts on their future educational attainment. In addition, social cohesion within communities enhances levels of participation and completion in local educational institutions thus reducing the levels of drop-outs.

Temple (2000) refers to social capital as a means for refining the analysis of economic growth across countries, in light of the unique characteristics of each country. He proposes the introduction of variables which are relevant to growth and allow for a "gradual accumulation of evidence" to support the development of a coherent picture of economic development. (Temple, 2000, p. 22). Social capital is provided as an umbrella term which encapsulates dimensions within societies that are determinants of long-term economic

growth. While the definitions and measurement of social capital are still in their infancy, Temple asserts that economists are beginning to recognise and emphasise its role in measuring economic growth.

2.5 Defining social capital

Social capital broadly refers to “social networks, the reciprocities that arise from them, and the value of these for achieving mutual goals” (Schuller, Baron and Field, 2000, p. 1) or “norms and networks that facilitate collective action” (Woolcock, 2001, p. 9). The theoretical debate around the concept of social capital, has largely been attributed to three authors: Pierre Bourdieu, James Coleman and Robert Putnam. Bourdieu’s focus was on the way social capital along with other forms of capital, was used to reproduce and entrench class privilege. For Bourdieu, social capital is a link to a network of relationships which are subject to the levels of cultural and economic capital that exist. As such he emphasised the primacy of economic and cultural capital over social capital. (Schuller et al., 2000)

Coleman’s approach was particularly concerned with “the relationship between educational achievement and social inequality” (Coleman, 1988, p. 5). For Coleman, social capital is a resource within the family and in the community that can be drawn upon to advance and enhance educational outcomes. In this way he viewed social capital as a mechanism for advancing the development of human capital. Coleman shifted the debate towards a

focus on non-elite groups, with a particular focus on the role of family and neighbourhood structures.

Coleman (1988) sought to merge the sociological premise of norms and obligations, with the economic emphasis on the individual's interest in maximum utility. If social capital exists, Coleman argues that its manifest value for the individual is the existence of high levels of trust, which ensure that individuals will fulfil their obligations, that decisions and action will be based on sound information sharing and that there will be effective sanctions to ensure individual's act with the community's interests in mind.

However, Coleman's work was restricted by its uncritical focus on dense ties or close networks and therefore a lack of recognition that such dense ties can entrench class differences and inhibit growth and development (Schuller et al., 2000). Putnam broadened the scope for defining social capital which links civic community to economic growth (Helliwell & Putnam, 1995). In their analysis of regional differences within Italy, the authors found higher social capital at a regional level contributes to more effective institutional performance, which in turn enhances economic growth. According to Putnam (1993) social capital is a public good, compared to "conventional" capital which is a private good. Similar to Coleman, Putnam's views social capital as norms of reciprocity which are generated and reinforced through close-knit networks. Reciprocity ensures social trust which can result in collective action and mutual benefit. However, networks can be horizontal (where there is equivalence in status) or vertical (where there is a hierarchy). Invariably, there

is a mixture of both types of networks, but it is through strong horizontal networks that civic engagement can best be realised and there is more chance of effective problem resolution. Vertical networks undermine the norms of reciprocity and problem-solving cannot be as effective. These hierarchical relationships will predominate where there is a lack of co-operation within horizontal networks and the potential for exploitation emerges. Thus the effects of power imbalances within society become evident.

Putnam (2000) and Narayan (1999) split social capital into “bonding” and “bridging” social capital. The first refers to relationships with one’s immediate social group, including friends, family and neighbours, while the second refers to more distant relationships, including associates and colleagues. Therefore social capital is built first and foremost in the family and community, but its true value is realized through exposure to, and engagement with, institutions of learning, communities and firms. (OECD, 2001)

Woolcock (2001) further refines the definition of social capital, emphasizing that it must be understood in terms of its sources rather than its consequences. As such social capital is about the networks which, if effective, allow for the creation of trust and other outcomes. Woolcock emphasizes that social capital should be understood as a sociological rather than a political or psychological variable as this allows for the most effective means of comparison across disciplines. Reinforcing Putnam’s approach, Woolcock states that the sources of social capital take on a horizontal and vertical

dimension. The horizontal dimension refers to the bonding and bridging social capital. The vertical dimension (referred to as linking social capital) relates to the effect of poverty and class on power structures in society and the extent to which groups have access to formal public institutions, such as banks and institutions of government.

According to Narayan (1999), bridging social capital is essential for achieving social cohesion in that it creates cross-cutting ties. The author argues that where social capital is only focused within primary social groups, its benefit is only realised for that particular group. Where social capital is built across groups, it provides the basis for broader economic opportunities. The benefits of bridging are most apparent in the relationship between formal and informal institutions, where a well-functioning state, combined with cohesion across social groups, will lead to optimal well-being. Where the state is not functioning well, informal social groups become the alternative form of social capital and this often results in anarchic abuses of power at lower levels leading to conflict and upheaval. Therefore the development and sustainability of social capital is embedded in the role of the state.

In the field of economics, the analysis of social capital focuses on “institutions and rules governing economic transactions at both micro and macro levels” (Schuller, 2001, p. 19). While there is a substantial body of work that links social networks to employment outcomes, the economic benefits of social capital are also felt in the manner in which institutions promote the flow of information and thereby contribute to enhanced productivity. Szreter (2000)

describes the relationship of social capital to the economy in terms of the productive benefits that arise from mutually trusting relationships. The sets of relationships “minimizes the transaction costs of information across the whole economy” (Szreter, 2000, p. 61) and this ensures the availability of information for making decisions, running productive businesses and accessing work opportunities. Szreter calls for the development of “communicative competence” to ensure the development of effective social relationships. Communicative competence denotes the capacity of individuals to converse with others in a manner which is conducive to the sharing and processing of information. This promotes creative use of human capital in the marketplace and equitable relationships between individuals. This in turn allows social capital to flourish within the context of a market economy.

Schuller (2001) outlines four reasons to justify the inclusion of social capital in policy:

- a) It overcomes the reliance on single policy instruments to explain the high level of complexity and interconnectedness in the modern world, by providing a wider focus on the effect of social relationships.
- b) It sharpens the focus on social cohesion as a key ingredient of economic progress in addition to human capital.
- c) It provides a longer-term perspective as social capital accumulates gradually.
- d) It includes measures that will better indicate sustainability.

In summary, therefore, social capital is defined in terms of social networks that promote trust and norms and thereby facilitate effective transactions which allow for more productive use of human capacity. Social capital takes the form of bonding, bridging and linking as an all-inclusive mechanism for individuals to move from a sound foundation of trust and norms to enable an engagement with broader institutions in society in a productive and empowering manner. The lens for understanding the value of social capital is through a focus on the inter-relatedness of systems within particular contexts and the manner in which this inter-relatedness impacts on and informs socio-economic development.

2.6 Evidence for social capital

Evidence for social capital has emerged primarily from micro-studies involving “sophisticated measures of community networks, the nature and extent of civic participation and exchanges amongst neighbours” (Woolcock, 2001, p. 5). While social capital is still in its infancy in the field of education and training, it has been subject to rigorous empirical research within economics, with a particular emphasis on social and sustainable development. In a longitudinal study of the factors that determined the success of developmental interventions in rural India, social capital, in the form of collective action, was found to be the key determining variable in achieving and sustaining the expected outcomes of the programme (Krishna & Uphoff, 1999). Similarly, a large scale comparative study of three countries – Bolivia, Burkina Faso and Indonesia – demonstrates the importance of local associations in improving

economic outcomes (Grootaert, 2001). The findings demonstrate a positive result for membership of local associations on household welfare and poverty alleviation. A study of households in rural Tanzania demonstrated the impact of horizontal associations on individual outcomes, such as household income, and on villages as a whole as there is a ripple effect from one household to another, thus creating an aggregated village-level effect. (Narayan & Pritchett, 1997)

Temple (2000) focuses specifically on the element of trust as a quantifiable variable that is comparable across countries. Using the World Values Surveys of 1981 and 1990 to extract an index of trust, Temple demonstrates strong associations between this index and levels of economic growth in a sample 29 countries, particularly in low income countries. However, Temple points to the fact that there may be independent and unrelated effects both on trust and growth in different contexts. Importantly, the research has suggested strong associations between trust and levels of educational attainment. The authors suggest that education may have a positive effect on the development of trust. (Knack & Keefer, 1997, as cited in Temple, 2000)

Other studies of social capital have tended to focus on specific communities or sectors and have been largely qualitative in nature. In an education and training focused study, Schuller and Bamford (2000, p. 5) focus specifically on “the importance of relationships in shaping the level and quality of continuing education and training.” Working on the premise that Scotland and Northern Ireland perform better than England with respect to initial education but this

situation is reversed with respect to continuing education, this study investigated the relationship between this discrepancy and stakeholder perceptions. The robustness of the data is called into question by the authors as it does not demonstrate a clear set of findings. Rather, the research acted as a heuristic tool, opening up new areas of discussion and debate.

The concurrent research in Northern Ireland (Field, 1999) provides a more coherent set of findings. The divergence between attainment of initial education and adult participation was clearly demonstrated through the statistical data. Outlining a number of structural factors, both supply and demand, the authors suggest that these did not sufficiently explain the divergence. Instead they turn to social capital to suggest some additional empirical findings, including “the tendency to use informal networks and shared values in decision making,.....decisive influence exercised by the family...on the educational and vocational behaviour of both young people and adults; a tendency for school and family to inculcate a conservative view of adult learning; and a high level of recognition of informal learning amongst adults” (Field, 1999, p. 8). However the author points to some of the negative aspects of social capital, including informal methods of recruitment and selection (rather than abiding by labour policy) which may lead to exclusion. Such informal networks also informed choices about where to study.

Similar to the Scottish study, the Northern Ireland study provided insight into a range of issues which have direct impact on policy-making, especially in relation to the reasons why people make choices about education and training

and the role of the broader community in perpetuating or changing these decisions.

Falk and Harrison (1998) report on a whole community pilot project in an Australian rural town. Using a grounded theory approach, the study elicited a set of social capital indicators under three headings: knowledge resources, identity resources and consolidated resources. While the indicators were analysed and synthesised, the authors state that they would then need to undergo significant empirical testing to ensure their veracity. However, the authors report that the indicators reasonably reflect the description of social capital in the literature. They subsequently extended this to two other communities in order to test them further. The authors highlight the focus on a distinction between the process (interactive productivity) and outcome of learning (stores of social capital) and claim to have developed their measures on this basis.

Temple (2000) is optimistic about the future of research into social capital. However, he states that in order for social capital to become integrated into policy debates, the mechanisms for creating social capital need to be better understood – what are the incentives that drive people to contribute to or undermine social capital and what is the impact of policy on this process? Temple also suggests that the elements of social capital need to be brought into the mainstream of economics research so that models can be developed where such aspects as social norms become endogenous. Such modeling is also necessary to understand how social capital informs economic outcomes.

He suggests that studies at the micro-economic level, within specific sectors or communities, will be more informative than macro-economic studies.

2.7 Social capital and youth transitions

Youth worldwide and in Sub-Saharan Africa (SSA) specifically demonstrate high levels of unemployment, under-employment and non-standard employment (Guarcello et al., 2005; Quintini, Martin & Martin, 2007). Quintini et al. (2007, p. 4) emphasise that conventional indicators of youth labour market performance are not accurate due to the multiple routes that young people will follow in their transition from school to work, particularly in terms of combining studying and work, interspersing periods of inactivity with periods of work and prolonged periods before settling into the labour market.

The labour market context for youth transitions is key to understanding the nature of these transitions and what factors intervene to influence such transitions. The choices made during these transitions will be highly dependent on the labour market context. In particular, labour market conditions provide the basis for understanding the institutional conditions that exist to support young people in their transition and how such institutions impact on their choices.

Schömann (2000) describes the school to work transition as a process in which the young person is migrating from one institutional arrangement to another. This transition process is referred to as a 'critical transition' in a

person's life course along with other key transitions such as retirement (Behrens & Voges, 1996, as cited in Schömann, 2000). However, given the labour market contexts in western, industrialized nations the transitions will be multiple and may be multi-dimensional in that young people will move in and out of various situations.

There is increasing emphasis on the non-linearity of youth transitions (Thomson et al., 2000). Studies have begun to conceptualise transitions as diverse and unique in light of the complexity of the context in which they are occurring. Raffo and Reeves (2000) propose *Individualised Systems of Social Capital* as a model for understanding the impact of social structures on individual choices and dispelling any notion of a normative model for youth transition. Youth are increasingly faced with complex and uncertain environments in which to make choices and their growth and development is highly dependent on the constellation or systems in which they operate. These systems can advance or inhibit growth and development depending on the opportunities they create for the development of practical knowledge and understanding. It is the extent and type of social capital within these systems that allows such learning to take place, so that particularly marginalized young people actively engage with and tackle everyday challenges presented to them and this process of learning will be different for everyone and can also be changed over time.

Raffo and Reeves (2000) delineate four types of individualized systems of social capital:

- Weak – small network of social relations, generating little practical knowledge and limited access to resources, thus making individual growth and development static and passive.
- Strong – concentration of opportunities for practical knowledge thus providing young people with the greater ability to cope and survive in a changing labour market.
- Changing – where a particular individualized system of social capital changes and a new network forms.
- Fluid – where the individualized system of social capital is dynamic and flexible and allows the individual access to a wide range of relationships and learning opportunities.

The authors state that, for disadvantaged youth who are at risk for economic exclusion, having access to strong and fluid Individualized Systems of Social Capital will improve their chances to access authentic learning which provides the basis for a more empowering engagement with the challenges of the labour market.

Raffo (2006) provides a consolidated analysis of data emerging from four qualitative research studies focusing on transition issues. The themes emerging from these suggest that decontextualised learning provides limited labour market outcomes. Access to authentic and practical learning, particularly through strong networks, allows learning to be contextualized and developed in such a way that it can be used to further one's career. In these networks the role of mentors is critical in making sense of the knowledge

being developed and its application. Access to experienced and skilled practitioners, for example, provides an important mechanism for authentic learning in a work situation and opportunity to gain access to networks with other people working in the same sector or area of expertise.

In a report on “authentic work experiences” and post-school pathways Billett (2006) indicates that despite a rapid increase in VET programmes at senior secondary education levels, there is still a strong lack of authentic workplace experience which limits the capacity of young people to make effective choices about post-school pathways.

2.8 Social capital and post-school choices

There is a strong emphasis in some social capital literature on the role of family in building social capital and thereby creating the basis for strong relationships, norms and networks. This initial social capital is referred to as ‘bonding’ social capital (Putnam, 2000; Narayan, 1999) and is an investment by family members in a resource from which individuals can draw (Sandefur, Meier & Hernandez, 1999). Theorists have extended the notion of social capital in the family by differentiating between three aspects: forms, quality and assistance (Sandefur et al., 1999; Meier, 1999). The former two aspects may refer to the type of family structure and the relationships that exist. The latter refers to the type of assistance that the individual may draw from these relationships. Strong parent-child interactions will provide an important source of information and advice and will contribute to the capacity of individuals to

cope with life changes and the prevention of educational failure later on. These interactions will more likely arise from families that have two parents available and that are well entrenched in a stable living and social environment.

While parental inputs will have a positive impact on educational attainment, they are also likely to reinforce class differences. Reay and Ball (1997) and Reay and Ball (1998) indicate that the educational market will be engaged with differently by families from diverse classes. Educational choice amongst working class families will be guided strongly by limited information, convenience and financial considerations (Ball, 2003, as cited in Croll, 2004). Middle-class families, on the other hand, may have broader sources of information, a wider range of choices and the capacity and resources to accommodate a specific educational institution within their working and family life.

Reay and Ball (1998) emphasise the differential approach of middle-class and working class parents towards educational choice. Whereas choice is driven by parental preferences and concerns in middle class families, working class families will defer to the child's preferences and consider where friends will be attending and the locality of the school. Parental input, particularly in middle-class families, can drive career strategy and may take the form of *mentoring* whereby family members acts as mentors, "supporting their children, giving advice and direction and mediating between them and the educational system" (Croll, 2004, p. 395). Here, parents will use their knowledge of the

schooling system and available options and thereby take a more strategic approach. Schneider and Stevenson (1999, as cited in Croll, 2004) distinguish between *parent support* and *parental challenge*. The former relates to the strength of relationships in the home while the latter refers to the standards set in relation to the career strategy and aligning these with the demands of the career aspirations.

Sandefur, Meier and Campbell (2006) examined the effects of social capital, family structure, family income and parental education on enrollment in college by age 20. Drawing on extensive research from a variety of sources which has demonstrated a relationship between family factors and post-secondary educational attainment, the authors hypothesize that parents should also influence post-secondary educational choices, such as that of choosing to enroll in college and then choosing to either further their studies or exit. This obviously provides an important gateway to fulfilling learning and career aspirations. The type and length of college programmes in which youth enroll will impact on the occupational status they are likely to achieve. The authors sought to examine the family factors that influence such decisions.

Using data from the National Educational Longitudinal Survey (NELS), the authors found that all the social capital variables used, with the exception of intergenerational closure were significantly related to college enrolment. Females and minority groups experienced the lowest level of social capital and could have achieved higher if their levels of social capital were improved. Further, parents with higher income and levels of education tend to invest

more substantially in social capital and their children are therefore more likely to attend a four-year college and less likely to enroll in a two-year or certificate programme or not to enroll at all.

Larger families imply a dilution of social capital and children are less likely to achieve a more substantial education. Frequent parent-child discussions around school choices are a key ingredient here. Attending a Catholic school and school stability also contributed significantly to the likelihood of choosing a four-year college. Parents who participate in school activities and therefore had a better understanding of the schooling system were also more likely to be able to guide decision-making around entering a four-year college. Since parents have little capacity to change the status of family resources over a short period of time, they are unlikely to be able to improve their capacity to provide the necessary resources for choosing more prolonged and substantial programmes. However, they are able to change their involvement in schooling and their communication with their children which gives them some mechanism to enhance decision-making capability. All these findings suggest a significant relationship between family resources and choice to attend college. Social capital therefore appears to play an important role therefore in post-secondary school choices.

2.9 Social capital and the transition to the labour market

While bonding social capital has positive effects for the individual in terms of the establishment of norms and family support, it can also be restrictive and

promote exclusion. As such it will not benefit the wider economy and can entrench poverty (Narayan, 1999). Through bridging social capital individuals participate in broader networks that cut across different communities.

Granovetter (1973) conceptualizes bridging social capital in terms of “weak ties”, referring to connections across networks which create opportunities for a broader flow of information and ideas. These weak ties enhance mobility and contribute to greater social cohesion.

Wahba and Zenou (2005) investigate the effect of social networks on the chance of finding employment, particularly networks that have weak ties. Such weak ties are seen as critical in providing bridging between strongly knit social networks, thus providing broader access to information. Dense networks limit employment opportunities, as they cause over-reliance on close relationships. Areas with high population density such as cities, allow more opportunities for random acquaintances in a larger network, while in more rural areas individuals will be more dependent on strong ties for employment information. Where unemployment is high, strong ties will not necessarily be beneficial. Therefore, the probability of finding a job increases with higher population density. Drawing from Egyptian Labour Market data, the authors find that if the individual is already employed, the chances of finding employment through personal contacts increases in areas with denser populations than in low density areas. This probability, however, decreases if the networks become too large. Furthermore the chance of finding a job through personal networks also decreases if the unemployment rate

increases because the quality of the networks is affected. Denser areas negatively affect the chance of finding a job directly. Less educated people are also more likely to use personal networks than well educated individuals.

Similarly, Stone, Gray and Hughes (2003) present a significant set of results around the relationship between networks and job search. Social networks, both formal and informal, enhance the efficiency and effectiveness of job search. For those with limited connections, bonding social capital will be more critical in that it creates access to a high-density network, while for those with more diverse connections, bridging social capital will play a more valuable role particularly in providing access to more professional contacts. The danger here is that social capital may exacerbate or perpetuate socio-economic inequality as “the use of friends and family connections by those from low socio-economic backgrounds for finding jobs is less likely to result in high quality work, than for those from higher socio-economic circumstances, who would be more likely to use professional contacts.” (Stone, Gray & Hughes, 2003, p. 23)

Examining search approaches amongst ethnic minorities in the UK, Battu et al. (2004) found that less assimilated ethnic minorities were more likely to use personal networks to find a job than well assimilated white and other ethnic groups. In the study concerned, such ethnic minorities are more likely to be unemployed and have lower levels of education. The results demonstrate, however, that this search method is not necessarily effective in finding employment for any group and direct approaches to employers seem to be

more effective. Direct approaches also lead to higher level positions. Ethnic minorities who got their jobs through personal networks are likely to be lower-level positions, which indicate the poor quality of their networks.

As a result, Battu et al. suggest that personal networks will operate more effectively for whites and other assimilated groups. The successful use of the direct approach and adverts for ethnic minorities increases with years since migration, especially amongst males, with greater assimilation over time. However, reliance on personal networks does not change with time. The findings further support the contention that personal networks are particularly important for individuals with lower levels of education, but they offer narrow search routes. Yet again, unemployment rates will play an important role as higher unemployment results in fewer job places.

Mouw (2002) questions the proposition that good contacts improve labour market outcomes. The author claims there is little evidence that personal contacts lead to higher wages or increased occupational prestige. Rather, such connections will only lead to positive outcomes if the contacts concerned are in good quality networks themselves – if personal contacts are better-connected the individual is more likely to benefit from these contacts in finding employment. This is because they will have access to better information and influence.

Bentolila, Michelacci and Suarez (2003) explore the relationship between social networks and occupational choice. Social contacts are viewed as an

easy mechanism for finding jobs and individuals may choose to use contacts to get into an occupation even where they have a comparative advantage in another occupation.

2.10 Critiques of social capital

Schuller et al. (2000) highlight some of the critical responses to social capital as a conceptual tool. The first relates to the definition of social capital. By virtue of its immaturity as a concept relative to other form of capital (physical, financial and human) it is still open to diverse definitions and requires more consensus as its empirical base develops. Similarly, its versatility in addressing a range of social issues raises suspicions about its use value, particularly in the mainstream economic measures of 'capital'. The challenge around of social capital is how to ensure its measurement holds up to tests of validity. The contextual nature of social capital makes it difficult to apply in a purely quantifiable manner and therefore difficult to aggregate beyond an immediate social environment. Furthermore, its conceptual base is inherently circular and cannot be applied in a linear manner. Therefore, neat explanations of cause and effect cannot be achieved due to its focus on the complexity of social interactions and the manner in which systems operate.

Durlauf and Fafchamps (2004, p. 57) suggest that social capital research needs to "step back from grandiose approaches to social capital and focus on the more mundane but potentially far more fruitful task of analyzing specific social components to individual behavior." The authors warn against the

attempts to aggregate measures of social capital due to the relative immaturity of the concept. Rather, discrete studies of social interactions and the manner in which these manifest in particular outcomes would assist to consolidate empirical measures which can then be extrapolated and applied across different contexts. The challenge raised by the authors is to get mainstream economists to recognise the value of evidence being generated from such studies which does not rely on high level statistical regressions but that generates potential hypotheses and explanations to inform broader developmental questions.

This is further supported by Quibria (2003) who provides a comprehensive critique of both the economic and social elements of social capital measurement. In the first instance, Quibria highlights the confusion surrounding the definitions of social capital. These definitions range from a focus by some theorists on social capital as an individual asset to an emphasis from other theorists on social capital as a collective or shared asset. The plethora of definitions, including such issues as trust, civic engagement, culture and social norms, make it difficult to measure and therefore difficult to clearly distil cause and effect.

From an economic perspective, Quibria outlines the concerns raised by theorists around whether social capital is in fact a form of “capital”. In order for it to satisfy the notion of capital, it would have to reflect an investment in the future which would elicit some rate of return and which can be transferred to another individual. As evidenced in the heterogenous nature of the definitions,

it is difficult to measure social interactions in any meaningful manner to define and measure the rates of return. Investments in social capital on the part of an individual cannot be defined in terms of market transactions. From a sociological perspective, while networks can open access to opportunities, they can also restrict such access. Key characteristics of any society, such as race, ethnicity and religion can entrench social inequality. Restrictive networks can stifle innovation and entrepreneurial activity and can restrict individual freedom through conformity and coercion. The potentially negative consequences associated with challenging the norms within close networks can also lead to being trapped in a bad equilibrium which can result in destructive social behaviour and reinforce the negative effects of unequal societal conditions.

Similar to Durlauf and Fafchamps (2004), therefore, Quibria states that the heterogeneous perspectives around social capital should be embraced and focus be placed on subjective and experimental data which can assist in better distilling the definitions of social capital.

2.11 Summary and Conclusion

The literature reviewed above reflects the complexity in seeking to understand the contribution of education and training to economic development. While there is consistent emphasis on the value of human capital for economic development, evidence thereof is not conclusive. The returns to the individual take on various forms and have had varied success. The research seems to

point, however, to the need to conceptualise these strategies in terms of national responses to the challenges of globalisation and the potential impact thereof on labour market performance. In order to more clearly understand the effect of human capital development within nation-states, it is necessary to develop a perspective on the contextual factors that impact on the development of an effective skills base and on the creation of jobs, particularly for young people who are making the transition from school to work. Such a perspective should be particularly concerned with issues of social cohesion and equity and how to ensure a broad-based approach to human resource development.

An emerging theory which informs these developments is that of social capital, which provides a framework for understanding the dynamic of relationships within society that promotes economic well-being. Social capital refers to relationships both within the family environment and within the broader social and economic environment and emphasises the role of various institutions in the environment in enhancing access to learning and job creation.

In the context of South Africa's Human Resource Development Strategy, FET Colleges are viewed as key sites for delivery of intermediate to high level skills. However, the World Bank - ILO research referred to above suggests that the expansion of vocational education and training via public institutions does not always provide the necessary results for economic growth.

This literature points to the need to better understand the factors within VET that can enhance its contribution to economic development in the South African context. As the government embarks on a large-scale strategy to incentivise skills development and expand VET, it becomes necessary to develop a sound empirical model that can guide policy implementation. This study seeks to explore the applicability of social capital as a model to achieve this.

CHAPTER THREE: THE EVOLVING ROLE OF VET

3.1 Introduction

This chapter locates VET within the global context and describes the different ways in which nation-states utilise VET to support broader social and economic goals. The chapter then looks at the evolving role of VET within the African context and examines how the approaches to VET being adopted by industrialised countries manifest within the developing context. The evolving role of VET in the South African context is then examined and the chapter describes how the current policy imperatives have evolved through the recent history of the country prior to democracy and since the onset of democracy. Finally, the chapter explores the policy options going forward as South Africa grapples with its struggle to reduce poverty and create employment.

3.2 International context

3.2.1 Globalisation and the demand for skills

The pressure on nation-states to remain competitive in the face of global economic shifts manifests in an increasing skills bias, requiring education and training systems to ensure a wide distribution of generalized skills (Tabbron & Yang, 1997) and equal access to education and training (Ashton & Green, 1996; Carnoy, 2001; Brown, 2001). Such global competitiveness is characterised by an increasing demand for a knowledge-based economy,

where institutions and organisations are organised around technological systems and where core activities are influenced by global economic determinants. (Castells, 2001)

This demand for skills also emerges through increased competition as a result of the rapid industrialisation of some emerging economies, the liberalisation of trade across national boundaries and the increasing prominence of service industries in developed countries (Tabbron & Yang, 1997). In this context, generalised skills emerge as more important than occupation-specific skills (especially for new entrants to the labour market), which necessitates changes in the types of vocational programmes being offered.

As globalisation intensifies it is also argued that there have been significant shifts in the manner in which work is organised in capitalist societies. The latter part of the twentieth century has witnessed the emergence of a “post-industrial” or “post-fordist” society, where traditional models of production, based on fordist principles, have broadly become outdated and inappropriate for sustained competitiveness (Brown & Lauder, 1992). While this shift has been uneven across countries, there is general consensus that a transition towards a more flexible mode of production requiring a more flexible labour force and greater investment in education and training is inevitable.

According to Carnoy (2001, p. 23) globalisation has created a fundamental change in the labour market whereby work has been reorganised “around decentralised management, work differentiation and customised production,

thereby individualising workers in their relationship to supervisors and employers.” Central to this change is the role of technology and the creation of a flexible labour force that does not need to be integrated as do workers in fixed stable jobs. Similarly, Keep (1999, p. 326) refers to the shift away from hierarchical modes of operation to flatter, well-networked structures that will require workers to “work more autonomously, to monitor their output and behavior, adapt to change, solve problems, take initiative, and think creatively in order to arrive at solutions that enable the organisation to perform more effectively and better meet customer expectations.” This requires that workers not only be highly skilled but also be engaged in a process of lifelong learning so that they are constantly able to cope with changing market demands.

The implication of this is that inevitably a mass of workers, who do not have access to technology, “become ‘disaggregated’ from traditional networks but not ‘integrated’ into new ones” (Carnoy, 2001, p. 25). For Carnoy (2001, p. 28), therefore, the role of the nation-state is to find strategies “to reintegrate workers into a globalised notion of community and identity”. The education system becomes a key mechanism to achieving this, as the traditional utilisation of knowledge to reproduce class power, can now become a vehicle for enhancing the skills base of the population in order to be integrated into the global economy.

3.2.2 National VET Strategies in the global economy

There is ongoing concern that within the global economy, the power of nation-states to determine education and training policies outside of the predominance of neo-liberal orthodoxy will be limited (Rizvi & Lingard, 2000). Anderson (2006, p. 4) disputes this and argues that “education and training is one of the few domains in which national governments are still able to exert a relatively strong influence.” In addition, employment and skills demands are inevitably dependent on the rate of economic growth in any particular country (Tabbron & Yang, 1997).

The latter arguments emphasize the critical role that nation-states continue to play in developing strategies for national skills formation and for determining appropriate responses to global competition in order to realise equitable benefits for the population as a whole (Brown, 2001). The key challenge, in this regard, is whether the particular model that the nation-state adopts will provide the path to a ‘high skills’ economy, which is viewed as desirable in order to enhance national competitiveness. The contribution of skills to competitiveness will vary according to the relative competitiveness of different economic sectors within which such skills are being developed and will therefore differ across nation-states (Green, 2001). National competitiveness will be the aggregated productivity achieved across the different sectors concerned.

The 'high skills' economy is broadly defined as "an economy with a wide distribution of workforce skills where these are fully utilized to achieve high productivity across a wide range of sectors, at the same time producing high wage rates and relative income equality" (Green, 2001, p. 64). Green refers to four variations of high skill strategies, namely

- a) High skilled elites and skills polarisation (the United States of America and the United Kingdom are used as examples here).
- b) High skilled elites with wide skills distribution and relative income equality (Germany is the prime example of this).
- c) High skilled elites with wide skills distribution and relative income equality, emerging from a high level of labour intensity and cooperation (this is evident in the Japanese economic context).
- d) Rapid but uneven skills formation but with high levels of labour intensity and discipline (the key example being Singapore).

In order to illustrate how these different models of high skills manifest, the focus below is on the first two approaches.

Young (2001) asserts that, despite the convergence of global economic pressures, diverse strategies are being adopted by nation-states towards achieving a 'high skills' economy. Where nation-states are being driven by the neo-liberal orthodoxy, such as the United Kingdom and the United States, the economy becomes characterised by a dual existence of high skills and low skills (Crouch et al., 1999). In such a context, there are high levels of income inequality and the nation-state is more reliant on capital productivity than skills to drive its competitiveness. (Green, 2001)

The truly “High Skills” economy is characterised by a greater focus on constructive collaboration between the state and the labour market with a common goal of achieving optimal levels of productivity and growth across all sectors of the economy. Such a ‘High Skills Society’ model is ascribed primarily to Germany (Green, 2001; Lauder, 2001; Young 2001). The collaborative nature of the German system allows for a cohesive strategy around education and training where supply and demand factors are co-ordinated and aligned (Green, 2001; Lauder, 2001). This has resulted in a wide distribution of skills, particularly at the intermediate level, combining both technical skills and socialisation, with employers being clear about the nature of qualification and skills that the worker has obtained. The system is characterised most significantly by high levels of trust relations and strong networks. Social partners play key roles in economic policy development at all institutional levels and sufficient enabling conditions and incentives for employers to support the education and training system. The German system seems to cope well with the pressures of flexibility brought on by technological advances, largely due to the willingness of social partners to embrace innovation and thereby create opportunities for shifting into new forms of work, although concerns have been raised about how such responses across specific sectors have emerged in relation to global pressures. (Lauder, 2001; Young, 2001)

VET in Germany is demand-driven, linking VET structures to the economy and relying on a strong training culture which sustains the relationships

between social partners and reinforces the regulations (Keating, 2008). Qualifications and occupations are closely aligned and the basis of the system is to make people productive (Lauder, 2001). Employers know what to expect from the qualification and this ensures a smooth transition to the workplace. Although there is concern that the system is rigid and the knowledge produced is limited to the specific occupations, Lauder (2001) indicates that the demand-driven nature of the system and the close involvement of industry allows for new or revised occupations or professions to be generated within a relatively short space of time, thereby allowing the system to be flexible where needed.

The United Kingdom model seeks to drive the VET system through centralized planning but relies on voluntarism in the market to implement training (Keating, 2008). As such, employers and institutions are left to form relationships around the delivery of training in a typical market-led relationship. The relationship between VET and the labour market is driven by choice – individuals judge the value of different qualifications and choose the type of post-16 education they would like to have (Lauder, 2001). The education market has produced a wide range of learning pathways and courses and skills diffusion relies on personal social networks rather than on institutional structures.

Unlike the other three models referred to above, the United Kingdom has not demonstrated a movement towards wide skills distribution (Green, 2001). In contrast to Germany, which is characterized by an occupational labour

market, the United Kingdom labour market is described as “flexible”. The economy exemplifies a link between low skills and low productivity across a range of sectors from manufacturing to service industries. According to Keep (1999) it is the reliance on voluntarism and market forces that makes the UK VET system fundamentally weak. This weakness is reflected in the continuous attempts at reform on the part of government, with little success. The role of industry is undermined by its lack of real interest in developing a skilled workforce. Invariably, the reliance on a supply side approach to economic growth continues to reinforce inequality and results in a low skills route for the majority of sectors with high skills being concentrated in a few sectors.

VET systems are strongly embedded in the social and economic structures of nation-states and are therefore diverse in terms of their level of participation and the manner in which they are managed (Tabbron & Yang, 1997). However, in the context of globalization and the shift to the knowledge economy, most VET systems are faced with some common policy considerations. These include a breakdown in the divide between academic and vocational education, more generalized VET at early stages with occupation-specific VET moved to post-secondary levels, growing co-operation between education and employment authorities as business is able to increasingly put pressure on TVET processes and there is increasing evidence of local co-operation between institutions and employers at local levels as VET delivery is increasingly decentralized. (Tabbron & Yang, 1997)

The key issue of bridging the divide between academic and vocational education is located within a general move worldwide to unify post-compulsory education and training (Raffe, Howieson, Spours & Young, 1998). The pressure for unification arises from global economic and social shifts which challenge the division of labour and calls for more generalisable skills, combined with new demands from youth to ensure their options are not restricted by narrow educational routes. Increasingly, even countries that have a strong vocational education tradition are feeling the pressures to modernize and be more flexible (Raffe, 2004). Unification is also important for coherence in education systems as they continue to expand and the transitions from school to work become longer and more complex.

Although the pressures are felt globally, the extent to which unification is being pursued is dependent on the historical value attached to VET. Therefore, in countries where VET and the occupational labour market are strongly embedded, such as in Germany, the pressure to unify is less evident and different tracks are being maintained (although some moves to limited unification are being explored even here) (Raffe, 2004). Countries that do not have a strong tradition of separate tracks are not likely to pursue this and will move towards unification.

The key ingredients are the extent to which there are sufficient institutional arrangements in place to support young people through this process, particularly in times where economic activity is under threat and the extent to which there is a well-structured link between the learning pathways and labour

market destinations, i.e. to what extent are young people gaining access to the workplace as a result of their studies (Durand-Drouhin & Sweet, 2000). Having workplace experience accompany institutional learning appears to have a positive impact on the transition process. Ultimately, however, the transition system will differ according to labour market context and there is no set model. The support system should be geared to ensuring, whatever the labour market context, the system as inclusive as possible to ensure success.

3.2.3 *VET and the nation-state*

The development of VET is viewed as an important innovative mechanism to meet any country's skills requirements. While schooling systems are closely linked to civil society and reflect to some extent reflect the culture of the nation, they are inherently conservative and will generally not be subject to radical change (Keating, Medrich, Volkoff & Perry, 2002). Nation-states view VET as an economic tool and are more likely to make use of its innovative value to advance economic objectives, including its capacity to contribute to labour productivity, to tackle unemployment and to offer young people more scope for skills through their process of transition. In addition, there is wide ranging evidence of borrowing of VET approaches across nation-states.

However, Gill et al. (2000) highlight the overstated expectations of governments of VET in addressing unemployment, increasing earnings and investment and reducing inequality and thereby bring about economic growth. This has resulted in a high level of government involvement in VET with

disappointing results. While demand-side pressures have driven VET reform, the supply-side characteristics of VET entrenched by the over-involvement of government have been a key determinant of the disappointing contribution of VET. In particular, attempts by nation-states to manipulate the VET system to address labour markets demands have generally had negative consequences. In addition, where countries have sought to utilise vocational education as a means of stemming supply to higher education, this has not proved to be cost effective and has generally lead to a drop in the quality of instruction. For transition countries vocational education represents a short-term measure to keep people out of the labour market while the government addresses macroeconomic issues, while in high-growth countries vocational schools have become demand-driven by focusing on the skills needs of the labour market.

Gill et al. (2000) highlight the commonality of fragmented VET supply due to the multiplicity of providers and financiers. The authors divide VET supply into vocational and technical education in schooling, pre-employment vocational training and in-service training. In general, vocational and technical education in school is managed by the ministries of education, while the ministries of labour oversee vocational education outside of the schooling sector. In-service training, however, is dispersed across ministries, although the ministries of education are mostly not involved.

Keating et al. (2002) state that VET can be differentiated from general education through its institutional forms, learning pathways and the distinction

between academic learning and practical learning. In many countries, students are divided early on into vocational streams (termed “general-vocational”) which would lead to earlier labour market entry, apprenticeships or VET programmes at secondary and post-secondary levels. Raffe et al. (1998) refer to “tracked”, “linked” and “unified” post-compulsory education and training systems, determined by the extent there are distinct tracks for academic and vocational learning, or where the manner in which provision operates allows for integration or in fact has no separate organization whatsoever.

Most states throughout the world play a critical role in the provision of VET through direct provision in state-run or funded institutions; regulating the provision of other providers or establishing mechanisms to incentivise the private sector to invest in training (Crouch et al., 1999). These authors emphasise that the state will invariably play a role in shaping the VET sector to meet its economic imperatives and will also accept certain responsibilities for such provision while passing some of the responsibility on to other providers. The level of involvement of the state will vary depending on the labour market context in which it operates. However, the authors state that the core policy goal is that the state maintains a central role in order to ensure the highest skilled population possible is created.

Despite the perceived value of VET, states have been more reluctant to fund VET than schooling and Higher Education (Keating et al., 2002). As a result, despite substantial increases in budget allocation for VET over the last couple

of decades, VET continues to attract a relatively small share of government funding. This small allocation is not commensurate with the fact that VET is characterized by substantially higher delivery costs than general education (Gill et al., 2000). Substantial increases in VET enrolment and the pressures on the system to address the rising youth unemployment crisis have placed pressure on nation-states to diversify the funding base for VET. (Keating et al., 2002)

3.2.4 *The demand for VET in Africa*

VET has been a popular feature of national education and training systems across Africa since achieving independence from colonialism (Atchoarena & Delluc, 2001). In the early years following independence, VET received intensive support from aid agencies in the belief that it was necessary for the modernization of the various nation-states. Most critically, VET was seen as a mechanism for resolving rising urban unemployment and the pressures on the higher education system manifesting through increased access to education (Johanson & Adams, 2004). Subsequently, with the general economic slow-down and structural adjustments in the 1980's, including the massive downscaling of public sector employment, the relative cost of VET and its effectiveness in meeting the needs of a labour market increasingly dominated by informal trade of goods and services were brought into question.

Despite ongoing debates about the relative value of VET in post-independence Africa, VET continues to have a strong appeal for African

states as they seek to solve the challenges of rising youth unemployment (Unesco Institute of Statistics, 2006). The models for public VET have taken diverse forms depending on the historical colonial legacies attached to different countries. Therefore, Francophone countries have tended to opt for a more integrated curriculum with a predominance of academic over vocational content, while Anglophone countries have adopted a dual-track approach, where the vocational track has limited academic content. The former has the danger of being delinked from the labour market, while the latter potentially is limiting because of its specificity and the lack of pathways into higher levels of the education system. (Oketch, 2007)

In both these scenarios, African VET systems have not been able to respond to the changing needs of the labour market (Johanson & Adams, 2004). Sub-Saharan Africa (SSA) is dominated by informal economies - as much as 85% (Johanson & Adams, 2004). Stagnant wage employment has increasingly forced large numbers of young labour market entrants into the informal economy. This has been a result of large-scale expansion of post-independence education which has far outstripped expansion of formal labour markets (McGrath et al., 2006). In addressing the dual challenge of youth unemployment and economic growth, SSA governments have tended to fall back on the traditional notion that employment growth refers to wage employment and SSA VET systems as such have not been geared to addressing the skills demands of the informal economy despite its prevalence (Johanson & Adams, 2004). Other attempts to stimulate youth employment demand through Active Labour Market Policies such as a National Youth

Service and Youth Brigades have also not demonstrated much success. As such, two priority objectives for VET tend to dominate debates on the future role of VET: training the workforce for self-employment and raising productivity in the informal sector (Atchoarena & Delluc, 2001; Oketch, 2007)

While responding to the pressures of globalization and developing a knowledge economy are key drivers for VET in Africa, the challenge is how education and training can play a critical role in overcoming poverty traps by developing human beings to be more self-sustaining (Johanson & Adams, 2004). The authors contend that, in light of the failure of public training institutions to respond to labour market realities, the role of governments should be to promote and incentivise efficient, demand-driven training markets and set the policy guidelines and institutions in place to ensure quality and allow such markets to operate. State intervention is necessary to address shortcomings in the delivery of these markets in strategic sectors of the economy, particularly in the informal sector.

However, as King and Palmer (2006) indicate, there is little evidence to demonstrate a positive relationship between skills development and poverty reduction. The creation of enabling environment for productive utilization of skills will determine the success of the VET system. This requires that nation-states explicitly adopt pro-poor training policies which goes against a typical market-led system. The challenge for any developing state is therefore to locate skills development strategies within broader strategies for poverty reduction.

3.3 The evolving role of VET in South Africa

3.3.1 The origins of VET

Technical education in South Africa arose in response to the discovery of diamonds in Kimberley and gold on the Witwatersrand in the late 1800's. This emerging industry created a demand for artisans to serve the mines and the railways. Prior to this, industrial education had been largely the domain of the mission schools and was focused primarily on 'native' and coloured children. As Paterson (2004) demonstrates, however, the exposure of these children to industrial education in the mission schools was marginal and diffuse, comprised largely manual skills and handiwork, and did not have much impact on the labour market. Around the turn of the century, the state significantly lowered funding to schools and institutions catering for 'native' industrial education, as it sought to expand provision of industrial education to the white working classes, in order to uplift their status in the labour market. Industrial education for Africans was aimed at equipping them to become productive farm labourers.

Changing economic conditions within the agricultural sector and resultant increases in urbanisation raised the need for a strategy to combat the emergence of 'poor whites' in the urban areas and the associated social problems that arose. With the rapid industrial expansion in the early part of the twentieth century, the Union government actively intervened to regulate and expand the technical education system as a supportive mechanism for its

"civilised white labour" policy. The Apprenticeship Act of 1922 was enacted as a gatekeeping mechanism to regulate the supply of skilled white labour and prevent black access to skills development. The transfer of power to the Union government from the provinces vastly improved the standard of provision of industrial education over the next decade and enhanced the status of industrial education. Concurrently, technical colleges became increasingly popular for white middle-class youth in urban areas as these institutions became increasingly geared to providing pre-apprenticeship and apprenticeship training.

3.3.2 VET in the Post World War II era

The Second World War created an economic boom in key sectors and there was a general increase in the number of Africans, coloureds and Indians in skilled labour. The shift in power in 1948 arose largely in response to the perceived need to contain the threat to white jobs, especially as the economic boom during the Second World War had resulted in increasing numbers of black people being placed in skilled positions to cope with the production demands. The establishment of the Central Organisation for Trade Testing (COTT) was a key driver in the development of technical skills amongst black groups during this period. After the war, COTT was used for the large-scale training of ex-servicemen. COTT was successful in putting in place trade testing and national standards and manage to train large numbers of people in a short space of time. (Chisholm, 1992)

During the 1950's, the apartheid government began an active campaign of gearing technical training for Africans towards the new homeland system. The introduction of Bantu education incorporated a vocationalisation of the curriculum for Africans in order to build them into productive and self-sustaining individuals within the Bantustans. Therefore, African learners were forced into Bantustan schools to get vocational education and opportunities for Africans to access technical education in the urban areas were blocked.

White technical and vocational education, on the other hand, experienced limited development in this period, as there was a surplus of skilled white labour and there was no need to introduce any changes to TVET system. However, there was a general expansion and diversification of the system to cater for both intermediary and advanced learners, as well as the increasing role of providing theoretical training for apprentices. Larger technical colleges were upgraded in terms of the Technical Education Act of 1967 into Colleges for Advanced Technical Education, and these later became Technikons (Chisholm, 1992). Certain institutions were also transferred into separate government departments for Indians and Coloureds.

The 1960's and 1970's saw significant shifts in the labour market, as the corporate sector had begun pressurising the state to enhance the skills base of black workers in the urban areas to meet their changing needs. Thus, technical education for blacks began to receive more attention. However, additional pressures on the system came from the rising militancy amongst Africans, first through the Durban strikes of 1973 and spreading to the

schooling system in 1976, manifesting through the Soweto riots. South Africa's military campaigns in neighbouring countries also forced big business to be more reliant on black workers as increasing numbers of whites were being conscripted for military duty. (McGrath, 2004a)

Following the political upheavals of the 1970's, the government undertook a substantive review of labour and training policies through the establishment of the Wiehahn and Riekert Commissions, resulting in the formulation of the Manpower Training Act of 1981 aimed at the "streamlining and rationalisation of labour and training legislation" (Kraak, 2004, p. 48). This was followed by the NTB/HSRC *Investigation into Training of Artisans* in 1985, which critically challenged the form and function of the apprenticeship system in the context of technological advances in industry.

The NTB/HSRC report recommended a shift from a largely unstructured and unmonitored system, with a narrow focus on 'on-the-job' occupation-specific skills, towards a more integrated system allowing for greater exposure to both theory and practice, within an institutional context, in a manner that did not restrict the learner to a limited set of skills (Kraak, 2004). It also recommended the introduction of competency-based system, which would require the apprentice to demonstrate competence for each module of learning rather than achieving artisanship through a fixed period of time on the job, and the successful completion of a trade test.

Formal training for the private sector was placed in the hands of the employers through amendments to the Manpower Act in 1990, which established Industry Training Boards (ITBs) with the authority to dictate their own training policies. This Act also incorporated findings from the 1985 *Investigation into the Training of Artisans* undertaken by the HSRC and the National Training Board, through invoking a shift in the training of artisans from the traditional apprenticeship route to a modular competency-based system, which combined theory and on-the-job practicals. The devolution of training to the ITBs was predicated on the belief that the state was inefficient and should not intervene in the training of the workforce.

The shift towards a 'market-led' approach to education and training was in line with a shift in the macro-economic policy of the state from one of strong state intervention to a more free-market oriented approach. However, there was still a strong emphasis in the Manpower Training Act on apprenticeship training, which suited the needs of the corporate sector as it did not require much investment. At the same time, however, the market-led approach had devastating consequences for the apprenticeship system.

MACRO OVERVIEW OF APPRENTICESHIP TRAINING AS RECORDED BY THE DEPARTMENT OF LABOUR, 1986 – 1998														
YEAR:	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
New apprenticeships indentured	9660	8185	7919	9891	9054	10758	7492	6247	5002	5545	5292	5599	5040	3129
Total	29826	25689	23416	26941	24448	26714	25785	21677	22015	22316	20979	18033	16577	16868
Attaining artisan status	11769	10686	8578	5138	7132	4527	5588	9362	3960	5235	5554	5607	4046	2556
Percentage rate of change in the numbers attaining artisan status	-9.2	-19.7	-40.1	38.8	-36.5	23.4	67.5	-57.7	32.2	6.1	1.0	-27.8	-36.8	

Taken from Kraak, Paterson, Visser & Tustin, (2000). Source: Annual Reports, Department of Labour, 1985, 1988, 1994, 1997, 1998 and 1999. National Manpower Commission, 'Commemorative Issue, 1979-1995', Government Printers, Pretoria.

Ironically, rather than improving the fit of the system to the labour market, the recommendations of the NTB/HSRC investigation of 1985 into the apprenticeship system, resulted in the state relinquishing its direct responsibility for the system and devolving this responsibility to the ITBs, created the setting for the complete decay and erosion of the apprenticeship (Lundall, 1998). The adoption of a neo-liberal approach placed the continuation of the system in the hands of employers and Lundall argues that it was this shift, rather than the problems with the apprenticeship model itself that primarily led to the system's ultimate demise. The poor commitment of employers to training in general, there was a constriction of in-service training along the short-term and immediate needs of employers. (Kraak, 2004)

3.3.3 The emergence of post-apartheid VET policies

The origins of South Africa's current VET system is rooted in The National Training Strategy Initiative (NTSI), which sought to lay the foundation for an integrated framework for education and training for the post-apartheid system

(National Training Board, 1994). The ANC-trade union movement alliance sought to provide the basis for equity and redress in education and training by adopting a macro-institutional framework in which government would play a key steering role (Kraak, 1997). The report outlined a state-driven transformation process aimed at democratising education and training in order to address the developmental needs of the country with respect to socio-economic upliftment, while inevitably responding to the pressures of the global economy.

The NTSI supported the idea of putting in place a single Ministry of Education and Training. Ultimately, two distinct ministries were created whereby the Department of Education maintains responsibility over formal schooling and public FET colleges, while the Department of Labour oversees skills development in the private sector.

The NTSI also laid the foundation for the creation of a National Qualifications Framework (NQF), as the vehicle for mapping articulated pathways through education and training and accumulating recognized learning achievements towards qualifications in a flexible manner. The promotion of an integrated approach to education and training was reflected in FET White Paper, expressing the intention to ‘overcome outdated divisions between “academic” and “vocational” education, and between training, and [the FET curriculum] will be characterised, not by the “vocationalisation” of education, but by a sound foundation of general knowledge, combined with practical relevance’ (Department of Education, 1998a, p. 30). This was in line with policy emerging

from the Department of Labour in the form of training for 'applied competence' (Department of Labour, 1997) which would bring vocational education into the realm of building 'thinking' learners, a realm traditionally associated exclusively with academic education.

In 1996 the National Commission for Further Education (NCFE) was appointed to investigate options for consolidating a fragmented FET sector. The brief of this commission was to "advise the Minister on all aspects of the band prior to entry into Higher Education (HE), including curriculum-related matters, a funding model, an appropriate governance model and career guidance and counselling services" (Department of Education, 1998a, p. 10). On the basis of the National Commission's report the Green Paper for Further Education and Training (Department of Education, 1998b) was published and was immediately followed by the White Paper on FET (Department of Education, 1998a). Concurrently, the FET Act (RSA, 1998a) was drafted and promulgated in November of 1998.

The compression of policy development within this short space of time was arguably linked to concurrent policy processes in the Department of Labour. The Green Paper for a Skills Development Strategy (Department of Labour, 1997) set in place a grant-levy system aimed at increasing the investment and involvement of employers in training of their workforce. The Skills Development Act (RSA, 1998b) and the Skills Development Levies Act (RSA, 1999) put in place the legislative mechanisms for this system to be realised, including the establishment of new Sector Education and Training Authorities,

and the introduction of learnerships (the model to succeed the apprenticeship system). While the Skills Development Strategy was primarily geared towards the private sector, the intent for overlap between the activities of the Department of Labour and Education was stated explicitly in the White Paper 4 on FET. (Department of Education, 1998a)

Besides co-operation between the two departments, FET colleges would be guided in how to access funding from the skills levy, particularly through the provision of learnerships. Interlinking between these two departments was further emphasised through the joint release of the national Human Resource Development (HRD) Strategy (Departments of Education and Labour, 2001). The strategy provided a baseline on supply and demand issues of Human Resource Development and set a key set of indicators in relation to each sphere of education and training to be realised by 2005/6. The HRD strategy spelled out in particular the following objectives in relation to public FET colleges:

- Increased enrolments in engineering at the Higher Education level in order to create high level technical skills.
- Greater participation of adults (73% of FET college learners were in the 15-24 age group).
- Generally increased enrolments to ensure greater distribution of learners at post-school levels, with FET colleges comprising the largest number of these learners.

- Realignment of FET colleges with the labour market following collapse of the apprenticeship system to ensure greater job opportunities for black graduates.

All of these objectives spoke to increasing the capacity of FET Colleges to absorb learners and create new opportunities for both schools leavers and returning adult learners. This institutional capacity was generally inhibited by high levels of inequality across colleges within the system as a result of apartheid.

3.3.4 VET policy in the new century

The complexity of public VET in post-apartheid South Africa is rooted in its location within the broad FET band, which incorporates a large secondary schooling system and a range of industry players and within which it is a relatively minor player. The complexity manifests in two ways: around institutional issues and around curriculum and articulation issues.

3.3.4.1 Institutional Issues

The pivotal point in the transformation of the VET sector in the post-apartheid era was the release of the New Institutional Landscape for Public FET Colleges in August 2001 (Department of Education, 2001). Prior to 2001, the technical college sector was characterised by two distinct legislative and institutional frameworks - the state and state-aided college. The former represented those colleges who fell primarily under the former (African) Department of Education and Training, and the former 'homelands' education

departments, while the latter fell under the (white) Department of Education and Culture. These two institutional forms were characterised by distinct governance and legal frameworks, with distinct funding mechanisms. While state-aided colleges were governed by a governing council, these councils had only advisory functions in state colleges. State-aided colleges had financial autonomy in that they were responsible for their own budgets and were able to set their own fees and generate income which could be used to fund additional lecturing posts, beyond those officially provided by the state. The council had the power to set policy with regards to finances and to appoint and promote staff where necessary. State colleges had limited financial autonomy and have no proprietary capacity. The state effectively managed and administered the budgets for state colleges and the colleges had no scope to set internal policies.

This resulted in a sector that was highly fragmented along resource and service delivery lines, depending on the historical status of the institutions in relation to this role. Therefore, colleges that were established primarily to provide high-level technical training to whites for employment in a protected job market, under the old apprenticeship system, were given greater freedom to build a resource base and were linked more systematically into particular industries that they served. On the other hand, colleges established to provide low-level skills to black people, initially to serve the “homeland” system and later to serve the growing needs of the urban economies, were poorly resourced and restricted in their scope of operations.

While technical colleges for whites had been established close to industrial centres, opportunities for technical education for African learners were restricted under apartheid to the Bantustans (Chisholm, 1992). Furthermore, while technical education for Africans in industrial areas was expanded in the 1980's, in order to support emerging market demands for increased technical skills, such provision was limited to under-resourced institutions. By the end of the 20th century, technical colleges had undergone a substantial deracialisation with respect to student profiles, but the institutional conditions created as a result of apartheid still placed certain institutional types at an advantage in meeting local economic demands.

It was within this context that the Department of Education moved to invoke a national restructuring of the institutional landscape in 2001. A National Landscape Task Team (NLTT) was established and provinces were pulled together into a national policy formulation process, resulting in the publication of the new institutional landscape for FET (Department of Education, 2001). Prior to this, provinces had operated independently and had placed varying levels of emphasis on FET. A particular feature of the pre-2001 context in the provinces was the disparate capacity across provinces to effectively manage the technical colleges in their provinces (Fisher, Hall & Jaff, 1999; National Business Initiative, 2000a-f). Resource constraints and a lack of dedicated personnel prevented some provincial Departments of Education from engaging effectively with colleges. Relationships between Provincial Department of Education and the colleges were generally acrimonious,

especially as previously white colleges resisted the pressures for transformation.

The work of the NLTT began a process of greater co-ordination in policy implementation. While provinces continued to drive their own implementation, there was an overarching focus on the achievement of equity across the system, which could allow for a better analysis of needs and more effective distribution of resources. The national process also provided a mechanism for raising the profile of the VET sector within policy agendas across the provinces and at the same time better equipping provinces to take on policy implementation in a more effective manner.

The result of this process was that in a relatively short space of time, the 152 technical colleges in the country were reduced to 50 public FET colleges, through a process of merger. The new multi-site “mega” colleges comprised campuses within a relatively close geographic locality, depending on the geographic profile of the province. Therefore, instead of an average of 808 full-time equivalent learners in each college in 1998, there was an average of 2774 full-time equivalents in 50 colleges, in 2000. In each merged college, previously disadvantaged colleges were integrated with previously advantaged colleges and a process began for better utilisation of resources.

More recently, two government initiatives have driven this process of institutional transformation further. The first was a substantial R1.9billion investment in the form of grants by the Treasury for a three year period

towards the recapitalisation of the college sector. Focused predominately on the upgrading and improvement of college infrastructure towards enhanced programme delivery, the recapitalisation programme was launched in 2005. The second was the promulgation of the Further Education and Training Colleges Act (RSA, 2006) which makes provision for greater autonomy within colleges with respect to appointment and management of staff. This allows colleges to more optimally appoint and utilise human resources in a manner suited to the particular college's needs. This dual mechanism for institutional transformation substantially advances the positioning of colleges in relation to responding to labour market demand.

3.3.4.2 Curriculum challenges

Significant curriculum shifts have been transpiring concurrently with institutional change initiatives in FET Colleges. Historically, college programmes fell predominately within two fields of learning – business studies and engineering studies (Department of Education, 2002). Utility Industries has been a growing field of study, incorporating Hospitality, Tourism, Clothing Production, Haircare and Cosmetology. However, Utility Industries accounted for only 5% of total enrolments in the colleges nationally in 2000. All these programmes were theory-biased with minimal practical, work-based application. There has been no requirement for colleges to expose learners to practical experience in a workplace or work-related environment. Certain colleges had introduced some practical, non-formal programmes, but this only accounted for 12 per cent of learners in 2000. (Department of Education,

2002)

Curriculum reform is a key lever for transformation in FET Colleges, as it requires colleges to become more focused on the quality of their provision. Over-reliance on narrow national programmes has limited the scope of the college ability to respond to changing demands and to provide students with optional specialisations. As such, college programmes have become outdated and not aligned to market demands.

In the FET Band, colleges operate alongside secondary schools and private providers (including in-company training units) in offering programmes that lead to an equivalent exit-level qualification at level 4 (Further Education and Training Certificate). Therefore, while there is institutional differentiation and multiple purposes, the FETC must provide some form of coherence if the fundamental premise of a National Qualifications Framework is to be realised.

There are two important issues which inform curriculum reform in FET Colleges. The first is the issue of equivalence and how it relates to the different learning pathways for young learners. The second issue relates to the kind of knowledge and skills that FET College programmes should produce to prepare young people for the labour market.

In seeking equivalence, the Department of Education has indicated a desire to bridge learning in secondary schools and college under the National Qualifications Framework (NQF):

The Ministry seeks to transform the separate and distinct areas of learning in schools and colleges, to an integrated approach to education and training. Through the integrated approach, the FET curriculum will be brought in line with the principles of the NQF, which will guide the development of relevant curricula, qualifications, unit standards, programmes and assessment strategies consistent with the outcomes-based approach (Department of Education, 2000).

The challenge in achieving an equitable FETC across learning sites in FET is located in the perceived value of the qualification that the learner will achieve. Matriculation with endorsement is viewed as a mechanism for identifying those learners who will succeed in a higher education environment. However, an average of only 14 per cent of learners who enrol to write the matriculation examinations gain entry into the public higher education system (Subotsky, 2003). While FET policy views college enrolment as a route to higher education, there is an absence of articulation between FET Colleges and higher education institutions and college programmes are generally inferior to those offered in schools (Umalusi, 2003 and 2006). Many youth who enter FET Colleges already have a matric qualification (Cosser, 2003) and many of these youth will have achieved a poor result on their matric examination and are therefore unable to access higher education. Therefore, the college is seen as a mechanism to get a vocational qualification to supplement the school qualification and thereby provide individuals with more scope for labour market opportunities.

In this context, the inherent difficulty is putting in place learning pathways in FET learning sites that lead to varying lifelong learning opportunities, without prejudicing the value of the qualification that the learner will achieve on exiting FET. The process of curriculum reform in FET Colleges should be done in such a way as ensure that the FETC provided by both schools and colleges represents the knowledge and skill required for preparation to enter into higher education, without placing restrictions on the specific sector requirements from qualifications. In this way colleges may provide access to different higher education opportunities, dependent on the particular needs of the individual.

The danger exists that an attempt to create coherence will result in the compulsory requirements for the FETC to be too prescriptive and thereby create artificial barriers to progression as is the case with the Senior Certificate with matriculation endorsement. Too much flexibility however, inevitably results in social judgements about the “exchange” value of certain qualifications and ultimately prejudices the learners who hold the qualification, negatively (SAQA, 2000a, p. 13).

A common requirement, which has been missing from FET Qualifications, is the inclusion of Fundamental Learning (Mathematics, Language and Lifeskills) as well as electives for greater breadth in the qualification (Umalusi, 2003). In seeking to create an FET sector that can respond to the growing demands of

the global economy, there is increasing pressure to view knowledge acquisition in holistic terms (SAQA, 2000b). This necessitates a fundamental paradigm shift regarding where learning takes place, as long as equivalence can be achieved. The challenge for the education system in South Africa is whether such a paradigm shift can be translated in the way learning is organised across the FET system. For colleges, the challenge is whether their definition of the nature of knowledge and skills with which graduates emerge is of a sufficient level, so that colleges can begin to break out of the narrowly-defined and marginalised role they have traditionally played and the qualifications they offer adequately prepare learners for the challenges of the global economy.

In 2003 the Departments of Education and Labour jointly published a response to a report on an investigation into the implementation of the National Qualifications Framework (Departments of Education and Labour, 2003). The document continues to place FET Colleges within the realm of “General Vocational” provision, aimed at learners “who wish to progress to higher education in a career-focused pathway or who have not been able to secure access to a workplace for trade, occupational and professional skills training” (Departments of Education and Labour, 2003, p. 15). The document separates out discipline-based learning in an institution and occupationally-driven learning taking place in the workplace. The implication for colleges is that they should be geared towards discipline-based learning and act as a conduit for higher education or workplace learning.

As from 2007, the Department of Education has begun implementation of its new General Vocational curriculum with the introduction of the National Certificates (Vocational) (NC(V)) which are underpinned by an integration of theoretical and practical learning (in authentic or simulated workplace environments). In addition, the new qualifications cover a broad spectrum of key economic sectors and incorporate literacy, numeracy and lifeskills elements and extend the period required for completion of the qualification. Thus, the programmes form the basis for higher quality skills and knowledge with a more strategic link into economic growth.

3.4 The context for skills demands in South Africa

The South African labour market is characterised by high unemployment and substantial inequalities along racial lines. The creation of jobs since the onset of democracy in 1994, while significant, has not been sufficient to cope with growth in the labour force (Bhorat & Oosthuizen, 2008). The first decade of democracy also produced upwards trends in income poverty, income inequality and urban poverty (Bhorat & Kanbur, 2006). The stability in the youth unemployment rate over this decade further suggests that the economy has not been successful in creating jobs for young people. (Burger & Woolard, 2005)

In 2005, the unemployment rate amongst young people aged 15 to 24, using the expanded definition¹, was 65% (Rankin, Simkins, Rule, Trope & Bernstein, 2007). The official unemployment rate for this age group (50.2%) was double that of the general labour force. In addition to the growth in the labour force referred to above, there is also a mismatch of skills of young people entering the labour market and those being demanded by employers. As a result, there is a high incidence of young Africans becoming trapped in a situation of unemployment with little scope for moving out of it. While the level of young people who have never had jobs decreases within an increase in age, around 30% of individuals over 30 years of old remain in a chronic state of unemployment.

While there is a general increase in the level of education across the labour force, the growing African labour force still mostly comprises individuals with incomplete or complete secondary education. The increasing exposure of the South African economy to the global market has increased the demand for higher-level skills, and low-skilled workers have become increasingly redundant, across a range of economic sectors (Pillay, 2003). While there has been an increase in the number of available jobs, the capacity of the labour market to absorb the growing number of low-skilled African jobseekers is a critical challenge for the state.

However, the increased demand for high skills is not fully diffused across the labour market. (Kraak, 2003). Therefore, traditional labour-intensive work

¹ The expanded definition of unemployment includes individuals who are unemployed but not seeking employment

practices continue despite the introduction of new technologies. In addition, the projected demand for high skills is largely based on replacement demand rather than the creation of new jobs. Job retention amongst older workers remains a key factor in this replacement while younger workers are less likely to get employed. (Bhorat & Oosthuizen, 2006)

Kraak (2003) warns against ignoring segments of the society that are not necessarily impacted upon by globalization. He emphasizes that globalization does not imply an end to traditional occupations at the intermediate level, as these create the basis for a stable society.

“Their jobs and security lie in an expanded manufacturing sector; in the revitalization of mines and farms; in the state; and in the formal small, medium and micro enterprise (SMME) activity.” (Kraak, 2003, p. 665)

To ignore this group, would result in an under-valuation of the importance of intermediate skills.

According to Kraak, there is a persistent demand for skilled artisans and technicians in the South African labour market that is not being met by the education and training supply. Along with global economic shifts, the late 20th century saw greater mobility of many highly skilled technicians out of the country and into new occupational roles within the country, leaving a vacuum in the availability of skilled artisans (McGrath, 2004a). At the same time, the

country had a broad base of low-skilled black workers whose educational opportunities had been severely limited by state policies and whose education was explicitly geared towards maintaining these workers in unskilled and semi-skilled positions.

Since the early 1980's the labour market has been characterized by deracialisation and an increased supply of youth with higher levels of education. However, the qualifications that many young graduates in the intermediate skills band have acquired during this period increasingly do not match the 'hard' skills requirements of industry. Despite the technological shifts in the manufacturing sectors, "the demand for sufficient numbers of technically competent operatives, artisans and technicians has not subsided" (Kraak, 2003, p. 676).

3.5 The Gauteng labour market and skills demands

Although Gauteng is the smallest province by size in the country (covering only 1.4% of the South African surface) it accounts for 20% of the total population (Stats SA, 2007) and 33% of South Africa's Gross Domestic Product (GDP) (Gauteng Provincial Government (GPG), 2006). Employment in the province is predominately in services and manufacturing industries, and there has been a significant shift from secondary to tertiary sector economic activity, with the latter accounting for over 60% of the provinces GDP (GPG, 2006). Employment and economic output is dominated by finance, trade and manufacturing (CDE, 2008). Gauteng also employs a substantial number of

people in the community/social services sector relative to other provinces due to Tshwane being the administrative centre of the national government. Manufacturing provides more employment than any other sector in the province. The unemployment rate, according to the official (narrow) definition², has dropped from 28.8% in 2001 to 22.6% in 2007. (Stats SA, 2007)

Around the time of the first survey of technical college graduates (2000), the labour force in Gauteng was 4.4million. This had increased to 5 million by 2005 (Stats SA, 2007). Despite this, the broad unemployment rate declined slightly from 32.6% to 31.9% for the same period compared to national increase in the broad unemployment rate by 4.5% (GPG, 2007b). This suggests that Gauteng has been more successful in absorbing its growing labour force despite the broader labour market pressures in the country.

Gauteng also has the most highly educated population with 40% of people over 20 years old having a secondary or post-secondary qualification (compared to an average of 28% for the country). It is estimated that 72,500 young people enter the Gauteng labour market each year (GPG, 2007a). Government estimations are that 29% of African first entrants find a job compared to 75% of whites.

² According to Stats SA (2007), the official unemployment rate refers to the percentage of people within the *economically active population* who: (a) did not work during the past seven days, (b) want to work and are available to start work within two weeks and (c) have taken active steps to look for work or to start some form of self-employment in the previous four weeks prior to the interview.

The largest employment category in Gauteng in 2005 was elementary (unskilled) workers, which made up 18.3% of Gauteng employment. Elementary workers work in unskilled jobs, such as cleaning and packing (GPG, 2007b). The number of workers categorised as elementary increased by 57.3% during the period 2000 to 2005, probably as a result of the increase in business services employment (security guards, cleaners etc).

Employment in highly skilled jobs (primarily legislators, senior officials and managers) jumped by 30.8% while the number of skilled jobs increased by only 7.8%. The limited expansion of skilled employment is partly ascribed to poor supply channels and resultant skills shortages (GPG, 2008). This is also reflected in an oversupply of unskilled labour.

Africans have benefited most from employment creation in Gauteng, with a substantial increase (20.8%) in the number of Africans in skilled occupations between 2000 and 2005 (GPG, 2007b). The more impressive change is the increase of 56% of Africans in highly skilled occupations during this time. Both of these improvements far surpass similar changes in the rest of the country.

At the same time, the province has also experienced increasing numbers of African workers entering the informal sector (GPG, 2007b). The development of small business within the informal sector has primarily created low-skill employment in the wholesale and retail trade and construction, where it is easiest for small businesses to compete.

Despite Gauteng being the richest province in the country and having the highest per capita income, it is still characterised by high levels of poverty and inequality. The Gini coefficient for Gauteng in 2006 was 0.59, indicating high levels of inequality (GPG, 2008). This Gini coefficient is in line with the national level of inequality (Woolard & Woolard, 2008). This high level of inequality is attributed to the high growth of the African middle class thus creating more inequality within this population group. Although Gauteng has the second lowest share of population in poverty, the share of the poverty gap is high compared to other provinces. While the percentage of household poverty is substantially lower than the national norm, the increasing number of households due to population growth in the province results in substantial increases in the absolute number of households living below the poverty line. This implies increasing inequality in the province.

It is estimated that 54% of economic activity in South Africa occurs in its six metropolitan municipalities (CDE, 2008). Growth in the metropolises since 1996 has outstripped the rest of the country. In addition, incomes are substantially higher in the metropolitan areas than in the rest of country. The populations in Gauteng metropolises in particular have grown more rapidly than other metropolises over the last decade. Young Africans make up the majority of unemployed who are migrating in large numbers to the metropolises, with Johannesburg accounting for two-thirds of the migration. (CDE, 2008)

The large number of in-migrants from other provinces allows Gauteng to attract a large labour and skills pool which helps to keep its unemployment

rate lower than other provinces (Oosthuizen & Naidoo, 2004). Gauteng has an important pull-factor due to its employment potential relative to some of the other provinces. However, this influx of people does put pressure on the education, health and social service systems. It also places pressure on the province to provide adequate housing and associated basic services and the in-migrants represent the largest group of informal dwelling residents in the province.

Gauteng also absorbs the largest number of immigrants from other African and non-African countries – 5.4% of people in Gauteng in 2001 were not born in South Africa compared to 2.3% for the rest of the provinces. (Stats SA, 2007)

The Growth and Development Strategy (GDS) for Gauteng Province (GPG, 2006) identified the following growth sectors and clusters that could meaningfully contribute to economic growth and job creation:

- Smart Industries (including ICT, Pharmaceuticals)
- Trade and Services (including Finance and Film)
- Tourism
- Agriculture (agri-processing and bio-tech)
- Manufacturing (steel related industries, automotive parts and components, Beer and malt)
- Infrastructure expansion and investment

Business Process Outsourcing and the Call Centre Industry are viewed as significant growth areas of growth, due to the prevalence of business centres for financial services, ICT and other service industries.

From a VET perspective, the provincial Human Resource Development (HRD) Strategy (GPG, 2007a) calls for increased enrolments and throughput in FET Colleges and improvement in the relevance and quality of learning programmes at FET Colleges. It also focuses on ensuring there are sufficient workplaces available for workplace experience needed to achieve occupational competence and sufficient qualified and experienced people in industry who can provide mentoring and coaching during experiential training.

The provincial HRD Strategy notes the fact that the access to workplace experience is the only way that young people coming out of colleges can move up the value chain and thus gain access to opportunities in the province that require higher level skills. In the context of the Gauteng labour market in particular, the ability to move up the skills value chain is critical to long-term employability. To this end, the strategy outlines the need to offer employers incentives to take on students for experiential learning. Gauteng accounts for the largest share of national enrolments in learnerships (HSRC, 2007). This large enrolment is achieved partly through high in-migration. Research by the HSRC (2007) suggests 53% employment of previously unemployed youth after completion of the learnerships. However, the research suggests that doing a learnership in Gauteng did not seem to improve chances of finding a job after completion. Ironically, those that did not find employment attribute it

mainly to not getting enough work experience during learnership suggesting that learnerships are not as yet being successful in overcoming this important obstacle to employability. More research is needed to understand the factors behind this as it does have implications for successful transitions of young people, both in Gauteng and in South Africa more broadly.

While the metropolises in Gauteng offer the best chance for employment growth, the predominance of low-skilled employment and the limited expansion of intermediate/skilled employment suggests that there is a problem with supply of skilled workers but also that the labour market is to create enough demand for such occupations, despite rising concerns about skills shortages at the intermediate skills level. Simultaneously, there is a trend towards increasing demand for highly skilled occupations, which bodes well for sectors in the labour market that rely on these skills. However, from a VET perspective the increasing supply and demand for intermediate skills is at the centre of potential growth in the FET College sector.

3.6 Policy challenges for VET in the current South African context

The role of technical colleges in South Africa throughout a large part of the 20th century was to provide the skills base necessary to support the state's segregated industrial policy. As the country neared liberation from apartheid, changing labour market conditions and shifting state policy relegated the technical college sector to the margins of the education and training system.

The post-apartheid state inherited a system plagued with a high level of fragmentation and with little link to the labour market. (McGrath, 2004b)

The transformation of the FET College system which began in earnest in 2001 has been more recently been prioritised in light of the shift in policy focus following the 2004 elections. During the first decade of democracy, the state's approach to socio-economic development quickly evolved from a focus on integrated service delivery and grassroots orientation to a conservative neo-liberal macroeconomic strategy (McGrath & Akoojee, 2007; Kraak, 2006). Following the 10-year review of the post-apartheid government's achievements, the ruling party sought to refocus its energies on development, with an integrated approach to socio-economic reform and poverty reduction, comprising three pillars:

- Developing the first economy in order to realise its potential to create jobs;
- Addressing the challenges in the second economy; and
- Addressing poverty alleviation directly through an enhanced social security system. (*ibid.*)

This three-pronged approach reflects challenges evident in the segmented character of the labour market and the differentiated strategy needed to address skills at high, intermediate and lower levels (Kraak, 2006). While high skills production dominates specific sectors of the economy, there are simultaneously various sectors that, despite the pressures of globalisation, still rely on intermediate skills. Furthermore, there is a need for effective

strategies that will ensure the mass of individuals are able to escape the low-skills trap providing opportunities to access training and work that will advance them up the value chain. (Lauder & Brown, 2006)

The shift to a stronger developmental framework, embodied in the Accelerated and Shared Growth Initiative for South Africa (AsgiSA), emphasises the centrality of skills and recognises the negative impact of skills shortages (particularly graduates, technicians and artisans) on economic growth and the potential contribution of education and training to addressing inequality, particularly in the context of globalisation (McGrath & Akoojee, 2007). In light of this, the state has invested R1.9billion in the recapitalisation of FET Colleges, put in place a new national curriculum and a financial aid scheme and instituted a deliberate plan to substantially expand the number of enrolments in FET Colleges from around 400,000 in 2006 to 1-million enrolments by 2014. The challenge facing the state is how best to position the FET College sector to maximise its contribution to the developmental objectives underlying government's emphasis on poverty reduction and job creation.

On the supply side, FET policy seeks to create the conditions for colleges to be optimally responsive to the labour market and the communities they serve by providing a legislative framework for colleges to become autonomous in their governance and management (RSA, 2006). McGrath (2004b) describes this policy approach as reflecting dominant neo-liberal discourse relating to a market-led system. Counteracting this is the emphasis by the state on

steering the system towards achieving policy objectives that reflect broader developmental goals by applying a uniform national curriculum and setting measures of accountability, particularly through funding mechanisms.

The general-vocational curriculum introduced in 2007 reflects the trend towards post-school integration of academic and vocational education in line with demands within the global economy for more generalisable skills (as per Tabbron & Yang, 1997 and Raffe et al., 1998, above). As Kraak (2006) asserts, VET in South Africa at the onset of democracy reflected the low-skills equilibrium associated with market-led systems. The description above of the evolving role of VET in South Africa indicates how, despite the best initial intentions, the first decade of democracy was not successful in creating the conditions for a high-skills route. The slow movement towards transformation of the system resulted in a perpetuation of a dual high-skills / low-skills context. The new curriculum reflects the state's revived developmental framework in that it seeks to more effectively prepare the young person to be employable in a sustainable manner.

On the demand side, however, FET College graduates are unlikely to easily find employment and even less likely to find employment in an occupation that is related to their field of study (Cosser, 2003). This is despite the high demand for artisan and technical skills across key sectors of the economy (Kraak, 2008). Kraak ascribes this mismatch in supply and demand to the absence of structured pathways with the decline of the apprenticeship system since the mid-1980's and the shift to a neo-liberal education and training

market where individuals are required to make choices on what education and training route to follow and respond to employer demands for skills in this process. The institutionalised structures that existed under the apprenticeship system for placing young people in meaningful employment have disappeared. This is particularly detrimental to African youth who are the majority of graduates out of the FET College system. (Powell & Hall, 2000; Department of Education, 2002 and 2004)

In order to stave off the growing unemployment crisis, the state has adopted a strategy to prioritise training of unemployed youth through learnerships (Kraak, 2008) and more recently has reintroduced apprenticeships. While this has created a substantial market for training providers, the roll-out of training has not necessarily been linked to employer needs, either in terms of the specificity of the skills being created or in terms of the levels at which the programmes have been pitched and has not therefore necessarily improved the employment outlook of graduates. The launch of the Joint Initiative on Priority Skills Acquisition (JIPSA) as a component of AsgiSA has prioritised the training of large numbers of artisans to meet the projected demand in the economy currently and in the future. As Kraak (2008) indicates, this is part of a broader state strategy that repositions state-owned enterprises as key players in the economy. However, effective institutionalised relationships to support pathways into employment are still elusive and the continued inherent tension in the role of state in seeking to steer a market-led system may hinder attempts to achieve this.

Government has also invested significant resources in creating mass labour intensive, low-skills employment for unemployed people through its Expanded Public Works Programme (EPWP). This seeks to tackle the dual challenge of unemployment and a lack of workplace experience. The challenge facing the state is how to create the enabling conditions for these workers to move up the skills value chain by accessing VET qualifications that do not limit their portability in the industry in which they are working (Kraak, 2008). This also requires strategies for creating demand amongst employers for higher-level skills and ensuring that employers are incentivised to take on higher skilled workers. In addition, McGrath (2005) emphasises the value of appropriate VET programmes for enabling emerging micro and very small enterprises in the informal sector to compete in the value chain. South Africa faces similar challenges to the rest of Africa in terms of training for self-employment and raising productivity in the informal economy. However, as McGrath asserts, there is little evidence within education policy of a serious attempt to utilise the VET system to address skills challenges for self-employed and the informal economy.

3.7 Conclusion

Like all developing countries, South Africa is grappling with balancing the demands of the global economy with the imperative of poverty reduction and job creation. This chapter suggests that colleges have inherited a legacy of a disjointed institutional and labour market context created under apartheid and this invariably has an impact on their capacity to respond to the needs of the

economy in which they operate. The transformation of institutions through merging, increased accountability, curriculum reform and recapitalisation provides a mechanism for enhancing effectiveness and developing a more strategic response to local economic demands.

However, South Africa continues to be plagued by a segmented labour market. This requires significant resources at the lower level to ensure that people get access to work but do not get trapped in a low-skills path, while creating mechanisms at the intermediate and higher level for people who advance up the skills chain to access meaningful employment opportunities commensurate with their qualifications. The VET system is geared to developing the necessary generalised skills and knowledge that underpins the new national curriculum.

The labour market realities in South Africa make it difficult for institutions to create pathways to meaningful employment. In order to better understand this through empirical investigation, the chapters five and six provide a substantive analysis of what happens to young people who move through the FET College system and the factors that influence or undermine their pathways into employment.

CHAPTER FOUR: RESEARCH DESIGN

4.1 Introduction

This chapter outlines the approach taken in the study towards answering the key research question. The chapter starts out by revisiting the research problem and details the underlying argument that informs the design. The chapter then maps out the methodology, the variables being measured, the sample, the instruments to be used and the type of analysis to be undertaken.

4.2 Revisiting the problem and outlining the research argument

Social capital has emerged as a useful concept for understanding the complexity of transactions in social contexts. It allows for the incorporation of contextual factors into mainstream economic viewpoints, thereby providing for an understanding of the relationships that underlie and facilitate economic transactions. Social capital goes beyond the narrow confines of human capital theory which asserts the notion of individual choice above all else as a key driver in decisions to invest in education, with no regard for different societal and economic contexts and the impact thereof on economic outcomes. (Ashton & Green, 1996; Brown 2001)

While social capital is built primarily in families (bonding social capital), its true value for economic growth is felt as individuals are exposed to and engage with broader networks in society (bridging social capital) (Narayan, 1999).

Bonding social capital provides the foundation for growth and development but can also restrict mobility and reinforce social stratification. Bridging social capital allows individuals to gain access to a wider range of information and resources and thereby open new opportunities for economic gain. Bridging social capital also has broader social benefits as it promotes social cohesion.

While bonding social capital limits economic mobility, it also provides an important resource for groups in the context of social inequality. For example, the literature indicates the strong reliance on personal networks for groups who have lower levels of education (Wahba & Zenou, 2005), who are ethnic minorities (Battu, Seaman & Zenou, 2004), in conditions of political conflict (Leonard, 2004) and in poor urban environments (Reingold, 1999). The conditions of inequality prevent such groups from creating or access bridging social capital.

This study seeks to problematise the notions of bonding and bridging social capital in the South African context and understand how social capital operates for young people who pass through the FET College system. Based on the argument outlined above, considering the structural inequalities in the South African society, it is likely that young people emerging from FET Colleges will find it difficult to find meaningful employment. Despite having a post-school vocational qualification, which in human capital terms should enhance their employment prospects, their inability to access the necessary bridging social capital will limit their economic prospects. This analysis will assist to better understand the interaction between vocational education and

the economy in a developing context and thereby explore the factors that could enhance the employment outcomes of young people.

The central research questions that emerges from this problem is:

What are the features of social capital that enhance the employment opportunities of FET College learners in the South African economic context?

In answering the research question, the study seeks to contribute to the growing knowledge base around social capital theory by providing a particular focus on its role in supporting young people in the transition from school to work in a developing context.

Based on the literature outlined in chapter two, the study sets out to test the following hypotheses:

1. Young people from poor socio-economic family contexts will have limited access to information within the family network and choices will be made on primarily on the basis of short-term economic considerations.
2. FET Colleges are ineffectual as agents of bridging social capital and therefore play an insignificant role in facilitating access to employment opportunities.
3. In the face of limited access to broader networks, African youth in dense urban environments will be reliant on dense ties to create access to employment.

The logic linking these three hypotheses and which forms the basis for the argument in this thesis is as follows. The choice to study in a FET College will derive strongly from bonding social capital. The expectation from the family side is that post-school education is critical for career prospects and FET Colleges offer the most affordable and accessible route to this. This does not tell us much about the value of bonding social capital beyond suggesting that it exists and is influential in the process of choice around post-school studies.

Due to the socio-economic context, the literature suggests that it is likely the respondents will have little access to bridging social capital. As outlined in chapter 3, the FET Colleges have historical links with industry and state-owned enterprises and are part of broader state machinery geared to promoting the development of skills for employability. They therefore potentially provide a source of bridging social capital, by providing the support needed to access placement and employment opportunities. If this bridging social capital exists and it is facilitating favourable employment outcomes, then the choice to study in a FET College has proven to be a positive one.

If, however, FET Colleges do not prove to be a source of bridging social capital and the students are therefore not able to access opportunities for placement and employment, then the choice to study there may not have been an effective one. The reasons behind why the family supported this choice will be informative in providing the context behind which such a choice was made.

The next level of the argument relates to the role of bonding and bridging social capital, beyond the FET College, in facilitating access to employment. Despite the effectiveness of the college itself in facilitating access to the workplace, the fact that the individual has a post-school vocational qualification should make them more marketable and attractive to employers. However, in the labour market context outlined in chapter 3, young entrants will struggle to compete for jobs and having additional support, in the form of social networks (weak ties), would presumably improve their chances. Considering again the low likelihood of such bridging social capital, the young individuals will resort to strong family ties for such support.

4.3 Methodology

Babbie and Mouton (2001) distinguish between three research purposes: exploration, description and explanation. The authors emphasise that most studies will have elements of all three purposes, depending on the type of analysis that is being undertaken. The research question outlined above operates primarily from a descriptive frame of reference, although there is some attempt to explain the relationship between certain variables. Description is a critical part of any research and requires accuracy and precision in the data being collected (Babbie and Mouton, 2001). It can range from intensive qualitative interviews to highly structured statistical studies.

This study draws on empirical data from three quantitative surveys, involving large numbers of respondents. The survey method is “perhaps the most commonly used descriptive method in education research..” and the goal thereof is to “gather data at a specific point in time with the intention of describing the nature of existing conditions....[and] determining the relationships that exist between specific events.” (Cohen and Manion, 1994, p. 83)

Survey research is widely used in educational research, due to its versatility, cost efficiency and the relative ease with which results can be generalized if properly sampled (McMillan and Schumacher, 2006). Surveys, especially those that are self-administered, allow for large samples which can support more effective analysis and which are therefore useful in descriptive and explanatory research (Babbie and Mouton, 2001). They allow more flexibility in the development of operational definitions and they ensure standardization of the manner in which the question is administered.

Survey research also presents with a range of weaknesses. The need to standardize questions can lead to them being somewhat superficial in order to ensure applicability to all respondents (Babbie and Mouton, 2001). Furthermore, surveys also do not provide in-depth insights into the respondents’ context and do not directly measure social action. Rather, surveys are reliant on self-reported perceptions of social action.

In addition, the particular dynamics of a developing country context make surveys a contested research method (Babbie and Mouton, 2001). Diversity of cultures can lead to misrepresentations which can impact on the validity of the results. Thomas (2007) provides a comprehensive analysis of the challenges associated with self-report questionnaires in cross-cultural contexts. The challenge for quantitative research is to ensure the constructs being measured are being similarly understood and applied across the different groups, especially where studies involve national or large-scale samples. Furthermore, consideration must be given to sampling equivalence, by using a sufficient number of variables and that the scales being applied are clearly explained so that the responses are as accurate as possible.

Secondary analysis of existing survey datasets has gained popularity with advances in information technology and the increasing availability of data electronically (Babbie and Mouton, 2001). Considering the scale and expense involved in conducting survey research with large samples, secondary analysis allows the researcher to pursue research questions in a more convenient manner. However, there are dangers to validity when conducting secondary analysis, in that the original researcher collected the data for a particular purpose and the questions asked may not optimally fit with the purpose of the study being conducted through secondary analysis.

Dale (2006) states that while there are well-established rules for survey research, it is likely that any survey will have methodological challenges and there is a danger, particularly when doing secondary analysis, to overlook

these and accept that the design, collection and analysis process has been sound. Dale calls for increased transparency in the way in which the design, collection and analysis of data has been conducted.

Concerns over quantitative research are dominated by its association with positivist traditions and the applicability of positivism in the development of scientific theory. Critics of positivism have focused particularly on “science’s mechanistic and reductionist view of nature which, by definition, excludes notion of choice, freedom, individuality, and moral responsibility” (Cohen and Manion, 1994, p. 22). A common epistemological concern amongst anti-positivists is the “rejection of the belief that human behavior is governed by general laws and characterized by underlying regularities.” (Cohen and Manion, 1994, p. 26) As such, social behavior can only be understood from the perspective of the individuals concerned and requires the researcher to engage with the individual’s frame of reference and interpretation of the world.

In addition, preoccupations with the relative value of quantitative and qualitative paradigms have dominated research methodology discussions at both the philosophical and technical levels (Bryman, 2006). The philosophical level has traditionally reflected the dichotomous tension between positivist and interpretivist approaches, while at the technical level the distinctions have been reflected in the methods for collecting and analyzing data. However, there is a trend in the literature towards an integrative approach which emphasizes the complementarities of the two paradigms at a methodological level (*ibid.*; Lund, 2005). In addition, Lund emphasizes that the dominance of

positivism in quantitative research has been largely rejected and some level of critical realism is generally accepted in quantitative methodology. Subjective phenomena based on individual experiences can be measured through standardized instruments to “rule out possible threats to valid inferences about the phenomena.” (Lund, 2005, p. 120)

Carter and Hurtado (2007) further interrogate the key dilemmas underlying the use of a ‘critical eye’ in undertaking quantitative research. The authors seek to dispel the notion of objectivity in quantitative research and any attempts to reach consensus about research methodology limit the capacity of quantitative research to develop new theories, modify existing theories or explain anomalies which can advance understanding of educational issues. Rather an understanding of the researcher’s role and intentions forms the basis for judging the rigour of the work, the extent to which it achieves its objectives and its broader contribution to improving the field in which it is operating.

Much of the literature on the value of social capital for education and labour market outcomes draws on the quantitative paradigm. Using predominately secondary analysis of large national datasets or primary data collection in some instances, the studies seek to measure the relationship between family (bonding social capital) and educational outcomes (Sanderfur et al., 1999; Meier, 1999; and Croll, 2004) or social networks (bridging social capital) and labour market outcomes (Mouw, 2002; Stone et al., 2003; Battu et al., 2004; Wahbu & Zenou, 2005; and Bentolia et al., 2004). These studies reflect the

shortcomings of quantitative research outlined by Babbie and Mouton (2001) in that while they seek to quantify social capital they do not explore the processes involved in family interactions and the development of social networks and how these change and evolve over time. In the case of Leonard (2004) and Raffo and Reeves (2000), which are qualitative studies, the concern is with exploring the nature of the relationships themselves and the contextual factors that interplay to determine the value of these relationships.

Borland (2001) emphasizes the complimentary relationship of qualitative and quantitative research within the research process. The qualitative approach provides the basis for generating theory in the first instance which can then be tested through a quantitative approach. The qualitative approach is then useful to extract meaning from the findings that emerge through the quantitative study.

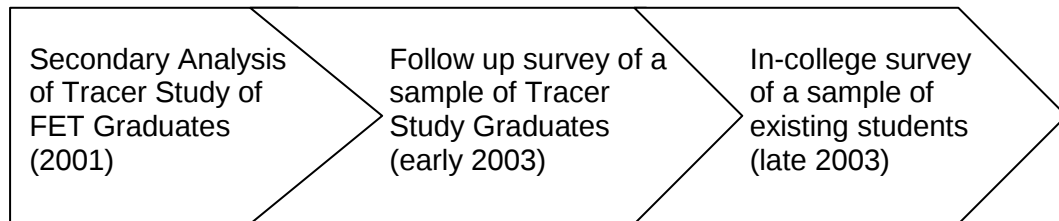
The current study draws off an existing knowledge base of theory around bonding and bridging social capital and seeks to measure its usefulness in the South African context. It draws initially from a quantitative dataset and then from subsequent primary quantitative data to describe and measure the relationship between social capital and labour market outcomes. The findings will form the basis for further in-depth investigation into the nature of the social capital concerned and the particular mechanisms that enable the development of social capital, be it in the family or more broadly in the community and labour market. Therefore, this study must be viewed as a step

towards a richer understanding of the social networks that support employability in South Africa and how these operate.

There are three methodological limitations or concerns associated with the approach. In the first instance, the study potentially faces the validity challenges associated with secondary analysis of survey data and highlighted above by Babbie and Mouton (2001) and Dale (2006) above. The social capital constructs that are being tested here were not implicit in the initial tracer survey (which is the main data source) and were applied post-hoc. This may limit the validity of the findings. Secondly, the study is vulnerable to the challenges of cross-cultural self-completion studies. Although the instruments were piloted, there may be some concerns about complexity in the language used and whether the respondents were able to adequately understand what the questions were requiring from them. Thirdly, as the sample for the study is limited to Gauteng, the findings suffer from challenges to external validity in that, while are generalizable within the Gauteng context, they are not generalizable to the population of the country as a whole. Considering the labour market context outlined in chapter 3 above and the particular value of the Gauteng labour market for the economic growth of the country, the focus on the three major urban metropolises was adopted purposefully and implies that the study did not intend to generalize the findings to less urbanized areas of the country.

4.4 Procedure

The study comprises three phases:



4.4.1 Secondary analysis of existing data (First Survey)

The first stage of the research involves a secondary analysis of a large-scale national survey in 2001 of graduates who achieved an engineering qualification in 1999 from FET Colleges in the FET band (Levels 2-4 on the National Qualifications Framework)³. The survey sought to identify employment patterns of FET engineering graduates from FET colleges, assess the graduates' levels of satisfaction with the college's provision, and investigate the link between college provision and employment outcomes.

The data emerging from this national survey is disaggregated so as to describe the characteristics of engineering graduates in the Gauteng province. The analysis identifies the population of graduates and the sample that was surveyed, including the colleges from which they graduated. It also identifies which of these graduates returned the survey questionnaires and

³ See Cosser (2003)

from which college they graduated. This formed the basis for the second phase of data collection.

4.4.2 Follow-up survey (Second Survey)

Follow-up postal surveys were conducted in early 2003 with a sample of the 1999 cohort of engineering graduates from Gauteng as identified through the original national database from the initial survey.

The original instrument developed for the national postal survey was adapted for the purposes of the follow-up survey and asked key questions about the progress of the students since completing the original survey, particularly in relation to employment and/or further studies.

4.4.3 In-college survey (Third Survey)

An in-college survey of a separate cohort of students was conducted towards the end of 2003. This survey asked key additional questions that had not been tackled in the first two surveys and was conducted in six large Gauteng colleges. Students were asked to complete the survey in their classroom. The survey tackled additional items about the students' backgrounds and their experience in the college. As this survey was conducted with a separate cohort of students, it does not lend itself to direct comparison with the initial sample. Its purpose was to augment the analysis of the first two surveys and enhance their explanatory power.

4.5 Measures

4.5.1 Identifying measures of social capital

As outlined in chapter two, definitions of social capital have been fraught with confusion and this presents challenges for measurement of the construct (Quibria, 2003). Drawing on the work of Putnam (2000), Narayan (1999) and Woolcock (2001), this study defines social capital in terms of social networks that facilitate effective transactions and which allow for more productive use of human capacity. The social networks can be dense and close-knit (bonding social capital) or weak and cross-cutting (bridging social capital).

Stone (2001) states that in order to understand social capital as a 'resource to action', it is necessary to measure both the social processes at work and the consequences or outcomes thereof. The challenge is not to conflate outcome measures with measures of social capital itself and therefore assume that if the outcome exists, then social capital exists. Similarly, Sabatini (2008) states that studies most commonly measure social capital through "indirect" indicators which do not measure the core elements of social capital (norms, networks and trust) but rather measure outcomes. This becomes particularly problematic when outcomes become more "distal" and the chance of an empirical relationship between measures of social capital and outcomes becomes more tenuous (Stone, 2001). Therefore, a sound research design must separate out the measures of social capital from its outcome measures.

Franke (2005) treats social networks as the unit of analysis, and seeks to measure networks in their own right, separate from their sources (determinants) and functions (effects). In this approach, the risk of confounding the evidence of social capital by focusing on the functions thereof is reduced. Social networks perform a mediating role – creating access for individuals and groups (determinants) to a range of other resources (information, material support, emotional support and others). Therefore, an understanding of the form and scope of social networks provides the basis for explore the benefits that are derived for individuals or groups in relation to the networks.

According to Franke (2005), the measurement of social capital takes on two forms: the quantity and form of social capital and how social capital is created and used. The former refers to a measure of what the networks comprise and what value they bring. The latter refers to how the social networks operate – how are they mobilized to provide access to the necessary resources.

Acknowledging that social capital is multi-dimensional, Sabatini (2005 and 2008) seeks to develop a single synthetic measure of social capital, using the “structural” lens which focuses on social networks as the key indicator of social capital. Drawing on large datasets, Sabatini’s analysis confirms the distinction between bonding (strong family ties), bridging social capital (weak bridging ties connecting families and acquaintances) and linking social capital (formal networks connecting members of voluntary organizations). It further

confirms the combination of low levels of bonding social capital with high levels of the bridging and linking social capital as having a strong statistical relationship with economic development. In addition, through structural equation modeling, Sabatini (2008) finds that the family can provide a strong defense in the face of high unemployment and can mitigate job precariousness.

4.5.2 Measures adopted in this study

This study adopts the focus on social networks as the key indicator of social capital and seeks to measure the extent to which social networks create access to meaningful employment opportunities for individuals who have obtained post-school vocational qualifications.

Based on the argument outlined in section 4.2 above, the study draws on data from the three surveys outlined in 4.4 above and extracts items which act as proxies for either bonding or bridging social capital. It is important to note upfront that these studies were not set up to specifically measure bonding and bridging social capital. Therefore this study seeks to draw from the items that provide the best indication of these.

4.5.2.1 Bonding social capital and choice of studies

The first set of items relates to choice of studies. Drawing on items relating to why they chose to study in a FET College, the analysis seeks to measure the

extent to which parents/relatives played a role in making study choices. The key measure that provides an indication of bonding social capital in relation to the issue of choice is *the number of respondents who relied primarily on parental / relatives' advice in making study choices.*

This is measured through the following responses:

- For question 1.2 of the first survey, the response identified is: “My parents wanted me to study at a technical college”
- For question 1.4 of the first survey, the response identified is: “My parents/relatives advised me to study at the college”
- For question 2.8 of the third survey, the response identified is: “Advice from your parents or relative”
- For question 2.9 of the third survey the response identified is: “My family recommended that I studied here”

If there is evidence of bonding social capital the analysis then draws on the responses from these and other related questions to analyse how bonding social capital influences the choice, in terms of the following:

- Why they chose to study in a FET College
- Why they chose to study in the particular college in which they enrolled
- Why they chose to move away from home in order to study

In order to understand the contextual factors that may influence the choices being made through the family, a range of background variables are measured including:

- the education levels of parents (First and Third Survey)
- the employment status of parents (Second and Third Survey)
- the number of people living in their house (Second Survey)
- the average household income (Third Survey)

4.5.2.2 The role of social networks in employment outcomes

The second part of the analysis seeks to examine the value of bonding and bridging social capital for finding employment. It explores evidence of bridging social capital either through the college or through social networks more broadly.

Bridging social capital in the college is measured through the accessibility and type of support being offered to students in the college, either by the lecturers or by the college student support structures. Therefore, the measures that indicate that there is evidence of social capital are:

- Whether or not colleges offer support in finding a job and the form that this takes.
- Whether or not colleges offer support in exposing students to workplace experience and what form this takes.

The analysis focuses on whether the support offered by the college actually results in the individual student finding meaningful employment.

For those who were employed at the time of the survey, the analysis draws on their responses to questions on how they found their first job (Question 1.24

on the first survey one and question 3.1 on the third survey) after completion of studies in order to explore what bridging social capital may exist.

In order to examine the value of bridging social capital for employment outcomes, the analysis explores statistical relationships between dependent and independent variables as follows.

Four dependent variables were identified through the first and second survey instruments. All of these variables were treated as categorical variables for the purpose of analysis, which required a recategorization of the variables where they were originally scale variables.

The primary Dependent Variable is:

- Employment status

Secondary Dependent Variables, which flow from the primary Dependent Variables, are as follows:

- Income levels
- Job appropriateness
- Use of skills and knowledge acquired during studies in employment

The independent variables reflect two measures of bridging social capital

- Exposure to workplace experience during studies
- Support in finding work after completion of studies

4.6 Instruments

4.6.1 First Survey

The first postal survey comprised a self-administered question consisting of 72 primarily closed-ended questions, categorized into eight areas:

1. Study programme / Course, comprising
 - choice of college;
 - choice of study programme;
 - career guidance;
 - work experience while studying; and
 - the graduate's first job.
2. Present employment and study situation.
3. Employment experience.
4. Work and use of qualifications, incorporating the use of acquired knowledge and skills in the workplace and levels of job satisfaction.
5. Unemployment, including how long they have been looking for a job, the reasons for being unemployed and what would help them find a job.
6. Present studies, looking at those that were still studying, what they were studying, at which institution and the reason for the chosen course of study.

7. Personal information, which examines biographical details such as gender, age, place of residence, parent's education levels, race, home language and details of employer if they were in employment.
8. Final satisfaction levels on the value of the college programme for finding a job and establishing a career path, as well as whether the graduate would make the same educational choice again.

The first survey instrument was piloted in June 2001 in two Pretoria Colleges (one Historically Advantaged Institution and one Historically Disadvantaged Institution). The instrument was completed both by a group of students enrolled in the colleges at the time, and a group of past students. The review of the instruments was conducted iteratively through a project reference group, with some input from two international experts.

4.6.2 Follow-up Survey (Second Survey)

The second survey instruments were reduced versions of the original survey instruments used in the 2001 study. The second survey comprised 45 primarily closed-ended questions focusing on:

1. Biographical details, including their updated contact details, their movements since studying and reasons for these.
2. Experience since completing the first survey, including how they went about finding their first job, whether they had changed jobs and, if so, the reason for change of jobs.

3. Employment status in 2003, including the type of job, their income levels and the appropriateness of the job to their qualification.
4. The role of the college in preparing them for the world of work, including the different types of support available and the value that these provided.
5. Unemployment, and the reasons for this.
6. Description of studies at the time, where relevant, and the reasons for engaging in such studies
7. Future plans for the next year.

In looking at the role of the college, the second survey provided more in-depth questions on the role of the college, in particular college staff, in supporting their transition to the labour market.

4.6.3 In-college Survey (Third Survey)

The third survey comprised 41 primarily closed-ended questions. Some questions remained the same as the earlier instruments, particularly relating to biographical information, choice of college and studies and the role of the college in preparing the respondent for the world of work. However, the in-college survey instrument differed in the following respects:

- It asked specific questions about migration from one geographic area to another in order to study at a FET College. The first two instruments had raised issues around migration and this instrument was used to test these further.

- It asked additional questions around the living circumstances of the respondent, in order to gauge the poverty status of the individual.
- Additional questions around factors influencing decision to study the particular programme and at the FET College in which they were enrolled.
- Additional question regarding the level of the support provided in the colleges and the perceived value of this support.

4.7 Sample Selection

The research comprises an investigation of students from FET Colleges in Gauteng, a densely urban province, which has 18% of the total population of South African living within its borders despite covering only 1.4% of the country's total surface area (Erasmus, 2000). In addition, Gauteng accounts for more than a third of all economic production in the country and for almost a third of formal employment opportunities. (*ibid.*)

In focusing on this primarily urban area with a diversified industrial base, the research seeks to control, to as large an extent as possible, the effects of local labour market conditions that may emerge when comparing across centres.

The study focuses on engineering as a specific field of study. The rationale for adopting such a focus is three-fold. Firstly, this is a field of study with which technical colleges had traditionally been identified, especially through the

apprenticeship system under apartheid, resulting in many having acquired significant resources to deliver such programmes. Secondly, engineering, along with science and technology, has been identified as a scarce skill for which a focused national strategy is required (Departments of Education and Labour, 2001) and which it is believed will substantively enhance the competitiveness of South Africa in the global community. Thirdly, while most colleges have offered engineering studies at both the Further Education and Training and the Higher Education levels, the majority of enrolments in engineering studies were at the FET level. This provides the basis for investigating graduates specifically trained at the intermediate levels, as this is the primary role of such colleges.

4.7.1 First and Second Survey

The secondary data for the first survey was drawn from a national postal survey of the 1999 cohort of FET graduates. This survey was distributed to over 9,800 graduates nationally, out of a total of 19,400. Non-probability sampling was utilised, in that the surveys were sent to all those graduates for whom contact details could be obtained from the colleges. Returns were obtained from 3,500 graduates, representing 36% of those that were surveyed and 18% of the total number of graduates. Of the total sample, almost half (4,776) were sent to graduates from Gauteng, with around 1,874 or 54% of the returns originating from the Gauteng province.

Through a disaggregation of the data, the initial study analyses the responses of 1,532 engineering graduates from 17 colleges in Gauteng. This final sample was selected on the following basis:

- 53% (n=1,874) of the respondents to the national survey came from Gauteng colleges.
- Of these Gauteng graduates, 1,566 or 83.6% were graduates from N2 and N3 engineering programmes.
- Of these Gauteng engineering graduates, 98% or 1,532 came from 17 colleges in the Gauteng area.

The 1,532 graduates from the 17 colleges represented the sample for the second survey.

4.7.2 Third Survey

The third survey adopted a purposive approach to sampling, drawing the sample from colleges to represent the geographic region in question (Gauteng). As such respondents were drawn from the six largest colleges in Gauteng, located in the three major municipalities (two in Johannesburg, two in Tshwane and two in Ekurhuleni)⁴.

The colleges were generally subjected to a constant state of flux due to the structure of programmes in the colleges at the time of the study. Engineering students enrolled in ten-week trimester programmes and there were three

⁴ By this stage, the college landscape for Gauteng was made up of 8 merged colleges – 2 in Greater Johannesburg, 2 in Tshwane, 2 in Ekurhuleni, 1 in Sedibeng and 1 on the far West Rand.

enrolments through the year. Business studies students enrolled for semester courses and there were two enrolments through the year. It was difficult therefore to predict the numbers of students in the colleges at any given time. Through consultation with the colleges, a week was selected towards the end of the year, just prior to students departing to prepare for examinations, when it was felt the largest number of students would be present at the colleges. During this week, fieldworkers visited the colleges and administered the questionnaires to all N3 and N4 engineering and business studies who were present in the college.

Due to the limitations identified in the findings of the first two surveys, it was decided to expand the sample from a focus on engineering studies at FET level in the first and second surveys. The sample for the third survey, therefore, included business studies students and students at N3 (FET) and N4 (Higher Education) qualification levels. This change in sampling served to augment the limitations of the first two surveys and provide a broader base for explaining some of the key findings. With the inclusion of business studies, which is predominately taken at Higher Education levels (N4-N6), it would be possible to assess whether or not the findings were limited to engineering students or could be more broadly generalised. It would also allow exploration of additional factors that emerged from the first two studies.

4.8 Data Analysis

The graduate surveys form the basis for testing hypotheses around the features of social capital that enhance employability amongst young FET learners in South Africa.

4.8.1 Descriptive Analysis

4.8.1.1 First Survey

In the first instance the analysis of the first survey describes the frequencies of findings within the sample, according to the following:

- Total returns by college.
- Age range, gender, highest previous qualification, race and programme sub-field of graduates.
- Highest parental education level.
- Factors influencing educational choice, including institution, field of study.
- Information on employment-related issues, including
 - status and type of employment,
 - income range,
 - how their first job was found,
 - support from college in finding a job,
 - access to work experience during studies,

- type and appropriateness of the employment to the qualification achieved at the college,
- reasons for taking employment that was not relevant to the qualification,
- length of time taken to find their first job, and
- perceived importance of different factors in finding employment.

In order to examine relationships between the different variables, a series of cross-tabulations were conducted. The cross-tabulations for the first survey investigate the following relationships:

- Highest parental education level and manner in which first job was found
- Whether or not the respondent moved away from home to study and manner in which employment was found
- The sector in which the employer is based and the type of work activity in which the graduates were engaged
- Work experience during studies and Employment Status
- Availability of College Support and Employment Status
- Job Appropriateness and Job Satisfaction
- Work experience during studies and Job Appropriateness
- Manner in which employment was found and Job Appropriateness
- Work experience during studies and Use of Skills and Knowledge
- Manner in which employment was found and Use of Knowledge and Skills
- Sector in which employer is based and Use of Knowledge and Skills

- Main activity at work and Use of Knowledge and Skills

4.8.1.2 *Second Survey*

The descriptive analysis of the second survey, comprised frequency analyses on the following:

- Studying situation, including level and field of study, place of study and reasons for study
- Comparisons of employment situation for 2001 and 2003, including
 - changes in the employment status and type,
 - changes in the appropriateness of the job,
 - changes in the use of skills,
 - changes in route utilized for finding employment
 - changes in the level of job satisfaction and
 - changes in income levels
- Factors influencing employment, including:
 - Number of months to find a job
 - Number of times the respondent has changed jobs and the reasons for this
 - Manner in which employment was found
 - Time in the labour market
 - Reasons for being unemployed
- Role of college in support graduates entry into world of work
 - Types of support available and the extent to which such support was utilized.

For the second survey, the following cross-tabulations focused more specifically on work-related issues, and examined the following relationships:

- Type of employment and job satisfaction
- Increases in use of Skills and Knowledge and Increases in Job Satisfaction
- Increases in Job Appropriateness and increase in Job Satisfaction
- Work Experience during studies and Employment Status in 2003
- Time in Labour Market and Increased use of Skills of Knowledge
- Reason for Changing job and Appropriateness of First Job

4.8.1.3 Third Survey

As the purpose of the third survey was primarily to augment and further explain findings from the first two surveys, the analysis thereof consisted of similar frequency analysis to those of the first two surveys:

- Total returns by college
- Age range, gender, highest previous qualification, race and programme sub-field of graduates
- Factors influencing educational choice

Additional frequencies that were produced through the analysis of the third survey included:

- Socio-economic conditions (family income vs number of people living in the home)
- Province of origin (to establish migration patterns)

- Key source of advice in making educational choices
- Availability vs Use of Support Services in the college

4.8.2 Inferential Analysis

The inferential analysis is aimed at establishing the extent to which relationships are *statistically significant* and can be inferred to the population from which the sample was drawn as a whole. Due to the variability of the response rates across the 17 colleges in the initial survey, a statistical weighting was applied to reflect the actual population of engineering students across the colleges from which the sample was drawn. For the purpose of inferential statistics, the statistical weighting was translated into a scaled weighting, to account for large discrepancies in frequencies across colleges, which results in some colleges producing large frequencies that may skew the analysis.

The inferential analysis sought to test out the hypothesis that there is a relationship between particular independent variables and the dependent variables outlined above. This analysis was conducted using the chi-square test. The chi-square test is a non-parametric test of statistical significance for use with categorical variables. The purpose of the chi-square is to test the null hypothesis that the two variables being compared are not related. It aims to establish whether sufficiently dependent to suggest that the one is contingent on the other and thereby reject the null hypothesis.

Chi-square compares the expected frequencies with the actual frequencies in the cross-tabulation and the size of the chi-square value (extent to which the observed value differs from the expected value) provides the basis to suggest the probability that there is a relationship between the two variables which is not due to sampling error. Where the observed value is lower than the expected values, the null hypothesis that there are no effects in the relationship cannot be rejected and the values could have been obtained by chance.

The measurement of statistical significance using the chi-square statistic requires a consideration of the degrees of freedom, which accounts for the possibility of variations in the values being analysed. This is calculated by deducting the number of parameters from the number of values being calculated (N-1). In the case of bi-variate tables, the degree of freedom is calculated by multiplying the number of rows in the observed frequencies minus one (r-1) by the number of the columns minus one (c-1). The degree of freedom is then taken into account when establishing the level of significance of the relationship.

In order to investigate the value of bonding and bridging social capital in achieving employment outcomes, the following relationships between variables were explored through the Chi-Square analysis:

- Availability of College Support in Finding a Job and Employment Status
- Work Experience during studies and Employment Status

- Moving away from home and employment status
- Moving away from home and job appropriateness
- Parental education and manner in which job was found
- Manner in which job was found and job appropriateness
- Changes in Employment Status from 2001 to 2003

CHAPTER FIVE – FINDINGS

5.1 Introduction

The purpose of this chapter is to present the findings of the three surveys and to demonstrate the extent to which the findings support the research hypotheses and answer the central research question. In order to do this the chapter uses the data to elaborate on the argument outlined in chapter four (section 4.1) and to interrogate its veracity.

The argument defines two critical transitions – the first being the transition from secondary school to VET and the second being the transition from VET to the labour market . The former transition relies strongly on bonding social capital to enable the young person to make effective educational choices. In this case bonding social capital is defined in terms of the advice and support of parents/family in making such choices.

The latter transition is most successful when bridging social capital, defined in this study as “social networks”, is available as it creates access to opportunities to support young people in this transition. However, in situations of social inequality or conflict, bonding social capital becomes an important resource for labour market transitions. Such bonding social capital may restrict broader labour market prospects as it does not provide the young person with the necessary networks needed to access opportunities.

This study views the first and second transition as stages in a continuum and the educational choices made post-school ultimately impacts on the individual's labour market outcomes. This chapter seeks to use the data to thread together the continuum in order to better understand the role of social capital in the transition process.

In order to introduce the findings, the next section describes the respondents to the surveys in terms of the college they attended, the programmes in which they were enrolled and their demographic characteristics. This provides the contextual lens from which to understand the respondents in the analysis to follow.

Following this, the analysis starts with a description of the school to work experience of the respondents. The analysis seeks to draw together the experience during the initial post-school transition to VET with the subsequent transition into the labour market and explores the role of social capital within this continuum.

The analysis firstly explores the role of family in facilitating the transition from school to work, both in terms of supporting and guiding educational choices and then supporting the transition from college to work. It interrogates the educational choice itself and explores the basis upon which the choice was made.

Following this the chapter explores how the respondents went about finding employment after college and describes the employment status of the first and second survey respondents at the time that the surveys were conducted. The chapter then interrogates the relative contribution of bonding and bridging social capital (in the form of access to social networks) to employment outcomes. In particular, the role of the college in facilitating access to social networks is explored.

5.2 Description of Respondents

5.2.1 First Survey

Table One below demonstrates the breakdown of responses from FET engineering graduates from the 17 Gauteng Technical Colleges.

Table One: Breakdown of FET engineering response rates for first survey (2001), by College

COLLEGE NAME	Students who qualified in 1999	Questionnaires sent out to students	Students responded to the survey	% responses against sample	% responses against total graduates
ATTERIDGEVILLE COLLEGE	223	135	60	44.4%	26.9%
BENONI COLLEGE	206	135	50	37.0%	24.3%
CARLETONVILLE COLLEGE	140	53	17	32.1%	12.1%
CENTURION COLLEGE	268	142	33	23.2%	12.3%
DOBSONVILLE COLLEGE	179	103	56	54.4%	31.3%
GERMISTON COLLEGE	682	413	185	44.8%	27.1%
HIGHVELD COLLEGE	288	167	92	55.1%	31.9%
JOHANNESBURG COLLEGE	1082	697	282	40.5%	26.1%
KEMPTON COLLEGE	423	324	125	38.6%	29.6%
KRUGERSDORP COLLEGE	111	75	20	26.7%	18.0%
LAZARUS NHLAPO COLLEGE	100	76	32	42.1%	32.0%
LEKOA COLLEGE	295	175	108	61.7%	36.6%

COLLEGE NAME	Students who qualified in 1999	Questionnaires sent out to students	Students responded to the survey	% responses against sample	% responses against total graduates
MAMELODI COLLEGE	331	126	50	39.7%	15.1%
ROODEPOORT COLLEGE	340	232	94	40.5%	27.6%
SOSHANGUVE COLLEGE	323	245	141	57.6%	43.7%
SPRINGS COLLEGE	349	223	111	49.8%	31.8%
VANDERBIJLPARK COLLEGE	239	123	76	61.8%	31.8%
	5579	3444	1532	44.5%	27.5%

As demonstrated in table two below, the majority of respondents were male. This is to be expected considering the predominance of males in engineering programmes (82% of enrolments) (Department of Education, 2002).

Table Two: Breakdown of respondents to first survey (2001), by Gender

	Frequency	Percentage
Male	1137	74.2%
Female	364	23.8%
Missing	31	2.0%
Total	1532	

In addition, the majority of graduates (74%) that responded fall within the 20-24 age range, while 24% were older than 24 years.

Table Three: Breakdown of respondents to first survey (2001), by Age

	Frequency	Percentage
17-19 years old	23	1.5%
20-24 years old	1106	73.7%
Older than 24	371	24.2%
Missing	32	2.1%
Total	1532	

Considering that the survey was conducted around eighteen months to two years after the completion of the N2 and N3 qualification, the table above reflects the generally young population of students in FET engineering

programmes. If two years are deducted from the age of the sample when they responded to the survey, the profile of graduates shifts to a younger age group, with 23% in the 17-19 age range and only 10% older than 25. Seventy five percent of the graduates had received a Grade 12 qualification prior to entering into the college, suggesting that they would have had to be 18 years and older in age.

Table Four: Highest Qualification prior to 1999 for respondents to first survey (2001)

	Frequency	Percentage
Grade 9	21	1.4%
Grade 10	39	2.5%
Grade 11	103	6.7%
Grade 12	1154	75.3%
Missing	215	14.0%
Total	1532	

The N3 qualification was perceived to be an exit level qualification for the FET phase, as is the Grade 12 (matric) qualification. As most of the graduates already had a Grade 12 qualification, they would have remained within the FET phase and entered at the N1 level. This is generally attributable to the fact that many African students who entered into colleges to do engineering had not done mathematics and science to Grade 12 level. They were therefore unable to enter a tertiary level (N4), either at the college itself, or at a Technikon, because they did not meet the basic criteria for admission and were unable to cope with the demands of the mathematics and science curriculum at this level for engineering.

Of the 1,532 respondents to the first survey, 94% are African. In 2002 Gauteng colleges as a whole comprised 81% African students (Department of

Education, 2004). Nationally, participation of African students was around 73% in 2002. Institutions that were historically reserved for whites have undergone a substantial deracialisation since the onset of the democratic government and as of 1998 comprised 61% African students. (Powell and Hall, 2000)

Table Five: Breakdown of respondents to first survey (2001), by race

	Frequency	Percent
African	1433	93.5
Coloured	10	0.7
Indian	6	0.4
White	50	3.3
Missing	33	2.2
Total	1532	

Non-African respondents were restricted primarily to historically well-resourced colleges. While there was a relatively large contingent of white students in Gauteng colleges at the time (13% of total) (Powell and Hall, 2000), the response rate of whites to the first survey was low.

5.2.2 Second Survey

The second survey was conducted in February 2003, around 18 months after the completion of the first survey. Surveys were sent to all 1,532 engineering students in the sample. Four hundred and forty seven valid responses were received, with a response rate of 29.2%. The response rate was highly variable across the sample of colleges, such that the level of inference that can be drawn will invariably be highly skewed.

Table Six: Breakdown of response rates from second survey (2003), by College

COLLEGE NAME	Questionnaires sent out to students	Students responded to the survey	% responses
ATTERIDGEVILLE COLLEGE	60	22	36.7%
BENONI COLLEGE	50	8	16.0%
CARLETONVILLE COLLEGE	17	3	17.6%
CENTURION COLLEGE	33	4	12.1%
DOBSONVILLE COLLEGE	56	16	28.6%
GERMISTON COLLEGE	185	39	21.1%
HIGHVELD COLLEGE	92	14	15.2%
JOHANNESBURG COLLEGE	282	99	35.1%
KEMPTON COLLEGE	125	47	37.6%
KRUGERSDORP COLLEGE	20	6	30.0%
LAZARUS NHLAPO COLLEGE	32	14	43.8%
LEKOA COLLEGE	108	48	44.4%
MAMELODI COLLEGE	50	8	16.0%
ROODEPOORT COLLEGE	94	35	37.2%
SOSHANGUVE COLLEGE	141	28	19.9%
SPRINGS COLLEGE	111	22	19.8%
VANDEBIEJLPARK COLLEGE	76	30	39.5%
OTHER		4	
	1532	447	29.2%

The small numbers from some colleges makes it problematic to draw inferences for the population. The analysis focuses rather on comparing the respondents to the follow-up survey in 2001 and 2003 and exploring some of the key themes that emerge.

5.2.3 Third Survey

The third survey involves a different cohort of students to the first and second survey. The purpose of this survey is to augment the findings from the first and second surveys by addressing gaps in the data that emerged through the initial analysis. This survey was conducted towards the end of 2003 and achieved 5,168 responses across six Gauteng Colleges. This represented 13% of the total enrolments in the colleges in 2003. A total of 3,264 (63%) of

these were engineering students, which represented 15% of the total engineering enrolments in the colleges.

The first key difference in this survey sample is that, whereas the initial surveys were on learners who had successfully passed their programmes, the focus here was on all learners who had undertaken their studies and who were about to begin writing their examinations.

Table Seven: Breakdown of response rates for third survey (2003), by College

College	Sample	Population	Return Rate
Central JHB FET College	593	7139	8%
Ekurhuleni East FET College	943	5683	17%
Ekurhuleni West FET College	1286	6926	19%
South West Gauteng FET College	307	6760	5%
Tswane North FET College	628	4974	13%
Tshwane South FET College	1407	8019	18%
Total	5164	39501	13%

The second key difference between the two samples was that, whereas the first and second surveys focused only on engineering, the sample for the third survey was expanded to include business studies learners. In addition, the focus was no longer N2 and N3 (FET level) learners, but now also included N4 learners who are considered to be Higher Education learners.

As demonstrated by table seven, the sample size varies across the colleges. As table eight below demonstrates, male respondents outnumbered females.

Table Eight: Breakdown of respondents to third survey (2003), by Gender

	Frequency	Percentage
Male	2986	57.8%
Female	2138	41.4%
Missing	44	0.8%
Total	5168	100%

Despite the inclusion of learners in Higher Education (N4) programmes, fewer learners had achieved a Grade 12 certificate than in the initial survey. In fact, there is a substantial difference between engineering students who have matric certificates (72%) and business studies students who have matric certificates (60%). This suggests that engineering programmes are receiving more students with matric certificates than are business studies programmes. One explanation for this is that, while young people will deliberately choose engineering as a post-matric option, business studies might be viewed more as an alternative option where the young person has failed matric.

Table Nine: Highest School Qualification for respondents to third survey (2003)

	Frequency	Percentage
Below Grade 9	46	0.9%
Grade 9	193	3.7%
Grade 10	415	8%
Grade 11	969	18.8%
Grade 12	3471	67.2%
Missing	70	1.4%
Total	5164	100%

Table Ten: Highest School Qualification for engineering respondents to third survey (2003)

	Frequency	Percentage
Below Grade 9	27	0.8%
Grade 9	103	3.2%
Grade 10	227	7%
Grade 11	539	16.5%
Grade 12	2333	71.5%
Missing	32	1%
Total	3261	100%

Finally, the racial profile of the learners who completed the third survey was similar to the first survey, although there was a slightly higher percentage of white learners who completed the third survey.

Table Eleven: Breakdown of respondents to third survey (2003), by race

	Frequency	Percent
African	4730	91.6%
Coloured	65	1.3%
Indian	57	1.1%
White	271	5.2%
Missing	41	0.8%
Total	5168	100%

5.2.4 Programmes of Study

The first survey focused only on engineering learners. Electrical engineering predominated amongst the available sub-fields in which the respondents had enrolled, followed by mechanical engineering, with construction attracting a relatively small number of students.

Table Twelve: Breakdown of respondents to first survey (2001), by engineering sub-field

Sub-field	Percentage
Electrical	70.1%
Mechanical	23.3%
Construction	6.6%

For the third survey the sample was broadened to include business studies. As a result, 32% of the sample was enrolled in business studies programmes, as demonstrated in table thirteen below.

Table Thirteen: Breakdown of respondents to second survey (2003), by field of study

Vocational Field	Frequency	Percentage
Engineering	3,261	63.1%
Business Studies	1,637	31.7%
General Education / Utlities	14	0.3%
Missing	252	4.9%
Total	5,164	100%

However, amongst the engineering responses, 67% were enrolled in electrical engineering programmes while 26% were enrolled in mechanical engineering programmes. Therefore, the enrolment trends in engineering sub-fields remained similar for the two samples.

5.3 The school to work transition

As stated in section 5.1 above, the argument presented below draws a continuum between bonding social capital in relation to post-school choices and subsequently the relative role of bonding and bridging social capital in facilitating access to employment. The factors behind the choice to study at a FET College combined with the support that is provided towards finding

employment provides insight into the challenges that young people from socio-economically deprived contexts face in their transition from school to work.

5.3.1 Bonding social capital and post-school choices

This section contextualises the post-school choices of young people within socio-economic conditions in which families operate. As outlined in the literature review, bonding social capital is a valuable resource on which young people can draw at critical moments to make decisions and take appropriate actions. However, dependent on the socio-economic context, bonding social capital also has the potential to restrict choices and reinforce class constraints by limiting access to broader information and networks. Parental background, including educational background and earning potential, may be important factors in determining the type of support that they are able to provide.

The respondents to the first survey indicated that the majority of parents had achieved secondary schooling or below, with around a third having achieved a primary school level education. Similarly, the respondents to the third survey indicated that in half of the cases, the highest qualification of the significant adult (parent / guardian) was secondary schooling or below.

Table Fourteen: Highest Level of Parental Education for respondents to first survey (2001)

	Highest Level of Education			
	Father		Mother	
Primary Schooling	513	33%	398	26%
Secondary Schooling / Matric	647	42%	536	35%
College Certificate	79	5%	67	4%
Technikon / University Qualification	83	5%	66	4%
Do not know	115	8%	182	12%
Missing	95	6%	283	18%
Total	1532		1532	

Table Fifteen: Highest Level of Parental Education for respondents to second survey (2003)

	Highest Education Level (Father / Mother / Guardian)	
Primary school or less	503	10%
Secondary Schooling / Matric	2041	40%
College Certificate	550	11%
Technikon / University Qual	946	18%
Do not know / Missing	1125	22%
Total	5165	

In addition, the third survey results indicate that a large percentage of the respondents were living in poverty-stricken family environments, with a household income of between R1 and R6000. There were, however, a large number of respondents who were unable to supply information on family income.

Table Sixteen: Total Household Income for respondents to third survey (2003)

Total Household Income		
Income Range	Frequency	Percentage
R1 - R6000	2117	41%
R6001 - R30000	737	14%
R30001 - R72000	375	7%
R72001 - R192000	203	4%
R192000+	99	2%
Missing / Do not know	1634	32%
Total	5165	

The third survey respondents reported having an average of 6 people living in their house. Half (53%) of the group reported having between 4 and 6 people living in their house, with only 12% having between 1 and 3 people living in their house. Considering the low level of income reported, this would further confirm the limited availability of resources in the family home.

Table Seventeen: Total number of people living in family home for third survey respondents (2003)

Number of people living in the family home		
Number of People	Frequency	Percentage
1-3 people	637	12%
4-6 people	2716	53%
7-9 people	1248	24%
10+	353	7%
Missing	212	4%
Total	5165	

The respondents to the third survey reported that their parents and relatives had provided the strongest influence on their study choices. Even if the relationships in these families were strong and supportive, the scope of assistance that the respondents would be able to draw from parents with respect to educational choices may have been limited by the socio-economic conditions in which they operate, as well as the parents' own educational experiences.

Table Eighteen: Source of influence in making study choices for third survey respondents (2003)

Factor Influencing Choices	Frequency	Percentage
Advice from your parents or relative	3325	44.4%
Advice from a teacher at school	1920	25.6%
Advice from a campus lecturer	731	9.8%
Advice from your friends	829	11.1%
Advice from my employer	216	2.9%
I responded to advertising / marketing	474	6.3%

The data presented in the following sections (tables 19-27) suggests that three factors were considered in making the decision regarding where and what to study:

- Locality
- Affordability
- Programme of Study

Three key findings emerged from the data presented below:

1. Despite parents and relatives being important sources of information and advice, youth appear to be making choices based on their individual aspirations rather than on the basis of family advice.
2. Engineering appears to be an attractive field in which to further one's quest for knowledge, rather than as an easy route to a job. The choice to study business studies, on the other hand, is driven more strongly by the desire to find work.
3. The young person's choice to migrate to major urban areas to study further appears to be driven out of a belief that urban settings offer enhanced learning and employment opportunities. This choice is not

driven by the young person's need to gain independence or be away from the family home.

5.3.1.1 *Choosing an Institution*

The strong influence of family and friends on decision-making supports the emphasis in the literature on the role of dense ties in influencing decision-making in families from poor socio-economic conditions. However, the data from the current study suggests that the respondents ultimately made their choice independent of this influence. The respondents were concerned with three factors when finally making their decision to study at a FET College: affordability, the availability of engineering and the inaccessibility of Higher Education Institutions.

Table Nineteen: Reason why chose to study at a technical college for first survey respondents (2001)

Reason	%
I wanted to focus on a field that I was interested in which was provided at a technical college	34.4
It was too expensive to study at a technikon or university	17.3
I could not get into a technikon or university	16.6
I could get more practical training at technical college than at school, in a technikon, or in a university	14.5
I wanted to go to a technical college rather than stay at school	5.4
I could not get a job	3.2
There was a college near my home	2.4
My parents wanted me to study at a technical college	2.8
Other	2.4
I did not know what I really wanted to do	1.1
Total	100.0

Respondents were conscious first and foremost of getting into the right programme and technical colleges provided this opportunity. In addition, the

affordability and accessibility (in terms of entrance criteria) of the institution made it an attractive and viable route. They also deliberately chose a college that had a good reputation in the provision of that field of study.

Table Twenty: Reason why first survey respondents (2001) chose to study at a particular college

Reason	%
The fees were affordable	20.0
The college was the best in the field in which I wanted to study	19.9
I was able to study the programme / course I wanted to study	18.0
The college was near the home of my parents / relatives	10.7
I wanted to study at a college which offered practical training in the field I wanted to study	10.6
My friends recommended the college to me	5.7
My parents / relatives advised me to study at the college	4.2
I could get a job in the area around the college	3.4
I didn't have transport to go to another college	2.7
I could get a study bursary to study at the college	2.5
Other	1.3
I could stay in the hostel at the college	1.0
Total	100.0

By linking affordability and the availability of the field they wanted to study, the respondents appear to view colleges as an affordable way to engage in a particular field of post-school study. As such, they were able to enroll in their field of choice at an affordable price. While the field of study would be available at another post-school institution, access may be limited by their school achievement and/or by the affordability of the institution.

The third survey confirmed many of these findings. Across both engineering and business studies, the primary reasons for choosing a particular campus were affordability and the particular field of study offered.

Table Twenty-One: Why did you choose to study at this campus? (Third survey (2003))

Reason	%
The fees were affordable	28.2
Particularly interested in engineering / business studies	21.0
The campus is near my home	14.1
I could not go to university or technikon	13.9
My family recommended that I study here	12.2
The campus offers extra-mural activities	3.8
There is a placement service in the campus	2.7
My friends recommended that I study here	2.3
Was not sure what I wanted to do	1.8
Total	100.0

Importantly, the colleges offered an alternative to Higher Education Institutions. Not being able to go to university or technikon featured prominently in the first survey as a reason for why they chose a FET College. The two factors behind not going to these institutions were affordability and the stringent entrance criteria. These factors made colleges more attractive. At the same time, the availability of practical training at FET Colleges was also an attractive feature.

While families were an important source of support, it is not clear where the respondents gathered their information to make choices. School teachers appear to have played a role in providing advice, but the respondents to the first survey were split in terms of whether they had received guidance at school prior to deciding to enrol in the college. A slightly larger percentage of students reported having received guidance on entering the college. Therefore, sources of information are split and varied, but the data suggests that there is no firm information base, either in the family or in the immediate educational community to assist with choice-making.

5.3.1.2 Choosing a Field of Study

When the first survey was administered, there was an expectation that the primary reason why young learners enter into FET programmes after school is that they would offer an easier route to employment. In fact, the majority of respondents to all three surveys indicated that they had chosen the FET College programme (particularly engineering) out of an interest in the field of study, rather than out of the desire to get a job. They also did not choose the programme because they perceived it to be easy or because their family wanted them to choose it.

This raises important issues around the choices that these young people make as they leave school. Faced with the wish to study further, their decisions are not necessarily guided by immediate economic concerns or pressures from their family. The perceived role of VET as a narrow stream towards entry-level employment in industry is also not an essential guiding factor. Rather, enrolment in VET is viewed as a means to advance knowledge and thereby enhance prospects in the labour market.

This suggests that youth are aware of the need to take responsibility and further their education if they are to succeed in the labour market and thereby escape their current socio-economic context. This, combined with their responses in the previous section, suggests that they are concerned with

career prospects and family plays an insignificant role in determining their choices in this regard.

Table Twenty-Two: Reason for choosing engineering for respondents to first survey (2001)

Reason	%
I was interested in it	61.5
To get a job	22.9
It was the easiest programme / course for me to study	8.5
Other	4.3
The programme / course I wanted to study at the college was full	1.6
My family wanted me to	1.3
Total	100.0

Table Twenty-Three: Reason for choosing engineering for respondents to third survey (2003)

Reason	%
I was interested in it	61.7
To get a job	27.8
I did not have any other choices	4.9
Other	1.63
Missing	4.0
Total	100.0

There is an important distinction between engineering and business studies emerging from the third survey. Whereas 62% of learners choose engineering out of an interest in the field of study, only 47% of business studies learners chose their field of study for this reason. Thirty seven percent of business studies chose that field of study in order to get a job compared to only 23% of engineering students. Furthermore, more business studies learners (8%) chose their field of study because they did not have any other choice, compared to engineering (3%). Therefore, engineering appears to provide a more attractive field of further study for furthering knowledge rather than gaining skill which will lead to quick employability. This may be due to the fact that engineering is based on a particular discipline and has a more specific

focus than business studies which is spread across a range of different areas of business theory with no substantial disciplinary base.

Gender also plays a key role here. Whereas 67% of learners in business studies were female, compared to engineering where 72% were male. This suggests that males appear to be enticed by the field of engineering, while females appear to be more focused on the skills that can assist them in accessing the job market.

The data indicates a small difference between genders with respect to primary source of advice. Males were marginally less likely to value parents' advice and more likely to value friends' advice.

Table Twenty-Four: Source of influence in making study choices for respondents to third survey, by gender

Factors influencing choice of studies	Female	Male
Advice from your parents or relative	47%	42%
Advice from a teacher at school	25%	26%
Advice from a campus lecturer	11%	9%
Advice from your friends	9%	12%
Advice from my employer	2%	3%
I responded to advertising / marketing	6%	7%

Interestingly, although the third survey respondents had originally enrolled in the engineering qualification primarily out of an interest in the field, by the time they moved on to more advanced studies they were more concerned with the employment opportunities that studying further presented. The frequency with which learners were studying further out of an interest in the field had dropped since 2001. Both engineering and business studies learners in 2003 viewed

studying further as important for improving their chances of finding a job, as well as to get a better job.

5.3.1.3 Migration choices

The first survey indicates that 42% of the Gauteng learners from 1999 had moved away from home in another province to attend the FET College in Gauteng. The third survey in 2003 surpassed this with 55% of respondents reporting that they had migrated from another province to study in Gauteng. More than half of these came from the Limpopo province, which is a large predominately rural province with limited industrial activity. Limpopo has seven FET Colleges spread across the province. Despite the rural nature of the province, the FET Colleges, with their multiple campuses, are all reasonably accessible.

Three common factors across initial survey and the third survey were:

- the perceived non-availability of colleges near their home,
- perceived non-availability near their home of the particular programme they wished to study, and
- the need to be near the college where they will be studying.

However, the most prominent response to the third survey around why they had moved away to study at a FET College was that they could get a job more easily in the area where the college was located.

Table Twenty-Five: Reason why respondents to first survey (2001) moved away from home to attend the FET College

Reason	%
There was no college in my area	22.3
I wanted to stay near the college	18.1
College near home does not offer programme / course	18.7
The college closest to my home is not a good college	14.4
I wanted to be independent	12.8
I wanted to get away from the family home	8.1
Other	5.6
Total	100.0

Table Twenty-Six: Reason why respondents to third survey (2003) moved away from home to attend the FET College

Reason	%
I could get a job more easily in the area where the college is	26.1%
There was no college in my area	18.0%
The college near my home does not offer the programme / course I wanted to study	15.7%
I wanted to stay near the college	12.6%
I wanted to be independent	11.1%
The college closest to my home is not a good college	10.3%
I wanted to get away from the family home	6.1%
Total	100.0%

Considering that many of the learners originate from areas which are highly rural in character, there appears to be a belief that moving to Gauteng will enhance employment opportunities.

Table Twenty-Seven: Province of origin of migrant learners in Gauteng for respondents to third survey (2003)

Province of Origin	Frequency	Percent
Eastern Cape	179	6.2%
KwaZulu-Natal	191	6.6%
Limpopo	1605	55.3%
Mpumalanga	463	15.9%
Northern Cape	25	0.9%
North West	352	12.1%
Western Cape	18	0.6%
Missing	70	2.4%
Total	2903	100.0%

A higher percentage of engineering students are migrant learners (64%) compared to business studies students, where only 48% are migrant learners. This suggests that more learners are migrating to Gauteng to study engineering.

Of the 646 students from 1999 who reported having moved away from home to study in the college, 69% were still living in Gauteng at the time of the first survey, suggesting that many who migrated to the province to study, tended to stay there for a while. In the 2003 study, 56% of those learners from other provinces who were planning to look for a job in 2004 were planning to do so in Gauteng.

A strong factor behind the movement of learners to Gauteng was the perception that there was either no college nearby or the college that was nearby did not offer engineering or was not of a sufficient quality. Therefore, learners were generally not leaving home to study because they wanted to get away from home, but rather to get to a college with the right programme and with quality provision. This suggests that the graduates held the colleges and

their provision (especially engineering in this case) in high regard and were willing to travel to get to them.

5.3.2 Finding Employment

5.3.2.1 Employment Status

At the time of the first survey, 25% of the respondents reported being in some form of employment. Most of the other respondents reported that they were unemployed and still seeking employment.

Table Twenty-Eight: Employment status of respondents to first survey (2001)

Employment Status	Percentage
I am employed (by a company / organisation)	19.7
I work for myself, and employ other people	1.4
I assist someone else in his / her small business	4.9
I am unemployed and seeking employment	67.2
I am unemployed but not seeking employment	2.2
Missing	4.6
Total	100.0

By early 2003, the employment status of the respondents to the second survey had almost doubled from 21% to 41%. This increase occurred primarily in formal employment in a company or organisation, while there had been little change in self-employment or working in small businesses.

Table Twenty-Nine: Comparison of employment status between respondents to the first and second surveys (2001 and 2003)

	2001		2003	
	Frequency	Percent	Frequency	Percent
I am employed (by a company / organisation)	69	15.4	158	35.4
I work for myself, and employ other people	6	1.3	8	1.8
I assist someone else in their small business	20	4.5	17	3.8
I am unemployed and seeking employment	328	73.4	221	49.4
I am unemployed but not seeking employment	7	1.6	43	9.6
Total	430	96.2	447	100.0
Missing	17	3.8		
Total	447	100.0	447	

A chi-square analysis produces a significant relationship between the 2001 and 2003 employment rates [$\chi^2(4, N=447) = 66.981, p < 0.005$], thus the null hypothesis that employment rates between 2001 and 2003 would have changed is rejected, suggesting a significant association between employment rates for the two periods.

Despite the absence of a significant change in employment rates after two years, the table above indicates that if the individual perseveres there is a good chance of finding some employment. What is concerning, though, is the substantial increase in the frequency of unemployed graduates who were no longer seeking employment. The majority of these respondents (84%) had been unemployed in 2001 and they had effectively become economically inactive by 2003.

In order to get a more refined understanding of the nature of this employment, the tables in the following sections describe the type of employment, its

relevance to the individual's field of study, and its prospects for career advancement.

5.3.2.2 *Form of employment*

The majority of respondents (79%) who were employed at the time of the initial survey were in their first job since completing their qualification, and earning up to R3,000 per month.

Table Thirty: Income of respondents to first survey who were in employment (2001)

Income Range	Frequency	Percentage
Less than R 500	58	12.8
R 501 – R 1 000	107	23.6
R 1 001 – R 2 000	145	32.0
R 2 001 – R 3 000	79	17.4
R 3 001 – R 4 000	37	8.2
R 4 001 – R 5 000	8	1.8
R 5 001 – R 7 500	13	2.9
R 7 501 – R 10 000	5	1.1
More than R 10 000	1	0.2
Total	453	100.0

A comparison of earnings levels across different sectors suggests that the highest concentration of respondents earning less than R500 were located within the wholesale/retail/hotels sector, while 31% of those earning between R2000 and R4000 are in the manufacturing sector.

Table Thirty-One: Comparison of income levels for respondents to first and second surveys (2001 and 2003)

	2001		2003	
	Frequency	Percent	Frequency	Percent
Less than R500	22	17.9	10	5.4
R501 – R1000	28	22.8	40	21.5
R1001 – R2000	45	36.6	57	30.7
R2001 - R3000	14	11.4	33	17.7
R3001 – R4000	6	4.9	19	10.2
R4001 – R5000	3	2.4	15	8.1
R5001 – R 7500	5	4.1	7	3.8
R7500 – R10000			4	2.2
R10000 +			1	0.5
Total	123	100.0	186	100.0

Table Thirty-One above demonstrates the change in income levels amongst the sample. The table suggests a general increase in income levels over the 18-month period years.

For the 21% who had changed jobs since achieving their qualification, 60% stated they had changed jobs because their first job had only been a temporary job. A further 11% reported they had found a job which better suited their skills and qualifications. In only 9% of cases did they leave their first job to return to studying.

Table Thirty-Two: Reported Reasons for Job Change for respondents to second survey (2003)

Reasons for Job Change	Frequency	Percent
Temporary Job	63	40.1%
Better pay	16	10.2%
Found job better suited to qualification	16	10.2%
Company moved or closed	12	7.6%
I start studying	10	6.4%
Had to take on family responsibilities	9	5.7%
I was retrenched	12	7.6%
Other	19	12.1%
Total	157	100.0%

Of the 19 graduates who reported “other” as a reason for changing jobs, four of these were due to them being under contract, while a further eight changed jobs because they were unhappy with their working conditions.

The changes in jobs between 2001 and 2003 was also characterised by a shift from part-time to full-time employment.

Table Thirty-Three: Comparison of full-time vs part-time employment for respondents to first and second survey (2001 and 2003)

	2001		2003	
	Frequency	Percent	Frequency	Percent
Full-time	81	64.8	141	75
Part-time	44	35.2	47	25
Total	125	100	188	100

This reinforces the contention that employment prospects improve over time and that there is also increased prospects for stable employment.

5.3.2.3 *The relationship between qualification and work*

The respondents to the first survey were divided equally as to whether their current job was appropriate to their college qualification. Only 59% of those located in the manufacturing sector felt the job was appropriate to their qualification, despite the fact that these graduates were mostly in positions that demand technical skills.

A quarter of those who were employed at the time of the first survey reported being employed in the manufacturing industry, with trade and the electricity/gas/water sector combined comprising a further 25% of the employment.

Table Thirty-Four: Sector location of employers for respondents to first survey (2001)

Main activity of employer	Percentage
Manufacturing	25.5
Wholesale / Retail / Repairs / Hotels	14.2
Electricity / Gas / Water Supply	11.3
Construction	6.6
Mining / Quarrying	6.1
Transport / Storage	5.2
Community / Social / Personal Services	5.2
Financial / Insurance / Real Estate / Business Services	4.5
Agriculture / Hunting / Forestry / Fishing	0.2
Invalid	21.2 ⁵
Total	100.0

A cross-tabulation of the sector in which the employer is located, with the main activity that the graduate performed at work, produced the following results.

⁵ The large number of invalid responses is probably explained by the respondents not have the necessary understanding of the company in which they are employed to enable them to accurately categorise their employer according to the categories provided.

- The predominant forms of work in which the graduates were engaged were:
 - ⇒ Technicians (20%)
 - ⇒ Maintenance/Repairs (19.6%)
 - ⇒ General Assistants (17.9%)
 - ⇒ 8.6% of the graduates were in supervisory/management positions.
- Half of the graduates who reported being employed as Technicians, were located in the Manufacturing and Electricity/Gas/Water sectors.
- 10% of those employed in the manufacturing sector were in in-service/apprenticeship positions.

When asked why graduates had taken a job that was not linked to their college qualification, 39% reported that they had not been able to find a job that was more relevant. A further 9% felt there were better career prospects with the job they had taken while 10% did not mind having a job that was not linked to their qualification. Eighteen percent reported having no choice in selection of the job, in half of these cases due to having to look after family needs.

Therefore, where respondents had found jobs, there was a 50% chance that they would not find a job that was relevant to their field of study and in most cases the decision to take the job anyway was due to a perception of being forced into the situation because there were no other options.

At least three-quarters of the respondents who changed jobs between 2001 and 2003 did so from a temporary job that was not appropriate to their qualification.

When the appropriateness of the position is cross-tabulated with job satisfaction,

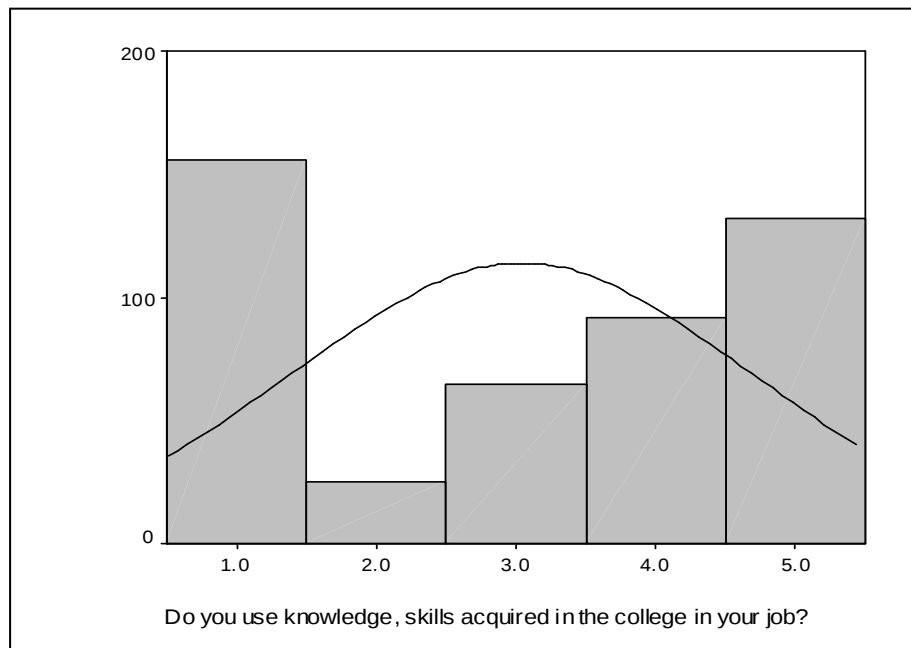
- 67% of those who thought their job was appropriate to their qualification, were also highly satisfied with their jobs while,
- for those who thought their job was not appropriate, the level of satisfaction was more diffuse, with most (42%) being very dissatisfied, and many (31%) also being highly satisfied.

There was a wide distribution of responses from employed graduates as to whether or not they used their knowledge and skills acquired during college studies in their jobs. Thirty three percent reported not using their knowledge and skills at all, while 28% reported using their skills to a very large extent.

The graduates who did not feel they were using their acquired knowledge and skills at all were primarily employed as general assistants and clerical/secretarial/ administrative workers.

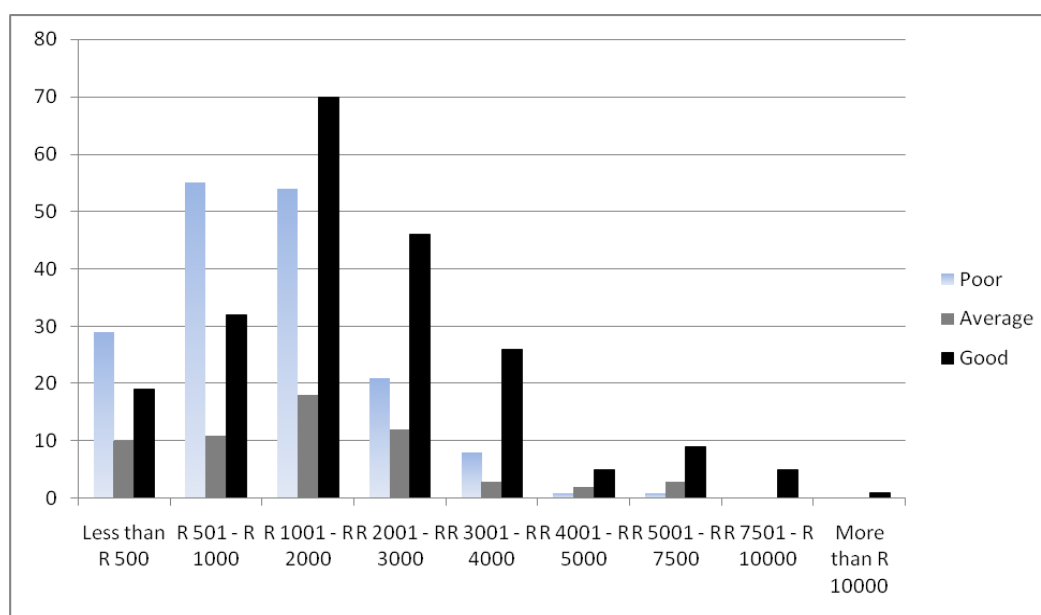
Those who felt they were using such knowledge and skills were largely technicians and maintenance/repairs workers.

Graph One: Distribution Graph for Use of Acquired Knowledge and Skills in the workplace



As suggested in graphic form below, satisfaction levels appear to have some relationship to the level at which skills and knowledge acquired in the college are being used in the workplace. Higher levels of skills use are associated with higher levels of income.

Graph Two: Relationship between Earnings and Use of Skills and Knowledge



The increase in employment rates between the first and second survey was not necessarily accompanied by an increase in jobs that were related to the engineering field of study. The graduates reported a slight decrease in the appropriateness of their employment.

Table Thirty-Five: Comparison of Appropriateness of job to qualification for respondents to first and second survey (2001 and 2003)

	2001		2003	
	Frequency	Percent	Frequency	Percent
Appropriate	58	45.0	77	41.2
Not appropriate	71	55.0	110	58.8
Total	129	100.0	187	100.0

There does, however, appear to be an increase in the extent to which graduates are utilising the skills they acquired in the college, in their place of work. Despite this, 39% of the employed graduates were not adequately utilising their skills at the beginning of 2003.

Table Thirty-Six: Comparison of level of use of skills in job for respondents to first and second surveys (2001 and 2003)

	2001		2003	
Level of skills use in job	Frequency	Percent	Frequency	Percent
Poor	52	40.6	71	38.6
Average	25	19.5	21	11.4
Good	51	39.8	92	50
Total	128	100	184	100

In addition, 37% of the graduates were dissatisfied with their current job. The most common reason why they were doing the job, despite it not being satisfying, was still because they had not found a job that was linked to their qualification.

Table Thirty-Seven: Comparison of Level of Job Satisfaction for respondents to first and second surveys (2001 and 2003)

	2001		2003	
	Frequency	Percent	Frequency	Percent
Dissatisfied	35	29.9	64	37.0
Ambivalent	32	27.4	35	20.2
Satisfied	50	42.7	74	42.8
Total	117	100.0	173	100.0

While the frequency of graduates who are satisfied with their jobs had not changed, there was an increase in the frequency of graduates who were dissatisfied with their jobs.

A cross-tabulation of job satisfaction and the type of employment (full-time or part-time) suggests that graduates in full-time employment demonstrate higher levels of job satisfaction.

In addition, a cross-tabulation of the increase in job satisfaction and the extent to which the respondent is using his or her skills in the job suggests that

where the graduate has increased their use of acquired skills and knowledge in the workplace, there is a concomitant increase in job satisfaction.

Finally, increased job satisfaction appears to compliment increased job appropriateness, suggesting that those graduates who were in employment in engineering-related jobs, were more satisfied with their work situation.

These findings present an overview of the employment situation of the respondents. Moving beyond a narrow focus on employment figures alone, the findings provide a more in-depth analysis of the relationship between what they were studying and the nature of employment. This provides a basis for a more nuanced understanding of the role of social capital in not just supporting access to employment, but also to relevant employment where youth can realise their aspirations and apply the skills and knowledge they have acquired during their studies.

5.3.2.4 The value of personal networks

Personal networks and relationships seem to play a key role in finding employment, while colleges appear to have played a marginal role. Other important routes include employment agencies and newspaper advertisements. It is ironic that, amongst the respondents to the third survey, 51% of those who intended looking for jobs in 2004 were going to do so through employment agencies and newspaper advertisements. Despite intending to use these obvious routes, it would seem that networks and

relationships represent a more effective route and learners who have strong networks in place will more likely get employed. Only 21% of the third survey respondents who intended looking for work reported that they would use community or family networks to find employment. Based on the first survey data it is likely that they would have resorted to personal networks as the easiest route to finding employment.

Table Thirty-Eight: Process followed in finding first job for respondents to first survey (2001)

How did you find your first job?	Percentage
Through personal contacts	33.4
Through relatives	18.8
Through a newspaper advertisement	11.3
Through an employment agency	10.1
I am working for the same employer	4.5
Through my employer coming to the college to find employees	3.6
I am self-employed	3.3
With the help of the college	3.0
Through holiday jobs during period of study	2.7
I joined the family business	2.4
Through employer coming to college-talk to students	2.4
The college gave me a reference	2.1
Through paying back a loan	0.9
Through college teaching staff	0.9
Through placing my own advertisement	0.6
Total	100.0

For 79% of the first survey respondents who were employed, this was their first job. The majority of the respondents who found employment, did so in the first 6 months. This implies that many of the graduates who had found employment had managed to maintain such employment.

Table Thirty-Nine: Time taken to find a job for respondents to first survey (2001)

Months to find first job	Percentage
0-6 months	65.0
7-12 months	21.7
12+ months	13.3
Total	100.0

Table forty below demonstrates that the route towards finding employment had shifted. While personal and family contacts had accounted for 63% of success in finding first employment, graduates who completed the follow-up survey reported with greatest frequency that they had found their first job through newspaper advertisements, with employment agencies playing a noticeable role.

Family relations continued to play a dominant role, while the role of the college had increased as had finding employment through college links with an employer.

Table Forty: Comparison of Route for finding first employment for respondents to first and second surveys (2001 and 2003)

Employment Route	First survey (2001)		Second survey (2003)	
Employment agency	7	8.8%	34	12.4%
College support	6	7.5%	33	12.0%
College links with employer	3	3.8%	21	7.7%
Family relations	13	16.3%	49	17.9%
Joined family business	1	1.3%	3	1.1%
Personal contacts	37	46.3%	49	17.9%
Holiday jobs	2	2.5%	15	5.5%
Same employer	4	5.0%	16	5.8%
Advertisement	7	8.8%	54	19.7%
Total	80	100.0%	274	100.0%

Almost two-thirds of the sample who reported being unemployed at the time of the second survey, had been looking for a job for between one and three years.

Table Forty-One: Time period passed for unemployed looking for jobs for respondents to second survey (2003)

Time in labour market	Frequency	Percent
More than four years	15	5.6%
Three to four years	32	12.0%
Two to three years	82	30.7%
One to two years	87	32.6%
Six months to a year	25	9.4%
Six months or less	26	9.7%
Total	267	100%

Bonding social capital is consistently an important resource for finding employment. However as young people spend more time in the labour market, they appear to become more exposed to the realities of the labour market and it emerges that personal networks are not an effective mechanism for finding jobs in the longer-term. They therefore shift to broader engagement with the labour market and make use of other tools at their disposal. This does not necessarily increase their chances of finding relevant employment but they are able to expand their resource base and thereby open up networks being their family environment.

5.3.2.5 Colleges as agents for labour market entry

This section of the survey focuses on the perception of the respondents regarding the extent to which colleges provided support to them on entering the world of work. Based on the findings below, it is evident that such support

was generally lacking in the colleges. Of the first survey respondents, 72% report having received no help in finding a job from their college. Where there was support, it mostly took the form of colleges arranging interviews with employers.

Table Forty-Two: Kind of help received from college in finding a job for respondents to first survey (2001)

Help received from college	Percentage
Expert helped in finding a job	8.9
One of the teachers helped me find a job	24.2
The college arranged for employers to interview students	52.2
Other	23.6
Total	100.0

The findings above suggest the absence of a systematic job placement system. Lecturers play some role, but generally do not place much emphasis on this element of support. At the time of the survey, it would seem that colleges had not put in place work placement systems and students were largely left to their own devices.

A cross-tabulation of the type of support received by the college in 1999 and employment outcomes indicates that the support provided did not add much value as almost equal numbers of graduates who got support were employed and unemployed.

Table Forty-Three: Cross-tabulation of type of support in finding a job and employment outcomes for respondents to first survey (2001)

Employment Status	Kind of Help Received in finding a Job				
	An expert in helping people find jobs helped me	One of my teachers helped me find a job	The college arranged for employers to interview students	Other	Total
Employed	67 (39%)	160 (38%)	596 (40%)	242 (39%)	1065 (39%)
Unemployed	106 (61%)	263 (62%)	885 (60%)	386 (61%)	1640 (61%)
Total	173	423	1481	628	2705

The second survey provided a particular focus on the role of the lecturers in preparing the learners for the world of work. Respondents provided a rating of the role of lecturers in this regard. The findings in table forty-four below suggests that the role of lecturers was limited to a relatively passive one, whereby they would impart the subject matter and its possible application, build the confidence of the learners and share ideas on possible job opportunities. However, the ratings suggest that the lecturers were generally average to below average in proactively creating the links between the college and the employers, to enhance job prospects.

Table Forty-Four: Perceived role of lecturers in preparing respondents to first survey (2001) for world of work

Role of lecturers	Mean response (maximum = 5)
Knowledge of Subject Matter	4.0
Enhanced confidence of learners	3.8
Learners taught how to apply learned materials	3.2
Arranged visits to workplaces	2.3
Shared ideas on job opportunities	3.1
Assistance in Contacting Employers	2.5
Invited employers to speak at college	2.2
Arranged interviews with employers	2.2

These findings imply that lecturers were not effectively engaging with the outside world. At the level of the college, the respondents reported getting

above average support in making choices and acquiring the necessary cognitive skills for learning, while the college's engagement with personal problems, or its engagement with practical skills and job finding, was below average. Yet again, the support provided by the college is largely driven by the necessary elements for programme delivery, rather than preparation for, or supporting the transition to, the world of work.

Table Forty-Five: Perceived role of college in preparing respondents to first survey (2001) for world of work

Role of College	Mean Response
Help with language problems	3.1
Help with study methods	3.8
Guidance on choice of course	3.3
Guidance on career choices	3.3
Practical / Work Experience during studies	2.4
Counselling support for personal problems	2.4
Help in finding a job	2.1

The third survey respondents were also asked to rate the support provided both by the college and by the lecturers specifically in preparing them for the world of work. Table forty-six below provides a breakdown of the responses.

Table Forty-Six: Perceived support provided by college in preparing respondents to first survey for world of work (Third Survey)

Rating of support provided by college	Mean
Support in preparing for job interviews	2.90
Help in finding a job at the end of your studies	2.74
Practical/Work experience during studies	2.59

Amongst the third survey respondents, 42% were negative about the support provided the college in finding a job and 46% rated the practical or work experience gained during studies as below average.

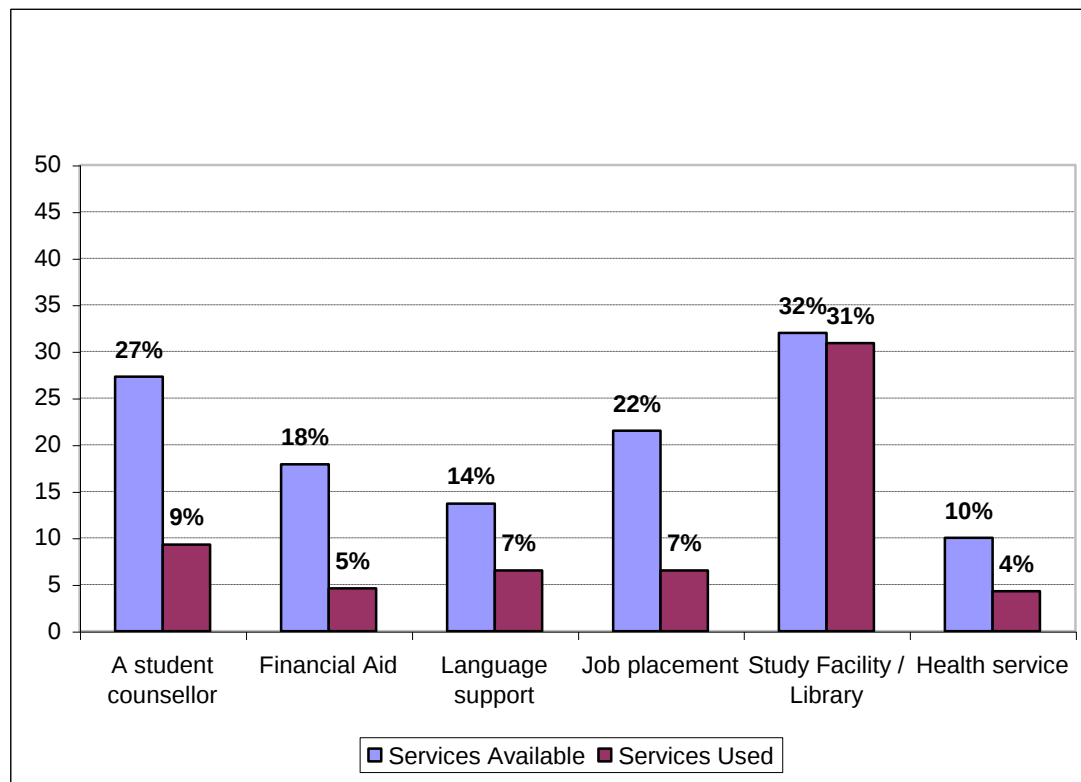
When asked to rate the college staff in assisting them to prepare for the working world, respondents were yet again positive about the encouragement and support provided in the classroom. However, when it comes to practical activities such as visits to workplaces or making contact with employers, the learners were again not positive. Therefore, by 2003, colleges had still not put in place effective systems to create links with employers.

Table Forty-Seven: Role of College Staff in preparing respondents to third survey (2003) for world of work

Rating of support provided by college staff	Mean
Make you confident that you will get employed	3.59
Teaching you how to apply what you have learned in the workplace	3.37
Support in preparing job applications	3.24
Sharing ideas around job opportunities	3.12
Support in contacting employers	2.50
Conducting visits to workplace environments	2.31
Support in arranging interviews with employers	2.30
Inviting employers to speak to you at the campus	2.22

When asked to select which support services were available to them in the college, the third survey respondents reported that there was a job placement service available but only 7% reported having made use of it.

Graph Three: Frequency availability vs Use of Services (Third Survey)



The primary reason reported for not using support services was that they did not know how to access the support. This suggests that either colleges were not encouraging learners to use these services or learners were not being proactive in accessing these services. However, it is interesting that fewer learners reported that they had not used the services because they were not appropriate to their needs. Therefore, these learners viewed such services as useful but were not sure how to access them.

In general, therefore, colleges provided little bridging social capital as they were not proactively engaging with employers or outside agencies and therefore not creating access to networks which may enhance employment opportunities. Their most proactive role in this regard was in inviting

employers to come to the college and speak to students. This may have opened some form of access to employers but would have still relied on the initiative of students to approach employers directly.

5.3.2.6 The importance of workplace experience

The decline in the apprenticeships over the last two decades has significantly constrained the opportunities of young learners for a combination of theoretical learning and workplace experience (Kraak, Paterson, Visser & Tustin, 2000). At its peak, engineering colleges were responsible for training large numbers of white males for large state-owned enterprises and private industries and preparing them to become artisans. With the gradual decline of the apprenticeship system and the concurrent decline in the number of artisans, there has been a shift in colleges towards fee-paying students. Based on the responses from the 1999 cohort, only 7.2% of the students were indentured as apprentices, while only 8.7% reported being qualified as Artisans. Engineering studies in a technical college continued to provide a route to traditional artisan training for only a small percentage of students.

In 1998, the Department of Labour introduced learnerships, which are a legislated approach to training which incorporates both institutional and workplace training in a structured manner (RSA, 1998b). Colleges have gradually benefited from this initiative by gradually offering learnerships to their young learners. This is indicated by the change in the scope of work experience being gained by learners while studying in the college. Twelve

percent of the respondents to the second survey reported being part of a learnership or apprenticeship. The majority of these (68%) were engineering students. The large majority of students, however, were still not receiving work experience during their studies.

Table Forty-Eight: Breakdown of type of work experience received for respondents to third survey (2003)

Work experience during studies	Frequency	Percentage
Part of a learnership / apprenticeship	565	12.1
In a company that has links to the campus	221	4.8
In the campus	248	5.3
I found work by myself	728	15.6
No work experience	2890	62.1
Total	4652	100.0

Despite being well resourced in terms of workshops, 83% of the first survey respondents report having received no practical training / experience while in the college. The large majority of students would only experience classroom-based teaching during their studies. Workshop experience was not a prerequisite for completing a formal Department of Education accredited programme at the time and workshop-based training in the college was viewed as separate from such classroom teaching.

For those who got work experience during their studies, just over a half reported having to find work on their own. In some cases, the college links with industry allowed for a limited period of practical experience.

Table Forty-Nine: Breakdown of type of work experience received for respondents to first survey (2001)

Type of work experience	Percentage
In a company that has links to the college	20.9
In the college	26.2
I found work by myself	52.8
Total	100.0

A cross-tabulation of work experience during studies amongst 1999 graduates and employment offers an indication of improved employability. At the time of the follow-up study, almost half of those graduates who had received work experience during studies were employed, while only 23% of those who had not received work experience during studies were employed.

Table Fifty: Cross-tabulation of work experience during studies and employment status for respondents to first survey (2001)

	Did you get work experience during your programme / course?		
Employment Status	Yes	No	Total
Employed	106 (48%)	289 (23%)	395
Unemployed	116 (52%)	975 (77%)	1091
Total	222 (100%)	1264 (100%)	1486

A chi-square analysis suggests a significant relationship between work experience and employment [$\chi^2(1, N=1486) = 59.914$, $p < 0.0005$]. The null hypothesis that the table variables (experience and employment) are independent (i.e. not related) is rejected because the p value is small ($p < 0.0005$) and the chi square value is 59.914. Thus, there seems to be a significant association between getting work experience during studies and being employed.

Interestingly, however, whereas having work experience during studies appears to have some influence on employability originally in 2001, a cross-tabulation of work experience during studies and employment status in 2003 for the same cohort suggests little variability in employment status between those that received work experience during studies and those that did not. This suggests that the effect of work experience is felt most strongly on initial entry into the labour market, but the longer one is in the labour market the less this effect is felt.

In addition, the level of job appropriateness, seems to be linked to whether or not the graduate received work experience during studies. The majority of first survey respondents (71%) who reported that their job was appropriate to their qualification also report having received some form of work experience during their studies. On the other hand, 85% of those graduates who reported that their job was not appropriate to their qualification also report having received *no* work experience during studying.

A chi-square analysis of the relationship between work experience during studies and job appropriateness produced a significant result [$\chi^2(1, N=1486) = 29.406, p < 0.001$].

Yet again, the chi-square analysis suggests a significant association between work experience during studies and use of skills and knowledge in employment [$\chi^2(1, N=1486) = 28.774, p < 0.005$].

Use of skills and knowledge appears to have a strong relationship with work experience during the studies, in that 78% of those who report using their skills and knowledge to a large extent, also received work experience during studies, compared to only 42% of those who received no work experience.

Based on data from the second survey of the 1999 cohort, the link between work experience during studies and employment in a job that is appropriate to the qualification obtained appears to have strengthened over time. However, time in the labour market does not appear to lead to increased use of skills and knowledge acquired during studies.

5.4 Summary and Conclusion

The findings presented above suggest that young people face significant challenges in their transition from school to work. The post-school choices they make appear to be based on a considered appraisal of labour market realities. However, they are hamstrung by the limited resources (information and networks) available to them to realise these aspirations. It would seem, however, that the findings provide important insights into these challenges and point to some important implications for policy development and implementation.

It would seem that the respondents were largely employed in sectors that were relevant to their field of study, but the particular occupation in which they were employed was only relevant to their qualification in around half of the

cases. In addition, these jobs were relatively low paying and were viewed as temporary jobs that had been taken because they could not find a job that was more relevant and they needed to earn money. At the same time, many of the respondents (84%) went on to study further, a third of these to N6 level. Those that studied further did so because they understood they needed a higher qualification in order to improve their employment prospects. The data suggests that these further studies did not enhance their employment prospects significantly.

There is an indication that getting into the labour market as soon as possible, even into temporary/casual jobs that are not necessarily linked to their field of study, and persevering in these jobs will enhance their employment prospects over time and they are more likely to eventually move into a more relevant job with better pay once they gain some work experience.

The findings also support the contention that social networks are critical in gaining access to initial employment, particularly for respondents from disadvantaged communities. Due to the limited nature of these social networks in disadvantaged communities, it is unlikely that the individual will find a job that is relevant to their studies, unless a family member happens to be in a related occupation already. However, these social networks at least assist with the initial entry into the labour market from which the individual can then develop new networks and create opportunities for advancement.

A further critical finding is the importance of work experience during studies. Those respondents that gained access to some form of work experience during their studies were significantly more likely to find employment after their studies. Social networks again seemed to play an important role here as the college in which they were studying appeared to play a minimal role in facilitating such access.

The next chapter seeks to link these findings to the theoretical framework, test whether or not the hypotheses guiding the study held true, and explores the implications.

CHAPTER SIX – BONDING AND BRIDGING SOCIAL CAPITAL

6.1 Introduction

The findings presented in Chapter 5 highlight the critical challenges facing South Africa in addressing youth unemployment. While government has highlighted the need for intermediate skills to support key sectors of the economy, it is clear that the pathways for young people into these sectors are not well established. The implication of this is that the economy will not make full use of the skills developed and young people from impoverished environments may continue to be caught in a cycle of poverty because they are unable to gain access to meaningful employment opportunities. This reality reflects challenges in other African countries (King & Palmer, 2006). These young people rely on personal networks which do not necessarily lead them to employment that is related to what they studied. The data therefore calls into question the investment in a FET College qualification for advancing a young person's career and whether, like other African countries, FET Colleges are not responding adequately to the particular labour market context in which they are operating.

In order to explore this further, this study set out to describe the school-to-work transitions of a sample of young South Africans who studied through FET Colleges in Gauteng. Thus far, this study has depicted a young cohort of South African school-leavers who have entered the FET College system with the aim of primarily advancing their knowledge base and enhancing their

employment prospects, particularly in the field of engineering. The data emerging from the first and second surveys has indicated that, despite these aspirations, many young people who had completed their studies were unemployed or had to settle for jobs which are not relevant to their qualifications and they were therefore not applying their skills acquired during their studies. This has significant policy implications as it suggests a crucial disparity between supply and demand factors in the labour market.

In the context of poor articulation between colleges and the labour market, this study examines the value of social capital in enhancing the school-to-work transition process. Social capital literature emphasises that social capital is built first and foremost in the family and is advanced through the institutions that individuals encounter as they progress through the various stages of development. Initially social capital is fairly insular, located within one's immediate social grouping. It is here that the defining norms and networks are established and is referred to as "bonding" social capital. However, it is through "bridging" social capital that one gains access to broader resources and opportunities through extended relationships and networks. It is also the latter that is of more relevance to economic development in that it creates connections that would not be available in immediate familiar networks.

On the basis of the findings from the previous chapter, this chapter seeks to extrapolate and explore some of the societal factors that contribute to realisation of the benefits of VET for individuals and for the economy. Through testing the key hypotheses that have framed the study the chapter

interrogates the features of bonding and bridging social capital that emerge, and how these contribute to, or impede, effective employment outcomes for young people.

6.2 Testing the Hypotheses

This study works from the premise that social capital is a tangible resource from which young people can draw at critical times to make informed choices and take appropriate actions. Through relationships in the home and more broadly, young people can gain access to information and evaluate choices. The context in which this information is sourced, however, determines the extent of its value.

This study is framed by three hypotheses:

1. Young people from poor socio-economic family contexts will have limited access to information within the family network and choices will be made on primarily on basis of short-term economic considerations.
2. FET Colleges are ineffectual as agents of bridging social capital and therefore play an insignificant role in facilitating access to employment opportunities.
3. In the face of limited access to broader networks, African youth in dense urban environments will be reliant on dense ties to create access to employment.

This study addresses two critical moments in the school-to-work transition – school-to-college and college-to-work. It describes the experiences of young people during these two transition moments and examines the labour market outcomes that result from these transitions. In doing so the study conceptualizes the two critical moments as a continuum which ultimately has a labour market outcome. The value of social capital reflects firstly in the post-school choices made by young people and the extent to which these choices are driven by an effective knowledge and support base within the family. The literature suggests that this resource will be limited in poor socio-economic contexts and the individual will have to take responsibility for making this decision independently of the available advice and support.

In the second instance, bonding social capital should provide immediate access to networks that can enable the young person to access employment opportunities. In the context of inequality the literature demonstrates the value and limitations of bonding social capital in supporting labour market entry. In the context of poor socio-economic circumstances, where access to effective networks will be limited, families may hope that the qualification will hold enough currency so that their limited networks will not matter. Furthermore, there may be an expectation that enrolling in the college might enable the young person to access networks by virtue of the college's standing in relation to industry. When the qualification and the college do not deliver, the young person has no choice but to fall back on whatever value the bonding social capital can provide. Therefore, family and friends become a key source of

employment opportunities and the jobs will invariably not be related to what they studied.

6.2.1 Bonding social capital and post-school choices

Research into the role of families in educational choices (Sandefur *et al.*, 1999 and 2006, Reay & Ball, 1997 and 1998, Croll, 2004) provides insight into how parental input into post-school education potentially has a positive impact on educational attainment. However, access to information and the manner in which information is used in the family also has the potential to restrict the scope of such decision-making. Access to information may be linked to the socio-economic conditions in which the family operates and the extent to which parents themselves have access to broader networks that can provide such information. Where information is lacking, parents may either defer to the child to make such choices or will rely on narrow information provided by immediate networks, such as word of mouth from friends or locality of the institution. (Reay & Ball, 1998)

Parental education, income levels and the size of one's family relative to the socio-economic context may be important factors in the provision of bonding social capital, particularly when it comes to educational choices. The findings of this study suggest that the majority of respondents operate within a context of poor socio-economic conditions and that access to resources is generally a challenge. The key issue of concern is whether or not parents from such a

context are able to provide a strategic approach to career planning. (Croll, 2004)

While there is a general recognition of the need to embark on post-school vocational education in order to improve career prospects, the scope of resources available to the families of the respondents for developing a career strategy are limited considering the historical legacy of education and its impact on the availability of such resources, particularly for Africans. As such, youth are faced with having to make hard choices in the absence of sufficient support which places them at a significant disadvantage. Considering the complexity and uncertainty in the labour market, narrow choices without sufficient information can have negative consequences for the individual throughout the transition process.

When this study was first conceptualized it was assumed that young people, particularly those from previously disadvantaged backgrounds, would choose to enrol in FET Colleges because they provided an easy route to the labour market and as well as a route not provided by, or not accessible, through other post-school educational institutions. The results of both the initial survey and the third survey suggest that this latter assumption holds true. College offers programmes that youth struggle to access in Higher Education Institutions because of stringent entry criteria, at an affordable price.

However, the assumption that young people view colleges as an easy route to employment does not necessarily hold true. The findings suggest that young

people are primarily interested in engaging in post-school education, with a view to gaining a meaningful higher-level qualification and enhancing their chances of finding meaningful employment. This is particularly true for engineering students, who are predominately male. The data indicates that many of these students tend to study beyond the minimum exit level, in order to get higher qualifications and find better jobs. This implies that they view college as an alternative form of higher education to traditional higher education institutions.

These findings suggest that study choices of young school leavers in the South African context may be guided by broader economic realities where young people are recognising the need for marketable skills, in order to access a wider range of opportunities. The fact that they have accessed a FET College relates to the affordability and accessibility of the institutions concerned. However, this does not detract from the proposition that they view FET Colleges as a form of higher education and want to gain nationally recognised qualifications rather than expedient short courses.

This would link into a broader global trend towards increased demand for post-compulsory education amongst young people, based on the belief that this will contribute to longer-term mobility in the labour market. In this regard, Wolf (2002, p. 79) refers to rational teenagers who are “clearer about their own self-interest *and* the nature of the labour market..” Wolf argues that teenagers have a perception of labour market realities and are choosing to stay in education longer to enhance long-term career prospects. The key

issue is to explore the extent to which family and immediate social networks (bonding social capital) provide the necessary support to such choices, or in the absence of support, what resources are young people using to make these choices.

With respect to initial study choices, the third survey indicates that advice from parents and relatives features most prominently (44%) in providing advice on what to study and where, followed by teachers at school (26%). However, when asked why they had chosen to study at a FET College and at a *particular* FET College, the advice of parents and relatives did not feature highly as a reason for making these choices. Therefore, while parents were the main source of advice, their advice was not necessarily the ultimate factor in deciding on study routes. Similarly, when asked why they chose to study engineering, very few respondents indicated that they had chosen this field of study because of their family's advice. These findings seem to support Wolf's argument about the level of independent choice-making amongst youth. In all instances, the overwhelming finding seems to be that while the family plays an important supportive role, the respondents appear to be making study choices on their own. This supports the view of Reay and Ball (1998) with regards to working class families.

These choices will invariably impact on the family and presents it with a number of decisions. In the first instance, the family will need to be concerned with the financial implications of the choices. While affordability is a key factor in the choice-making process, families will still need to find mechanisms to

pay for studies. This burden is exacerbated by the high failure / dropout rate of engineering students from FET Colleges (only around 45% of students at the FET engineering level, both nationally and specifically in Gauteng, successfully completed their studies at the time of the study (Department of Education, 2002)) which undermines any returns on their investment. In addition, for more than half of the respondents, families had to participate in a decision for young people to move from a rural to urban environment in order to attend the particular college. The findings suggest that this is done with the belief that that such a move would offer better job opportunities which would then offset the investment in the college education. Considering the historical migration of people from rural to urban areas under apartheid, it is possible that family networks extend to such urban locations, and may in fact offer more access to job opportunities than family networks in rural locations.

In the context of limited information within family networks, it is not clear where young people are getting the necessary information with which to make educational choices. Teachers and friends appear to be important sources of advice. The respondents were probably exposed to information about colleges while they were still at school or through social networks. However, the study does not provide clear insight into how such information is sourced outside of the family network and how it is used.

With respect to hypothesis one, the first part of the hypothesis is supported, i.e, poor socio-economic family contexts appear to offer little in the way of information from which to make effective educational choices. However, with

respect to the second component, it would seem that young people recognize the long-term value of post-school education for social and economic mobility and therefore make choices primarily on the basis of these prospects.

6.2.2 *Entry into employment*

Hypotheses two and three relate to mechanisms for accessing broader networks beyond the family environment. These networks or “weak ties” create opportunities for employment and labour market mobility.

In conceptualizing the role of FET Colleges and other networks, it is important to reflect on the low employment rate of FET College graduates. The initial survey indicated an employment rate of 25%, while the follow-up survey indicated that the employment rate of those surveyed had doubled but was still below 50%. In general, it would appear that FET Colleges were not providing an effective route into employment. In examining the employment status of *employed* FET Graduates, there are four findings that indicate the link between qualification and field of employment.

1. In the first instance, around 50% of employed graduates indicated in the initial survey that they were employed in a sector that had direct relevance to their field of study, i.e. engineering (Manufacturing, Mining and Electricity/Gas/Water Supply).

2. Forty percent of employed graduates were employed as Technicians or Maintenance/ Repairs workers and 20% classified themselves as General Assistants.
3. Forty five percent reported that their job was appropriate to their qualification. Only 59% of those in the manufacturing sector reported that their job was appropriate to their qualification.
4. Around 40% of employed graduates reported a high level of use of skills and knowledge acquired during studies, with a further 20% reporting an average use of such skills and knowledge.

When consolidated, these four findings suggest that between 10% and 12.5% of FET College graduates get employed in fields that are relevant to their qualification.

The key issue then is what role the college played in assisting these graduates to find appropriate and relevant employment.

- A total of 72% of the graduates reported having received no help from the college in finding a job. For the 28% who did receive some support, this support came mainly in the form of the college arranging for employers to interview students.
- The type of support offered did not appear to add value to the employment outcome, in that equal numbers of respondents who received support were employed and unemployed.
- Graduates who responded to survey one and learners who responded to survey three shared the view that, while college staff actively encourage and support them in the classroom, there was little practical activity around

exposing learners to workplace contexts or making contact with employers.

- For the 10% to 12.5% of respondents who got employment in relevant occupations, the key variable that appeared to enhance their chances of finding employment related to their field of study was having some form of work experience during studies. The findings indicate a positive correlation between work experience and relevant employment, as well as between work experience and use of skills and knowledge acquired during studies.

By 2001, almost half of the graduates who had received work experience during studies were employed, while only 23% of those who had not received work experience were employed.

However, only 16% of graduates reported receiving work experience during studies. Of these 16%, around half found such work experience on their own. The other half reported receiving work experience in the college itself or in a company that has links with the college. Therefore it would seem that the college supported around 8% of the graduates by assisting with work experience during studies and this added value to these graduates by enhancing their chances of finding relevant employment. This suggests that the value that was added by the college was largely through its capacity to offer some form of work experience during studies. This value-add appears to be felt most strongly on initial entry into the labour market and subsides somewhat the more time the graduates spends in the labour market.

Beyond this, there was minimal direct support from the college towards finding employment after studies. A comparison of respondents to the first survey with the same respondents to the second survey two years later indicates that between 4% and 8% of graduates find their first employment through college links with employers.

The findings suggest that while colleges have some capacity to enhance the employment prospects of graduates through their links to the labour market, this capacity has limited impact on the rate of employment and in particular the rate of relevant employment. In effect, the colleges' links into the labour market are either underutilised or are simply not effective. Either way, these links do not appear to provide substantive evidence of social capital. Any evidence of social capital is demonstrated through the high percentage of graduates who find employment through family networks and personal contacts. It would seem that graduates would be better off relying on their personal networks to find employment than to expect that the college will provide much access to labour market opportunities. Therefore, while there was some evidence that college links into the labour market could be valuable for young people in transition from school to work, the findings suggest that this hypothesis is not supported.

As with findings from research into a number of contexts plagued with social inequity and injustice, personal contacts and family relations appear to be the most useful resources for initial access into the labour market (Wahba & Zenou, 2005; Battu, Seaman & Zenou, 2004; Leonard, 2004 and Reingold,

1999). In the initial survey, 52% of employed graduates found their first job through personal contacts or family relations. This is despite the fact that the majority of the respondents in the third survey reported that they would use traditional routes such as employment agencies and newspaper advertisements to find jobs. The findings suggest that these latter routes to finding employment are secondary to the family and social networks. If the family and social networks are not successful in providing access to job opportunities, the young person will place more emphasis on the other routes.

While family and social networks will provide useful mechanisms for finding initial employment, such employment will not necessarily be related to the qualifications for which the graduate studied at the FET College. More than half the employed graduates in the initial survey reported being in employment that was not appropriate to what they studied, and not using the skills and knowledge acquired during studies in their work. A cross-tabulation of the route taken in finding employment with the appropriateness of the job indicates that of the 183 graduates who found employment through family and social networks, only 45% were in jobs that were relevant to their qualifications. This compares to 62% of graduates who found employment through other routes. Traditional routes such as employment agencies and newspaper advertisements appear to provide a more effective route to *relevant* employment because they open up a wider range of opportunities.

An obvious factor informing the choice to study at a FET College in Gauteng was the belief that there would be more employment opportunities available in

Gauteng. However, the other key factor was that there was no college near their home and they wanted to be near the college. Gauteng provides the environment for young people to stay with an extended family member and attend one of the large colleges that are near where they would be staying. In doing so, young people are also potentially being exposed to broader networks and thereby enhanced social capital resources. As such there may have been an implicit belief that the Gauteng environment would create more opportunities and choices and wider family and other networks may assist in ultimately securing employment.

While the choice to move to Gauteng may have made the post-school college education more affordable and accessible, it did not necessarily succeed in accessing broader networks for employment opportunities as the sample of those who migrated would have faced an equally difficult task in finding work as did those who had originated from Gauteng. For Raffo and Reeves (2000) the changing nature of the labour market will disproportionately impact on disadvantaged members of society, thus creating a high level risk of marginalisation from effective networks. Therefore, the extent to which young people will be able to benefit from the career opportunities created by extended networks will depend on their individual systems of social capital. If they are open and fluid, they will be able to adapt and develop relationships thus expanding their networks and opening learning opportunities. Where their individualised systems of social capital are weak and closed, they will be constrained in their access to resources that can support their choices.

The danger here is that social capital may exacerbate or perpetuate socio-economic inequality as “the use of friends and family connections by those from low socio-economic backgrounds for finding jobs is less likely to result in high quality work, than for those from higher socio-economic circumstances, who would be more likely to use professional contacts.” (Stone, Gray & Hughes, p. 23) Similar findings emerge from studies by Battu *et al.* (2004) who found that people from poorer socio-economic environments will be more likely to rely on personal networks.

The findings for the current study indicate that for young South Africans, particularly on initial entry into the labour market, the role of personal networks is critical for finding employment. As the individual progresses through the labour market, the sources for opportunities shift to employment agencies and newspaper adverts. However, the poor relationship between field of study and employment suggests that personal networks are not effective mechanisms for youth transitions to the labour market. The networks made available by family contacts, particularly from impoverished environments, will be relatively weak and closed and will limit the scope of opportunities for relevant employment. Thus, the value of the post-school vocational education is undermined and does not necessarily contribute to enhanced employment outcomes, without having access to wider networks to support greater access to work opportunities that are relevant to what they studied.

The findings further indicate that access to work experience during studies was a key factor in successful employment outcomes. However, the low availability of work experience during studies mitigates the benefits of being in a dense urban environment and gaining access to wider networks. Therefore, access to authentic learning experiences will be limited and ultimately access to relevant employment opportunities will therefore be limited.

6.3 Broader implications for VET in South Africa

As has been stipulated previously, the South African labour market has been struggling to create sufficient jobs for new entrants. While the state has deliberately sought to create the enabling conditions for FET Colleges to strategically position themselves as key providers of intermediate skills for the economy, the labour market context creates a difficult environment in which to achieve this.

The literature on social capital and the findings in this study indicates its value in the school to work transition. However, this study also demonstrates that, in the context of socio-economic inequality, bonding social capital is insufficient for expanding career and employment opportunities. Access to bridging social capital is a necessity for meaningful economic participation. From a policy perspective, creating access to bridging social capital implies creating pathways from college to work.

Strategies for the creation of pathways to employment will invariably coincide with broader labour market conditions. International literature suggests that labour market contexts that are more structured will be characterised by stronger pathways. Kraak (2008) refers to apprenticeship training as one example of a structured labour market context. Flexible labour markets run the risk of entrenching a low skills culture and limited pathways to employment, which may ultimately have the effect of further entrenching conditions of poverty. Since the demise of the apprenticeship system, FET Colleges have operated within a flexible labour market context with little direct linkage to the workplace. Therefore, despite obtaining a post-schooling qualification, young people who emerge from FET Colleges have not necessarily improved their labour market standing.

The emergence of learnerships and the reintroduction of apprenticeships represent attempts by the state to create more effective pathways. However, as demonstrated through the German Occupational Labour Market example successful implementation of structured pathways necessitates strong social networks and high levels of trust amongst social partners (Green, 2001; Lauder, 2001). FET Colleges in South Africa have generally not been successful in achieving this. In the context of poverty, sound institutional relationships can facilitate effective pathways and thereby provide the necessary bridging social capital. Simultaneously, however, such partnerships cannot be effective if the necessary enabling environment does not exist (King & Palmer, 2006). Demand-side incentives and/or pressures can go some way towards stimulating greater investment in training by employers. However,

such training is expensive and there is a challenge of scalability in light of resource constraints.

In addition, recent case studies of sector-level college-industry partnership initiatives (Marock, 2007) suggest that, in the context of socio-economic transformation, social partnerships cannot easily be limited to specific institutional contexts. In order to have meaningful impact on job creation, the necessary systemic conditions need to be created for such partnerships to develop and thrive. In particular, developing a sufficient base of trust between the partners concerned is a time-consuming process and the ingredients of successful partnerships that lead to job creation in a South African context are still not understood.

Finally, it is clear that FET Colleges are not geared to preparing young people for self-employment and the informal economy. As with other countries, the value of the informal economy is under-rated and labour market policies and regulations are not necessarily conducive to the development of the informal economy and small business development. In seeking to directly impact on poverty reduction, it is clear that the state needs to take more active measures to stimulate FET College provision for the informal economy and small business development and then provide the necessary enabling conditions for economic activity in this arena to thrive. Access to the informal economy relies strongly on social networks. Social partnerships that can generate access to such networks can further stimulate economic activity. Through Broad-Based Black Economic Empowerment (BBBEE) measures,

the state has created the space for medium and large business and state-owned enterprises to take on the responsibility of developing small and micro enterprises within their value chain. Young entrepreneurs who can provide the types of goods and services needed to service these value chains have the opportunity to benefit significantly from these measures. The challenge is to ensure that FET Colleges are able to provide the necessary skills base for this pool of young entrepreneurs to develop.

From the perspective of the state, the foregrounding of education and training in AsgiSA should create an enabling mechanism for creating effective education to work pathways by creating short-term employment opportunities that can allow young people to access workplaces and develop their networks further. The Expanded Public Works Programme in particular is reported to have created almost a million work opportunities across various sectors by September 2007 (The Presidency, 2008), although these are primarily short-term work opportunities. While not specifically targeted at youth, the programme has attracted large numbers of school-leavers and given them access to workplaces in a way that would not have otherwise been achieved.

A more targeted programme is the National Youth Service, which recruits young people into volunteer projects where they can gain access to skills training and workplace experience while at the same time developing a sense of civic responsibility. Yet again, such an initiative provides young people with the opportunity to develop and expand appropriate networks.

The extent to which these initiatives do lead to meaningful career and employment opportunities is not clear. However, having access to the workplace is the first critical challenge facing a young person. Once in the workplace they have the opportunity to demonstrate their ability and thereby enhance their potential for ongoing employment. At the same time, however, if the necessary skills are not being developed in an effective manner, the scope for career progression will be limited. Thus, as part of government's broader strategy for skills development, FET Colleges potentially play an important role in preparing young people to maximise the exposure to the workplace and to develop effective career paths.

CHAPTER SEVEN: CONCLUSION

This study set out to understand the dynamics underlying the choices and experiences of young people who engage with the VET system after school and to what extent these choices and experiences realise meaningful career and employment outcomes.

The study draws a continuum from post-school choice making through to labour market entry after completion of studies in the FET College. It explores the extent to which bonding social capital provides the necessary resources from which to make educational and career choices and to gain access to labour market opportunities. It then explores the extent to which bridging social capital exists to broaden access to networks both during and post college enrolment so that young people have increased access to employment opportunities.

In examining the manifestations of bonding social capital in the South African context, the study draws on the work of Reay and Ball (1997 and 1998), Croll (2004) and others to examine the relationship between class and the process of making choices in the family.

Situations of social inequality, such as in South Africa, impact on the capacity of working-class families to support effective choice-making as access to information and networks will be limited (Reay & Ball, 1998). The findings lend support to the proposition in the literature that working class families are

unable to garner the necessary resources to support their children in making educational choices and that parents will defer this choice-making to the child in the belief that the child is more empowered and knowledgeable in this respect. Although the parents of students in this study are fully supportive of further education after school, any input from parents will be limited to practical issues of affordability and locality. From the young person's perspective, choices will be defined by individual aspirations and an appraisal of the labour market using whatever resources they can find. They will then balance off their choice with practicalities and may choose to migrate to a major urban area in order stay nearer a college but also in the belief that they will more likely find a job in the major urban environment.

In order to find employment, young people should ideally be able to draw on bridging social capital to gain access to networks which can provide more employment opportunities. This should happen during the course of their studies through linkages between the college and the labour market, through workplace experience during or after studies and through extended family and social networks that link into broader networks either through working environments or social environments. Migration to a major urban environment should by default expose the young person to greater networks and more opportunities to find employment because of the vicinity to industry and commerce (Wahba & Zenou, 2003).

However, the social inequalities further complicate the ability of young people to access bridging social capital. With limitations in their access to resources,

it is unlikely that families from poor socio-economic environments will have the necessary networks that can provide bridging social capital. Therefore, the young people in this study were unable to access jobs that were related to their studies, because their family and social networks did not provide channels to these types of jobs. Colleges were also found to be largely ineffective in creating access to workplace experience or work opportunities. In addition, being in a major urban environment did not appear to enhance the prospects of finding meaningful employment.

This study contributes to the research into social capital and labour market outcomes in two ways.

In the first instance it contributes to an enhanced understanding of how young people grapple with the realities of widespread poverty and unemployment in realising their career aspirations in a developing context. There is a range of research which highlights the significant rate of youth unemployment in developed and developing countries (Quintini et al., 2007; Guarcello et al., 2005). In both contexts, youth transitions from school to work are taking longer and youth are not being equipped with the skills needed by the labour market. However, youth unemployment rates in SSA are substantially higher than those in developed countries, youth are more likely to be in low skilled employment and the transition from school to work for youth in SSA is lengthier than their counterparts in the developed world, suggesting barriers to labour market entry.

This study moves away from an econometric analysis to one which explores the social factors that inform individual choice and labour market outcomes in developing contexts. The focus on social capital provides a theoretical grounding for exploring the individual experiences of young people in making choices about their education and career pathways, as well as in accessing labour market opportunities, in the context of high levels of unemployment and poverty. This therefore provides insight into the factors underlying the negative youth labour market statistics.

Secondly, the study contributes to an enhanced understanding of the role of social networks in supporting access to employment in contexts of poverty and unemployment. There is a range of literature that illustrates the importance of social networks. However, much of it is focused on the developed world. One exception is Wahba and Zenou (2003) who demonstrate the value of personal social networks for job seeking in urban environments in a developing context but also show how ineffective personal networks can be in situations of high unemployment. Other studies demonstrate the prevalence of personal networks for finding employment in situations of poverty and inequality *within developed contexts* (Battu *et al.*, 2004; Amuedo-Dorantes & Mundra, 2004; Reingold, 1999). Invariably personal networks will be ineffective in creating access to employment that is related to studies or that requires high level of skill. This study extends knowledge about the role of social networks in urban environments and suggests that the reliance on personal networks is more widespread in a developing context than in a developed context, thus perpetuating poverty.

In the South African context social inequality is strongly embedded in all spheres of society. The country is characterised by a large majority of people who have not had access to meaningful education opportunities, public service institutions that are weak and inefficient and limited access to economic opportunities due to continued inequality in the labour market. This creates a context for limited resources for large numbers of families which will impact on the manner in which they support choice-making in young people.

In the face of high unemployment, young people will be put under pressure to find employment in order to contribute to the economic survival of the family. In the absence of broader networks, young people will resort to any employment that can be found through the family or social network, which invariably means employment which is not related to what they studied. In addition, migration to the major urban environment will not increase opportunities because unemployment is wide spread and there will be congestion in the urban labour market with many people fighting for a few jobs. Therefore, any access to networks in the major urban environment will not necessarily be effective if the employment opportunities are not there. Therefore, young people will revert to bonding social capital as a default resource for finding any employment. This has implications for continued inequality in the labour market as young people struggle to compete for jobs.

Through an exploration of the relationship between social capital and labour market outcomes, this study provides insight into the role of VET in a

developing context. South Africa is characterised by high labour force growth and low employment growth (Bhorat & Oosthuizen, 2008). In line with trends elsewhere in the world, where similar conditions exist, (Gill et al., 2000) the South African government is seeking to significantly increase enrolments in the FET College sector as part of a broader strategy to enhance the skills base of the country and thereby make the country more globally competitive. The VET system faces the challenge of positioning itself appropriately to make a meaningful contribution to strategic human resource development. Government has provided FET Colleges with the institutional framework and curriculum tools to provide a high quality general vocational offering to young school leavers. Colleges are now required to build on their past role in creating structured pathways to employment, and broaden their programme base to ensure young learners can access skills that are appropriate for current labour market opportunities.

This study has demonstrated the inherent difficulties in linking VET to economic growth in a developing context. Research based on human capital theory suggests that investments in education will realise effective returns for the individual and the economy. However, these returns are dependent on favourable labour market conditions where there is collaboration amongst social partners towards common objectives. A further body of research suggests that achieving the necessary institutional conditions for social and economic development is reliant on the existence of social capital, both within the family and more broadly in society. Social capital can augment the

weaknesses in the labour market by creating mechanisms for individuals to create and access opportunities through the agency of social networks.

The findings emerging from this study suggest that young people are eager to invest in VET and they realise the value of further education and training for enhanced career prospects. This is indicated through their individual choice preferences. However, the structural conditions in the South African labour market impacts on their choices and undermines the value of their investment in terms of employment outcomes. While social networks play an important role for young FET College graduates, these networks are limited by the unequal socio-economic conditions in which they operate. In the context of high levels of poverty and unemployment, the structural inequalities in the economy mitigate against the potential value of such networks in that, despite the intentions, there may be limited access to economic opportunities through such networks. Therefore, these social networks potentially further entrench inequality in the labour market by restricting mobility of marginalised groups.

This study has highlighted the challenges facing FET College youth in navigating through the school-to-work transition. This understanding can inform the development of policies for more effectively supporting young people in making this transition and thereby making the institutional conditions for this transition more favourable. However, more insight is still needed into the processes of decision-making within the family and the resources outside the family from which young people draw information. This would contribute to a more refined picture of how social capital operates in the transition process.

It would therefore be useful to conduct local level investigations into the dynamics of choice within families from poor socio-economic environments and the types of resources that families are able to garner in facilitating choice. Local level studies can begin to generate clearer hypotheses around the role of bonding social capital in the South African context and to what extent bonding social capital can be used more productively to access broader networks and create more opportunities.

From a policy perspective, creating conditions in which FET Colleges are required to facilitate access to information and employer networks would ensure they were able to better fulfil their role and would enhance the scope for job creation. This would put in place the mechanism to better align supply and demand and allow labour market processes to operate in a more equitable and broad-based manner. Colleges therefore need to be pressured to create sustainable networks with industry, government and community organisations which will lead to work experience or work placements for their students.

Effective networks are built on the basis of constructive collaboration and mutual trust between social actors. While the Department of Education has adopted a strong steering role, FET Colleges operate within a market-led framework requiring them to become flexible and responsive to the needs of employers and compete for market-share in the education and training arena. The difficulty is convincing employers to invest in initial training of young people when it may be more in their interest to attract well-trained individuals

that can provide quicker returns (Crouch *et al.*, 1999). In fact, labour market trends suggest that companies prefer to replace workers with experienced workers rather than create positions for first-time entrants (Bhorat & Oosthuizen, 2006). At the same time, employers face the risk of there not being right kind of skills available once replacement demand reaches its limits if they don't invest in initial training.

This leads the debate back to the development of “structured learning pathways” for young FET College students into the world of work, particularly in the absence of strong government intervention (Kraak, 2008). Learnerships have not necessarily demonstrated their value in creating avenues for meaningful employment for unemployed youth or in creating the required skills for industry demands. Weak articulation between college provision and employer needs still plagues the FET College sector and limits the scope of employment after college.

The creation of effective networks between colleges and employers is complex. In line with the growing recognition of the value of social capital, there is an increasing movement towards the development of “social partnerships”, comprising regional and local collaboration around collective interests towards achieving common goals (Seddon & Billett, 2004). In the South African context, the lack of alignment between colleges and employers implies low levels of trust which undermine any collaborative activity. The key challenge facing colleges in achieving greater alignment and creating networks is to develop the necessary trusting relationships with employers

and community structures. The development of trust is a lengthy and time-consuming process and requires proactive and sustained engagement between colleges and local stakeholders in order to identify needs and formulate strategies to address these needs. One useful approach may be for colleges to target particular sectors in which they operate and build partnerships at a sectoral level. However, colleges will need to become highly knowledgeable about the sectors being targeted and ensure they have a sound understanding of market dynamics.

There is little understanding of what it would take to achieve social partnerships in South Africa. This study does not provide clear insight into what colleges need to do to create strong partnerships with external stakeholders but suggests that networks can enhance their role in supporting students' transition to employment. Before policy decisions can be made, substantive research is needed into how such partnerships should operate to ensure the development and maintenance of networks which promote job creation.

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APPENDIX A: FIRST SURVEY (POSTAL)

TECHNICAL COLLEGE LEARNER SATISFACTION QUESTIONNAIRE

INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE

- Please use a pen or pencil to complete the questionnaire, and mark each answer clearly.
- Please follow the instructions in red carefully. There are instructions before some questions and next to the answers for some of the questions.
- Please mark only one box in a list of answers unless the instruction says "You may mark more than one box". Mark a box by placing either a tick or a cross in it – for example,

☒

or

☐

- Where there is a scale and you are asked to rate an item from, for example, "Very bad" to "Very good", please rate every item in the list. If you are asked to rate the teaching and learning at the Technical College, and you feel that the teaching was "good", but not "very good", you would mark as follows:

Very bad	Bad	Neither bad nor good	Good	Very good
1	2	3	4	5
☐	☐	☐	☒	☐

**THANK YOU FOR TAKING THE
TIME TO COMPLETE THIS
IMPORTANT QUESTIONNAIRE**

SECTION 1: STUDY PROGRAMME / COURSE

1.1 Please indicate all your qualifications by indicating the year you started the course / programme and the year you completed the course / programme. For example, if you started and completed Grade 11 (Standard 9) during 1996, and you started the NSC during 1998 and completed it during 1999, you would answer as follows:

(Example)		
Year Started	Year Ended	Qualification
96	96	Grade 11 (Standard 9)
98	99	National Senior Certificate (NSC)

	Year Started		Year Ended	Qualification
V1.001		V1.013		Grade 9 (Standard 7)
V1.002		V1.014		Grade 10 (Standard 8)
V1.003		V1.015		Grade 11 (Standard 9)
V1.004		V1.016		Grade 12 (Standard 10 / Matric)
V1.005		V1.017		National Senior Certificate (NSC)
V1.006		V1.018		N2
V1.007		V1.019		N3
V1.008		V1.020		N4
V1.009		V1.021		N5
V1.010		V1.022		N6
V1.011		V1.023		Technikon or university certificate or diploma
V1.012		V1.024		Other (please specify):

----- V1.025() -----

1.2 Why did you choose to study at a technical college? *(You may mark more than one box)*

- V1.026(1) ☐ I wanted to focus on a field that I was interested in which was provided at a technical college
- V1.027(1) ☐ I did not know what I really wanted to do
- V1.028(1) ☐ There was a college near my home
- V1.029(1) ☐ I could not get into a technikon or university
- V1.030(1) ☐ I could not get a job
- V1.031(1) ☐ My parents wanted me to study at a technical college
- V1.032(1) ☐ I wanted to go to a technical college rather than stay at school
- V1.033(1) ☐ I could get more practical training at a technical college than at school, in a technikon, or in a university
- V1.034(1) ☐ It was too expensive to study at a technikon or university

v1.035(1) ☐ Other (please specify):

v1.036()

1.3 At which technical college did you get your N2, N3 or NSC?

v1.037()

1.4 Why did you study at this college? (You may mark more than one box)

v1.038(1) ☐ The college was near the home of my parents / relatives

v1.039(1) ☐ I could get a study bursary to study at the college

v1.040(1) ☐ I could stay in the hostel at the college

v1.041(1) ☐ My friends recommended the college to me

v1.042(1) ☐ I was able to study the programme / course I wanted to study

v1.043(1) ☐ I wanted to study at a college which offered practical training in the field I wanted to study

v1.044(1) ☐ My parents / relatives advised me to study at the college

v1.045(1) ☐ I could get a job in the area around the college

v1.046(1) ☐ The fees were affordable

v1.047(1) ☐ I didn't have transport to go to another college

v1.048(1) ☐ The college is the best in the field in which I want to study

v1.049(1) ☐ Other (please specify):

v1.050()

1.5 Did you move away from home to study at a technical college? (Mark one box only)

v1.051(1) ☐ Yes

v1.051(2) ☐ No → Please go to Question 1.7

1.6 Why did you move away from home to study at a technical college? (You may mark more than one box)

v1.052(1) ☐ There was no college in my area

v1.053(1) ☐ I wanted to get away from the family home

v1.054(1) ☐ The college closest to my home is not a good college

v1.055(1) ☐ The college near my home does not offer the programme / course I wanted to study

v1.056(1) ☐ I wanted to stay near the college

v1.057(1) ☐ I wanted to be independent

v1.058(1) ☐ Other (please specify):

v1.059()

1.7 In which field of study did you get your highest qualification (N2, N3 or NSC)? (Mark one box only)

Business Studies

v1.060(1) ☐ Secretarial

v1.060(2) ☐ Administration (Public & Business)

v1.060(3) ☐ Personnel (including Human Resources & Public Relations)

v1.060(4) ☐ Financial Management

v1.060(5) ☐ Marketing

Engineering Studies

v1.060(6) ☐ Electrical (Heavy & Light Current)

v1.060(7) ☐ Mechanical

v1.060(8) ☐ Construction

Art & Music

v1.060(9) ☐ Art & Design

v1.060(10) ☐ Music & Dance

General Education

v1.060(11) ☐ Grade 10 & 11 Programmes

v1.060(12) ☐ Grade 12 (National Senior Certificate / NSC)

Utility Studies

v1.060(13) ☐ Cosmetics

v1.060(14) ☐ Haircare

v1.060(15) ☐ Interior Decorating

v1.060(16) ☐ Clothing Production & Textiles

v1.060(17) ☐ Hospitality & Associated Industries

v1.060(18) ☐ Tourism

Educare & Social Services

v1.060(19) ☐ Educare

Other

v1.060(20) ☐ (please specify):

v1.061()

1.8 Did you get your highest qualification (N2, N3 or NSC) through full- or part-time study, or both? (Mark one box only)

v1.062(1) ☐ Full-time

v1.062(2) ☐ Part-time

v1.062(3) ☐ Both

1.9 Why did you choose to study in this field? (You may mark more than one box)

v1.063(1) ☐ I was interested in it

v1.064(1) ☐ To get a job

)

- v1.065(1) ☐ My family wanted me to
- v1.066(1) ☐ It was the easiest programme / course for me to study
- v1.067(1) ☐ The programme / course I wanted to study at the college was full.
- v1.068(1) ☐ Other (please specify):

v1.069()

1.10 Did your programme / course consist of...
(Mark one box only)

- v1.070(1) ☐ mainly lectures (in a classroom)?
- v1.070(2) ☐ mainly practicals (in a workshop)?
- v1.070(3) ☐ equal numbers of lectures and practicals?

1.11 In which language were you mostly taught at college? (Mark one box only)

- v1.071(1) ☐ Afrikaans
- v1.071(2) ☐ English
- v1.071(3) ☐ IsiNdebele
- v1.071(4) ☐ IsiXhosa
- v1.071(5) ☐ IsiZulu
- v1.071(6) ☐ Sepedi
- v1.071(7) ☐ SeSotho
- v1.071(8) ☐ Setswana
- v1.071(9) ☐ Siswati
- v1.071(10) ☐ Tshivenda
- v1.071(11) ☐ Xitsonga
- v1.071(12) ☐ Other (please specify):

v1.072()

1.12 Did the language of instruction make the programme / course more difficult? (Mark one box only)

- v1.073(1) ☐ Yes
- v1.073(2) ☐ No

1.13 With the Mathematics and Language studies that you did at school, were you able to cope at technical college? (Mark one box only)

- v1.074(1) ☐ Yes
- v1.074(2) ☐ No

1.14 On a scale from "Very bad" to "Very good", how would you describe studying at the college? (Mark one box in every row)

	Very bad 1	2	3	4	Very good 5	
Quality of teaching						
v1.075	☐	☐	☐	☐	☐	Quality of teaching
v1.076	☐	☐	☐	☐	☐	Practical instruction
v1.077	☐	☐	☐	☐	☐	Fairness of marking
Academic support						
v1.078	☐	☐	☐	☐	☐	Help with language problems
v1.079	☐	☐	☐	☐	☐	Help with study methods
v1.080	☐	☐	☐	☐	☐	Staff available to help me when needed
Buildings						
v1.081	☐	☐	☐	☐	☐	Condition of buildings
Teaching and learning materials						
v1.082	☐	☐	☐	☐	☐	Text books
v1.083	☐	☐	☐	☐	☐	Lecture handouts
v1.084	☐	☐	☐	☐	☐	Library material
Equipment						
v1.085	☐	☐	☐	☐	☐	Computer laboratories
v1.086	☐	☐	☐	☐	☐	Engineering workshops
v1.087	☐	☐	☐	☐	☐	Other practical workshops (Educare, hair salons, etc.)
Security						
v1.088	☐	☐	☐	☐	☐	Personal security at the college
v1.089	☐	☐	☐	☐	☐	Security of belongings at the college

1.15 Would you recommend the technical college where you studied to your family or friends? (Mark one box only)

- v1.090(1) ☐ Yes
- v1.090(2) ☐ No

1.16 At school, did you receive any guidance on which programme / course you should study at college? (Mark one box only)

- v1.091(1) ☐ Yes
- v1.091(2) ☐ No

1.17 When you enrolled at the college, did you receive any guidance on which programme / course you should study? (Mark one box only)

- v1.092(1) ☐ Yes
- v1.092(2) ☐ No

1.18 At the end of the programme / course leading to your highest qualification, did you receive any help from the college in finding a job? (Mark one box only)

- v1.093(1) ☐ Yes
- v1.093(2) ☐ No → Please go to Question 1.20

v1.093(3) ☐ I did not need help in finding a job, because I went on to study further → **Please go to Question 1.20**

1.19 What kind of help did you get from the college in finding a job? (Mark one box only)

- v1.094(1) ☐ An expert in helping people find jobs helped me
- v1.094(2) ☐ One of my teachers helped me find a job
- v1.094(3) ☐ The college arranged for employers to interview students at the college
- v1.094(4) ☐ Other (please specify):

v1.095()

1.20 Did you get any work experience during your programme / course? (Mark one box only)

- v1.096(1) ☐ Yes
- v1.096(2) ☐ No → **Please go to Question 1.22**

1.21 What kind of work experience did you get? (Mark one box only)

- v1.097(1) ☐ In a company that has links to the college
- v1.097(2) ☐ In the college (e.g., Educare Centre)
- v1.097(3) ☐ I found work by myself

1.22 Were you an apprentice under contract with an Industry Training Board? (Mark one box only)

- v1.098(1) ☐ Yes
- v1.098(2) ☐ No

1.23 Have you qualified as an artisan? (Mark one box only)

- v1.099(1) ☐ Yes
- v1.099(2) ☐ No

IF YOU FOUND A JOB AFTER LEAVING COLLEGE, PLEASE ANSWER QUESTIONS 1.24 TO 1.26. IF NOT, GO TO SECTION 2.

1.24 How did you find your first job after your college education? (Mark one box only)

- v1.100(1) ☐ Through an employment agency
- v1.100(2) ☐ Through relatives
- v1.100(3) ☐ I joined the family business
- v1.100(4) ☐ Through personal contacts
- v1.100(5) ☐ Through a newspaper advertisement
- v1.100(6) ☐ Through paying back a loan I received from an employer to study
- v1.100(7) ☐ Through placing my own advertisement in a newspaper
- v1.100(8) ☐ Through my employer coming to the college to talk to students about jobs in that company

v1.100(9) ☐ Through my employer coming to the college to find employees

v1.100(10) ☐ With the help of the college

v1.100(11) ☐ Through college teaching staff

v1.100(12) ☐ Through contact with my employer through holiday jobs during my period of study

v1.100(13) ☐ I am working for the same employer for whom I worked before my studies

v1.100(14) ☐ The college gave me a reference

v1.100(15) ☐ I am self-employed

1.25 How many months did it take you to find a job after leaving college?

v1.101 months

1.26 How important were the following in helping you to get your first job? (Mark one box in every row)

	Not at all important					Very important
	1	2	3	4	5	
v1.102	☐	☐	☐	☐	☐	Having matric
v1.103	☐	☐	☐	☐	☐	Having an N2 / N3 / NSC
v1.104	☐	☐	☐	☐	☐	The programme / course I studied at the technical college
v1.105	☐	☐	☐	☐	☐	Practical / work experience acquired during the programme / course
v1.106	☐	☐	☐	☐	☐	The help which the college gave me for the job interview
v1.107	☐	☐	☐	☐	☐	References from people who knew me
v1.108	☐	☐	☐	☐	☐	The confidence which the N2 / N3 / NSC gave me for the job interview
v1.109	☐	☐	☐	☐	☐	Other (please specify):
						v1.110()

SECTION 2: PRESENT SITUATION

2.1 Which describes your present employment situation best? (Mark one box only)

- v2.1(1) ☐ I am employed (by a company / organisation)
- v2.1(2) ☐ I work for myself, and employ other people
- v2.1(3) ☐ I assist someone else in his / her small business
- v2.1(4) ☐ I am unemployed and seeking employment
- v2.1(5) ☐ I am unemployed but not seeking employment

2.2 Which describes your present study situation best? (Mark one box only)

- v2.2(1) ☐ I am studying at the moment
- v2.2(2) ☐ I am not studying at the moment

IF YOU CURRENTLY HAVE A JOB, OR IF YOU HAD A JOB AFTER GETTING YOUR N2, N3 OR NSC BUT NO LONGER HAVE A JOB, PLEASE ANSWER SECTIONS 3 AND 4. IF NOT, GO TO SECTION 5.

SECTION 3: EMPLOYMENT EXPERIENCE

PLEASE ANSWER THIS SECTION WITH REGARD TO YOUR MOST RECENT EMPLOYMENT EXPERIENCE

3.1 Is / Was this your first job after getting your N2, N3 or NSC? *(Mark one box only)*

- v3.01(1) ☐ Yes → *Please go to Question 3.3*
v3.01(2) ☐ No

3.2 Why did you leave your first job after getting your N2, N3 or NSC? *(Mark one box only)*

- v3.02(1) ☐ It was a temporary / part-time job only
v3.02(2) ☐ I found a better paying job
v3.02(3) ☐ I found a job that better suited my skills and qualifications
v3.02(4) ☐ The company I worked for closed / moved
v3.02(5) ☐ I started studying
v3.02(6) ☐ I had to take on family / social responsibilities
v3.02(7) ☐ I was retrenched
v3.02(8) ☐ Other (please specify):
v3.03()

3.3 How many hours do / did you work per week?

v3.04 hours

3.4 Do / Did you work full time or part time? *(Mark one box only)*

- v3.05(1) ☐ Full time
v3.05(2) ☐ Part time

3.5 What kind of employment are / were you in? *(Mark one box only)*

- v3.06(1) ☐ Permanent employment
v3.06(2) ☐ Temporary contract employment
v3.06(3) ☐ I am/was a casual worker

3.6 What kind of employer do / did you work for? *(Mark one box only)*

- v3.07(1) ☐ A government organisation
v3.07(2) ☐ A non-governmental organisation

- v3.07(3) ☐ A private company
v3.07(4) ☐ I am / was self-employed

3.7 What is / was the main activity of your employer / organization / small business *(Mark one box only)*

- v3.08(1) ☐ Agriculture / Hunting / Forestry / Fishing
v3.08(2) ☐ Mining / Quarrying
v3.08(3) ☐ Manufacturing
v3.08(4) ☐ Electricity / Gas / Water Supply
v3.08(5) ☐ Construction
v3.08(6) ☐ Wholesale / Retail / Repairs / Hotels
v3.08(7) ☐ Transport / Storage
v3.08(8) ☐ Financial / Insurance / Real Estate / Business Services
v3.08(9) ☐ Community / Social / Personal Services
v3.08(10) ☐ Other (please specify):

3.8 What is / was your occupation? *(Mark one box only)*

- v3.10(1) ☐ Legislators, Senior Officials and Managers
v3.10(2) ☐ Professionals
v3.10(3) ☐ Technicians and Associate Professionals
v3.10(4) ☐ Clerks
v3.10(5) ☐ Service Workers, Shop and Market Sales Workers
v3.10(6) ☐ Skilled Agricultural and Fishery Workers
v3.10(7) ☐ Craft and Related Trades Workers
v3.10(8) ☐ Plant and Machine Operators and Assemblers
v3.10(9) ☐ Elementary Occupations
v3.10(10) ☐ Unsure (please specify):

v3.11()

3.9 What is / was the main activity you perform / performed in your work? *(Please give only one answer)*

v3.12()

3.10 What do / did you earn per month before tax is / was taken off? *(Mark one box only)*

- v3.13(1) ☐ Less than R 500
v3.13(2) ☐ R 501 – R 1 000
v3.13(3) ☐ R 1 001 – R 2 000
v3.13(4) ☐ R 2 001 – R 3 000
v3.13(5) ☐ R 3 001 – R 4 000

- v3.13(6) ☐ R 4 001 – R 5 000
- v3.13(7) ☐ R 5 001 – R 7 500
- v3.13(8) ☐ R 7 501 – R 10 000
- v3.13(9) ☐ More than R 10 000

IF YOU WORK / WORKED FOR YOURSELF, PLEASE ANSWER QUESTIONS 3.11 & 3.12. IF YOU DO / DID NOT WORK FOR YOURSELF, GO TO SECTION 4.

3.11 If you work / worked for yourself and employ / employed others, how many persons do / did you employ?

v3.14 persons

3.12 Why are / were you working for yourself (either on your own or employing others)? (You may mark more than one box)

- v3.15(1) ☐ I could not find a job in the field in which I am trained
- v3.16(1) ☐ I could not find a job in formal employment
- v3.17(1) ☐ I prefer / preferred flexible working hours
- v3.18(1) ☐ I prefer / preferred to be my own boss
- v3.19(1) ☐ It is / was better than having no job
- v3.20(1) ☐ I have / had more opportunity to do the work I want/wanted to do
- v3.21(1) ☐ I prefer / preferred working from home to working in an office
- v3.22(1) ☐ I can/could earn a higher income than if I were/had in formal employment
- v3.23(1) ☐ Other (please specify):
- v3.24()

SECTION 4: WORK AND USE OF QUALIFICATIONS

PLEASE ANSWER THIS SECTION WITH REGARD TO YOUR MOST RECENT EMPLOYMENT EXPERIENCE

4.1 Do / Did you use the knowledge and skills that you learned during your studies in your current / past job?

	Not at all				To a very large extent
	1	2	3	4	5
v4.01	☐	☐	☐	☐	☐

4.2 Is / Was your job appropriate to your college qualification, i.e., the N2, N3 or NSC? (Mark one box only)

v4.02(1) ☐ Yes →Please go to Question 4.4

v4.02(2) ☐ No

4.3 If your employment is / was not appropriate and not linked to your education, why did you take the job? (You may mark more than one box)

- v4.03 (1) ☐ I have not (yet) been able to find a job that is better linked to my level of education
- v4.04 (1) ☐ In doing this job I have better career opportunities
- v4.05 (1) ☐ I do not mind having a job that is not linked to my studies
- v4.06 (1) ☐ While my previous position was closely linked to my studies, I have been promoted to a position less closely linked to my studies
- v4.07 (1) ☐ I can / could earn more money in my current/past job
- v4.08 (1) ☐ My current / past job is / was more secure
- v4.09 (1) ☐ My current job is more interesting
- v4.10 (1) ☐ My current / past job allows/allowed me to work part-time or when I want/wanted to
- v4.11 (1) ☐ My current/past job allows/allowed me to work where I want/wanted to
- v4.12 (1) ☐ My current/past job allows/allowed me to look after my family's needs
- v4.13 (1) ☐ I have/had to accept work that is/was not closely linked to my studies at the beginning of my career
- v4.14 (1) ☐ Other (please specify):
- v4.15()

4.4 How satisfied are / were you with the following aspects of your work situation? (Mark one box in every row)

	Very dissatisfied	1	2	3	4	5	Very satisfied	
v4.16	☐		☐		☐		☐	Content of work
v4.17	☐		☐		☐		☐	Working conditions
v4.18	☐		☐		☐		☐	Job security
v4.19	☐		☐		☐		☐	Opportunity to use knowledge and skills acquired during studies
v4.20	☐		☐		☐		☐	Some
v4.21	☐		☐		☐		☐	Opportunity to learn while working

IF YOU ARE / WERE EMPLOYED BY A COMPANY / ORGANIZATION, PLEASE ANSWER QUESTION 4.5. IF NOT, GO TO QUESTION 4.6.

4.5 How satisfied are / were you with the following aspects of your work situation? (Mark one box in every row)

	Very dissatisfied				Very satisfied	
	1	2	3	4	5	
V4.22	☐	☐	☐	☐	☐	Promotion opportunities
V4.23	☐	☐	☐	☐	☐	Equal treatment of all population groups
V4.24	☐	☐	☐	☐	☐	Equal treatment of women
V4.25	☐	☐	☐	☐	☐	Equal treatment of disabled persons
V4.26	☐	☐	☐	☐	☐	Benefits (e.g., medical aid, housing allowance, pension, etc.)

4.6 Overall, how satisfied are / were you with your work situation?

	Very dissatisfied				Very satisfied
	1	2	3	4	5
V4.27	☐	☐	☐	☐	☐

SECTION 5: UNEMPLOYMENT

5.1 Have you been looking for a job? (Mark one box only)

V5.01(1) ☐ Yes

V5.01(2) ☐ No → Please go to Question 5.3

5.2 For how many months have you been looking for a job?

V5.02 months

5.3 What are the main reasons for your not having a job? (You may mark more than one box)

V5.03(1) ☐ There are no job opportunities where I live

V5.04(1) ☐ No employer wants me because I don't have the skills for the job

V5.05(1) ☐ No employer wants people from my college

V5.06(1) ☐ The level of my education is not high enough

V5.07(1) ☐ No employer wants people with skills in my field of study

V5.08(1) ☐ I have not been looking for a job → Please go to Section 6

V5.09(1) ☐ I do not know

V5.10(1) ☐ Other (please specify):

V5.11()

IF YOU ARE BLACK (AFRICAN, COLOURED, OR INDIAN), FEMALE, OR PHYSICALLY DISABLED, PLEASE ANSWER QUESTION 5.4. IF NOT, GO TO QUESTION 5.5.

5.4 How important do you think the following are as reasons for your not having a job?

	Not at all important				Very important	
	1	2	3	4	5	
V5.12	☐	☐	☐	☐	☐	n black
V5.13	☐	☐	☐	☐	☐	I am a female
V5.14	☐	☐	☐	☐	☐	I am physically disabled

5.5 Which of the following would help you get a job? (You may mark more than one box)

V5.15(1) ☐ Move to another area where there may be work

V5.16(1) ☐ Get (more) practical training

V5.17(1) ☐ Enrol for an N3 / NSC / N4

V5.18(1) ☐ Send my CV to employers / organizations

V5.19(1) ☐ Make an appointment with employers / organizations to ask them for a job

V5.20(1) ☐ Send my CV to an employment agency

V5.21(1) ☐ Advertise in the newspaper that I am looking for a job

V5.22(1) ☐ Get someone to help me write a good CV

V5.23(1) ☐ Apply for more jobs than I have so far

V5.24(1) ☐ Other (please specify):

V5.25()

IF YOU ARE STUDYING, PLEASE COMPLETE SECTION 6. IF NOT, GO TO SECTION 7.

SECTION 6: PRESENT STUDIES

6.1 Are you presently studying full time or part time? (Mark one box only)

V6.01(1) ☐ Full time

V6.01(2) ☐ Part time

6.2 Towards which qualification type are you studying? (Mark one box only)

V6.02(1) ☐ N3

V6.02(2) ☐ NSC

V6.02(3) ☐ N4

V6.02(4) ☐ N5

V6.02(5) ☐ N6

V6.02(6) ☐ Diploma

V6.02(7) ☐ Degree

V6.02(8) ☐ Other (please specify):

V6.03()

6.3 At which institution type are you studying?
(Mark one box only)

- v6.04(1) ☐ Technical College →Please go to Question 6.5
- v6.04(2) ☐ Another kind of college
- v6.04(3) ☐ Technikon
- v6.04(4) ☐ University
- v6.04(5) ☐ Training centre

6.4 Why are you not studying at a technical college?

v6.05()

6.5 What programme / course are you studying at present?

v6.06()

6.6 What are the main reasons for your studying this programme / course? (You may mark more than one box)

- v6.07(1) ☐ To achieve a higher qualification
- v6.08(1) ☐ To improve my chances of finding a job
- v6.09(1) ☐ To help me get a better job
- v6.10(1) ☐ To improve my promotion opportunities
- v6.11(1) ☐ To help me earn more money
- v6.12(1) ☐ To further my interest in a particular subject area

IF YOUR PRESENT STUDIES ARE RELATED TO YOUR N2, N3 OR NSC, PLEASE GO TO SECTION 7. IF NOT, FIRST ANSWER QUESTION 6.7.

6.7 If your present studies are not related to your N2, N3 or NSC, why did you change study direction?

v6.13()

SECTION 7: PERSONAL INFORMATION

7.1 What is your sex? (Mark one box only)

- v7.01(1) ☐ Male
- v7.01(2) ☐ Female

7.2 What is your age in years?

v7.02 years

7.3 In which province have you undertaken most of your college studies? (Please indicate first the postal code of the area in which the college is situated) (Mark one box only)

v7.03 Postal code: _____

- v7.04(1) ☐ Eastern Cape
- v7.04(2) ☐ Free State
- v7.04(3) ☐ Gauteng
- v7.04(4) ☐ KwaZulu-Natal
- v7.04(5) ☐ Mpumalanga
- v7.04(6) ☐ Northern Cape
- v7.04(7) ☐ Northern Province
- v7.04(8) ☐ North West
- v7.04(9) ☐ Western Cape

7.4 In which province do you live at present? (Please indicate first the postal code of the area in which you live) (Mark one box only)

v7.05 Postal code: _____

- v7.06(1) ☐ Eastern Cape
- v7.06(2) ☐ Free State
- v7.06(3) ☐ Gauteng
- v7.06(4) ☐ KwaZulu-Natal
- v7.06(5) ☐ Mpumalanga
- v7.06(6) ☐ Northern Cape
- v7.06(7) ☐ Northern Province
- v7.06(8) ☐ North West
- v7.06(9) ☐ Western Cape

7.5 What is the highest level of education of each of your parents (where applicable)?

Father		Mother	
v7.07(1)	☐	v7.08(1)	☐ Primary school or less
v7.07(2)	☐	v7.08(2)	☐ Some secondary schooling
v7.07(3)	☐	v7.08(3)	☐ Matric
v7.07(4)	☐	v7.08(4)	☐ College certificate
v7.07(5)	☐	v7.08(5)	☐ Technikon or university certificate or diploma
v7.07(6)	☐	v7.08(6)	☐ Technikon or university degree
v7.07(7)	☐	v7.08(7)	☐ I do not know

7.6 What population group do you belong to?
(Mark one box only)

- v7.09(1) ☐ African
- v7.09(2) ☐ Coloured
- v7.09(3) ☐ Indian
- v7.09(4) ☐ White
- v7.09(5) ☐ Other (please specify):

v7.10()

7.7 What language do you speak most at home? (Mark one box only)

- v7.11(1) ☐ Afrikaans
- v7.11(2) ☐ English
- v7.11(3) ☐ IsiNdebele
- v7.11(4) ☐ IsiXhosa
- v7.11(5) ☐ IsiZulu
- v7.11(6) ☐ Sepedi
- v7.11(7) ☐ SeSotho
- v7.11(8) ☐ Setswana
- v7.11(9) ☐ Siswati
- v7.11(10) ☐ Tshivenda
- v7.11(11) ☐ Xitsonga
- v7.11(12) ☐ Other (please specify):

v7.12()

IF YOU PRESENTLY HAVE A JOB, PLEASE ANSWER QUESTIONS 7.8 to 7.12. IF NOT, PLEASE GO TO SECTION 8.

7.8 In which province do you work at present? (Please indicate first the postal code of the area in which you work) (Mark one box only)

v7.13 Postal code:

- v7.14(1) ☐ Eastern Cape
- v7.14(2) ☐ Free State
- v7.14(3) ☐ Gauteng
- v7.14(4) ☐ KwaZulu-Natal
- v7.14(5) ☐ Mpumalanga
- v7.14(6) ☐ Northern Cape
- v7.14(7) ☐ Northern Province
- v7.14(8) ☐ North West
- v7.14(9) ☐ Western Cape

7.9 What is the name of your current employer / organization / workplace?

v7.15

7.10 What is the postal address of your current employer / organization / workplace (including postal code)?

(PO Box number)

v7.16

(Town / City)

v7.17

(Postal code)

v7.18

7.11 What is the telephone code and number of your current employer / organization / workplace?

(Code)

v7.19

(Number)

v7.20

7.12 Apart from yourself, how many persons do you support every month out of your income?

v7.21 persons

SECTION 8: FINAL SATISFACTION LEVELS

IF YOU HAVE WORKED BEFORE, OR IF YOU HAVE A JOB NOW, PLEASE ANSWER QUESTION 8.1. IF NOT, PLEASE GO TO QUESTION 8.2.

8.1 Did your college studies help you to...

	Not at all			To a very large extent		
	1	2	3	4	5	
v8.1	☐	☐	☐	☐	☐	Find a satisfactory job?
v8.2	☐	☐	☐	☐	☐	Create long-term career opportunities for yourself?

8.2 Looking back, if you were free to choose again, how likely is it that you would ...

	Not likely at all			Very likely		
	1	2	3	4	5	
v8.3	☐	☐	☐	☐	☐	Choose the same study programme / course?
v8.4	☐	☐	☐	☐	☐	Choose the same technical college?
v8.5	☐	☐	☐	☐	☐	Decide not to study at all?

THANK YOU VERY MUCH FOR COMPLETING THIS QUESTIONNAIRE. PLEASE REMEMBER TO PLACE IT IN THE PRE-PAID ENVELOPE PROVIDED AND TO MAIL IT TO US.

APPENDIX B: SECOND SURVEY (TELEPHONIC)

1. PERSONAL INFORMATION

Name		Code	
-------------	--	-------------	--

Age in years	
---------------------	--

Name of Suburb/ township/ town where you live	
--	--

Highest school qualification	< Grade 9	Grade 9	Grade 10	Grade 11	Grade 12
Year of Qualification					

Post-school qualifications	NSC	N2	N3	N4	N5	N6	Technikon/University certificate/diploma	Other
Year of Qualification								

If other please specify	
--------------------------------	--

Current Employment Status of Parents	Father	Mother
Employed in Office/Shop/Factory		
Self-Employed		
Unemployed		

	Father	Mother
If either of your parents is employed, what work do they do?		

Number of people living in your house	
--	--

1. EXPERIENCE AT COLLEGE



1.1 Which of the following accurately described your reasons for studying at the Technical College?

Particularly interested in Engineering	
Was not sure what I wanted to do	
The college is near my home	
My parents/relatives recommended that I study there	
My friends recommended that I study there	
I could not go to university of technikon	
The fees were affordable	
I could get a bursary to study there	

1.2 If you had to choose again, would you choose to study at the same Technical College	Yes	No
---	-----	----

If no, where would you rather have wished to study?

--

1.3 Why did you choose to study Engineering?

I was interested in it	
To get a job	
My family wanted me to	
Other	

1.4 On a scale of 1-5 (1 = very bad, 5= very good), how would you rate the following features of studying at the college?

Quality of Teaching	1	2	3	4	5
Quality of Classroom Teaching					
Quality of Practical Instruction					
Teaching and Learning Materials					
Text Books					
Lecturer handouts					
Equipment					
Computer Laboratories					
Engineering Workshops					
Security					
Personal Security at the college					
Security of belongings at the college					

1.5 Did the college provide you with any of the following support services?

Support service	✓ or X	If yes, rate the quality of these services (1=very bad, 5=very good)				
		1	2	3	4	5
A counsellor for personal problems						
Help with language problems						
Help with study methods						
Special help for Maths and Science						
Financial support						
Guidance on which course to choose before or during registration						
Guidance on career or employment opportunities						
Work experience during studies						
Help in finding a job at the end of your studies						

1.6 What kind of work experience did you get while studying?

✓

In a company that has links to the college	
In the college (in the workshop)	
I found work by myself	

1.7 What form of help did you get from the college in finding a job?

✓

The student support officer gave me advice	
The student support officer helped me contact an employer	
One of my lecturers helped me	
The college arranged for employers to interview students at the college	
The college gave me a reference	
Other	

2. POST-COLLEGE EXPERIENCE

Have you been in employment since completing your college studies? (if yes go to 3.1, if no go to 3.3)	Yes	No
--	-----	----

IF YOU HAVE HAD A JOB SINCE COMPLETING YOUR COLLEGE STUDIES.....

2.1 How did you find your first job after college? ✓

Through an employment agency	
Through relatives	
I joined the family business	
Through personal contacts	
Through a newspaper advertisement	
Through my employer coming to the college to talk to students about jobs in the company	
Through my employer coming to the college looking for employees	
Through contact with my employer through holiday jobs during my studies	
I was working for the employer before I started my studies	
Through a formal arrangement between the college and the employer	
With the direct help of the college student support officer	
Through college lecturers	
The college gave me a reference	

2.2 How many months did it take to find your first job after leaving college?

--

2.3 Rate the importance of the following in finding your first job. (1=not at all important, 5=very important)

	1	2	3	4	5
Having a matric					
Having the technical college qualification					
Practical / work experience gained during studies					
Help provided by the college for the job interview					
The confidence which the college qualification gave me for the interview					
References from people who know me					

2.4 How many times have you changed jobs since leaving the college?

--

2.5 If you have changed jobs, what have been some of the main reasons? ✓

It was a temporary / part-time job only	
I found a better paying job	
I found a job that better suited my skills and qualifications	
The company I worked for closed / moved	
I started studying I had to take on family / social responsibilities	
I was retrenched	
Other (please specify):	

3. CURRENT EMPLOYMENT SITUATION

3.1 Which of the following describes your current employment situation best? ✓

Employed by a company or organisation (If yes go to 3.2.1)	
Work for yourself and employ others (If yes go to 3.2.1)	
Assist someone else in his/her small business (If yes go to 3.2.1)	
Unemployed and seeking employment (if yes go to 3.3.1)	
Unemployed but not seeking employment (if yes go to 3.3.1)	

Are you studying at the moment? (if yes, ask 3.4. after completing either 3.2.1 or 3.3; if no do not ask 3.4)	Yes	No
---	-----	----

IF CURRENTLY EMPLOYED

3.2.1 Do you work full-time or part-time	Full-time	Part-time
--	-----------	-----------

3.2.2 Are you a permanent or temporary worker	Permanent	Temporary
---	-----------	-----------

3.2.3 What kind of employer do you work for? ✓

A government organisation	
A non-governmental organisation	
A private company	
I am self-employed	

3.2.4 What is the main activity of your employer/ organisation/ small business ✓

Agriculture / Hunting / Forestry / Fishing	
Mining / Quarrying	
Manufacturing	
Construction	
Wholesale / Retail / Repairs / Hotels	
Financial Services (e.g., banks, insurance companies, etc.)	
Government (e.g., government departments, education and training, public administration, etc.)	
Social / Personal (e.g., NGOs, Educare, social services, etc.)	
Other (please specify):	

3.2.5 What is your main activity you perform at work?

--

3.2.6 How much do you earn before tax?

< R500	R501 – R1000	R1001 – R2000	R2001 – R3000	R3001 – R4000	R4001 – R5000	R5001 – R7500	R7501 – R10000	>R10000
--------	--------------	---------------	---------------	---------------	---------------	---------------	----------------	---------

3.2.7 If you work for yourself and employ others, how many persons do you employ?	
---	--

	1	2	3	4	5
3.2.8 On a scale of 1 to 5 (1= not at all, 5=completely), rate the extent to which you use the knowledge and skills that you learnt during your studies in your current job?					

3.2.9 Is your job appropriate to your college qualification?	Yes	No
--	-----	----

If not appropriate, why did you choose to take the job?	✓
I have not found a job that is better linked to my qualification	
This job provides better job opportunities	
I could earn more money in this job	
My current job is more secure	
My current job is more interesting	
I have more flexibility in this job (can work part-time, look after my family, work where I want to)	

	1	2	3	4	5
3.2.10 On a scale of 1 to 5 (1= not at all, 5=completely), rate your level of satisfaction with your current job.					

IF YOU ARE CURRENTLY UNEMPLOYED....

3.3.1 Have you been looking for a job?	Yes	No
---	-----	----

3.3.2 For how many months have you been looking for a job?	
---	--

3.3.3 What are the main reasons for not having a job? ✓

There are no job opportunities where I live	
I have only recently graduated and am still looking for a job	
No employer wants me because I don't have the right skills	
Employer do not want to hire graduates from my college	
I do not have a high enough level of education	

3.3.4 Which of the following would improve your chances of getting a job? ✓

Move to another area where there may be work	
Get (more) practical training	
Enrol for an higher qualification	
Make an appointment with employers / organizations to ask them for a job	
Send my CV to an employment agency	
Apply for more jobs than I have so far	

IF YOU ARE STILL STUDYING....

3.4.1 Are you presently studying full-time or part-time?	Full-time	Part-time
---	-----------	-----------

3.4.2 Towards which qualification are you studying?							
NSC	N2	N3	N4	N5	N6	Diploma	Degree

3.4.3 At which institution are you studying?				
Technical College	Another kind of college	Technikon	University	Training Centre

3.4.4 If you are not studying at a Technical College, why not?

3.4.5 What course are you currently studying?

3.4.6 What are your main reasons for studying this course	✓
To achieve a higher qualification	
To improve my chances of finding a job	
To help me get a better job	
To improve my promotion opportunities	
To help me earn more money	
To further my interest in a particular subject area	

APPENDIX C: THIRD SURVEY

(SELF-COMPLETION)

COLLEGE STUDENT SURVEY

This survey will help us to better understand where college students go after finishing studying.

Please complete the following survey as carefully and accurately as possible.

1. PERSONAL INFORMATION

1.1. Name and Surname

--	--	--	--	--	--	--	--	--	--	--	--

1.2. Identity Number

--	--	--	--	--	--	--	--	--	--	--	--

1.3. Date of Birth

Y	Y	Y	Y	M	M	D	D

1.4. Current Postal Address

Postal Code											

1.5. Home / Family Postal Address (if different from above)

Postal Code											

1.6. Current Contact Details

Home (including code)

Cellular	
Other	
Name of Contact Person	

1.7. Race (for statistical purpose)

African	
Coloured	
Indian	
White	
Other (Please specify)	

1.8. Gender

Male	
Female	

1.9. From which province / country do you originate?

Eastern Cape	
Free State	
Gauteng	
Kwazulu-Natal	
Limpopo	
Mpumalanga	
Northern Cape	
North West	
Western Cape	
Neighbouring Country (Please specify)	

Other (Please specify)

1.10. Highest School Qualification (please tick)

		Year
Below Grade 9		
Grade 9		
Grade 10		
Grade 11		
Grade 12		

1.11. What is your highest qualification completed to date?

N2 / NIC	
N3 / NSC	
N4	
Other	

If other please specify

1.12. Highest Qualification of Parents/Guardian (please tick)

	Father	Mother	Guardian
Primary School or less			
Some Secondary Schooling			
Matric			
College certificate			
Technikon / University Diploma			
Technikon / University Degree			
I do not know			

1.13. Current Employment Status of Parents/Guardian (Tick one)

	Father	Mother	Guardian
Employed as a Professional (e.g nurse, lawyer, teacher)	☐	☐	☐
Employed in Office/Shop/Factory	☐	☐	☐
Self-Employed	☐	☐	☐
Unemployed	☐	☐	☐
Pensioner	☐	☐	☐

1.14. If either of your parents / guardian is employed, what work do they do?

Father _____

Mother _____

Guardian _____

1.15. Number of people living in your family home

1.16. Household Income per year

R1 – R6000 ☐ R72001-R192000 ☐

R6001-R30000 ☐ R192000 or more ☐

R30001-R72000 ☐

2. CURRENT STUDIES**2.1. Name of college****2.2. Name of campus****2.3. In which month and year did you first enrol in this campus?****2.4. What is your current level of study?**

N-Level (e.g N3) ☐

and / or

Skills Programme / learnership (e.g. level 4) ☐

2.5. If you are doing an N-level qualification, state your current field of study

Engineering ☐

Electrical ☐

Mechanical ☐

Civil ☐

Chemical ☐

Business Studies ☐

Secretarial ☐

Administration (Public & Business) ☐

Personnel (Human Resources & Public Relations) ☐

Financial Management ☐

Marketing ☐

Wholesale and Retail ☐

Other ☐

2.6. If you are doing a skills programme / learnership, state the name of the programme**2.7. Why did you choose to study to study this field? (tick one)**

I was interested in it ☐

To get a job ☐

I did not have any other choices ☐

Other: (e.g. to get a part qualification) _____

2.8. Which of the following have helped to make a decision about what to study? (you may select more than one)

Advice from your parents or relative ☐

Advice from a teacher at school ☐

Advice from a campus lecturer ☐

Advice from your friends ☐

Advice from my employer ☐

I responded to advertising / marketing ☐

Other (please specify) ☐

2.9. Why did you choose to study at this campus? (you may tick more than one)

Particularly interested in Engineering / Business Studies ☐

Was not sure what I wanted to do ☐

The campus is near my home ☐

My family recommended that I study here ☐

My friends recommended that I study here ☐

I could not go to university or technikon ☐

The fees were affordable ☐

There is a placement service in the campus ☐

The campus offers extra-mural activities ☐

2.10. If you moved away from home to study, why did you do so? (you may tick more than one)

There was no college in my area	☐
I wanted to get away from the family home	☐
The college closest to my home is not a good college	☐
The college near my home does not offer the programme / course I wanted to study	☐
I could get a job more easily in the area where the college is	☐
I wanted to stay near the college	☐
I wanted to be independent	☐
Other (please specify):	☐

2.11. Which of the following support services does the campus offer? (you may tick more than one)

	Was available (tick)	I used this service (tick)
A student counsellor	☐	☐
Financial Aid	☐	☐
Language support	☐	☐
Job placement	☐	☐
Study Facility / Library	☐	☐
Health service	☐	☐

2.12. If you did not make use of any of the support offered, why not?

I did not need the support	☐
I was not sure how to access this support	☐
It was not easy to approach campus staff	☐
The support was not suitable to my needs	☐

2.13. What kind of work experience did you get while studying? (Tick one)

Part of a learnership / apprenticeship	☐
In a company that has links to the campus	☐
In the campus	☐
I found work by myself	☐
No work experience	☐

2.14. Rate the role of CAMPUS STAFF in preparing you for the world of work (1=very bad; 3= average; 5=very good)

	1	2	3	4	5
Adequate knowledge of subject matter	☐	☐	☐	☐	☐
Make you confident that you will get employed	☐	☐	☐	☐	☐
Teaching you how to apply what you have learned in the workplace	☐	☐	☐	☐	☐
Conducting visits to workplace environments	☐	☐	☐	☐	☐
Sharing ideas around job opportunities	☐	☐	☐	☐	☐
Support in contacting employers	☐	☐	☐	☐	☐
Inviting employers to speak to you at the campus	☐	☐	☐	☐	☐
Support in arranging interviews with employers	☐	☐	☐	☐	☐
Support in preparing job applications	☐	☐	☐	☐	☐

2.15. How are your studies financed? (Tick one)

My own funds	☐
Bursary / Sponsor	☐
Company paid	☐
Student Loan	☐

2.16. Rate the level of support provided BY THE CAMPUS with respect to the following (1=very bad; 5=very good)

	1	2	3	4	5
Help with language problems	☐	☐	☐	☐	☐
Help with study methods	☐	☐	☐	☐	☐
Guidance on which course to choose	☐	☐	☐	☐	☐
Guidance on career or employment opportunities	☐	☐	☐	☐	☐
Practical/Work experience during studies	☐	☐	☐	☐	☐
Counselling support for personal problems	☐	☐	☐	☐	☐
Help in finding a job at the end of your studies	☐	☐	☐	☐	☐
Support in preparing for job interviews	☐	☐	☐	☐	☐

2.17. Rate the following features of studying at the campus (1=very bad; 3=average; 5=very good)

	1	2	3	4	5
Quality of Classroom Teaching					
Use of Practical Examples in the classroom					
Access to Practical Workshops					
Content of Textbooks					
Lecturer Handouts					
Access to Computers					
Relevance of Training					
Quality of Practical Equipment					

3. FUTURE PLANS

3.1. What are your plans once you complete your current qualification?

To continue in my current job	
To continue studying	
To get a full-time job	
To get a part-time job	
To set up my own business	
Other:	

IF YOU INTEND TO CONTINUE STUDYING,

3.2. What course will you be doing?

3.3. At which institution are you studying?

At the same FET College	
At another FET College	
At another public college (nursing, police etc.)	
At a private college	
Technikon	
University	
Training Centre	

3.4. What are the main reasons for studying this course? (You may tick more than one)

To achieve a higher qualification	
To improve my chance of finding a job	
To help me get a better job	
To improve my promotion opportunities	
To help me earn more money	
To further my interest in a particular subject area	
Other	

IF YOU INTEND LOOKING FOR A JOB IN 2004,

3.5. Have you secured a job yet?

Yes	No

3.6. If you have not secured a job, what job are you planning on looking for?

3.7. How are you planning on looking for a job? (you may tick more than one)

I will contact an employment agency	
Through family relations	
I will join the family business	
Through personal contacts in my community	
Through holiday jobs during my period of study	
With the same employer for whom I worked before	
Through support from campus teaching staff	
Through a campus placement programme	
Newspapers / Internet / Job Adverts	

3.8. Where do you intend looking for a job?

In this province	
In another province	
In another country	

**THANK YOU FOR YOUR
CO-OPERATION!**