

**THE EVALUATION OF SKILLS DEVELOPMENT FACILITATION IN GAUTENG
PUBLIC FURTHER EDUCATION AND TRAINING (FET) COLLEGES**

By

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DEDICATION

This dissertation is dedicated to my loving wife, Pinky and the five children, Tshepo, Tebogo, Mmamolemo, Mmarona and Lehlogonolo with whom we have been blessed. Their endless support served as a source of inspiration in moments of frustration during my studies. The perseverance they demonstrated during my difficult and uncertain study journey motivated me to stand up and be counted amongst others in the academic fraternity.

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DECLARATION

I, Marobane John Matea (student No: 08910766), declare that **THE EVALUATION OF SKILLS DEVELOPMENT FACILITATION IN GAUTENG PUBLIC FURTHER EDUCATION AND TRAINING (FET) COLLEGES** is my own work and that all the sources that I have used or quoted in this work have been indicated and acknowledged by means of complete reference techniques, and that this work has not been submitted before for any other degree at any other institution.

MAROBANE JOHN MATEA

DATE

SUMMARY

South Africa is a developing country that contends with a serious skills deficit that hampers its economic growth prospects. To address this skills deficit particularly at intermediate level, the government identified the public Further Education and Training (FET) College sector to serve as a medium to counter the challenge. Subsequent to the aforementioned decision by the government, political and financial support was pledged to the sector. Legislation that is attributed to the sector was also enacted and amended to capacitate the sector to perform optimally. The focus of this research was the capability of the public FET College sector in the province of Gauteng to respond credibly and qualitatively to the skills needs of the province's labour markets. Thus, the primary purpose was to evaluate the role that the sector in the province plays to address the skills shortage.

The research design for the study was triangulation in nature, encompassing qualitative and quantitative methods. Nine public FET colleges, six companies and the Indlela Training Centre were sampled for gathering information regarding the responsiveness, articulation and efficiency of the province's public FET College sector. Students, lecturers, HODs and company's skills development managers were interviewed and sampled for the completion of questionnaires.

Some significant differences in perceptions relating to the role played by the province's public FET college sector in addressing the skills shortage were found. Findings indicated that the massive financial and political support pledged to the sector by the government did not translate into efficiency, credibility and responsiveness nor capacitate the sector. In terms of the findings employers are skeptical about the quality of graduates that the province's public FET colleges ect or produces. Further, it was found that the sector's lecturers are inappropriately qualified and this contributes to the inefficiency of the sector in performing optimally.

The lack of a formal skills development partnership between the sector and the labour markets hampers the articulation and the responsiveness of the sector to the skills needs of labour market. However, the current development whereby all the skills development institutions have been placed under one department has the potential to add value to the skills development landscape, particularly the public FET College sector.

KEY TERMS

Articulation

Labour markets

Lecturer

Public FET College

Responsiveness

Skills development

ABBREVIATIONS AND ACRONYMS

CBD	Central Business District
CESA	Consulting Engineers South Africa
CFO	Chief Financial Officers
CHE	Council on Higher Education
CFO	Chief Financial Officers
COSATU	Congress of South African Trade Unions
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
DoE	Department of Education
ESCOM	Electrical Supply Commission
FET	Further Education and Training
GDP	Gross Domestic Product
HAI	Historically Advantaged Institution
HDI	Historically Disadvantaged Institution
HOD	Head of Departments
HSRC	Human Science Research Council
NATED	National Technical Education
NCFE	National Committee on Further Education
NCV	National Certificate Vocational
NQF	National Qualification Framework
NSC	National Senior Certificate
NSDS	National Skills Development Strategy
NSF	National Skills Fund
NTC	National technical certificate
QCTO	Quality Council for Trades and Occupations
SAA	South African Airways
SAQA	South African Qualification Authority
SASOL	Suid-Afrikaans Steenkool Olie
SETA	Sector Education and Training Authority

NTC

National technical certificate

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CHAPTER 1

ORIENTATION TO THE STATEMENT OF THE PROBLEM, BACKGROUND TO THE STUDY, AIMS OF THE RESEARCH AND RESEARCH METHODOLOGY

1.1 INTRODUCTION TO THE STUDY

Increasing concerns have been expressed about the skills shortage engulfing South Africa and the incapability of public Further Education and Training (FET) colleges to contribute effectively in the development of skills that are appropriate and relevant to our growing economy (Papier, 2006:2). In February 2001 in his state of the nation address, the former state president, Mr Thabo Mbeki unveiled a national education plan for public FET colleges entitled *A new institutional landscape for public Further Education and Training Colleges: Reform of South Africa's technical colleges* (Department of Education, 2001:1).

The then Minister of Education, Mr Kader Asmal (in Department of Education, 2001:5) asserted at the time that the plan was meant to transform public FET colleges from dysfunctional institutions to effective institutions that are capable of developing skills and addressing the skills shortage deficit engulfing our country. In view of the above attributes it can therefore be asserted that the South African government has prioritized public FET colleges as a means to cultivate quality skills development practices.

In support of the national education plan for public FET colleges, a number of pieces of legislation and policy frameworks were adopted to reinforce the development of skills and provide support to public FET colleges to deliver on their national mandate of addressing skills

shortage through skills development (Cosser, 2011:70). The purpose of policy and legislation relevant to the public FET college sector is better outlined by Chelechele (2009:44) as follows:

Skills development Act, 1998 (Act 97 of 1988): this Act was passed to provide an institutional framework to devise and implement national sector workplace strategies to develop and improve skills of the South African work force.

- *National Development Levies Act, 1999 (Act 9 of 1999): it provide for the imposition of a skills development levy to finance the process of skills development.*
- *National Skill Development Strategy, 2005: the aim of this strategy is to contribute towards the sustainable development of skills growth and the development and equity of skills development institutions by aligning their work and resources to the skills need for effective delivery of services.*
- *South African Qualification Authority Act , 1995 (Act 58 of 1995) provides ways of ensuring that training in South Africa is of a high quality and is able to address skills shortage.*

Prior to the 2001 state of the nation address, the FET Act ,1998 (Act 97 of 1998) was already in existence promoting the transformation of public FET colleges in order to enhance their ability and capability to respond effectively to the skills needs of labour markets (Bisschoff &

Nkoe,2005:214). It is now more than ten years since the 2001 state of the nation address, but concerns about skills deficits and inefficient skills development programmes are still prevalent (Papier, 2006:1). The public FET college sector, which was tasked to close the skills shortage gap through skills development as per the state of the nation address, appears to be struggling to deliver on that mandate (Papier, 2006: 3).

In view of the aforementioned factors it is very important to note that public FET colleges were identified in 2001 to take centre stage in the development of appropriate and relevant skills in order to alleviate skills deficits. According to the 2001 state of the nation address a national plan of action was implemented, relevant acts and policies were adopted and funds were made available to capacitate public FET colleges to deliver on their national mandate of developing skills. However, it is evident that delivery by FET colleges on their national mandate of effectively developing skills is far-fetched (Du Toit & Strauss, 2010:308). The challenges faced by FET colleges are outlined as follows:

An examination of the constraints faced by FET colleges suggests that more attention needs to be given to the structural constraints faced by the sector, as these prevent it from achieving its full potential as a national resource designed to articulate with national skills development imperatives. It is contended that attempts at galvanising the FET college system to respond in a nationally coordinated manner to the country's skills development challenges is unlikely to be successful as long as these constraints are not resolved (Akoojee, 2009: 118)

In terms of the above arguments it can therefore be accepted that public FET colleges are faced with serious challenges that inhibit them from delivering on their national mandate of addressing skills shortage through skills development.

The inability of the public FET college sector to close the skills shortage gap through massive skills development despite the adoption of legislation and the availability of funds from the national government as mentioned above is reflected in skills shortage concerns by different print media. According to *The City Press* (2010, 28 March: 8), South Africa is currently short of more than 15000 skilled workers in the structural steel and welding sector only. The Departments of Health and of Education are currently recruiting health workers and educators from foreign countries to address the skills shortage in their respective departments (*The Star*. 2009, 9 October: 2). According to *The Citizen* (2009, 9 October: 2), the Electrical Supply Commission (ESCOM) is appealing to engineers, technicians and artisans who once worked for them but took early pension to avail themselves for reemployment due to the difficulties experienced in sourcing skilled personnel. South Africa faces severe skills shortages, not least in the area of finance and accounting, but also in the public and the private sector (*The Star Workplace* 2010,15 June: 2). According to *The Star Workplace* (2010,15 June: 3) skills shortages are still hampering our businesses and our global competitiveness. Consulting Engineers South Africa (CESA) attributes inexperienced individuals and a lack of skilled individuals to current challenges in service delivery (*Engineering News* 2010, 12-18 February: 44).

The above mentioned state of affairs calls for a study of public FET colleges to evaluate the role they play in the development of intermediate skills with a focus on the following:

- The articulation of the curricula and course contents to the skills needs of labour markets;
- The responsiveness of public FET colleges to the skills needs of labour markets;
- The appropriateness of lecturers' qualifications;
- Challenges affecting the efficiency of public FET colleges in the development of skills;
- Quality compliance by FET colleges.

This study focuses on public FET colleges in the province of Gauteng, one of the nine provinces constituting the Republic of South Africa. The province was chosen because of its status as the economic hub of the country that contributes 38% of the country's GDP (Fisher, Hall & Jaff, 1998: 5). According to Gauteng Province, South Africa (2012) the province of Gauteng is the financial capital of Africa and contributes a phenomenal 10% to the GDP of the entire African continent. Gauteng has a total of eight public FET colleges out of fifty colleges nationwide.

1.2 BACKGROUND TO THE STUDY

Skills development is crucial to the economic growth of a developing country such as South Africa. The economic growth depends heavily on a balance between the supply of skilled labour and the skills needs of labour markets. The realization of such a balance of needs against supply calls for a mutual understanding and cooperation between institutions involved in skills developments and labour markets. Nzimande (2009b) indicated during his address to the US-South Africa

partnership for skills development that, it is very important if we are to be competitive and grow our economy that our skills development institutions should strive for quality, responsiveness, and articulation of their skills training to the skills needs of labour markets. Nzimande (2012) also argued in his address at Congress of South African Trade Unions (COSATU) Education and Skills Conference that prior to 1994, skills development was a terrain reserved for the white minority. Nzimande (2012) further contends that such a dispensation resulted in a bigger group of mainly white skilled workers and a massive unskilled black labour force. Chelechele (2009:48) concurs with Nzimande by asserting that the problem of skills shortage in South Africa has its origin in the apartheid laws that were purposefully designed to confine black South Africans to menial labour. Subsequent to such a racially skewed labour force of the apartheid era, the country is currently experiencing a serious skills deficit. The current government is henceforth faced with a reality of high levels of unemployment and poverty due to the unskilled and unemployable labour force of which the majority is black.

In view of the above assertions, there is a need to redress the past injustices pertaining to skills development. As much as the redress is important, it is also equally important that such an undertaking be articulated to, and be informed by current developments in the labour markets. The skills needs of labour markets have changed since the apartheid days. For instance today's labour markets focus on advanced technological skills as opposed to mass menial labour.

It is because of the above mentioned challenges that the current government undertook to redress the skills development landscape and align it to its national imperatives. Skills development has been prioritized by the current government as a tool to make the country

competitive and grow the economy (Pandor, 2006). Mbeki (2004) indicated that the Public FET college sector has been identified by the government as an important institution to address the skills deficit that our country is contending with, particularly intermediate skills. As outlined in aforementioned arguments, the government has made it clear that public FET colleges will receive financial and structural support to boost their capacity as key role players in skills development. Unfortunately, according to the Green Paper for Post School Education and Training (The Department of Higher Education and Training, 2012a:10) despite all the support by the government dating back to 2001, the public FET college sector remains weak and small.

The aforementioned arguments highlighted a very important factor, that of a commitment of support by the state to the sector, and a failure by the sector to take advantage of that support and transform itself from a dysfunctional to a functional sector. According to Nzimande (2009b) in his address at the US-South Africa partnership for skills development the government will continue to commit and invest in the public FET college sector for the benefit of the country and its labour markets.

Critics of the public FET college sector's inefficiency (see Akoojee, 2009:123; Cosser, 2011: 71; Lolwana, 2010:7) base their arguments on the following aspects:

- Responsiveness to the skills needs of labour markets
- Articulation of curricula to the skills needs of labour markets
- The appropriateness and relevance of lecturers qualifications
- Quality assurance and compliance
- Challenges hindering progress and efficiency

The above mentioned aspects as singled out by critics such as Akoojee, Cosser and Lolwana are outlined and demarcated as follows:

- ***Responsiveness to the skills needs of labour markets***

It is very important that public FET colleges build strong relations with labour markets in order to master the complexities and dynamics regarding the types, quality and levels of skills needed. Such a mutual relationship will enable both parties to balance the skills supply against the skills needs. However, such a balance will be a pipe dream as long as the two parties have a distant relationship. The closer the two sectors are, the greater the opportunities to know each other's strengths and weaknesses relating to skills training and development. For instance colleges could understand what kind of skills are in demand and articulate their training to such needs. On the other hand labour markets could share good practices with colleges based on their experience of global markets and save colleges from facilitating courses which are no longer in demand (The Department of Higher Education and Training, 2012a : 26).

According to Nzimande (2010), the Department of Higher Education and Training plan to expand public FET colleges to feature as a significant locus of skills development with strong links to industry in order to meet critical skills shortage. Zuma (2012) in his address to FET college principals concurred with Nzimande in asserting that successful industrial economies, such as Germany, thrive on vocationally based training similar to our FET colleges which are rooted in a strong partnership with labour markets.

Unfortunately despite the support that FET colleges are enjoying from the state, they remain small and weak, with none or very minimal relations with labour markets (Department of Higher Education and Training 2012a: 26). According to Cosser (2011: 71), the sector's dismal failure to grow stems from its poor marketing, poor image, and lack of capacity. The sector's failure to establish strong links with labour markets deprives it of being responsive to the skills needs of commerce and industry.

- ***Articulation of curricula to the skills needs of labour markets***

The public FET college sector has been identified by the current government as an important role player in the development of intermediate skills. In line with the recapitalization programme indicated earlier, its curriculum has also been reviewed. According to Akoojee (2009:38), funds to the amount of R1.9 billion were injected by the state in 2007 to recapitalize the sector's infrastructure, renew its curriculum and to ensure that the sector is aligned with the national skills development imperatives. Lolwana (2010:7) concurs with Akoojee by indicating that the public FET sector has undertaken curriculum engineering.

In terms of the above assertions, the curriculum of public FET colleges has received special attention from the government in an attempt to improve it. Money has been invested in its renewal programme. The question to be answered is whether the renewal programme achieved its goal. A skills inclined curriculum should be informed by the skills needs of commerce and industry.

Nzimande (2009a) explained the importance of the new curriculum as follows:

The R1.9 billion recapitalization of the FET colleges was largely spent on infrastructure, acquisition of equipment, development of a new curriculum and the skilling of human resources. In 2007 the Department of Education introduced the new curriculum namely National Certificate Vocational which is intended to directly respond to the priority skills demands of the South African economy. In developing these vocational programmes the department works in consultation with employers to determine the needs of the economy to respond with suitable programmes.

Unfortunately, in spite of the injection of money into the new curriculum, it still does not meet the standard as determined by critics.

Lolwana (2010 :7) criticizes the creation of institutions that look more like schools with young students pursuing a set curriculum pegged at grades 10 -12 instead of a fully-fledged technical education and training that articulate with labour markets and higher education. The Green Paper for Post School Education and Training (in The Department of Higher Education And Training 2012a:22) concurs with Lolwana in arguing that the success of the new curriculum, namely the National Certificate Vocational (NCV), is generally poor as demonstrated by the 4% throughput rate of the 2007 cohort which completed the qualification in 2009

In view of the above assertions, particularly that of Lolwana, the new curriculum does not articulate to labour markets. On the other hand its

success rate is very low. The above arguments highlighted a concern for the success and articulation of the new curriculum.

- **The appropriateness and relevance of lecturers' qualifications**

The recapitalization and transformation of public FET colleges as indicated in aforementioned arguments is aimed at making the sector responsive, articulate, efficient and relevant to the skills needs of labour markets. For such ideals to be realized the sector needs to ensure that those responsible for the facilitation of its programmes are also credible in terms of qualifications (Young, 2006:156).

The professional development of FET college lecturers has a history of neglect which resulted in the sector employing newly qualified artisans and technicians from industries and turning them into lecturers with neither professional pedagogic training nor technical practical experience (Young, 2006:156). Young's argument is further supported by The Green Paper for Post School Education and Training (in The Department of Higher Education And Training, 2012a: 24) which outline the challenge as follows:

College lecturers in technical fields have through the years been recruited from industry. They usually possess technical qualifications as well as workplace experience and knowledge, but little pedagogic training. Many lecturers in academic subjects like language, mathematics or science entered colleges with school teaching qualifications but no industry experience. Many lecturers are also college graduates who have completed their N6 courses or graduates

from universities of technology who have completed a National Diploma.

A 2010 Human Science Research Council (HSRC) report revealed that 57 % of lecturers in the employ of the public FET college sector are under qualified and in possession of inappropriate qualifications (Macupe in *The Sunday Independent* 2010, 05 August: 5).

The foregoing arguments indicate that the qualifications of FET college lecturers are a matter of concern. If the sector has prioritized responsiveness, quality and articulation of its skills training to labour markets, then the appropriateness and relevance of lecturer qualifications need to be given attention.

- ***Quality assurance and compliance***

Three education quality councils, namely Council on Higher Education (CHE), Quality Council for Trades and Occupations (QCTO) and Council for Quality Assurance in General and Further Education and Training (UMALUSI), are responsible for quality assuring qualifications (Quality Council for Trades and Occupations News, 2012 : 2).

CHE is responsible for Higher Education, UMALUSI for General and Further Education and Training, while QCTO is for trades and occupations (Nzimande, 2009a). The three councils oversee the adherence and compliance to quality by education and training institutions. UMALUSI quality assures Basic Education that comprises primary and high schools. It further quality assures FET colleges. In terms of the National Qualification Framework (NQF) it oversees qualifications from NQF L2 to NQF L4 (The Department of Higher Education and Training, 2012a:75)

Quality in public FET colleges is a matter of concern particularly to UMALUSI and employers. According to Council for Quality assurance in General and Further Education and Training (2009:60), all the NCV L2 to L4 subjects that were presented for examination result standardization in 2009 were found to be lacking in quality as reflected in reports from internal moderators and chief examiners. Professor Volmink (Council for Quality assurance in General and Further Education and Training,2009:60) contends that the quality of NCV programmes is further compromised by the lack of lecturers with practical and technical expertise to conduct, assess and moderate practical assessments.

In view of the above assertions, it can be argued that quality in public FET colleges is a matter of concern.

- ***Challenges hindering progress and efficiency***

According to The Green Paper for Post School Education and Training (Department of Higher Education and Training,2012a:32), the private FET college sector is substantial and expanding because it has bridged the responsiveness and articulation gaps by designing customized courses based on the needs of clients and employers. The Green Paper for Post School Education and Training (Department of Higher Education and Training, 2012a:33) further argues that this sector enjoys a positive relationship with its clients and employers because it is flexible and driven by the skills needs of labour markets. In spite of the fact that this sector does not enjoy financial support like its public sector counterpart, it is indeed growing.

While private FET colleges are growing against all odds as asserted above, Cosser (2011:72) argues that the same cannot be said about public FET colleges which are contending with poor marketing, poor image and lack of capacity and consequently remain small and weak.

In the context of the above assertions, it can be argued that the public FET college sector remains small and weak despite the financial and legislative support it enjoys from the government as pointed out earlier. The evidence of growth and improved relations with labour markets displayed by the private FET college sector provide enough evidence to suggest that there are factors hindering public FET colleges to prosper. If the public FET college sector wants to achieve responsiveness, articulation, quality and improved relations with labour markets like its private counterpart, it is necessary to reflect on daily operations.

1.3 THE RESEARCH PROBLEM

The current government, commerce and industry and other stakeholders outside government acknowledge that the country is faced with a serious skills shortage and inefficient skills development programmes (Powell & Hall, 2000: 6). Consequent to the skills shortage outcry a national plan for the transformation of Public FET colleges was introduced in 2001, to accelerate the development of skills and counter the skills deficit, by producing more skillful graduates (Department of Education, 2001:1).

Despite the implementation of the National Education Plan, Papier (2006:3) argues that there has never been any improvement of the efficiency of the public FET college sector, particularly the articulation of the programmes to the skills needs of labour markets. Challenges

related to merging public FET colleges as part of the National Education Plan are outlined as follows (Akoojee, 2009: 123):

The implementation strategy (Department of Education 2001:3) which provides the basis for transforming a previously racially segregated technical colleges system into one which in turn led to the establishment of 50 new institutions charged with the following:

- *Becoming more responsive to the development goals and to the labour market*
- *Doing this through better partnerships with industry and through curricula change*
- *Having greater, though still managed autonomy*
- *Providing a higher quality of learning*
- *Addressing equity and access*
- *Improving systems of student support*

These achievements, however, are still hampered by key constraints and challenges that prevent the sector from providing a sound basis for ensuring that supply-side considerations align with national skills development imperatives.

Bisschoff and Nkoe (2005:215) concur with Akoojee regarding challenges created by the merging of technical colleges as follows:

The feelings of FET stake holders were explored with regard to the declaration and merging of the FET colleges in South Africa. From the opinions of the FET stake holders, it became evident that there are threats

to the FET sector that create uncertainties with regard to the success of this education sector as a result of the declaration and merging of FET colleges. The researchers acknowledge the need to address these threats by the Department of Education, which will ultimately warrant the success of this sector with regard to colleges.

Thus, public FET colleges are struggling to deliver on their national mandate of addressing skills shortage through skills development, despite the implementation of the national education plan for public FET colleges and the merging of technical colleges.

In view of the above attributes, an emerging problem statement could be formulated and schematically illustrated as follows:

What role is played by public FET colleges in Gauteng in the context of skills development and the ever growing skills shortage gap?

The following sub- questions demarcate the problem more clearly:

- Is the curricula and course content of the province's public FET colleges articulated to the skills needs of the province's labour market?
- Are the province's public FET colleges responsive to the skills needs of labour markets?
- Do educators hold appropriate qualifications?
- What are the challenges affecting the efficiency of the province public FET colleges in the development of intermediate skills?
- Do the province's public FET colleges comply with national quality standards?

This study is based on the premise that public FET colleges are not performing to their ultimate best in terms of meeting the skills demand of our labour markets (Akoojee, 2009: 117). In evaluating the role of the public FET college sector in the Province of Gauteng with regard to skills development, the study has the potential to identify challenges that hamper the sector's progress in delivering on its mandate of developing skills that are sought after by our growing economy. In the light of the urgent need to address the national skills deficit, the study is of utmost importance in the enhancement of skills development by public FET colleges.

1.4 AIMS AND OBJECTIVES OF THE STUDY

Mbeki (2004) contends that the public FET college sector has a major role to play in developing the knowledge base and skills needed by the labour market. Maja (2000:1) concurs that to improve the country's level of competitiveness the curricula of FET colleges should prepare learners adequately for a world of work by means of a curriculum that is capable of laying the foundation for successful vocational education. According to the Department of Education (2001:1), FET colleges were identified in 2001 as major players in the closing of the skills shortage through skills development. Contrary to the political support that the sector enjoys, Akoojee (2009:118) contends that its inability to respond effectively to the labour market context has been documented and it is contended that attempts to galvanize it to respond in a nationally coordinated manner to the country's skills development challenges is unlikely to be successful.

The aforementioned arguments highlights the government commitment to public FET colleges in terms of finance and policy frameworks, in order to capacitate them to deliver on their mandate of addressing skills shortage through skills development. The factors

further highlighted the existence of a gap between skills development by public FET colleges and the skills shortage experienced by commerce and industry. The number of skilled personnel produced by public FET colleges does not meet the skills demand of commerce and industry (Akoojee, 2009:118). The apparent inability of the public FET college sector to deliver on its national mandate of addressing the skills shortage through skills development as reflected above calls for an investigation of public FET colleges with regard to their role in skills development. The aim of the study was to investigate the role played by Gauteng Province public FET colleges in skills development, responsiveness to the skills needs of labour markets and the articulation of courses to the needs of commerce and industry.

The study aims to evaluate public FET colleges in the Province of Gauteng, regarding their role in the development of skills. The aims are henceforth demarcated as follows:

- Evaluating the articulation of the province's public FET colleges' curricula and course contents to the skills needs of commerce and industry.
- Evaluating the responsiveness of the province's public FET colleges to the skills needs of labour markets.
- Evaluating the relevancy and the appropriateness of lecturers' qualifications.
- Evaluating challenges affecting the efficiency of the province's public FET colleges in the development of intermediate skills.
- Evaluating quality compliance by public FET colleges in the province.

1.5 MOTIVATION FOR THE RESEARCH

The study has been motivated by concerns of skills deficit and the ineffectiveness of public FET colleges in the development of skills. Du Toit and Strauss (2010: 308) argue that South Africa holds bottom position in the category of skilled workers due to the fact that the education and skills programmes of the state are insufficient and solutions to address them work slowly. In spite of the alarming skills deficit due to ineffective skills development programmes, the state continues to view the public FET college sector as a primary driver of the skills development initiatives and injected R1 billion to the sector for capital rejuvenation (Dibetle and Mohlala in *Mail & Guardian* 2010, 29 June: 1)

The study is guided by government's acknowledgment as reflected in aforementioned arguments that the country is engulfed by a serious skills shortage and the national education plan for FET colleges which aimed to transform public FET colleges from dysfunctional institutions to effective institutions (Department of Education, 2001: 2). Subsequent to the national education plan, funds were made available and policy frameworks were adopted as reflected above to reinforce the transformation process, but unfortunately concerns of skills shortage and dysfunctional public FET college sector are prevalent (Papier, 2006: 1).

It is more than a decade since the historic unveiling of the national education plan for FET colleges which identified FET colleges as key role players in addressing skills shortage through skills development. However, the FET college sector has not yet started to deliver on its national mandate as per above documented concerns. The desire to unearth the reasons why public FET colleges are less successful in contributing effectively in the development of skills as mandated by the government is a motivating factor for the study. Skills shortage and

dysfunctional public FET college sector is a national problem (Akoojee, 2009:117). However, the focus of the study is on public FET colleges in Gauteng Province.

The Republic of South Africa comprises nine provinces of which Gauteng is one. The reason why Gauteng Province was chosen for the study is explained below:

Gauteng has a special role to play in meeting the national challenges of raising skills and widening access to education and training opportunities. It is the engine of the national economy. Gauteng contributes just under 38 percent to the Gross Domestic Product, although it has only one fifth of the nation's population and occupies a mere 2 percent of national territory. The origins of wealth generating capability lie in the mining sector. The infrastructure and services that sprang up to support mining have provided the foundation for the development of manufacturing, an internationally renowned financial sector and other business services. Indeed, the influence of the Gauteng economy is not confined to South Africa, since it occupies a dominant position of influence in the Southern African region (Fisher, Hall and Jaff, 1998: 5).

Gauteng Province, South Africa (2012) concurs with Fisher, Hall and Jaff as follows:

Gauteng is the financial capital of Africa, more than 70 foreign banks have their head office in the province

and the JSE (Johannesburg Stock Exchange) situated in Johannesburg is among the top 20 stock exchanges in the world. It occupies 1, 4 % of South Africa's land share area but the tiny province of Gauteng punches way above its weight, contributing 33% to the national economy and a phenomenal 10% to the GDP of the entire African continent.

Thus, the province provides a fertile ground for the study owing to its vast variety of employment sectors and skills training opportunities. Public FET colleges in Gauteng are well positioned to contribute to skills development owing to their location within a huge mining, manufacturing and world renowned financial sector. The province has eight public FET colleges.

1.6 RESEARCH METHODOLOGY

1.6.1 Research approach

The researcher intend to use a triangulation design approach which combines qualitative and quantitative methods because of the advantages each one of them present in data collection and data analysis. The triangulation design is defined as follows: “Triangulation expresses the idea that you should collect your data in as many different ways and from as many different sources as possible, data from the different sources tells a similar story” (Riley, 1996: 131).

Patton (2002:247-248) concurs with Riley by asserting that triangulation is a concept of using a combination of methods to validate and cross check the findings of a study whereby one method compensates for the weakness of the other.

De Vos (2011:17) contends that most authors agree that in real life, social science researchers do use both quantitative and qualitative methodology sometimes consciously, sometimes unconsciously. The researcher 's fusion of the two methods stems from the fact that the qualitative method provides the opportunity to interact with sampled participants through interviews while the quantitative method provides the opportunity to interact through questionnaires. The researcher's interaction with participants adds more value and further enhances his understanding, interpretation and attachment of meaning to the study. The inductive approach of the qualitative method sheds more light on the study due to its norm of moving from unknown to known. De Vos (2011: 243) argues that a qualitative researcher embarks on a voyage of discovery rather than one of verification, henceforth his research is likely to stimulate new leads and avenues.

In the same light that the qualitative method adds value and enhance the study in terms of data collection and analysis the quantitative method does likewise. Through its deductive approach of moving from known to unknown to verify hypotheses as well as its use of questionnaires and scales, it supplements the qualitative method much to the advantage of the researcher. The quantitative paradigm aims to objectively measure the social world, test hypotheses and control the human behaviour (De Vos, 2011: 241).

1.6.2 Population

Prior to 1994 the region that constitutes Gauteng as it is known today was known as Pretoria-Witwatersrand-Vaal Triangle (PWV) (South African History online, n. d).After the 1994 democratic elections that resulted in the establishment of the nine provinces, the PWV area became known as the Province of Gauteng. The Witwatersrand area at that time comprised of Johannesburg, the East Rand and the West Rand (Witwatersrand-wikipedia, the free encyclopedia, 2012). The East Rand comprised the gold mining towns situated east of Johannesburg, while the West Rand was made up of gold mining towns situated west of Johannesburg. The Vaal Triangle was made up of towns situated south of Johannesburg and bordered by the Vaal River (Vaal Triangle-Wikipedia the free encyclopedia, 2012). The area west of Johannesburg is still known as the West Rand and the East Rand area has been renamed Ekurhuleni Metropolitan Council (Metro) while the Vaal Triangle is now known as Sedibeng District Municipality. Pretoria which is situated north of the Witwatersrand area has been renamed Tshwane Metro.

The Province of Gauteng comprises of three metros, namely Ekurhuleni, Johannesburg and Tshwane (Gauteng province, South Africa, 2012). Most public FET colleges in the Province of Gauteng are located within the three metros and some of them are named after these metros.

The population in the study comprised the following participants:

- Eight public FET colleges situated within the Province of Gauteng. It must be noted that the governance structure of all public FET colleges in the country (Further Education and Training Colleges Act, Act 16 of 2006) comprises of the College Council and the executive management which consists of the principal and three deputies. Only one campus per college was considered. The eight Colleges are as follows:

Central Johannesburg FET College

Central Johannesburg FET College is situated in central Johannesburg hence the name Central Johannesburg. The name defines its geographic location within the metro. It comprises of six campuses, Campuses-Central Johannesburg College (2012) as follows:

- Alexandra Campus
- Crown Mines Campus
- Ellis Park Campus
- Langlaagte Campus
- Park Town Campus
- Riverlea Campus

Each campus is managed by a campus manager who reports to the college principal. The college head office is currently situated at Park Town Campus. The executive management of the college comprises of the principal and three deputies who are responsible for the portfolios of Finance, Academic and Corporate services (Campuses-Central Johannesburg College, 2012). The researcher chose the Ellis Park Campus because it is central and accessible to most communities of the three metros by rail and road. It has also been selected due to the fact that it facilitates both NCV and NATED programmes.

Ekurhuleni East FET College

Ekurhuleni Metro is one of Gauteng's three metros. Prior to 1994 and before the establishment of Gauteng as a province, the area where the Ekurhuleni Metro is situated was known as the East Rand (Witwatersrand-Wikipedia, the free encyclopedia, 2012). The area is made up of gold mining towns. With the establishment of the Province of Gauteng, it became one of its three metros. Ekurhuleni East FET College is situated in the east of the Ekurhuleni Metro hence the name Ekurhuleni East. It comprises five campuses (Ekurhuleni East College, n.d). The five campuses are as follows:

- Benoni Campus
- Brakpan Campus
- Daveyton Campus
- Kwa Thema Campus
- Springs Campus

Like other public FET colleges in Gauteng, its executive management is comprised of the principal who is deputized by three deputies. The

college is surrounded by gold mining companies who recruit and train apprentices. The researcher chose the Kwa Thema Campus.

Ekurhuleni West FET College

Ekurhuleni West FET College owes its origin to the merger of six former technical colleges. Like its counterpart, namely Ekurhuleni East College, it is named after the Ekurhuleni Metro hence the name Ekurhuleni West. It is situated in the west of Ekurhuleni Metro. It comprises six campuses (Ekurhuleni West College, 2007).The campuses are as follows:

- Alberton Campus
- Boksburg Campus
- Germiston Campus
- Kathorus Campus
- Kempton Campus
- Tembisa Campus

The researcher chose Germiston Campus because it is the biggest campus which is easily accessible by rail and road to most communities of the Ekurhuleni Metro. It facilitates both NCV and NATED programmes.

Sedibeng FET College

Sedibeng FET College like all other public FET colleges in the Province of Gauteng owes its origin to the merger of four former technical colleges (Sedibeng College for Further Education and Training, n.d). It is situated south of the Johannesburg Metro in an area which used to

be known as the Vaal Triangle. The four campuses that constitute the college are as follows:

- Heidelberg
- Sebokeng
- Vanderbijlpark
- Vereeniging

The researcher chose Sebokeng campus because it is the college's only township campus. It is situated in the township of Sebokeng which like other townships in the country contends with poverty and unemployment. The college suits the study in terms of how it relates to the unemployed and unskilled youth of the township. Its executive management comprises a principal and three deputies.

South West Gauteng FET College

South West Gauteng FET College is situated in the south-west of the Province of Gauteng hence the name South West Gauteng. Like other colleges in the country it owes its origin to the merger of five former technical colleges which have since been turned into campuses (South West Gauteng College, 2011). The five campuses that constitute South West Gauteng College are as follows:

- Dobsonville Campus
- George Tabor Campus
- Molapo Campus
- Roodepoort Campus
- Technisa Campus

The researcher chose Technisa campus because it has successfully implemented distance learning which caters mostly for employed

learners. This campus was a distance learning centre with support offices all over the country long before its incorporation into South West Gauteng FET College. The college executive management is comprised of the principal and three deputies.

Tshwane North FET College

Tshwane North FET College is situated in the north of the Tshwane Metro, hence the name Tshwane North. The college's head office is situated in central Pretoria. It comprises five campuses (Tshwane North College, n.d). The five campuses are as follows:

- Mamelodi Campus
- Pretoria Campus
- Rosslyn Campus
- Soshanguve Campus
- Temba Campus

The executive management of the college comprises of the principal who is the head of the institution and three deputies. The three deputies are deputy principal academic, deputy principal corporate services and deputy principal: finance affairs. All five campuses are headed by campus managers who report to the principal. Campus managers are assisted by Head of Departments (HOD) and senior lecturers. Mamelodi Campus has been chosen for the study because it facilitates both NCV and NATED courses at exit level, namely N6 and level four.

Tshwane South FET College

As the name implies, the college is situated in the south of Tshwane Metro. It owes its origin to the merger of four former technical colleges into one public FET College (Tshwane South College, 2012). It comprises the following four campuses:

- Atteridgeville Campus
- Centurion Campus
- Odi Campus
- Pretoria west Campus

Each campus has a manager who serves as its administrative head. The campus manager is assisted by HOD's who head different faculties. The HOD's are in turn assisted by senior lecturers responsible for their respective programmes. The college executive management comprises of the principal and three deputies. The three deputies are responsible for three portfolios, namely academic, finance and corporate services. Centurion Campus has been chosen for the study because it has succeeded in building very expensive and advance workshops that are accredited by SETAS (Sector Education and Training Authority) for conducting trade tests.

Western College FET

Prior to 1994 and before the establishment of the nine provinces the area that constitutes Gauteng as it is known today was known as PWV. Witwatersrand at that time comprised of Johannesburg, the East Rand situated east of Johannesburg and the West Rand situated west of Johannesburg. The area west of Johannesburg is still known as the West Rand (Witwatersrand-Wikipedia the free encyclopedia, 2012). Western College FET is situated in the West Rand hence the name

Western College. It comprises of five campuses (Westcol for FET, 2011). The five campuses are as follows:

- Amandelbult
- Carletonville
- Krugersdorp
- Randfontein
- Thuba Makote

The West Rand region where the college is situated is a gold mining area. The region comprises of gold mining towns. Like other public FET colleges its executive management is comprised of the principal and three deputies accounting for three portfolios, namely finance, academic and corporate services. **Krugersdorp Campus has been chosen for the study because it facilitates both NCV and NATED courses at exist level.**

- **One college situated in Mpumalanga Province**

In terms of administration and executive management public FET colleges in Mpumalanga Province are similar to their counterpart in the Province of Gauteng as reflected above. The study had chosen CN Mahlangu Campus of Ekangala FET College. The campus is situated at Siyabuswa in the former homeland of Kwa Ndebele which has since been incorporated into Mpumalanga Province (Kwa Ndebele South African homeland, 2013). Contrary to campuses in Gauteng Province which are all in urban areas this campus is situated in an impoverished rural area (Tracing back our history & roots, n.d). The campus is situated 150 Kilometers from the College's head office in Witbank, a stark contrast to colleges in Gauteng province which are within a 30 kilometers radius from each other. The campus was under the

administration of Kwa Ndebele homeland before the establishment of Mpumalanga province. It is surrounded by impoverished villages with no employment prospects. The focus of the study remains public FET colleges in Gauteng Province but the study had selected this campus due its contrasting features to those of its counterpart in Gauteng Province as cited above. It has further been selected to enrich the study with challenges of a different nature to those of its counterparts in Gauteng. Despite the fact that the focus of the study remains public FET colleges in Gauteng, CN Mahlangu Campus was included due to its potential to contribute valuable information to the study.

The campuses in Gauteng Province are all selected owing to their strategic positions within their respective metros and local councils in terms of societies and industrial clusters they belong to. Their selection is further motivated by the fact that they are all beneficiaries of the R1 billion recapitalization grant and all fall within the scope of the national education plan for public FET colleges. Another factor that motivated their selection is that they all facilitate skills development courses and programmes.

The Ekurhuleni Colleges are situated next to avionic industries that provide service to the Oliver Tambo International Airport. Avionics related companies, such as South African Airways (SAA), South African Air Link (SA Link) and Denel aviation are based in Ekurhuleni (Ekurhuleni Metropolitan Municipality-Wikipedia, the free encyclopedia, 2012). South West and Western Gauteng Colleges are situated in a gold field area (South African History online, n.d).

The Tshwane Colleges are selected because of their proximity to the car manufacturing industries of Rosslyn in the west of Tshwane and Silverton in the east (Gauteng province, South Africa, n.d). Rosslyn has

Fiat, BMW, Nissan and Land Rover car assembly plants while Silverton has Ford, Mazda and Mitsubishi car assembly plants. Colleges in the greater Johannesburg region are situated in a financial and business management sector (Gauteng province, South Africa, n.d). The relationship between each college and the surrounding companies provided the researcher with valuable information regarding the articulation of skills development courses facilitated by the colleges and the skills needs of the companies.

- **Six companies**

Apprenticeship and learnership training culminates in trainees qualifying as artisans after successfully passing a trade test (Department of Higher Education and Training, 2012b:6) Skills acquired through apprenticeship and learnership are classified as intermediate skills. Such skills are a competency of FET colleges and henceforth acquired through a joint venture between these colleges and employers (Nzimande, 2010). In order for a skills training programme to successfully culminate in a national qualification, both stakeholders namely the FET colleges and the employer must cooperate and contribute to the training.

For a trainee to qualify as an artisan either through apprenticeship or learnership, the training schedule requires that he or she attend off the job training at a FET college and on the job training at a company's production plant. The two trainings should complement each other. The training schedule requires that a trainee integrates both theory and practice prior to consideration for a trade test that will qualify him or her

as an artisan (Department of Higher Education and Training, 2012b:9). An artisan is a trainee who had successfully completed an apprenticeship or learnership training and who had passed a trade test (Department of Higher Education and Training, 2012b:6). A trainee in a training schedule may occasionally attend a FET college for theoretical training and practical training at a company's training centre or production plants (Department of Higher Education and Training, 2012b:6).

In view of the above assertions FET colleges are bound to cooperate with labour markets in matters relating to skills training and development and be responsive to the skills needs of labour markets as reflected earlier in the research problem. Their curricula should be articulated to the skills needs of labour markets to avoid compromising the joint training.

Thus, the researcher saw it fit to include six companies in the population in order to have a more balanced and informed assessment of the role that public FET colleges play in skills development. Their inclusion is further motivated by the fact that they are compelled by law to be joint signatories of learnership contracts with FET colleges for contracts that involves their employees in training. The six identified companies are in close proximity to the eight Gauteng Province public FET colleges. The six selected companies are as follows:

Nissan South Africa

A car manufacturing and assembly plant situated at Rosslyn in the Tshwane Metro. It is closer to Tshwane North FET College particularly the Rosslyn and Soshanguve campuses.

Roodepoort Durban Deep.

This is a gold mining company in the West Rand which is situated next to South West Gauteng FET College. Roodepoort and Dobsonville campuses are closest to this mining company.

South African Airways Technical (SAAT)

A subsidiary of South African Airways (SAA) responsible for skills training and maintenance of the SAA fleet with its maintenance workshops situated at Oliver Tambo International Airport in Ekurhuleni. It is close to both Ekurhuleni East and Ekurhuleni West FET College.

Electricity Supply Commission (ESCOM)

It is an electricity generating and distributing company that trains and employs artisans across a variety of sectors.

Arcelor Mittal South Africa

This is a steel processing and manufacturing plant situated in the Vaal Triangle. It is situated next to Sebokeng and Vanderbijlpark campuses of Sedibeng FET College. It is involved in intermediate skills development through apprenticeship and learnership.

Ekurhuleni Metro

This is one of the three metros which comprise the Province of Gauteng. Ekurhuleni East and Ekurhuleni West FET College falls

within the jurisdiction of this metro. It is involved in learnership and apprenticeship training.

- **Indlela Training Centre**

Skills development is an undertaking that involves a number of role players that contribute to its success. One such role player is Indlela Training Centre situated at Olifantsfontein near Kempton Park in Gauteng Province. It was previously known as Olifantsfontein Trade Test Centre. It belongs to the Department of Higher Education And Training. Its main duty is to assess apprentices and learnership trainees who are in their final year of training using a trade test as an assessment tool (Department of Higher Education and Training, 2012b:6). A trade test is a practically orientated assessment tool that assesses the practical knowledge and skills acquired by trainees during training sessions held by FET colleges and employers. A trade test is an end result of a joint training by an employer and a FET college. Training remains incomplete unless a learnership or an apprenticeship is successfully completed and a trade test passed.

Thus, Indlela Training Centre can be regarded as one of the important role players in skills development. It is also equally important to note that public FET colleges have been identified by the government as important role players in skills development (Nzimande, 2010). It is precisely because of the role that Indlela Training Centre plays jointly with FET colleges in skills development that the researcher deemed it fit to include it. Its inclusion to the population of the study is further motivated by the potential it has to contribute valuable information about skills development.

1.6.3 Sampling

A sample is a small portion of the total population or set of objects which comprises the subject to be studied (De Vos, 2011:191). Sheppard (2004:93) concurs with De Vos in asserting that sampling refers to selecting a portion of a particular population to draw conclusions about that entire population. The main consideration in sampling is representative. The sample should be as representative to the population as possible.

The population was sampled as follows:

- Probability sampling particularly random sampling was used to sample learners at exit levels namely National Certificate Vocational (NCV) level 4 and NATED National Technical Education (NATED) Level 6 in the nine colleges as well as the exit levels of skills courses. Random sampling was used for learners and employees under training because it accorded all of them the opportunity to be sampled and also because of their large number. According to figures obtained from all nine colleges, there are 3000 exit level students. Thus 10 % of students at exit levels which amounted to 300 were randomly sampled. In terms of figures obtained from the six identified companies there are currently 200 of their employees who are undergoing skills training. Thus 10 % of the employees which amount to 20 were randomly sampled. In terms of the above figures a total of 320 participants were randomly sampled as questionnaire respondents.
- Non probability sampling particularly purposive sampling was used to sample participants in management positions who are responsible for skills training and skills development at the nine

colleges, six companies and at Indlela Training Centre. De Vos (2011:198) argues that non probability sampling is used to identify participants with relevant knowledge to the study. Non probability sampling was used to sample skills training managers because they have a wealth of experience in skills training and skills development. There are currently 60 management personnel involved in skills training and development in the nine colleges, six companies and Indlela Training Centre. A total of 25 skills training managers were purposively sampled for interviews owing to their experience and potential to contribute valuable information to the study regarding skills development by public FET colleges. Two skills development managers per college of the nine colleges, one skills development manager per company of the six identified companies and one from Indlela Training Centre were purposively sampled.

1.6.4 Data collection

It is of importance that validity and reliability be taken into cognition when gathering data. The instruments used to gather data should be proof tested against validity and reliability. Data collection should be taken very seriously due to its role later in data analysis. The success of data analysis relies on data collection.

Owing to its triangular nature the study used both the quantitative and qualitative mode of collecting data. In terms of the qualitative mode, 25 interviews were conducted with skills development managers: Head of Departments (HOD) and deputy principals of the nine colleges as well as skills development managers of the six companies and Indlela Training Centre. The interviews were conducted as follows:

- Nine interviews with nine deputy principal academics of the nine colleges
- Nine interviews with nine Head of Departments (HOD) of the nine colleges
- Six interviews with six skills development managers of the six companies
- One interview with an assessment manager at Indlela Training Centre

In terms of quantitative mode a total of 320 questionnaires were distributed to the exit level students and employees undergoing training at the nine colleges and six companies. This meant that 300 questionnaires were distributed to exit level students at the nine colleges and 20 questionnaires were distributed to employees undergoing training at the six identified companies for employees. Each college received 33 questionnaires except for Central Johannesburg College which received 36 questionnaires due to its size. Each company received three questionnaires respectively except for SAAT which received five questionnaires due to its size.

Krathwohl and Smith (2005:6) point out that a qualitative research orientation enables the researcher to understand people's behaviour and enhance the interpretation of data collected. From a qualitative perspective, observing, interacting and interviewing sampled participants accorded the researcher a better understanding of challenges faced by the province's public FET colleges in articulating their skills training and development to match the skills needs of the province's commerce and industry. The qualitative mode of data collection through its interviews and interaction with participants also enhance the researcher's understanding of challenges faced by the six

companies in addressing their skills shortage while having eight public FET colleges at their disposal to produce suitable graduates.

From a quantitative perspective of the study, questionnaires were used as a mode of data collection. Creswell (2003:196) asserts that questionnaires accord participants opportunities to respond freely so that desired factual information is collected. The questionnaires in the study made use of both closed and open ended questions. A total of 320 questionnaires were physically taken to sampled participants namely students at exit levels of nine colleges and employees under training at six identified companies. According to McMillan and Schumacher (2006:183), the advantage of questionnaires is that people respond to them with confidence and their response remains anonymous. Questionnaires were used to collect numerical data that would help the researcher to confirm and validate hypotheses pertaining to the challenges faced by the province's colleges, as well as the sampled companies regarding skills development and skills shortage.

1.6.5 Data analysis

Data gathered were analyzed quantitatively and qualitatively. Mouton (2001:108) points out that data analysis involves breaking up the data into manageable themes, patterns, trends and relationships. The aim of data analysis is better explained by Mouton (2001:108) as follows:

“The aim of data analysis is to understand the various constitutive elements of one’s data through an inspection of the relationships between concepts, constructs or variables, and to see whether there are

any patterns or trends that can be identified or isolated, or to establish themes in the data “

- **Qualitative analysis**

Patton (2002: 381) asserts that qualitative content analysis is a process of identifying, coding and categorizing primary patterns in the data collected. According to De Vos (2011: 271), coding represents the operations by which data are broken down, conceptualized and put back together in new ways. Data collection and analysis were done sequentially meaning that during interviews, transcripts and field notes were marked with codes according to similarities to prepare them for data analysis later. The researcher read all the interview scripts and field notes arranging them according to similarities and differences as per the different codes allocated to them. Data collected by means of audiotape were also transcribed verbally and coded.

The researcher used the inductive reasoning approach whereby early in the data collection process, he wrote notes relating observations to one another as well as developing new concepts and linking them to the skills shortage and skills development challenges faced by the province's public FET colleges. In the process of reading and rereading the transcripts and field notes, the researcher focused on identifying and discovering important information that singled out reasons or successes by the province's public FET colleges in addressing skills development. Having coded and sorted out transcripts and field notes according to similar views from data collected and rereading them over and over, the researcher thus developed a theory grounded in the data that accounted to skills shortage and skills development.

- **Quantitative analysis**

Retrieved questionnaires were also coded. De Vos (2011:160-161) argues that open questions give the respondents the opportunity to use their own discretion in answering questions, and closed questions are the type of questions that accord the respondents the opportunity to choose one or more responses from a number of responses provided.

Frequency distributions were used to analyze 320 questionnaires responses from the nine colleges, six companies and Indlela Training Centre. The responses were coded and arranged in terms of their frequencies on a table from low to high. The frequency table was then translated on a pie chart to present a clear picture of the responses.

1.7 RELIABILITY AND VALIDITY OF THE STUDY

It is of utmost importance to consider the issue of validity and reliability when deciding on tools to be used to collect data. McMillan and Schumacher (2006:324) point out that validity is concerned with the soundness, accuracy and effectiveness of the measuring instrument used to collect data. Creswell (2003:196) further argues that the potential of a research design to achieve its objectives rest with the validity of its instrument. For instance an item that is supposed to measure pain should indeed measure pain, not some related entity like anxiety.

The study used questionnaires and interviews as data collecting instruments. These instruments were tested for validity through pilot testing. During pilot testing the questionnaires and interview questions were administered to non-sampled participants to phrase and rephrase the questions until they were understood and interpreted the same by

everybody The questionnaires and the interview questions were first pilot tested using 10 non sampled skills development managers, 20 non sampled learners and 10 non sampled employees in training. The pilot testing used the research aims, hypotheses and research questions to test if questionnaires and interview questions yielded the responses expected from them.

In similar vein, McMillan and Schumacher (2006:183) argue that the reliability of an instrument has to do with its consistency to yield similar results under constant conditions on all occasions. To address the question of reliability the study used the same non sampled participants used in validity testing to pilot test questionnaires and interview questions for reliability. During pilot testing the questionnaires and interview questions were administered to non-sampled participants used in validity testing in order to phrase and rephrase the questions until they were understood and interpreted in the same way by everybody and further yielded the same responses.

1.8 ETHICAL MEASURES

McMillan and Schumacher (2006: 334) argue that people who are asked to participate in a study have a right to know what they are letting themselves into and the right to give or withhold their cooperation. **Creswell (2003:64)** concurs with McMillan and Schumacher in asserting that participants have the right to terminate their participation at any time and consent forms should also disclose that participation is voluntary. The ethical measures of the study were addressed in accordance with Borg and Gall's (1989:84-92) assertions as follows:

- Inform participants of all aspects of the research that might influence their willingness to participate in the study;

- Permit participant to furnish information anonymously if they so wish;
- Protect the right of participant;
- Keep the participant information confidential.

1.9 LIMITATIONS OF THE STUDY

- The study was limited to eight Gauteng Province public FET colleges and one College in Mpumalanga Province. The study did not cover private FET colleges because they are not funded by the government and they are not beneficiaries of the public FET college recapitalization programme.
- Time constraints limited the study because the researcher is a full-time employee in the Gauteng public FET college sector. The researcher relied only on his off duty time to commit to the study.
- Punctuality of participants for interview sessions could have posed a challenge. Participants were informed and forwarded interview schedules well in advance to reduce late coming.
- Training of field workers is a necessity. Field workers need adequate training in operating recording instruments, note taking and administration of questionnaires. Lack of training on their part was regarded as a limitation of the study.
- Access to company premises is always a challenge and the researcher had to comply with strict security control measures at access points.

1.10 DEFINITION OF KEY CONCEPTS

- **Apprentice**

An apprentice is a trainee in a respective trade who has entered into an agreement with an employer, respective SETA and the Department of Labour (Department of Higher Education and Training, 2012b: 7)

- **Artisan**

An artisan is a qualified trainee who had completed his apprenticeship training and passed a trade test (Department of Higher Education and Training, 2012b:7)

- **FET college**

A FET college is a former technical college that facilitates NCV courses from L2 to L4 and NATED courses to apprentices up to National N Diploma level (Department of Higher Education and Training, 2012a : 20)

- **Learnership**

A learnership is a skills training programme that is unit standard based and like apprenticeships, culminates in artisanship (Department of Higher Education and Training, 2012b:10)

- **NATED Courses**

NATED Courses are also known as report 191 or N courses. They are theoretically inclined courses linked to apprenticeship facilitated by FET colleges from N1 to N6 (Department of Higher Education and Training, 2012b:6)

- **On the job training**

It is a practical training undertaken by trainees at a company production plant under the supervision and mentorship of a qualified artisan (Department of Higher Education and Training, 2012b:9).

- **Off the job training**

It is a theoretical training undertaken by trainees while attending theoretical classes at FET colleges (Department of Higher Education and Training, 2012b:9).

- **Skill**

A skill is a capability and an art of knowledge application that can be transferred from one person to the other (Harrison, 1993:26)

- **Trade test**

A trade test is a practical summative assessment that certifies trainees as qualified artisans (Department of Higher Education and Training, 2012b:7)

1.11 DIVISION OF CHAPTERS

The study comprises six chapters that outline challenges that Gauteng's public FET colleges contend with in their quest to facilitate the development of intermediate skills which are sought after by the province's labour markets. Through the review of literature the study further highlights the imbalance between the supply of intermediate skills by the province's public FET colleges and the demand of such skills by the province's labour market. The chapters are demarcated as follows:

Chapter one gave an overview of the background to the challenges of Gauteng's public FET colleges that hinders their effort to close the skills shortage gap within the province. The problem statement forming

the basis of the study, research aims, research methodology and the research design were outlined in the chapter.

Chapter two focused on the historical perspective of the role played by predecessors of current FET colleges, namely Technical Institutes and Technical Colleges in the development of intermediate skills from period of the Union of South Africa to the apartheid era in South Africa.

Chapter three concentrated on the review of literature related to the study. Through literature review chapter two critiqued the role played by the province's public FET college sector in the development of skills sought after by the province's labour markets.

Chapter four outlined the approach and the method that the study followed in sourcing relevant and appropriate information from sampled participants. Information gathering tools were described with a focus on how they had been utilized to collect relevant and appropriate data necessary for the study.

Chapter five analyzed and interpreted data sourced from sampled participants with a specific reference and focus on the role played by the province's public FET college sector in addressing the skills shortage faced by the province's labour markets.

Chapter six presented the conclusions emanating from the study. The conclusions drawn were used to provide recommendations for the improvement of public FET colleges in Gauteng with regard to skills development.

1.12 CONCLUSION

Chapter one serves as an introduction to the study, as well as providing a brief historical perspective to the research undertaken. The problem of the skills shortage is introduced in the light of the poor development of skills by public FET colleges. The skills deficit in South Africa calls for public FET colleges to improve their approaches and strategies in order to contribute effectively in skills development. It has been argued that public FET colleges are not performing as expected of them by labour markets. Funds have been made available to them and specific legislation enacted to enhance their efficiency in the development of intermediate skills but unfortunately results are still not satisfactory.

CHAPTER TWO

TECHNICAL AND VOCATIONAL INSTITUTIONS IN SOUTH AFRICA AND THEIR ROLE IN THE DEVELOPMENT OF SKILLS: A HISTORICAL PERSPECTIVE FROM THE UNION OF SOUTH AFRICA TO PRESENT DAY PUBLIC FET COLLEGES

2.1 INTRODUCTION

The focus of this study remains to be the evaluation of skills development by public FET colleges in the province of Gauteng. This is prefaced by an overview of the development of skills by predecessors of current FET colleges. The exploration commences with technical colleges during the era of the Union of South Africa, during the apartheid era and lastly, the post-1994 period. The motive behind the exploration is to forge a broad and balanced understanding of the FET college sector from its early development to its current form.

Concerns echoed by critics of the public FET college sector (see par.1.2) dwelt on the sector's inability to take advantage of the immense state support that it enjoys and transform itself from a weak and dysfunctional institution to a competitive one. Critics decry the failure of the public FET college sector to close the skills shortage gap that our country's labour markets are contending with. Against the background of the FET College Act amended twice since 1995, legislation was passed to capacitate the sector and make funds available. However, the Green Paper for Post School Education and Training (Department of Higher Education and Training, 2012a:10) contends that the sector remains weak and small. The study seeks to establish the reasons why amid such enormous financial and political support the sector remains weak and small.

The aforementioned assertions should be understood in the context of developments that have unfolded in the intermediate skills development landscape since the dawn of South Africa's democracy in 1994. By then it was evident that the technical and vocational education sector responsible for the development of intermediate skills needed transformation to redress past injustices (Department of Education, 2008: 6). A National Committee on Further Education (NCFE) was established in September 1996 to investigate the problems relating to the FET sector and to make recommendations for its transformation (Department of Education, 2008: 6). Subsequent to the NCFE recommendations, the Further Education and Training Act (No 98 of 1998) was promulgated to serve as a guideline for the transformation and development of FET colleges for the period 1998 to 2006 (Department of Education, 2008: 6). In the light of lack of progress and escalating challenges in the public FET college sector the Further Education and Training Act of 1998 (No 98 of 1998) was amended in 2006 to the Further Education and Training Act of 2006 (Department of

Education, 2008 :6). Unfortunately continuing challenges and the dysfunctional nature of the public FET college sector resulted in the amendment of the Further Education and Training Act of 2006 to the Further Education and Training Act of 2012 bill which is yet to be signed by the President.

The aforementioned discussion demonstrates the commitment of the current government in transforming the public FET college sector to a competent sector capable of playing a key role in addressing the skills deficit engulfing the labour market. The aforementioned argument further justifies the impatience of the sector's critics regarding the sector's failure to deliver, despite the massive government support it enjoys.

Thus, it is of important to understand the early development of predecessors of the current public FET college sector namely technical colleges, trade schools and vocational schools. Such an understanding of the complexities and dynamics related to the development of skills by technical colleges prior to 1994 has the potential to contribute positively to the study. The clear knowledge of pre 1994 technical colleges will enhance the understanding of the parallel between them and current public FET colleges in terms of skills development. For this reason, this chapter focuses on the historical perspectives of pre 1994 technical colleges. Attention is paid to the role that the pre 1994 technical colleges played in the development of skills for the labour market of the time. The chapter focuses on how these predecessors evolved during the early industrial development of South Africa, and what role they played at the time. Relevant literature is reviewed to establish the degree to which these predecessors were responsive, accountable and relevant to the skills needs of the labour market. A

parallel with regard to skills development between predecessors of public FET colleges and their present day counterpart is drawn.

The role played by predecessors of present day public FET colleges is examined in stages from the era of Union of South Africa to the apartheid era. To advance the aim and objectives of the study, this chapter also explores the role played by present day public FET colleges in the development of skills.

2.2 CONCEPTUAL FRAMEWORKS

Akoojee (2009: 118) asserts that there is an acknowledgement by the current government, commerce and industry and other stakeholders outside government that the country is faced with a serious skills shortage and inefficient skills development programmes. Chelechele (2009:52) concurs that most government interventions in skills development and training programmes are poorly implemented.

As a result of poor skills development programmes that contribute to the country's skills deficit, South Africa continues to rank low in the world of competitiveness (Du Toit & Strauss, 2010: 308). According to the 2008-2009 global competitiveness index, South Africa is placed 45th out of 134 countries and it holds bottom position in the category of skilled workers (Du Toit & Strauss, 2010: 308). The Human resource Development Strategy for South Africa (HRD-SA) 2010-2030 (Department of Labour , 2009: 14) concurs that a number of countries with lower incomes per capita, such as Kenya and Egypt, perform better than South Africa with regard to the education quality and the skills development output.

The aforementioned assertions of dysfunctional skills development undertakings are further confirmed by the National Skills Development Strategy III (NSDS III) (Department of Higher Education and Training, 2010:12) as follows:

“South Africa’s pool of intermediate skills, especially artisanal skills is too low to support national and sector development and growth. The workforce is not keeping up with the skills needed to remain competitive in an increasingly knowledge based economy.”

In this light, former president, Thabo Mbeki, in his successive state of the nation addresses during his tenure, emphasized the importance of the public FET college sector in skills development. President Zuma (2012) concurred with Mbeki in his address to the Principals of FET colleges that the sector is very crucial in keeping up with the strategic priorities of the National Skills Development Strategy III. In terms of the aforementioned, pressure from concerned skills development stakeholders (see par.1.2) is mounting on government and the public FET college sector to fulfill their mandates. The pressure stems from the fact that the public FET college sector is enjoying support at the highest political level but results are not yet forthcoming.

The fact that South Africa trails countries with lower income per capita as reflected above indicates the gravity of the inefficiency of the skills development landscape and explains why the skills deficit for almost two decades shows no signs of improvement. Maja (2000:2) argues that skills development and skills training are fundamental to economic growth and social development and are key to the eradication of poverty and unemployment. In support of Maja’s argument, Rabey (1987:6) contends that skills development is a process of assisting

people to acquire the knowledge, skills and attitudes necessary to do the work they are employed for or to prepare them for future employment. Rabey's assertion is further supported by Harrison (1993: 264) in his contention that the concept 'skill' is defined as a process of enabling individuals to assume new roles and implement systems effectively in order to successfully achieve stated performance outcomes. Harrison (1993:264) further argues that a skill is acquired through education and training. Campbell (2002: 25) concurs with these authors that whenever there is an inadequacy in skills development and skills training, a skills shortage is likely to surface.

In the context of the aforementioned arguments, it can be deduced that skills development in South Africa is not at a level where it is expected to be in terms of quality, quantity, relevance and responsiveness. Education and training could play a crucial role in addressing skill development and equip citizens with skills that could enable them to participate fully in the economic development and competitiveness of the country. Unfortunately South African skills development initiatives are not as effective as they are expected to be. The political and financial support pledged to the public FET college sector by the government suggests that education and training initiatives in support of skills development does exist. Yet positive and fruitful results are not forthcoming.

The transformation of the education system in South Africa particularly the technical college sector commenced shortly after the first democratic elections in 1994 (Department of Education, 2008: 6). According to the National Plan for Further Education and Training Colleges in South Africa (Department of Education, 2008: 6), the overhauling of the vocational and technical education system inherited from the apartheid government commenced in 1995. The

transformation was intended to transform the racially divided technical college sector to a coherent system capable of addressing the skills needs of the 21st century. As pointed out in aforementioned arguments the public FET college sector was identified by the new government as the appropriate tool to address the intermediate skills deficit. Since 1995 we have witnessed special attention paid to the public FET college sector by the government in the form of finance and legislation.

As reflected above the transformation of the public FET college sector unfolded in the form of amendments to legislation, passing of new legislation and financial commitment to the sector.

It is very important to be acquainted with the state interventions in the public FET college sector since 1995 in order to draw a balanced and informed parallel between arguments that view the sector as failing the labour markets and those who view developments differently (Department of Higher Education and Training, 2012a:10). Below is an exposition of how the transformation unfolded:

In 1995 the National Qualification Framework (NQF) was established to advance the integration of the education and training system under the auspices of the South African Qualification Authority (SAQA) (Department Of Education, 2008:6). Mr GF Qonde, Director General in the Department of Higher Education and Training, in his address to the South African Qualification Authority indicated that the NQF prevailed because of the shared desire to create a unified education and training system underpinned by the principles of equity, access, mobility and progression (Qonde, 2012)

- In September 1996 the National Committee on Further Education (NCFE) was appointed to investigate problems

relating to FET and make recommendations for its transformation (Department of Education, 2008:6).

- In August 1997 a Framework for the Transformation of FET in South Africa was published following a report of the (NCFE) and formed the basis for the Green Paper for FET and the White Paper for FET (Department of Education, 2008:6).
- In 1998 The Further Education and Training Act,1998 (Act No 98 of 1998) was enacted to guide and govern the development of the Further Education and Training colleges for the period 1998 to 2006 (Department of Education, 2008:6).
- In July 2001 A New Institutional Landscape for Public Further Education and Training Colleges was published and recommended the merging of 152 former technical colleges into 50 public FET colleges. In his state of the nation address of February 2001 the then state President, Thabo Mbeki firmly stressed the importance of the national education plan and that of FET colleges in human resource development (Department of Education, 2001:1). The aforementioned plan and the state of the nation address prioritized and placed a responsibility on public FET colleges to play a crucial role in the development of skills
- In December 2006 FET colleges were prioritized in official policy by the passing of the Further Education and Training Colleges Act (Act 16 2006) that gave clear direction in terms of funding, management and employment of educators in public FET colleges. This Act 16 of 2006 authorized the autonomy of the public FET college sector.

- In 2007 the national Department of Education committed a once off grant of R1,9 billion in recapitalization funding to public FET colleges for infrastructural development and R100 million bursary scheme to assist less privileged students (Akojee, 2009 : 131)
- In 2009 the Department of Education was replaced by two new departments, namely Department of Higher Education and Training and Department of Basic Education with the intend of improving quality and responsiveness in education and training (Nzimande,2009a)

The above exposition indicates how the government committed itself to address the skills deficit through skills development. The government commitment is evidenced by the transformation landmark of the public FET college landscape. The commitment of government to the public FET college sector is further evidenced by the passing of Acts, provision of funds and the implementation of the national education plan for public FET colleges. Based on the amount of support pledged by the government to the public FET college sector it is therefore justified to expect the public FET college sector to account for this support, and deliver on its national mandate of addressing the skills deficit.

On the contrary according to Accelerated and Shared Growth Initiatives for South Africa (ASGISA), recent research indicates that the skills shortage gap is widening due to the slowness of our education and skills development institutions to catch up with the current acceleration

of economic growth (Accelerated and Shared Growth Initiatives for South Africa, 2007)

The exposition as reflected above suggests a misalignment between the support pledged by the government to the public FET college sector and the commitment of the public FET college sector to the transformation process. The disparity in commitment between the two is evidenced by the lack of competitiveness and responsiveness in the public FET college sector amid the state support. The state of the skills deficit engulfing our country amid the state support to the public FET college sector is better explained below:

According to Dr Raymond Ngcobo, chief director of strategic competitiveness at the Department of Trade and Industry, research reveals a possible shortage of 1.5 million to 2 million skilled workers by 2017. This puts immense pressure on the officials at the Department of Home Affairs, who need to process some of the 35 200 quota work permit applications the Minister of Home Affairs made available in April 2007 to attract foreign workers in South Africa (Van Reenen, 2010: 5)

In view of the above argument, it can therefore be accepted that South Africa is less successful in developing and producing skilled workers at a rate that suits the skills demand of the economy. Consequently, the country relies on the recruitment of foreign skilled workers to close the skills shortage gap. The aforementioned development calls for the investigation of the role played by the public FET college sector in the development of skills.

The competitiveness of the public FET college sector to deal systematically with the skills deficit is partly hampered by its failure to research interventions prior to implementing them as reflected below:

It is evident that there are threats to the FET sector as a result of merging FET colleges that create uncertainties with regard to the success of this education sector, the Department of Education did not conduct enough workshops for the orientation of stakeholders towards the dynamics of the FET curriculum. Communication breakdown, mutual acceptance as equals, power problems and a shift of people from comfort zones were identified by researchers as factors contributory to the effectiveness of the merging process' (Bisschoff & Nkoe, 2005: 203-210).

The failure of the public FET college sector to respond systematically to the skills needs of the country's labour market was also highlighted by Nzimande in his address to the Kwa Zulu Natal inter-cluster forum on 3 August 2011 as follows:

A sparse analysis of the performance of our FET college graduates raises concerns. The success rate is low, the employability rate is low and the linkages between colleges and industry are few. The capacity within our colleges is also a matter of concern. On the other hand industry is raising concerns with regard to skills shortages especially of the middle level skills, but industry is also saying it is ready and willing to support teaching and learning in FET colleges. There are

concerns regarding the alignment between what is being taught at the colleges and what industry needs, and therefore the employability of college graduate is low (Nzimande, 2011a)

Nzimande's concerns as reflected above support critics (see par.1.2) who maintain that the sector is failing the country's labour markets and the economy despite the massive government support. This paints a bleak picture as far as the sector's competitiveness is concerned. Concerns echoed by Nzimande and the critics of the public FET college sector further necessitate the need to investigate why the public FET college sector is failing to deliver on its national mandate.

The challenge that the public FET college sector is currently contending with, is that of failing to respond systematically to the skills needs of labour markets in a way that reflect accountability to the state supports that it enjoys. Against the background of the support that the sector has been receiving from the state for more than a decade, it is therefore expected of it to start delivering and producing result that could be measured and quantified. Quantifiable result expected from the sector is that of producing graduates that meet the skills needs of labour markets in terms of quality and quantity.

The establishment of the Department of Higher Education and Training in 2009 changed the entire skills development landscape. Nzimande (2010) indicates that the Department of Higher Education and Training is constituted by the skills development component that used to belong to the Department of Labour, the universities and the college sector. The Department of Higher Education and Training was therefore established through the integration of the governance of the skills development institutions under one department. However, there has

been concern that the skills development institutions are not coordinated and, according to Nzimande (2010), integrating them under a single department is likely to remedy the lack of coordination amongst them. For instance the levy grants structures, such as SETAS and the National Skills Fund (NSF), used to be the competency of the Department of Labour whereas the FET colleges that were also involved in skills development were a competency of the Department of Education.

The lack of coordination was evident in the implementation of the NSDS I (2001-2005) and NSDSII (2005-2010) developed by the Department of Labour and aligned to the Human Resource Development Strategy for South Africa (HRD-SA). According to the National Skills Development Strategy III, the NSDS III is a subcomponent of the HRD-SA and it will operate concurrently with it to advance the national skills development imperatives (The Department of Higher Education and Training, 2010: 10).

Nzimande (2009a) also indicated that SETAs and the public FET college sector's skills development plans have not been informed by HRD-SA nor NSDS hence their failure to deliver (Nzimande 2009a). Nzimande further argues that the lack of coordination between SETAs and the public FET college sector resulted in SETAs failing to place FET college graduates in the Gautrain and the 2010 World Cup projects (Nzimande 2009a). Against this background the skills development component was consolidated under one department to advance the skills development agenda with accelerated vigour.

The establishment of the Department of Higher Education and Training and the integration of the skills development components under one department should auger well for the public FET college sector. The

public FET College sector as a competency of the Department of Higher Education and Training together with SETAS and the NSF plan jointly. SETAS and the NSF understand the skills needs of their respective economic sectors. Their involvement with the public FET college sectors is likely to enable colleges to align their skills training to the skills needs of labour markets. Nzimande (2011d) in his keynote address at the meeting with SETA chairpersons argued that one of his department objectives is to see SETAs opening offices in public FET colleges in order to facilitate work placement, learnerships and apprenticeships.

The next subsection will focus on the role played by the predecessors of the public FET college sector namely technical institutes and technical colleges during different stages from the Union of South Africa to the present day South Africa. The role played by pre 1994 technical colleges in skills development is important for the study because it can highlight their strengths and weaknesses and uncover good practice that could be emulated. While focusing on the contribution to skills development by predecessors of the present day public FET college sector, their contribution should be critiqued with reference to the following questions:

- Were their curricula and course content articulated to the skills needs of then labour market?
- Were they responsive to the skills needs of then labour markets?
- Were their educators in possession of appropriate and relevant qualifications?
- What challenges affected their efficiency in the development of intermediate skills?
- Were they compliant to national quality standards?

2.3 THE DEVELOPMENT OF SKILLS BY PREDECESSORS OF PUBLIC FET COLLEGES (TECHNICAL INSTITUTES AND TECHNICAL COLLEGES) DURING THE UNION OF SOUTH AFRICA

South Africa was colonized in succession by the Dutch and the British in the seventeenth century (Union of South Africa, 1999). The Dutch arrived first in the Cape in 1651, followed by the British in 1810 (Union of South Africa, 1999). Consequent to disagreements between the two colonial masters, the Dutch descendants known as Boers or Afrikaners left the Cape and trekked north where they established two Boer republics, namely Transvaal and Orange Free State (Union of South Africa, 1999).

Consequent to the great trek by the Afrikaners from the Cape, South Africa henceforth comprised of four colonies namely Natal, Cape, Orange Free State and Transvaal. Transvaal and Orange Free State belonged to the Afrikaners and were known as the Boer Republics whereas Natal and the Cape were British colonies. The discovery of gold and diamonds in the Transvaal and Orange Free State resulted in the British invading the Boers republics and triggering fierce battles with the Afrikaners over the precious metals. The invasion of the Boer Republics by the British contributed to the first and second Anglo Boer War. A mile stone was reached in 1902 when the two colonial masters brokered a peace accord known as the Treaty of Vereeniging that ended the second Anglo Boer War (Union of South Africa, 1999).

The Union of South Africa was formed on 31 May 1910 as a power sharing compromise between the Afrikaners and the British

consequent to the peace accord (Union of South Africa Google search, n.d). As its name implies, it owes its origin to the unification of two Boer republics, namely Transvaal and Orange Free State and two British colonies known as Natal and the Cape (Union of South Africa Google search, n.d).

The development of skills in South Africa particularly at intermediate level has always been the quest and the responsibility of predecessors of FET colleges namely trade schools, technical institutes and technical colleges. These predecessors played a crucial role in the development of skills during the Union of South Africa (1910 to 1960). The Union of South Africa coincided with the early industrial development in this country when labour markets were comprised of mining companies, railways and harbours. These early labour markets (railways, mines and harbours) needed skilled labour to survive. Technical colleges, technical institutes and trade schools were henceforth established solely to train and provide skilled labour to these early labour markets. The skills demands of labour markets by then were not as complex as they are today.

Against the above background certain universities particularly those facilitating engineering courses owe their origin to the early labour markets. These universities started as technical colleges accounting to mines and railways in terms of skills development. The skills demand for the labour market changed with time and became more advanced and complicated. This created a need for universities. Consequent to the change in the level of skills demanded by labour markets, certain technical colleges transformed and upgraded to universities with the intent to focus on the development of skills at a higher cognitive level (Kruger, Bisschoff and Van Heerden, 1986:183).

The aforementioned assertion regarding the transformation from technical colleges to universities is evidenced by history of the University of the Witwatersrand (WITS) which transformed from a technical college to a university. The University of the Witwatersrand was founded in Kimberly as a mining technical college in 1896 (Kruger *et al*, 1986:183). By then it was known as the South African School of Mines. Its prime responsibility at the time was to develop relevant skills needed by the diamond mines in that region. De Villiers, Badham, Crompton, Orr and Sinton (1948: 9) maintain that the discovery of gold in the Witwatersrand area influenced the relocation of the South African School of Mines (later WITS) to Johannesburg. Shortly after its relocation from Kimberly to Johannesburg in 1904, the South African School of Mines was renamed the Transvaal Technical Institute. On 1 March 1922 the Transvaal Technical Institute was given full university status and renamed WITS (Short history of the University, n.d). It is very important to note that after its relocation and renaming, WITS continued to develop and supply the gold mines in Johannesburg with skilled employees as it was the case in Kimberly.

Similarly, other universities particularly those facilitating engineering courses also started as technical colleges. De Villiers *et al* (1948: 8) contend that the Universities of Natal, Free State and Cape Town owe their origins to the railways. According to De Villiers *et al* (1948:7), the University of Natal was established in 1907 as the Durban Technical Institute for the purpose of developing technical skills for the Natal railways. The University of Cape Town also started as a technical college and its origin is linked to the Cape Colony railways (De Villiers *et al* 1948:7).

This discussion indicates that skills development has been the purpose of technical colleges from the early days of South Africa. Labour

markets created by the railways and mines worked in close conjunction with technical colleges to ensure that appropriate, qualitative and efficient skills were developed. Rees (1957: 25) points out that the Durban Technical Institute which later became the University of Natal trained apprentices for the Natal railways for years and sometimes released its instructors to teach at the railways training centre.

A commonality can be demonstrated between South Africa and Britain in terms of engineering universities that started as technical colleges and later upgraded to universities (Rees (1957:5). Such universities played a crucial role in developing skills for labour markets in both countries. The common trend is associated with South Africa's status as a British colony. Akoojee, Gewer and McGrath (2005:99) argue that South Africa's vocational education and training system and its performance were profoundly shaped by the history of its colonization by the British. Cosser, McGrath, Badroodien and Maja (2003:13) indicated that South African technical colleges followed the model of their British sister institutions in their concern with theoretical provision of apprentices.

Thus, it was not only in South Africa where skills development was a joint venture between labour markets and technical colleges. As reflected above, Britain also used the same model where technical colleges tailor-made their skills training to the needs of labour markets. In this way the Union of South Africa's technical colleges managed to forge mutual relationships with labour markets and enhance the principle of responsiveness and articulation to employers. The responsiveness to the needs of labour market and the articulation of programmes to the needs of employers is something that current public FET colleges are failing to achieve (Department of Higher Education and Training, 2012a: 26). However, it should be noted that earlier

labour markets were small and comprised only the mines and railways. The mining sector and railways used electrically powered equipment as well as petrol and diesel powered earth moving equipment. The railways used steam locomotives that needed maintenance. Skilled employees in the form of electricians, fitters, motors and diesel mechanics were in demand in the two sectors. Other trades such as rigging, plumbing and welding were also crucial to the two sectors. Moreover, the size of the economy at that time contributed to the achievement of the mutual relationship. The economy was small, hence the less complex skills demand. The question arising from the history of the strong bond between the former technical colleges and employers is why it is so difficult to achieve a similar bond today (Department of Higher Education and Training, 2012a: 26)

Another similarity between the early colleges in South Africa and their British counterparts was their autonomy and independence from state intervention (Rees, 1957: 5). They were both managed by councils that were yielding enormous power and influence. According to Rees (1957:5), the council of the Durban Technical Institute had powers to decide on the curricula, course content and the appointment of lecturing staff. These councils comprised of influential people sourced from the ranks of academics and industrialist. It was through these councils that commerce and industry was capable of influencing the curricula and the course content of the colleges. They ensured that the curricula and course content suited the skills needs and aspirations of commerce and industry. It is no surprise that the current apprenticeship and learnership programmes are still rooted in trades that were trademarks of early labour markets (Zuma, 2012).

In terms of the aforementioned arguments, the Union of South Africa's technical colleges were responsive to labour markets. It is therefore

accepted that their autonomy and independence from the state contributed to their responsiveness to the skills needs of labour. The responsiveness and articulation of courses to labour markets is evidenced by the mutual relationship between the Durban Technical Institute and the Natal railways. The mutual relationship between WITS and the Johannesburg gold mines is further evidence of the Union of South Africa's technical Colleges responsiveness to labour market. Therefore, the positive relationship between the technical colleges and labour markets contributed to the balance between the skills supply and the skills demand. This positive relationship contributed to graduates of technical colleges being absorbed and inducted with ease by labour markets. Current public FET colleges are a competency of the Department of Higher Education and Training and as such they are not as autonomous and independent as their Union of South Africa counterparts (Cosser, 2011: 70)

In South Africa the autonomy of technical colleges, (Kruger *et al*, 1986: 204) was seriously affected by the introduction of *The Higher Education Act of 1923* that enabled the Union of South Africa government to take control of all technical colleges. According to Kruger *et al* (1986:204), the government felt threatened by the technical colleges' autonomy to an extent that it could no longer tolerate it. Rees (1957:283) contends that the intolerance became more conspicuous when the Minister of education, Mr. FS Malan leveled accusations of segregation and abuse of power against the colleges. According to Rees (1957: 283), the minister's accusations stemmed from the fact that none of the technical colleges used Afrikaans as a medium of instruction.

The introduction of The Higher Education Act of 1923 signaled the end of the technical college's autonomy (Kruger *et al*, 1986: 204). The

achievements of college councils evidenced by strong relations with labour markets and the alignment of skills training to the skills needs of employers were forfeited. Despite their resistance, the colleges were eventually taken over by the Union of South Africa's government. According to Rees (1957: 77), the resistance by colleges was based on the fear that the state might not be capable of replacing the expertise possessed by the councils of different colleges. The management of different colleges and their councils were concerned that the state would degrade and transform them to trade schools that were narrow in scope (Rees, 1957: 77).

In Britain technical colleges also lost their autonomy to the state, but for a different reason. Burgess and Pratt (1971: 20) argue that in Britain the London exhibition of 1851 sparked the taking over of colleges by the state. At that exhibition Britain's dominance in industrial development was sternly challenged by Germany and Russia. In particular, the standard of technical education in Germany was very high. According to Burgess and Pratt (1971:20), the British government assigned the Robbins Commission to investigate and report on the standard of technical education in Britain. The British government eventually used the London show and the commission's report to take over technical colleges with the intent to improve their standard.

This discussion indicates that the predecessors of FET colleges during the Union of South Africa were involved in skills development independently and free from the interference of the state. They used their autonomy to strengthen their college councils with experts from different sectors of the economy. Their autonomy was also used fruitfully to recruit and appoint instructors with relevant and appropriate expertise. Despite their independence from the state they succeeded in recruiting instructors with appropriate expertise and developed

curricula that were relevant and articulated to needs of labour markets. The aforementioned assertions suggest that they were responsive to the skills needs of labour markets. They were the breeding ground of technically skilled prospective employees sought after by labour markets particularly mines and railways.

Further, employers were actively involved in decision-making pertaining to course contents and curricula facilitated at respective technical colleges. The course contents and the curriculum were responsive to labour markets and suited the skills needs of employers. The autonomy of technical colleges enabled them to be responsive and flexible in responding to the skills needs of employers. The responsiveness is emphasized by the fact that most colleges were facilitating courses relevant to their local employers namely mines and railways. Moreover, quality and compliance were adhered to as demonstrated by the Union era colleges' strong relationship with labour markets.

However, during the Union of South Africa, whites were the only racial group catered for in terms of skills development (Akoojee *et al*, 2005:106). White learners were in a position to access work places fully equipped for the workplace in terms of acquired skills. Unfortunately their successes were eroded by discriminatory legislation, such as the Apprentice Act of 1922. According to Akoojee *et al*, (2005:106), this Act enabled the technical college sector to become tightly aligned with the needs of industry in a racially defined model that categorically excluded Africans. As a result of the exclusion only a white minority was skilled at the expense of the African majority. The nature of discrimination pertaining to skills development and training that impacted negatively on technical colleges during the Union of South Africa is better outlined below as follows:

The State policy during the period 1920 to 1930 was ambivalent on the racial division of labour, where the unskilled and rural Afrikaans speaking workers who always felt threatened by competing for jobs with African Workers, sought to protect their narrow interest in the labour market. It was through the introduction of the so called civilized labour policy in 1922 that a racially based system of job reservation was implemented. Artisan and tradesmen's jobs were reserved for workers classified as whites, where black workers could access jobs at the lower end of the market. This marked the beginning of the skills development regime which was based on racial discrimination in which case the white unions used their representation in the industrial councils to sign collective agreements with employers to exclude the African workers from skilled jobs. The job reservation Act of the early 1950's reserved all skilled work for white workers (Bisschoff & Nkoe, 2005:204).

2.4 THE ROLE PLAYED BY PREDECESSORS OF PUBLIC FET COLLEGES IN SKILLS DEVELOPMENT DURING APARTHEID (1948 to 1993)

The previous section dealt with the role played by technical colleges in the development of skills during the early days of South Africa's industrial development. This section will focus on the role played by technical colleges in the development of skills during the apartheid era from 1948 to 1993.

In terms of the Constitution of the Union of South Africa, which was a power-sharing compromise between English-speaking South Africans and the Afrikaners, an attainment of a two-thirds majority was a prerequisite to effect changes on the Constitution (Union of South Africa, 1999). In 1948 the National Party under the leadership of DF Malan reached a milestone by obtaining a two-thirds majority which enabled them to change the Constitution. Subsequently the National Party seized the opportunity and enacted apartheid laws which were unjust and discriminatory. The National Party used its majority in parliament to enshrine apartheid in the Constitution. Apartheid was a social system enshrined in the Constitution to maintain white domination and racial segregation (The History of Apartheid in South Africa, n.d)

The National Party used apartheid to advance its racial segregation agenda and to promote white supremacy. According to The History of Apartheid in South Africa (n.d) apartheid and its motives are explained as follows:

Following the independence from England an uneasy power-sharing between the two groups held sway until the 1940's, when the Afrikaner National Party was able to gain a strong majority. Strategists in the National Party invented apartheid as a means to cement their control over the economic and social system. Initially, the aim of apartheid was to maintain white domination while extending racial separation. Starting in the 60's, a plan of Grand apartheid was executed emphasizing territorial separation and police repression. With the enactment of apartheid laws in 1948, racial discrimination was institutionalized. Race laws touched every aspect of social life including a prohibition of

marriage between non whites and whites, and the sanctioning of white only jobs. In 1950, the Population registration Act required that all South Africans be racially classified into one of three categories, white, black or colored.

Power sharing between the Afrikaners and their English-speaking counterparts suffered a huge setback subsequent to a two-thirds majority attained by the National Party in 1948. The Union of South Africa based on power sharing between the two groups was challenged as a result of the Afrikaners pushing for the enactment of apartheid laws. The English were generally opposed to apartheid but unfortunately the two-thirds majority attained by the National party in parliament countered their aspirations for a free society. The two-thirds majority augured well for the National Party and the predominantly Afrikaner constituency because it gave them more leverage to change the constitution and promulgate apartheid laws (The History of Apartheid in South Africa, n.d)

The era of Union of South Africa was also characterized by war namely World War I and II as well as Anglo Boer wars. Many young men of school going age join the war efforts. Education was therefore interrupted by these wars. The apartheid era was characterized by the enactment of racist laws such as Group Areas Act, Separate Amenities Act and the Population Registration Act that segregated communities along racial lines (The History of Apartheid in South Africa, n.d) . Racially integrated communities where residents had lived together in harmony for decades were forcefully segregated through forced removals. The apex of apartheid was realized with the establishment of nine Bantustans known as homelands. According to the Union of South Africa (1999) the nine Bantustans were as follows:

- Bophuthatswana
- Ciskei
- Giyani
- Ka Ngwane
- Kwa Ndebele
- Kwa Zulu
- Lebowa
- Transkei
- Venda

The establishment of Bantustans resulted in black people relocated from what was declared whites only residential areas to these Bantustans and townships in accordance to their ethnicity (Union of South Africa, 1999). Consequent to the formation of Bantustans was the establishment of separate education departments for each Bantustan in addition to departments for other racial groups such as Colored and Indians who were exempted from Bantustan citizenship politics. The country ended up with several education departments established along racial and ethnic lines.

South Africa's apartheid laws which impacted negatively on education and skills development were declared a crime against humanity by the United Nation (Angelis, Lolwana, Marock, Matlhaela, Mercorio, Tsolo and Xulu, 2001: 26):

Legislated race relations in South Africa, prior to 1994 were not in line with the United Nations Declaration on Race and Racial Prejudice particularly Article 1 of the declaration. For example, Article 1 unambiguously states that all human beings belong to

a single species and are descended from a common stock. They are born equal in dignity and rights and all form an integral part of humanity (Angelis et al, 2001: 26).

Thus, pre 1994 South Africa was in stark contrast with the United Nations Declaration. South Africa's apartheid system discriminated against people of colour by not affording them the same status and opportunities as their white counterparts.

According to Akoojee *et al* (2005:99), South Africa's social, economic and political development was perversely shaped by policies that built divisions within the country and which advantaged whites both educationally and economically at the expense of other population groups. Chelechele (2009:48) concurs that the education and training resources were heavily biased towards furtherance of white progress while deliberately under skilling other population groups. The state of South Africa's education prior to 1994 is better explained below:

The South African education system prior to 1994 was fragmented, discriminatory and uncoordinated. There were different education policies and education departments for each of the four racial groups in the country. There were also different education department and policies for each of the then homelands (Angelis et al, 2001: 28)

During the apartheid era, technical colleges and technical institutions (as was the case during the Union of South Africa) were not committed to developing skills on an equal footing across the different racial groups. To advance the separate development agenda based on race,

technical colleges were classified as Historically Disadvantaged Institutions (HDI) and Historically Advantaged Institution (HAI). According to Powell and Hall (2000:19), HDI colleges were state colleges that were established for Coloreds, Indians, Blacks and residents in the Bantustans; HAI were state aided colleges established for whites only.

Angelis *et al* (2001: 28) contend that the allocation of funds and resources were overwhelmingly skewed in favour of white institutions (HAI) and their learners at the expense of other racial groups. According to Nzimande (2012) in his address to COSATU Education and Skills Conference, Africans were not allowed to do skilled work and were also prevented from getting the kind of education or training that would prepare them to do such work. Mr GF Qonde, the Director General of the Department of Higher Education and Training, in his address to the South African Qualification Authority, concurred with Nzimande that during apartheid, training opportunities for black workers were limited, whereas the technically inclined white youth could quite easily enter apprenticeships and other high skilled programmes.

Thus, pre 1994 technical colleges did not succeed in developing and imparting technical skills at a rate that met the skills needs of commerce and industry due to racial barriers. The failure to close the skills shortage gap that existed at the time is made evident by the apartheid government's decision to recruit white skilled workers from Europe rather than train black South Africans (Akoojee *et al*,2005 :106).

White technical colleges and learners were a priority to the former government, HDI institutions were excluded from training artisans because legislation did not permit Blacks, Indians and Coloreds to

register as apprentices with the Department of Manpower. HAIs were the only institutions permitted to train artisans because legislation permitted only whites to be trained as artisans. Therefore, apartheid era skills development and training programmes were focused on a small percentage of the population mainly tapped from the white minority. Consequently, a small percentage of the population was skilled at the expense of the majority. This suggests that the apartheid era technical colleges were not successful in achieving the balance between the skills needs and skills demand, hence the reliance on importing foreign skilled labour by the government. Akoojee *et al* (2005:106) contend that the government opted to import skilled labour from Europe to address the skills shortage instead of extending skills development and training opportunities to non whites.

Angelis *et al* (2001: 29) argue that enormous pressure was put on the economy as the ranks of the unemployed swelled while at the same time there was a dearth of an adequately skilled labour force. Against this background it can therefore be accepted that the apartheid era government education strategy was ill conceived, undemocratic and illegitimate. Nzimande (2011a) argues that, white higher education institutions were part of an establishment that entrenched white supremacy and apartheid ideologies while their black counterparts were established with the intent to produce poorly qualified black academic elite required to advance white supremacy and apartheid ideologies in Bantustans.

The winds of change began to blow in the early 80's with the promulgation of the Manpower Training Act of 1981 which was a turning point in the history of technical colleges and skills development in South Africa. According to Akoojee *et al* (2005: 106), the Manpower Training Act of 1981 extended apprenticeship training to all

racess. For the first time in the history of South Africa, nonwhites were permitted to register as apprentices with the Department of Manpower and affiliate to a labour union of their choice.

In line with the Manpower Training Act that gave credence to skill development, a number of discriminatory Acts were repealed in the early 80's. Three acts that were pillars of apartheid and that played a major role in excluding non whites from accessing opportunities were repealed much to the advantage of skills development: The Population Registration Act (Act No 30 of 1950); the Group Areas Act (Act No 41 of 1950) and the Separate Amenities Act (Act No 49 of 1953). Subsequent to the repeal, not only were non whites allowed to register as apprentices but they were also permitted to register at any educational institution without discrimination.

Racial barriers were legally removed from the statute books prior to 1994 (Influx Control, n.d). Thus, the early 1980's saw a removal from the statute books of racially discriminating acts that were impacting negatively on skills development and training. HDI colleges were no longer prevented by any law to engage formally with their local labour markets and the Department of Manpower in matters relating to apprentice training (The History of Apartheid in South Africa,n.d).

Furthermore, the early 80's saw the playing fields beginning to level between HDI colleges and HAI colleges. Learners were accorded an opportunity to choose colleges to suit their needs without discrimination. HDI colleges were also accorded the opportunity to participate as equal partners with HAI colleges in skills development and training. Thus, the grip of apartheid discriminatory laws on skills development and training started to loosen (Influx Control, n.d). However, even though the discriminatory pieces of legislation were

removed prior to 1994, their legacy remained intact. Their removal could not undo the ills inflicted by them overnight. The evaluation of the role that apartheid era technical colleges played in the development of skills should be undertaken bearing in mind that the government of the day was still in charge and responsible for the implementation of policies. However, the focus of this study is not about the discriminatory nature of these colleges, but their contribution to skills development and their degree of responsiveness and relevance to the skills needs of labour markets. Against this background the following questions arise pertaining to their contribution:

- Were their curricula and course content articulated to the skills needs of the labour market of the time?
- Were they responsive to the skills needs of labour markets?
- Were their educators in possession of appropriate qualifications?
- What were the challenges that affected their efficiency in the development of intermediate skills?
- Did they comply with national quality standards?

2.5 THE ROLE OF PUBLIC FET COLLEGES IN THE DEVELOPMENT OF SKILLS IN POST1994 SOUTH AFRICA

The previous section demonstrated how pre 1994 technical colleges were hindered by discriminatory laws to perform optimally in terms of skills development and training. Ethnic and racial barriers denied them the opportunity to tap into the broader population with regard to skills training and skills development. Discriminatory legislation further hindered pre 1994 technical colleges from producing the multiracial skilled labour force capable of closing the skills shortage gap. Subsequent to the failure to meet the labour markets skills needs, importing foreign skilled labour was henceforth an alternative. However, according to the foreword of the National Plan for Further Education and Training Colleges in South Africa (Department of Education, 2008:6), there was some evidence of quality provision by the apartheid era technical colleges. Their programmes, particularly those of HDI colleges, were of poor quality and unresponsive to former labour markets (Department of Education, 2008: 6).

On the contrary, post 1994 public FET colleges enjoy the political support and mandate from the government through legislation to focus on skills development without any racial prejudice. However, the effect of discriminatory legislation is unlikely to be undone overnight. The legacy of apartheid negatively influences the efficiency of the public FET sector. However, the focus of this study is not about apartheid and its legacy. It is about the failure by the public FET college sector to fulfill its mandate of developing intermediate skills despite massive political and financial interventions by the government (Nzimande, 2011a).

The call to transform the education system particularly the post school education and training system was made well before 1994 by a variety of pressure groups such as academics, liberals and leftwing politicians (Nzimande, 2011 b). Subsequent to this the Manpower Training Act, 81 was enacted in 1981 to level the playing field in skills development (Akoojee *et al*, 2005: 106). Since 1995 a number of interventions were made by the government to change the public FET college sector from a dysfunctional system to a functional one capable of addressing the skills shortage. In 1995 the SAQA Act (Act No 58 of 1995) was promulgated followed by the *New Institutional Landscape for Public Further Education and Training Colleges* in 2001 which set the pace for the landmark transformation of the public FET sector (Department of Education and Training, 2008: 10).

However, in 2012, seventeen years since the transformation of the public FET college sector was implemented, serious concerns about the inefficiency and under performance of the public FET college sector have been voiced. Below are concerns of underperformance leveled at the public FET college sector in 2011 and 2012:

- Mr GF Qonde (2012), Director General of the Department of Higher Education and Training, alluded to the failure of the post school system including the public FET college sector in his address to the South African Qualification Authority on 15 February 2012 as follows:

Challenges are being raised in the context of the delivery of education and training. The public perception is that the quality of education and training has not improved, as much as would have been expected, given the amount of resources allocated and

changes that have been introduced in terms of policies, regulations and systems. More and more people are asking, why is it that people emerging from our post school system are not better equipped to take up employment, and why so many skilled people need to be recruited from abroad in order for us to build football stadiums, railway lines and roads. Surely after 17 years we should be doing better employing more of our own people, using home grown skills to drive economic and industrial development (Qonde, 2012).

- Nzimande, the Minister of Higher Education and Training concurred with Qonde in his address to the Kwa Zulu- Natal Inter-Cluster forum on 3 August 2011 as follows:

A sparse analysis of the performance of our FET college graduates raises concerns. The success rate is low, the employability rate is low and the linkages between colleges and industry are few. The capability within our colleges is also a matter of concern. On the other hand, industry is raising concerns with regard to skills shortages, especially of the middle level skills. There are concerns regarding the alignment between what is being taught at the colleges and what industry needs, and therefore the employability of college graduates is low. We are all talking about the shortages of artisans in the country. In fact we have been doing so for many years now and we do not seem to have made headway (Nzimande, 2011a).

- Paragraph 4.3 of the National Skills Development Strategy III highlights a significant point that hinders public FET colleges from responding to the skills need of labour markets as follows:

FET colleges have an important task in equipping their lecturers to meet industry needs. In the past, many college lecturers were qualified in the trades and occupation they were teaching, but did not have appropriate teaching qualifications. Much has been done to address this in recent years. Now however the problem is that although having education qualifications, many lecturers lack occupational qualifications, relevant occupational work experience and contacts. Such a situation creates serious difficulties for FET colleges' effort to align programmes to industry needs (Department of Higher Education and Training, 2010:15).

- The Green Paper for Post School Education and Training published in 2012 argues as follows:

Most of our colleges are weak institutions. Success on the NCV is generally poor, as demonstrated by the 4% throughput rate of the 2007 cohort which completed the qualification in 2009. The dropout rate in colleges is estimated to range between 13% and 25% per annum, the highest levels being evidenced in level 2 of NCV. The net certification rate of the N courses has over the years, remained consistently poor at around 12% (Department of Higher Education and Training, 2012a: 20-22).

The aforementioned arguments paint a bleak picture with regard to the capability of the post 1994 public FET college sector to contribute effectively in skills development. The arguments further suggest that there is an acknowledgement on the part of government that the transformation of the public FET college sector which started in 2005 as reflected above has not yet yielded anticipated results since its inception. This suggests strongly that post 1994 public FET colleges are not yet successful in addressing the skills deficit as mandated by the government. However, it is important to identify the transformation landmarks in the public FET college sector since 1995 in order to have a balanced and informed overview of what hinders their progress.

The public FET college transformation landmarks are summarized in Table 2.1 below:

**Table 2.1:A SUMMARY OF THE TRANSFORMATION OF FET
COLLEGES IN SOUTH AFRICA**

Date	Transformation Landmark
1995	National South African Education and Training System established
1995	South African Qualification Authority (SAQA) Act
September 1996	National Committee on Further Education (NCFE) established
August 1997	Report of the NCFE published as A Framework for the Transformation of FET in South Africa
April 1998	Green Paper on FET Preparing for the 21 st century through education, training and work
August 1998	White Paper on FET A programme for the transformation of FET
November 1998	Further Education and Training Act (Act 98 of 1998)
November 1998	Skills Development Act, 1998
July 2001	A New Institutional Landscape for Public Further Education And Training Colleges
2001	National Skills Development Strategy 2001-2005
April 2003	50 Public FET colleges declared in provincial gazettes with councils
August 2004	Draft Re-capitalization Plan
March 2005	Announcement of R1,9 billion for FET colleges Re-capitalization
2005	National skills Development Strategy 2006-2010
2005	Launch of the Accelerated and shared Growth Initiative South Africa (ASGISA)
2005	Launch of the Joint Initiative for Priority Skills Acquisition (JIPSA)
March 2006	Qualification policy framework for FET Programmes gazette- National Certificate (Vocational) NC(V)
July 2006	Curriculum for the initial 11 FET priority programmes published
December 2006	Promulgation of the Further Education and Training Colleges Act, 2006 (Act 16 of 2008)
December 2006	Announcement of the FET college Bursary Scheme.

Source: National Plan for Further Education and Training Colleges in South Africa (DOE, 2008)

Table 2.1 summarizes the public FET college sector transformation landmarks from 1995 to 2006. These are evidence of a commitment by the government to capacitate the public FET college sector to fulfill its skills development mandate. The importance of the public FET college sector in skills development was emphasized by former Minister of Education, Naledi Pandor as follows:

FET colleges are central to our agenda of developing skills. It is our intention to build and sustain a well-designed set of institutions offering flexible programmes and ensuring that we have students qualified in critical skills (Pandor, 2006).

The significance of public FET colleges in skills development and training was again pronounced by Pandor in her address to the Pan African TVET and FET conference in Cape Town as follows:

In Africa we face two huge challenges, the first is to be able to re skill the existing workforce to meet new workplace needs. The second is to educate and train young people to meet new and high level skills demands. It is these challenges that place technical and vocational education at the centre of the skills development agenda (Pandor, 2008).

Mr Thabo Mbeki, former State President also pronounced the significance of FET colleges as follows:

Further education and training colleges and learnership programmes are highlighted as particularly crucial in reducing youth unemployment and in up skilling the nation. There are promises to recapitalize colleges and make their curricula more responsive (Mbeki, 2004).

Thus, post 1994 public FET colleges have been identified and mandated by the government to play a pivotal role in developing skills at the intermediate level to address the skills deficit faced by our labour markets. The onus rests with these colleges to take advantage of opportunities placed at their disposal by legislation and transform themselves from dysfunctional institutions to effective, responsive and efficient institutions. A transformation management plan has been put in place; what remains is implementation. The commitment of the government to capacitate the public FET college sector has been continuous since 2005 as indicated by the pronouncements of Mbeki and Pandor. To sustain the transformation process, the current state president, Jacob Zuma and the Higher Education Minister, Blade Nzimande have also pledged their support to the sector. As a result, the public FET college sector features prominently in the Human Resource Development strategy (2010-2030) and the National Skills Development Strategy III (par. 2.5).

Nzimande and Zuma outlined the commitment of government to the FET college sector as follows:

- Zuma in his address to the FET college principals on Skills Development for Economic Growth on 4 April 2012 at Saint George's Hotel outlined the government commitment to the public FET college sector as follows:

In keeping with the strategic priorities of the National Skills Development Strategy III, which includes the expansion and strengthening of public FET colleges, the National Skills Fund and the SETAs will allocate R2.5 billion towards the refurbishment and construction of FET colleges over the next three years. We must therefore change the mindsets in our society and enable FET colleges to become institutions of choice for many young people, so that we can obtain needed technical skills (Zuma, 2012).

- Nzimande in his address to the National Assembly on Skills Development Within a Single Post School Education and Training System on 10 November 2009, alluded as follows regarding FET colleges:

We will consolidate the institutional base for FET colleges in partnership with the skills development system and improve responsiveness to the needs of the economy. Programmes offerings will be expanded, training partnerships with industry will be funded through SETAs, partnerships with employers will be established and a work placement programme for graduates of FET colleges will be set up. We will also expand workplace training opportunities for students. Quality interventions also include initiatives to improve management capacity, materials development and the introduction of formal qualification for lecturers (Nzimande, 2009a).

These pronouncements clearly demonstrate the continuous commitment by government to the public FET college sector and suggest that the accusations of failure by critics (see par.1.2) are justified. Critics of the public FET college sector feel strongly that the sector must start yielding results as per its mandate due to the support it receives from the state.

It is of utmost importance to discuss, analyze and critique the public FET college sector's transformation landmarks from 1995 to date. The rationale behind the critique is to achieve a more informed understanding of challenges to the sector. The public FET college transformation landmarks are outlined below:

2.5.1 South African Qualification Authority Act (No 58 of 1995)

The significance of this Act to the education and training system is spelled out below as follows:

The South African Qualification Authority (SAQA) is the body with overall responsibility for the implementation of the NQF. SAQA is a juristic person with a board of twelve members. Its official objectives are to advance the objectives of the National Qualification Framework (NQF) oversee the further development and implementation of the NQF and coordinate the three sub frameworks that comprise the NQF. It also manages a national database of learning achievements, the National Learners Record Database (NLRD) (Department of Higher Education and Training, 2012a:71).

The importance of SAQA in education and training has also been stressed by Chelechele (2009:48) as follows:

“It provides ways of ensuring that training in South Africa is of high quality and is able to address the skills shortage”.

The SAQA Act was enacted in 1995 with the intent to redress past injustices and establish a high quality education system capable of addressing the skills deficit. According to the Department of Higher Education and Training (2012a:70), the objectives of the NQF which is a competency of SAQA, is to create an integrated national framework for learning achievements. The NQF was also established to facilitate access, mobility and progression within education in order to enhance the quality of education and training (The Department of Higher Education and Training, 2012a:70). It was the responsibility of SAQA as reflected above to oversee the implementation of the NQF and coordinate the three sub frameworks that it comprises of.

From the foregoing it is evident that the government was, and is still committed to redressing past injustices particularly in education and training. The promulgation of the SAQA Act shortly after the democratic elections as reflected above shows that the transformation of the education system followed quickly after the elections. Against this background the public FET college sector has been accused by critics for taking too long to transform and realise its mandate of developing intermediate skills.

The significance of SAQA and NQF to the public FET college sector is evident in their objectives to integrate and recognize all qualifications

including informal qualifications acquired from FET colleges (Department of Higher Education and Training, 2012a:71).

2.5.2 Education White Paper (no 4 of 1998): A Programme for the Transformation of Further Education and Training

The importance of the Education White Paper 4 in the public FET college sector is defined as follows:

In August 1998 Education White Paper 4: A programme for the transformation of Further Education and Training was published by the ministry of Education, ushering in a period of tremendous excitement and trepidation for the FET sector. It spoke clearly and rationally of the urgent need for a FET system, using words like responsiveness, efficiency, effectiveness and accountability. The white paper identified the role which the new FET colleges would take up within our education system (Papier, 2006:1).

Hoppers concur with Papier regarding the significance of the Education White Paper 4 as follows:

The White Paper 4 of 1998 states that the long term vision for further education and training is the development of a coordinated FET system providing high quality and responsive programmes and opportunity for a learning society (Hoppers, 2000 : 21).

According to the Department of Education (2008: 6), the Education White Paper 4 formed the basis for the FET ACT (Act 98 of 1998). The

objective of the Education White Paper 4 was to achieve responsiveness, efficiency and accountability in the FET sector.

2.5.3 The Further Education and Training Act (Act 98 of 1998)

The significance of this Act to the public FET colleges is outlined as follows:

The FET Act makes provision for colleges to become autonomous and thus attain legal personality status juristic person status. This will enable the colleges to enter into contracts and partnership with financial and other institutions or bodies which could bring financial or monetary benefit to the college. It is this aspect of partnership and funding that is crucial for the sustenance of FET institutions (Hoppers, 2000:38).

2.5.4 A new institutional landscape for public Further Education and Training colleges: Reform of South Africa's technical colleges

The importance of this new institutional landscape in the transformation of the public FET college sector is explained by Cosser *et al* (2003:65) as follows:

The new institutional landscape for public Further Education and Training colleges: Reform of South Africa's Technical colleges, set out to develop a flexible infrastructure that could respond to particular skills needs of the country. The restructured college landscape has seen 160 technical colleges and

colleges of education reorganized and merged into 50 large multi-site FET colleges.

Akoojee (2009:123) concurs with Cosser's assertion regarding the significance of the new institutional landscape to the public FET college sector as follows:

The implementation strategy (Department of Education 2001:3) which provides the basis for transforming a previously racially segregated technical colleges system into one which in turn led to the establishment of 50 new institutions charged with the following:

- *Becoming more responsive to the development goals and to the labour market*
- *Doing this through better partnerships with industry and through curricula change*
- *Having greater, though still managed autonomy*
- *Providing a higher quality of learning*
- *Addressing equity and access*
- *Improving systems of student support.*

The foregoing illustrates that as early as 2001 the government was committed to transforming public FET colleges from dysfunctional institutions to efficient and credible institutions capable of addressing the skills deficit. The arguments advanced by both Akoojee and Cosser above project the *new institutional landscape* as a transformation plan meant to entrench responsiveness, quality and accountability to the public FET college sector.

2.5.5 April 2005: R1.9 billion for FET Colleges' recapitalization

The significance of the FET colleges' recapitalization plan to the public FET college sector is explained below:

In April 2005 government announced an allocation of R1.9 billion for the recapitalization of FET colleges over the period 2006/2007 to 2008/2009. The focus of the FET college recapitalization grant was to improve the delivery of vocational education programmes in order to respond to the skills needs of both the employed and unemployed youth, as well as adults. This would be achieved by encouraging colleges to align their programmes and qualifications to needs of society and the labour market. Recapitalization of FET colleges was the response to the challenges that were identified in the human resource development strategy (Department of Education, 2008: 28).

Nzimande (2009b) in his address to the US-South Africa Partnership for Skills Development Launch at Waterberg FET College on 20 October 2009 described the significance of the Recapitalization grant as follows,

“The R1.9 billion recapitalization of the FET colleges was largely spent on infrastructure, acquisition of equipment, development of a new curriculum and skilling of human resources”.

This meant that R1.9 billion was injected into the public FET colleges in stages from 2007 to 2009 and spent on infrastructure, acquisition of

equipment, development of curriculum and the skilling of human resource. The recapitalization programme was established with the intention to respond to challenges identified through the human resource development strategy. This indicates that the public FET college sector is receiving tremendous support at the highest political level in government. Unfortunately, concerns about underperformance have been leveled at the sector despite the incredible support received from the government. Considering that the recapitalization programme was completed in 2009, it can be expected that the public FET college sector should be responsive, accountable and credible to the skills needs of labour market as projected in the objectives of the recapitalization programme.

2.5.6 The Further Education and Training Colleges Act (no 16 of 2006)

The Education White Paper 4 of 1998 is credited for setting the pace for the transformation of the FET sector and also forming the basis for the FET Act of 1998. However, both the Education White Paper 4 and the FET Act 1998 failed to clearly distinguish between the FET school sector and the FET college sector (Department of Education, 2008:8). Against this background, the FET Colleges Act of 2006 was promulgated to address the shortcoming and recognizes that the FET college system has a unique role and identity that is different from that of the school system.

The significance of the FET Colleges Act (no 16 of 2006) to the public FET college sector is explained as follows:

The FET colleges Act, 2006 determines that the role of FET colleges is to provide programme-based further

education and training which responds better to the human resources, economic and development needs of the Republic. The FET colleges are also expected to respond to the needs of labour markets and of the communities they serve and to compliment the National Skills Development strategy (Department of Education, 2008:44).

2.5.7 Announcement of the FET College Bursary Scheme (2006)

Nzimande (2011c) in his address at the opening of Chief Albert Luthuli Campus of Umfolozi FET College on 18 November 2011 outlined the significance of the FET college bursary scheme as follows:

As from the beginning of this year all poor students who qualify for NSFAS and doing NCV or N courses have been completely exempted from paying fees. Since 2007 the DHET had availed financial aid to the needy but academically deserving students, and in 2011, the bursary allocation tripled from R318 million in 2010 to R1.235 billion in 2011. For 2011/2012/2013 financial year, my department has projected an estimation of R1, 735 billion allocation for bursaries.

There is a concern that the public FET college sector remains weak and small (Department of Higher Education and Training, 2012a:19). Akoojee (2009: 39) concurs with the Department of Higher Education and Training that the 1 million enrolment target envisaged in ministerial speeches is likely to be more imagined than real. The implementation of the FET college bursary scheme has thus been implemented to strengthen the sector and make it accessible to many students

particularly those from poor communities. The bursary scheme, the recapitalization programme and the political support have all been designed to make the public FET college sector more accessible, attractive and vital.

2.5.8 The Green Paper for Post School Education and Training (2012)

The significance of the Green Paper was pronounced by President Jacob Zuma (Zuma, 2012) in his address to the principals of FET colleges on skills development for economic growth at Saint George's Hotel on 4 April 2012 as follows:

The turnaround of FET colleges to occupy a more strategic role in the country's development is dealt with extensively in the DHET's green paper for post school education and training, and the national plan vision 2030 that further recommends that the colleges should be strengthened to deliver on the required programmes, increase throughput rate and expand their infrastructure to produce at least 30 000 artisans a year.

The developments outlined above demonstrate that the transformation of the public FET college sector commenced shortly after the 1994 elections and has been vigorously pursued. The newly elected government saw potential in the public FET college sector and therefore prioritized it to play a pivotal role in the development of skills. Despite the fact that the sector is engulfed by challenges of which most stem from our apartheid past, the government has committed itself to support and transform the sector. To realize its goal of addressing the

skills deficit, the government has embarked on a transformation process aimed at capacitating and strengthening the public FET sector.

The transformation landmarks cited above are a reflection of government commitment to the sector. Successive speeches and pronouncements on the significance of the FET college sector by both current and previous cabinet ministers suggest that the sector receives attention at the highest political level. However, the sector remains engulfed by challenges that inhibit it to perform to its ultimate best despite the government support. The skills shortage faced by the country's labour markets arose from the discriminatory laws of the previous period. Nevertheless, the transformation process appears to be taking too long to produce results. Based on the support that the sector is receiving from the government as reflected in the transformation landmarks cited above, criticism of lack of progress is justifiable (Nzimande, 2011b).

Challenges such as responsiveness to labour markets, accountability, healthy relationships with commerce and industry, inappropriate staff qualifications and an inflexible curriculum are still a concern today. In 2001, Asmal, former Minister of Education (in Department of Education, 2001:7) described the challenges as follows:

Colleges must develop the capacity to offer greater support to learners, innovative partnership with business, industry and communities and an even more responsive and flexible curriculum. Failure to address these imperatives will result in colleges remaining mere aggregations of what existed before.

Asmal warned that unless these challenges were addressed, the public FET college sector would be destined to failure. In 2001 the curriculum of the public FET college sector was not articulated to the skills needs of commerce and industry and hence the sector was not responsive to the skills needs of labour markets. It was further evident that qualifications possessed by the sector's lecturers were contributing to the sector's challenges (see par. 1.2).

It is disturbing to note that concerns documented more than a decade ago are repeated today. The Green Paper for Post School Education and Training published in 2012 outlines the FET college sector's shortcomings as follows:

The college sector is small and weak. With their present capacity, colleges can neither absorb significantly larger number of students nor achieve acceptable levels of throughput. The sector general vocational programmes have not had time to mature and to be tested in the labour market. The decentralization of various functions previously held by government to college councils was instituted in an attempt to increase responsiveness and flexibility, but many of our institutions were not ready for it. There are significant resource inequalities between colleges, evident in inadequate infrastructure, student financial aid and caliber of staff exacerbated by problems of poor governance, administration and intra-institutional relations (Department of Higher Education and Training, 2012a: 10).

The Green Paper for Post School Education and Training further describes the challenge of lecturers' qualifications as follows:

The single greatest challenge in improving and expanding the colleges is the capacity of lecturers, particularly their subject matter expertise. College lecturers in technical fields have, through the years, been recruited from industry. They usually possess technical qualifications as well as workplace experience and knowledge, but little pedagogical training. Many lecturers in academic subjects like Language, Mathematics or Science entered colleges with school teaching qualifications but little industry experience. Many lecturers are also college graduates who have completed their N6 courses or graduates from universities of technology who have completed a National Diploma. Many of these lecturers have limited subject content knowledge and little if any workplace experience (Department of Higher Education and Training, 2012a: 24).

Thus, the public FET college sector in 2013 is still contending with challenges such as responsiveness, accountability, articulation of curriculum to skills needs of labour markets and inappropriate lecturer qualifications. These are the same challenges raised by Asmal in 2001 as cited in aforementioned arguments. Contrary to the apartheid era technical colleges which were contending with unjust and discriminatory laws, post-apartheid era public FET colleges are struggling to fulfill their mandate. Challenges identified in 1995 are still engulfing the public FET college sector despite receiving support at the highest political level.

Nzimande in his address to the Kwa Zulu-Natal inter-cluster forum on 3 August 2011 outlined the current challenges facing the public FET college sector as follows:

We are all talking about the shortages of artisans in the country. In fact we have been doing so for so many years now and we do not seem to have made headway. A few years ago SASOL imported a particular type of welders because we were not producing this particular type of welders in the country. This year the Medupi project requires the same type of welders, we are still not producing these welders. The project is then left with no option but to import these skills. The Medupi project has been planned, why have we not managed to identify the skills that will be required for this project and produce them in our institutions? Do we have the capacity in our colleges to teach these specialized skills?

A sparse analysis of the performance of our FET college's graduates raises concerns. The success rate is low, the employability rate is low and the linkages between colleges and industry are few. The capacity within our colleges is also a matter of concern. There are concerns regarding the alignment between what is being taught at the colleges and what industry needs (Nzimande, 2011b).

The aforementioned assertions by Nzimande and the Green Paper on Post School Education and Training highlight the following facts:

- The public FET college sector remains small and weak despite the fact its transformation commenced in 1995. To date, the sector does not have the capacity or the competency to contribute effectively in the development of skills. It is a matter of concern if the sector remains small despite the introduction in 2006 of the FET college bursary scheme. In terms of the aforementioned the bursary scheme was meant to grow the sector and make it more accessible and attractive particularly to academically capable but financially needy students.
- In terms of Nzimande's assertions above, the Medupi project demonstrates that the sector is not yet responsive to the skills needs of labour market, and it has no formal relations with commerce and industry. The Medupi incident could have been avoided if the sector had good relations with commerce and industry. The public FET college sector could have responded in advance and introduced appropriate and relevant training before the project commences. The Medupi incident suggests that the public FET college sector has no formal relations with labour markets hence its failure to know what skills are needed by commerce and industry.
- According to Nzimande's argument above, the curriculum and course contents are not articulated to the skill needs of labour markets. Nzimande pointed out that the concern regarding the alignment between what is taught in colleges and what is needed by commerce and industry. It is a matter of concern if the public FET college sector curriculum is not yet aligned to the skills needs of labour markets. The introduction of the new institutional landscape for public FET colleges in 2001 (see par.1.1) was precisely aimed at addressing responsiveness and articulation in the sector. In 2007 a new curriculum, namely

NCV, was introduced as an appropriate curriculum articulated to the skills needs of commerce and industry (see par.1.2).

- In terms of The Green Paper for Post School Education and Training as cited above the single greatest challenge in improving and expanding the colleges is the capacity of lecturers, particularly their subject matter expertise. The Green Paper for Post School Education and Training published in 2012 paints a bleak picture as far as the public FET college sector's educator staff qualifications are concerned. According to the Green Paper, lecturers are in possession of inappropriate qualifications in terms of subject matter expertise, hence the challenge of underperformance that the public FET college sector contends with. It is indeed disturbing to learn that lecturer qualifications are still a matter of concern when bearing in mind that one of the objectives of the R1.9 billion recapitalization programme introduced in 2005 was to develop and improve lecturer qualifications (see par.1.2).

President Jacob Zuma (2012) in his address to principals of FET colleges concurred with Nzimande and the Green Paper in pointing out that successful industrial economies such as Germany has a vocationally based training similar to our FET college sector that is rooted in an apprenticeship model based on strong relations with manufacturing sectors. Cosser *et al* (2003:1) point out that throughout the world, different countries are trying to create closer synergies between the needs and purposes of their education and training systems, their local and regional labour markets, and their national economies.

A major challenge faced by the post 1994 public FET colleges is that of articulating their teaching and learning programmes to the needs of the

country's commerce and industry. The colleges should know exactly what kind of skills are in demand. Their mandate of developing skills to address the skill's deficit will not be accomplished if the synergy between them and labour markets is non-existent. With the lack of a synergy between colleges and labour markets as pointed out by Asmal, incorrect programmes and courses are likely to be facilitated resulting in the development of the wrong kind of skills. The synergy could address the supply-demand concerns.

The above arguments indicate that post 1994 FET colleges are supposed to align their course contents and curriculum to the needs and aspirations of their regional labour markets and national economies. Public FET colleges should articulate their skills training to the skills needs of labour markets in order to address the skills deficit. Unfortunately post 1994 public FET colleges are faced with a challenge of redressing past Injustices by ensuring that those who were denied opportunities in terms of skills training and skills development access them. It remains to be seen if these post 1994 public FET colleges could capitalize on the government support and narrow the skills shortage gap. The dilemma of post 1994 public FET colleges in addressing the skills deficit is explained as follows:

It is no wonder that FET colleges who have been training for industry and building relationships with SETA's in terms of the skills development legislation are worried about what their clients in the workplace might make of the new vocational qualifications to be registered by the department of education on the National Qualification Framework. With a history of little or no articulation between FET colleges and Higher Education, and progression routes for

vocational qualifications still unclear, it may well be that FET colleges will satisfy neither the demands of the workplace or the requirements of Higher Education
(Papier, 2006: 1)

The discussion indicates that post 1994 FET colleges are engulfed by challenges that limit their potential to contribute effectively in skills development and training. Post 1994 FET colleges are free from discriminatory laws but are faced with operational challenges that limit their efficiency. Akoojee *et al* (2005:106) argue that the government has acknowledged that the pace of redressing past injustices is too slow to keep up with the accelerating social and economic challenges. Owing to the challenges that the government faces in addressing past imbalances particularly the skills shortage, the public FET college sector has been identified as one of the means to meet both the social and economic aspirations.

Pressure is mounting on both the government and the public FET college sector to yield expected results because the skills shortage gap is widening at an alarming rate. The pressure is justified by the fact that it is more than ten years since the transformation of the public FET college sector began but results are not forthcoming.

The post 1994 public FET college sector has more opportunities at its disposal to contribute effectively to the development of skills based on the political support it receives, compared to its pre 1994 counterpart. The pre 1994 public technical college sector was restricted by discriminatory laws. Although some discriminatory legislation was repealed before 1994, the discriminatory legacy affected the education and training landscape. For instance prior to 1994, colleges located in previously disadvantaged communities had difficulty in attracting

appropriately qualified educators because most highly qualified applicants were whites who were reluctant to work in villages and townships. Such colleges were further challenged in their attempt to source financial assistance from their local commerce and industry because labour markets were predominantly white and sympathetic to the former government. Thus, the pre 1994 public technical college sector could not be held accountable for their failure to contribute effectively in skills development as it was expected (Department of Higher Education and Training, 2012a: 10).

Contrary to their pre 1994 predecessors which were handicapped by unjust and discriminatory legislation, the post 1994 public FET college sector is free from discriminatory laws and it enjoys the financial and political backing of the current government. Therefore, the sector is accountable for its failure due to the financial and political support it enjoys from the government. In the light of this, the following questions need answers:

- *Is the sectors' curricula and course content articulated to the skills needs of labour market?*
- *Is the sector responsive to the skills needs of labour markets?*
- *Are the sectors' educators in possession of appropriate qualifications?*
- *Is the sector engulfed by challenges that affect its efficiency in the development of intermediate skills?*
- *Is the sector compliant to national quality standards?*

The above mentioned aspects singled out by Zuma and Nzimande and the Green Paper for Post School Education and Training are outlined and demarcated as follows:

2.5.9 Recruitment and development of Human Resources

In terms of the Further Education and Training College Act, 2006 (Act 16 of 2006) the public FET college sector was mandated in 2006 to assume the role of an employer, and all educators who were employed by the government were henceforth transferred to college councils as their new employers. This legislation was aimed at capacitating the public FET college sector in terms of responsiveness, accountability and staff recruitment. The significance of the Further Education and Training Act, 2006 (Act 16 of 2006) with regard to staffing is explained below:

In pursuit of flexibility and responsiveness, the FET colleges Act, 2006 makes it the responsibility of public FET colleges to employ the lecturers and support staff. The terms and conditions of service are set out in this Act. In order to ensure that the appropriate calibre of lecturers is developed and recruited, the Department must develop a national lecturer development framework, which spells out the knowledge, skills and qualifications required to teach at public FET colleges (Department of Education, 2008:20).

Thus, human resource recruitment and development has been identified as one of the challenges of the public FET college sector. In terms of the Act the responsibility to employ lecturers and support staff has been transferred from the government to college councils. The Act

mandates colleges to make appointments based on their needs in order to be responsive and accountable to labour markets. This legislation empowers the sector to search for appropriately and highly qualified employees particularly lecturers. The intervention also enables colleges to speed up crucial appointments and offer better and improved employment prospects. However, despite the fact that the intervention was made in 2006, concerns about the calibre of lecturers in the employ of the public FET college sector persist. The transfer of employer status from government to college councils had negative and unintended consequences. The Green Paper for Post School Education and Training (Department of Higher Education and Training, 2012 a: 25) explains the challenge emanating from the change in employer status as follows:

The FET colleges Act (Act 16 of 2006) stipulated that educators at FET colleges are employed by the colleges and not by the provincial departments of education. The intention behind this move was to enable flexibility in deployment of staff, allowing colleges to be responsive to a variety of needs. However it has had many unintended consequences. One was that the change of employer from the state to the college councils caused an exodus of around 12% of college lecturers who did not have confidence in their council as an employer and preferred to stay in the employment of the state.

Unfortunately the legislation intervention meant to address the challenge engulfing the public FET college sector in terms of the calibre of lecturers yielded unintended consequences. Contrary to the sector attracting more appropriately qualified lecturers due to the

intervention the opposite happened. Many lecturers opted to leave the sector due to their lack of confidence in the college councils as employers. Further, despite the mandate to attract and employ highly skilled personnel particularly strategic managers, many FET colleges were still operating without Chief Financial Officers (CFOs) (*The Sunday Independent*, 5 August 2012:5). The failure to appoint qualified CFO's contributed to many colleges failing to account for funds allocated to them due to mismanagement. According to *The Sunday Independent* (5 August 2012:5) Nzimande, the Minister of Higher Education and Training, threatened to withhold money from colleges who at this point in time had not appointed qualified CFO's to oversee their finances. A 2010 Human Science Research Council (HSRC) report found that 57 percent of educators in the sector are unqualified or in possession of inappropriate qualifications (*The Sunday independent*, 5 August 2012: 5)

The calibre of lecturers in the employ of the public FET college sector is affecting its performance. Young (2006:153) contends that lecturers in the public FET college sector must possess employment related knowledge and skills in specific occupational fields as well as sound pedagogical knowledge. Unfortunately lecturers befitting Young's description are difficult to find. Lecturers in the employ of the public FET college sector are either sourced from schools and have pedagogical knowledge but no workplace experience or from industries and thus lack pedagogical expertise. It is difficult to find a lecturer who is both pedagogically and vocationally qualified. The National Skills Development Strategy III published in 2010 explains the challenge of lecturer's qualifications in the public FET college sector as follows:

FET colleges have an important task in equipping their lecturers to meet industry needs. In the past many

college lecturers were qualified in the trades and occupations they were teaching but did not have appropriate qualifications. Much has been done to address this in recent years. Now, however the problem is that although having education qualifications, many lecturers lack occupational qualifications, relevant occupational work experience and industry contacts. Such a situation creates serious difficulties for FET colleges' efforts to align programmes to industry needs (Department of Higher Education and Training, 2010:16).

In terms of the arguments advanced above, the public FET college sector still contends with the problem of inappropriate lecturer qualifications. Against the background of delegating staffing responsibilities to college councils in 2006, the issue of inappropriate qualifications remains as cited in the National Skills Development Strategy published in 2012 and reflected above. The underperformance of the public FET college sector and the lack of responsiveness to labour markets could be partly attributed to the qualification issue.

Furthermore, the public FET college sector qualification challenge is graver than the mere failure to recruit appropriately qualified lecturers. The R1.9 billion recapitalization grant was meant for the refurbishment of infrastructure, acquisition of equipment and skilling of human resources. Unfortunately another challenge to the public FET college sector is a lack of synergy between teacher training institutions including universities and public FET colleges. Although money was granted through the recapitalization grant to recruit and develop lecturers, few lecturers are available who possess both vocational and pedagogic qualifications. The country's teacher training institutions do

not have courses geared towards public FET colleges; their main focus is the training of school teachers (Young, 2006:153). Against this lack of a nationally recognized set of qualifications for vocational teachers, the public FET college sector cannot carry the blame for failure to recruit appropriately qualified lecturers. The lack of nationally recognized set of qualifications for vocational teachers is explained as follows:

Few universities have taken the initiative to design programmes for the vocational teaching sector. Consequently there is as yet no specific, nationally recognized set of qualifications for vocational teachers in South Africa. Several reasons apply: First, in the absence of a registered suite of national qualifications there is no mechanism that allows programmes designed for college lecturers to attract public funding. Second in traditional faculties of education academic capacity is focused on school teacher training and there is little capacity for or experience in vocational teacher education. Third faculties of education realize the low viability of designing and offering new vocational teacher qualifications because the sector is small in comparison with school teaching (8000 college lecturers compared with 500000 school teachers). A fourth and probably critical factor is that faculties of education of in South Africa have not engaged sufficiently with what vocational teacher education might be, or what it means to be a vocational teacher (Papier, 2011:104).

In view of the lack of a nationally recognized set of qualifications for vocational teacher training, it is difficult to recruit appropriately qualified lecturers in the public FET college sector and thus to achieve responsiveness, accountability, and alignment of its programmes to the needs of labour markets. For the sector to be responsive and accountable to the needs of labour market, its staff complement should be appropriately qualified. The quality of the sector staff complement is essential to enable the sector to fulfill its mandate.

2.5.10 Articulation of curricula and course content to the skills needs of labour markets

The aforementioned contentions contribute to the problem raised by critics of the sector in earlier arguments (see paragraph 1.2). The failure to appoint appropriately qualified personnel despite being mandated by the FET College Act, 2006 to do so is evidence of the sector's failure to reform. The failure of some colleges to account for funds allocated to them strengthens the assumption that consumables and equipment meant for Integrated Summative Assessment (ISAT) were never purchased and as a result students were compromised. Further, it is very important for the public FET college sector to develop strong and formal relations with labour markets to enable the sector to understand the needs of labour markets.

An understanding of what the labour market needs in terms of skills will enable the sector to appropriately align and articulate curricula to the needs of commerce and industry. However, the needs of labour markets are determined by the aspirations and demands of their client base. The needs and demands of clients and consumers keep changing due to the complexity and dynamics of global markets. The inflexibility of the public FET college sector might compromise its

students by facilitating skills development programmes which are outdated and irrelevant to labour markets.

To keep up with the pace at which labour market skills demands are changing, the public FET college sector should be flexible and responsive to the changes. If the public FET college sector is to remain responsive and accountable to the skills needs of labour markets, it should be flexible and keep abreast with the latest developments in the labour market landscape through positive and strong relations with commerce and industry. The Green Paper for Post School Education and Training outlines the dearth of a healthy relationship between colleges and labour markets as follows:

There is inadequate information about labour market needs and future growth possibilities. This makes planning and targeting of provision difficult. Articulation with labour market has two elements. Firstly, it is about matching the supply of and demand for skills in this market. Secondly it is about developing better links between education institutions and industry to create further opportunities for apprenticeships, learnerships, work experience and training. At present, statistical information on labour market demands remains thin and lacks uniformity across the different SETAs responsible for gathering this information. Central coordination of such data is also inadequate (Department of Higher Education and Training, 2012a: 14).

In terms of the aforementioned a formal relationship between colleges and labour markets is lacking which compromises the responsiveness,

articulation and accountability of the sector to the skills needs of labour markets. The aforementioned arguments as advanced by the Green Paper for Post School Education and Training suggest that articulation of the public FET college sector curricula and course content is unlikely to be achieved. The curricula and course contents of the public FET college sector should be informed by the skills needs of labour markets.

Thus, the difficulty of achieving responsiveness, accountability and articulation by the public FET college sector can also be attributed to the lack of a formal relationship with labour markets. According to the abovementioned argument, the public FET college sector is functioning in isolation from commerce and industry and do not understand the aspirations of commerce and industry and the skills in demand in the labour market landscape. The lack of a formal relationship between the public FET colleges and the labour market is likely to impact negatively on the graduates of these colleges. Their employment opportunities might be affected because the skills and knowledge that the colleges impart to them are irrelevant to labour markets. Nzimande in his address to the Kwa Zulu Natal inter-cluster forum on 3 August 2011 outlined the lack of articulation between the public FET college sector's curricula and labour markets as follows:

A few years ago SASOL (Suid Afrikaanse Steenkool Olie) imported a particular type welders because we were not producing this particular type of skill in the country. This year the Medupi project requires the same type of welders, we are still not producing these welders. The project is then left with no option but to import these skills. Do we have capacity in our

colleges to teach these specialized skills? (Nzimande, 2011a)

Nzimande concurs with the Green Paper for Post School Education and Training in identifying a misalignment between the curricula of the public FET college sector and the skills demanded by the labour markets. Moreover, the Green Paper for Post School Education and Training published in 2012 cites articulation of the public FET college sector's curriculum to the needs of labour markets as a challenge. According to Akoojee (2009: 132), when the NC (V) was introduced in 2007, it was hailed as a curriculum that articulated to the skills needs of labour markets. However, Nzimande's comments in 2011 and the Green Paper for Post School Education and Training in 2012 suggest that the NCV is not as effective as supposed. The pronouncement of the NCV as a curriculum articulated to needs of labour markets is outlined as follows:

In 2006 the National department undertook a radical revision of the curriculum, replacing the traditional NATED with the NCV. It was pointed out by the government that these programmes were designed with the intent of more closely aligning with the needs of business and labour in order to cohere more effectively with the economic needs of the country. The new curriculum was hailed as a long awaited response to the national skills crisis (Akoojee, 2009:132).

In terms of the aforementioned argument as advanced by Akoojee, the NCV was introduced in 2007 to address the lack of articulation to the skills needs of labour markets within the public FET college sector.

However, Nzimande (2011) questions the government pronouncement made in 2006 that the NCV is articulated to the skills needs of labour markets and this is supported by the evaluation made by the Green Paper for Post School Education and Training (2012). This suggests that although the post 1994 public FET college sector is receiving support at the highest political level, this has failed to yield anticipated positive result particularly with regard to the articulation of the curricula to the skills need of commerce and industry.

2.5.11 Responsiveness to the skills needs of labour markets

In terms of the aforementioned assertions the Union of South Africa's technical colleges were responsive to the then labour market (see par. 2.3). Responsiveness was easy to achieve because the labour market was small and uncomplicated. The skills demand was simple as this was the era of the early industrial development in South Africa. Consequently, the Union of South Africa's era technical colleges were successful in establishing strong relations with labour markets. For instance the Durban Technical Institute forged a successful relationship with the Natal railways to the extent of exchanging instructors (see par. 2.3). The successful relationship with labour markets comprised of the railways and mining companies enabled technical colleges to articulate their skills development programmes to the needs of labour markets. Further, these colleges were autonomous and independent from the state which made it possible to forge strong relations with labour markets without any red tape and enabled them to attract experienced candidates to their college councils (Rees, 1957: 5).

The apartheid era technical colleges were not as successful as those of Union of South Africa because of unjust and discriminatory laws (see paragraph 2.4) Apartheid era technical colleges were state owned and

state aided and thus not as autonomous as their Union of South Africa counterparts. Further, they were also not as successful with regard to the articulation of their curricula to the labour markets.

Post 1994 public FET colleges operate in a different environment to those colleges of the Union of South Africa and apartheid era. While the Union of South Africa technical colleges were autonomous and independent from the state in terms of curriculum development, the apartheid era colleges were purely state institutions. Their curriculum was a competency of the government. Post 1994 public FET colleges operate in a democratic environment free from discriminatory laws and should be responsive to a modern labour market with advanced and complicated skills demands within a global market context. Owing to the global nature of current labour markets, the post 1994 public FET college sector are supposed to be flexible and competitive.

Responsiveness of the public FET college sector to the skills needs of labour markets has been the aim of successive government interventions. In terms of the aforementioned argument the Education White Paper 4 was adopted as policy in 1998 and pronounced as a national programme for the Transformation of Further Education and Training. According to the Department of Education and Training (2008:12-13) the goals of the Education White Paper 4 are as follows:

White Paper 4 envisions a modern vibrant post school FET college sector that will constitute a national, co-ordinated FET system. Based on White Paper 4 and the current national priorities, the plan sets out the following six national goals:

- *Creating a national, coordinated FET system with its unique identity.*
- *Broadening access, participation and improving achievement*
- *Entrenching quality and excellence*
- *Encouraging diversity*
- *Promoting institutional autonomy, responsiveness and relevance*
- *Monitoring systematic and institutional performance and fostering public accountability.*

The six goals of the White Paper 4 outline a policy intervention implemented in 1998 with the intention of transforming the public FET college sector. The White Paper 4 as reflected above envisaged a public FET college sector that is responsive, relevant and accountable to commerce and industry. The White Paper 4 further demonstrates government commitment in capacitating the public FET college sector to respond qualitatively to the skills needs of labour markets. Against the background of the White Paper 4 (1998), it is a matter of concern that the Green Paper for Post Education and Training published in 2012 (see par. 2.5) decries the lack of responsiveness in the public FET college sector which indicates that the public FET college sector has challenges in implementing policies.

Thus, the objectives of the White Paper 4 are yet to be realized despite the fact that it was adopted as policy in 1998. It is disturbing that in 2012, fourteen years after the adoption of the White Paper 4 as policy, one of its objectives, namely responsiveness to labour markets, is not yet achieved. Nzimande, in his address to the Kwa Zulu Natal inter cluster forum, concurs with the argument advanced by the Green Paper for Post School education and Training in asserting that what is

taught in colleges is irrelevant to what commerce and industry needs (Nzimande,2011a).

The government intention to transform the public FET college sector to be responsive and accountable to commerce and industry is further evidenced by the enactment of the FET College Act, 2006 (Department of Education, 2008:44). The significance of the FET College Act, 2006 is explained as follows:

The FET colleges Act (No.16 of 2006) stipulated that educators at FET colleges are employed by the colleges and not by the provincial department of education. The intention behind this move was to enable flexibility in deployment of staff, allowing colleges to be responsive to a variety of needs. Colleges must be able to deploy lecturers when and where they are required, including for evening and weekend work to meet the specific needs of employers and communities (Department of Higher Education and Training, 2012a:25).

In terms of the aforementioned argument the public FET college sector was mandated in 2006 by the FET College Act, 2006 to assume the role of an employer able to employ appropriately qualified lecturers and support staff in pursuit of responsiveness to the skills needs of labour markets. On the contrary responsiveness of public FET colleges to the needs of labour markets is still unrealized. Post 1994 public FET colleges are still struggling to respond to the skills needs of labour markets. Policy interventions were undertaken, but results are not forthcoming.

Another government intervention is the R1.9 recapitalization programme (Department of Education, 2008: 28). The significance of the recapitalization programme to the public FET college sector with regard to the sector's responsiveness to labour markets is explained below:

In December 2005, the 50 Colleges recapitalization plans were approved and in April 2006 the first payments were made to colleges. These funds were allocated to support the delivery of priority skills programmes from 2007. In particular, funds were allocated for infrastructure development, procurement of equipment, development of administrative systems, staff development, as well as curriculum development (Department of Education, 2008: 7).

The aforementioned R1.9 recapitalization grant was focused on strategic areas pivotal to the efficiency of public FET colleges. For instance, learning equipment, revamped infrastructure and relevant curriculum are all important tools to enhance the realization of responsiveness. The development of staff and administrative systems enables colleges to execute their duties with proficiency and enhance their competitiveness. However, in spite of this development the public FET college sector's responsiveness to the skill needs of labour market has not yet been achieved.

2.6 CONCLUSION

The focus of this study is the evaluation of the development of skills by public FET colleges in the province of Gauteng. This chapter addressed the development of skills by predecessors of present day

FET colleges since knowledge of pre apartheid and pre 1994 technical colleges and their labour markets can enrich the study. An understanding of the parallel between post 1994 public FET colleges and apartheid era technical colleges has the potential to contribute immensely to the study. The exploration details how technical colleges evolved through different times in pursuit of a solution to the skills deficit engulfing the labour markets of the respective period.

Skills shortages pose a serious problem to the economic development of any developing country such as South Africa. To counter the skills deficit, effective and efficient skills development strategies need to be devised and implemented. Such skills development strategies should be aligned to the skills needs of labour markets. In terms of the aforementioned, the skills deficit that is currently engulfing our labour markets is interpreted as a signal of failure by the public FET college sector to address the following aspects:

- The articulation of the curricula and course contents to the skills needs of labour markets
- The responsiveness of public FET colleges to the skills needs of labour markets
- The appropriateness of lecturer qualifications
- Challenges affecting the efficiency of public FET colleges in the development of skills
- Quality compliance by FET colleges

The Union of South Africa's technical colleges appeared to have successfully managed to address the abovementioned aspects because the then labour market was small and uncomplicated. These colleges used their autonomy to their advantage and forged strong relations with the labour market. Their mutual relationship with the

labour market enabled them to be articulate, responsive and qualitative with regard to the skills needs of commerce and industry.

In contrast, the apartheid era technical colleges could not perform to their ultimate best because of the racial segregation and discriminatory laws. Apartheid era technical colleges were classified by race. The allocation of funds to colleges was in accordance to the racial contour. Non white colleges were marginalized and neglected. In terms of the aforementioned, apartheid era technical colleges contended with unjust and discriminatory laws that obscured their focus on skills development. These colleges could not be evaluated against their responsiveness to labour markets or their accountability to commerce and industry. Apartheid era technical colleges could not be fairly evaluated owing to the racial segregation and the exclusion of the majority from skills development.

Post 1994 public FET colleges belong to an era free discriminatory laws and enjoy tremendous support at the highest political level. Successive policy interventions evidence government support to the post 1994 public FET colleges. However, the colleges are engulfed by challenges that inhibit them from fulfilling their skills development mandate. In spite of government support, responsiveness, articulation and accountability of these colleges to labour markets is yet to be achieved. South Africa contends with a serious intermediate skills deficit. This skills shortage poses a serious threat to the economic development. To counter this skills deficit particularly at intermediate level, the government identified public FET colleges as important role players that could rescue labour markets and close the skills shortage gap (Department of Education, 2001:1).

Since 2000 legislation has been enacted to transform FET colleges from dysfunctional institutions to effective and efficient institutions. Funds have been allocated to them in order to refurbish their ageing infrastructure and acquire new equipment. A new curriculum has been implemented to improve their responsiveness to labour markets. Legislation was passed (The FET College Act, Act 16 of 2008) to enable them to employ educators with relevant and appropriate skills without interference from provincial education departments.

Despite the commitment and dedication by the government in transforming these colleges, serious challenges inhibit them from delivering on their national mandate of developing intermediate skills. The challenges range from the NCV curriculum that appears to miss the needs of labour markets (see par.1.2) to inappropriate qualifications of educators.

The next chapter, namely chapter 3, will focus on the development of skills by public FET colleges in the province of Gauteng.

CHAPTER 3

THE DEVELOPMENT OF SKILLS BY PUBLIC FET COLLEGES IN THE PROVINCE OF GAUTENG

3.1 INTRODUCTION

The province of Gauteng is the country's smallest province in terms of geographical area. It makes up 1,4% of South Africa's total area and it comprises of a total area of 16 548 square kilometers (Gauteng Province South Africa, 2012). It is the most populous province in the country with a population of 11 191 700 that makes up 22.4% of South Africa's population (Gauteng Province South Africa, 2012). In terms of the 2011 Census, Gauteng Province has overtaken the province of Kwa Zulu-Natal with regard to population size. According to the 2011 census report the province of Gauteng is henceforth the country's most populous province with a population of 12,2 million against the 10,2 million population of Kwa Zulu-Natal Province which used to be the most populous (Statistics South Africa, 2012). The province's huge economy attracts prospective citizens from other provinces and beyond South Africa's borders.

The Gauteng South African History Online defines the province of Gauteng as follows:

Gauteng means "Place of Gold" in the Sotho languages. It is the smallest province in South Africa but also the richest and most crowded. Gauteng is part of the old Transvaal. It was first known as the PWV which stands for Pretoria-Witwatersrand-Vaal Triangle. These are the three urban centres that make up the province. Pretoria, South Africa's Administrative capital

is in Gauteng, but it is not the capital of the province
(Gauteng South African History online, n.d).

The significance of the province of Gauteng in the country's economy is outlined as follows:

Gauteng has a special role to play in meeting the national challenges of raising skills and widening access to education and training opportunities. It is the engine of the national economy. Gauteng contributes just fewer than 38 percent to the Gross Domestic Product although it has only one fifth of the nation's population and occupies a mere 2 percent of national territory. The origins of wealth generating capability lie in the mining sector. The infrastructure and services that sprang up to support mining have provided the foundation for the development of manufacturing, an internationally renowned financial sector and other business services. Indeed, the influence of the Gauteng economy is not confined to South Africa, since it occupies a dominant position of influence in the Southern African region (Fisher, Hall and Jaff, 1998: 5).

In terms of the aforementioned assertions Gauteng province plays a pivotal role in the South African economy. It is the richest province in the country that contributes 38 % to the country's Gross Domestic Product. Its economy is propelled mainly by the mining sector. However, the province's economy has since diversified and no longer depends only on mining. The province has an internationally renowned manufacturing and financial sector, not only confined to South Africa,

but it also occupies a dominant position of influence in the Southern African region. Against the aforementioned background of economic prosperity, the province has been selected for the study (Fisher *et al*, 1998: 5).

3.2 CONCEPTUAL FRAMEWORK

As cited in aforementioned arguments, (see par. 1.6.2) prior to 1994 the province of Gauteng was known as the PWV. It comprises three metros, namely Tshwane, Johannesburg and Ekurhuleni. The province also encompasses the former Vaal Triangle region which is comprised of the heavily industrialized towns of Vereeniging and Vanderbijlpark. Gauteng province is one of the nine provinces which were established after the 1994 elections (Gauteng Province South Africa, 2012).

The Tshwane Metro is situated in the northern part of the province and it includes the greater Pretoria region. The former Witwatersrand which was comprised of the East Rand, Johannesburg and the West Rand (see par. 1.6.2) is now divided into two metros namely Johannesburg and Ekurhuleni. The Ekurhuleni Metro is comprised of the former East Rand. It comprises of the gold mining towns of Benoni, Boksburg, Brakpan, Germiston and Springs (East Rand- Wikipedia, the free encyclopedia, 2012). The Industrial towns of Kempton Park, Bedfordview, Edenvale and Alberton also constitute the Ekurhuleni Metro. The Ekurhuleni Metro is a vast mining and industrial hub situated east of Johannesburg (Ekurhuleni Metropolitan Municipality Wikipedia the free encyclopedia, 2012).

The Ekurhuleni Metro accounts for nearly a quarter of the province's economy which in turn contributes to over one-third of the national Gross Domestic Product (Gungubele, 2013; *Mail& Guardian* 22 March:

22). It has the largest concentration of industry in Gauteng, South Africa and Africa and it is often referred to as Africa's Workshop (Gungubele, 2013; *Mail & Guardian* 22 March: 22).

The Johannesburg Metro is comprised of the greater Johannesburg area (see par. 1.6.2) and parts of the former West Rand. The West Rand town that is included in the Johannesburg Metro is Roodepoort. Other West Rand mining towns, namely Krugersdorp, Randfontein and Westonaria are not included in the Johannesburg Metro but they belong to the province of Gauteng. It is no surprise that the province is referred to as the economic engine of the country. The province huge and diversified economy is evidence of its economic dominance (Gauteng Province South Africa, 2012).

The previous chapter explored the role that predecessors of current public FET colleges played from Union of South Africa to post 1994 in the development of intermediate skills. The chapter focused on their skills development performance with regard to the following aspects:

- The articulation of their curricula and course contents to the skills needs of labour markets
- Their responsiveness to the skills needs of labour markets
- The appropriateness of lecturer qualifications
- Challenges affecting their efficiency in the development of skills
- Quality compliance by FET colleges

This chapter will focus on the role played by the public FET college sector in the province of Gauteng as mandated by the government to develop intermediate skills with the intent to address the skills deficit faced by the province's labour markets. This chapter will further explore the responsiveness of the province's public FET college sector

with respect to the synergy between demand and supply of intermediate skills to the province's labour market.

This chapter will also critique the role that public FET colleges in Gauteng plays in the context of intermediate skills development with respect to the following questions:

- Is the curricula and course content of the province's public FET colleges articulated to the skills needs of the province labour market?
- Are the province's public FET colleges responsive to the skills needs of labour markets?
- Do the province's educators hold appropriate and relevant qualifications?
- What are the challenges affecting the efficiency of the province public FET colleges in the development of intermediate skills?
- Do the province's public FET colleges comply with national quality standards?

Gauteng is a Sotho word meaning a place of gold. Most of the gold mines in South Africa are concentrated in this province hence the name. The significance of the province of Gauteng and its public FET colleges in the country's economy is better outlined by Fisher *et al* (1998: iv) as follows:

“Given the province's pivotal role in the national and regional economy the evolution of a robust and responsive FET system here, will have implications far beyond provincial borders”.

Thus, the province's FET college sector is therefore supposed to be credible and competitive (Fisher *et al*, 1998: 2)

Public FET colleges in Gauteng belong to a region that constitutes the hub of the South African economy. Gauteng has a bigger economy as compared to other provinces and thus needs a more skilled and competitive labour force owing to its huge commerce and industry. The province's pivotal role in the country's economy challenges its public FET college sector to be responsive in terms of skills development to meet the skills demand of the province's commerce and industry. The province's public FET college sector is expected to be qualitative, articulate, efficient and responsive in terms of the curricula and course content that it facilitates (Fisher *et al*, 1998: iv).

According to Bisschoff and Nkoe (2005: 205), the National Department of Education embarked on a process of merging technical colleges as a long term vision to develop a coordinated FET college system which will deliver high quality, flexible and responsive programmes capable of creating opportunities for learning societies. Powell and Hall (2000:19) indicated that prior to 1994 there were 152 technical colleges in South Africa. Fisher *et al* (1998:4) maintain that out of the 152 technical colleges that existed in the country prior to 2004, 33 of them were in the province of Gauteng. The merging process culminated in the establishment of 50 mega public FET colleges across the country (Akoojee *et al* 2005:107). At present Gauteng comprises of eight mega public FET colleges with campuses sandwiched throughout the province.

As the economic engine of the country, Gauteng has a larger public FET college sector compared to other provinces. The province's large public FET college sector is evidenced by the 33 former technical

colleges and the eight public FET colleges. According to Akoojee (2005: 10), Gauteng's FET colleges constitute 57% of the country's FET colleges. It might have the same number of public FET colleges as other industrialized provinces, such as Kwa Zulu-Natal and Western Cape, but its colleges are bigger and have more campuses (see par. 1.6.2.) For instance, colleges such Ekurhuleni West and Central Johannesburg, have six campuses each. It can therefore be accepted that owing to its economic prosperity, the province has a bigger student base compared to its counterparts (Akoojee, 2005: 10).

The transformation of Gauteng's public FET colleges, such as the merging of 33 technical colleges into eight public FET colleges, and the allocation of R1 million to each college from the recapitalization project, are evidence of the state's commitment to the transformation of the province's public FET college sector (FET Directorate, n.d). The transformation is aimed at improving the sector's responsiveness to the province's labour markets and to enable it to keep up with the skills demands. The province's public FET college sector's supply of skilled labour should match the skills demands of the province's labour markets. The achievement of the supply-demand ratio calls for the establishment of a sound mutual relationship between the sector and the province's labour markets. In order for the sector to be conversant with the type of skills required by the labour market, such a mutual relationship is a necessity (Department of Higher Education and Training, 2012a:26).

The aforementioned argument further suggests that the transformation of the province's public FET college sector is aimed at improving quality, efficiency and flexibility. The improvement of quality and efficiency calls for the appointment of appropriately qualified educators with relevant skills and expertise capable of conducting quality tuition,

assessment and moderation. Colleges should prioritize quality in order to sustain their relationship with labour markets. As far as flexibility is concerned, the province's public FET colleges should be in a position to respond to the ongoing changes in the types of skills demanded by the labour market by continuously effecting changes in their operations to meet such demands. Flexibility therefore calls for a mutual relationship between the colleges and labour markets, a kind of a relationship that is likely to pave the way for them to be conversant of each other's challenges (Nzimande, 2011a).

All eight public FET colleges in Gauteng received funds from the recapitalization programme to rejuvenate and improve their infrastructure. Papier (2006: 5) points out that the national treasury had recapitalized colleges to the tune of R1.5 billion in order to over-haul their outmoded facilities and infrastructure. Mr Mokaba Mokgatle, Director of FET in Gauteng, in the message from the FET Directorate (nd) outlines the success of the recapitalization programme in the province of Gauteng as follows:

The 8 FET colleges in Gauteng have made great strides in 2008\09 implementation of the FET Recapitalization grant on the following strategic areas:

- *The development of human resource: College academic staff has been taken through NCV training.*
- *The IT systems connectivity: All 8 FET colleges have well defined and functional local area networks.*

- *Upgrading of College Sites: The entrances and grounds of our sites of learning have been improved aesthetically.*
- *Refurbishment of classrooms and laboratories: The classrooms as place of formal contact in NCV and workshops have been refurbished to be accommodative to the NCV demands.*
- *New Buildings: New Workshops, Classrooms, Computer centers and student study centers were erected to accommodate our learners.*
- *Text books and other LTSM materials: To support learners and educators with learner teacher support materials which are relevant*

In terms of the Gauteng FET directorate, the R1million rand recapitalization grant given to each college in 2007 was used profitably. Ageing infrastructure was refurbished, new buildings erected, staff trained and the IT systems upgraded. The recapitalization programme was a three year undertaking that started in 2007 and culminated in 2009 (see par. 2.5). This suggests that the province's public FET college sector is ready and well equipped to deliver on its mandate of addressing the skills deficit that the province labour markets are contending with. In addition to the recapitalization grant, legislation has also been enacted to pave the way for the Gauteng's public FET colleges to respond with ease to the skills needs of the province's labour market (Department of Education, 2008:6).

According to Chelechele (2009:45), apartheid policies in respect of human resource development had left a legacy of a low skill base and gross inequalities in terms of skills development in South Africa. Chelechele (2009:45) further contends that in order to address the injustice and imbalances of the past in terms of skills development the

South African government introduced various policies and legislation aimed at developing skills to improve the employment prospects of people who were previously disadvantaged by unfair discriminatory skills development policies which generally ignored the majority of the population.

Gauteng public FET colleges like all other colleges across the country received financial and legislative support from both provincial and national governments to transform into responsive, effective and accountable institutions capable of meeting the challenges of skills deficit through skills development. In line with the transformation landmarks (see par. 2.5) and the implementation of *The new institutional landscape for public further education and training colleges*. The Report 191 programmes popularly known as N courses were phased out and a new curriculum known as the National Certificate Vocational (NCV) was phased in during 2007 at all public FET colleges across the country including those in Gauteng (Akoojee, 2009:132). According to Akoojee (2009:132), the government pointed out that the new curriculum and its programmes are designed to align with the needs of business and labour more closely to cohere more effectively with the economic needs of the country. Akoojee (2009:132) further indicates that the new curriculum was hailed by the government as a long awaited response to the national skills crisis.

A milestone in the transformation of public FET colleges was reached in 2006 when the Further Education and Training Act (no 98 of 1998) was amended and the new Further Education and Training Colleges Act (no 16 of 2006) was enacted. Akoojee (2009:125) contends that the Further Education and Training Colleges Act (no 16 of 2006) designated the responsibility of appointing lecturers and support staff to colleges to enable them to deliver on their national mandate of

developing skills. The Further Education and Training Colleges Act (no 16 of 2006) enables the public FET college sector to undertake and conduct staffing in a manner that will enable it to attract and employ highly qualified candidates that will add value to the skills development landscape (Akoojee, 2009:125).

Public FET colleges across the country, including those of Gauteng, were identified and mandated by the government as early as 1995 to play a pivotal role in the development of skills. Legislation has been enacted and funds made available to them to focus on skills development in order to address the skills shortage. The old curriculum namely Report 191 has been phased out because it was perceived to be less responsive to labour markets (Department of Higher Education and Training, 2012a:22).

A new curriculum, namely National Certificate Vocational (NCV), hailed by the government as a clue to the skills deficit (see par.1.5) was phased in and implemented in 2007 at all Gauteng's public FET colleges. The merging process of Gauteng's 33 technical colleges into eight mega public FET colleges has been completed. Further, the recapitalization process has also been completed meaning that all public FET colleges in Gauteng have received their recapitalization money to refurbish their ageing infrastructure (FET Directorate, nd).

3.3 CHALLENGES FACED BY GAUTENG'S PUBLIC FET COLLEGES

The FET college sector in Gauteng is comprised of eight public FET colleges (see par.1.6.2).

Challenges engulfing these public FET colleges will be explored within the context of the following aspects:

- The appropriateness of lecturer qualifications
- The articulation of their curricula and course contents to the skills needs of labour markets
- Their responsiveness to the skills needs of labour markets
- Challenges affecting their efficiency in the development of skills
- Quality compliance

3.3.1 The appropriateness of lecturer qualifications

The professional status of FET college lecturing staff has always been clouded by controversy (Papier, 2011: 104). They are often seen as not befitting the title *lecturer* due to the fact that the most, particularly in the engineering studies, are not professionally qualified as educators, because they have been sourced directly from commerce and industry (see par. 1.2). Those who were professionally qualified as educators were not technically qualified as artisans or technicians but sourced from schools, hence their lack in vocational and practical expertise. The questionable qualification status of FET college educators is better explained as follows:

FET college teachers need to be specialists in a number of senses. First they must be specialist in areas of knowledge related to specific occupational fields such as construction, financial services, tourism, electronics, etc. Secondly they will need familiarity, not just with different branches of technical knowledge but with the broader disciplinary underpinning of such knowledge. It is therefore likely that they themselves

will have completed a programme of technical or professional education. It is also important to recognize that both their technical/professional knowledge and their pedagogic knowledge of the FET curriculum will need updating at different points in their career through programmes of professional development. To implement this new National Certificate Vocational, the teaching staff at FET colleges should not only be familiar with the new curriculum and its pedagogic demands, but must also have clarity on the new meaning of the vocational role of colleges. Thus if the new curriculum is to become a reality, systematic attention needs to be given to the professional development of FET college teaching staff (Young, 2006: 157)

Young (2006:155) further contends that when NCV was implemented with its knowledge based vocational programmes, it was never taken into account that the majority of FET college educators who would be delivering these programmes lack adequate specialized vocational expertise. Fisher *et al* (1998: vii) also contend that technical colleges require educators with a mix of professional teaching qualifications and practical experience of commerce and industry.

According to Akojee (2005: 38), the FET sector does not consider the formal teaching qualifications as either necessary or effective in providing quality instruction; technical practical experience is considered more important. The aforementioned argument is evidenced by the number of educators in the sector who are without a professional educator's qualification particularly in the engineering division of the sector.

According to the Green Paper for Post School Education and Training (Department of Higher Education and Training, 2012a:24), the FET sector employs technicians and artisans as educators and overlooks their lack of pedagogic knowledge. They are good in interpreting and understanding subject guidelines and assessment guidelines of vocational subjects owing to their industrial practical experience. Unfortunately their lack of formal training as educators compromises their effort to impart vocational skills to students.

Thus, Gauteng's public FET colleges like their counterparts nationally, are faced with the challenge of lecturing staff whose qualifications are questionable in terms of the relevancy to the programmes they facilitate. FET college educators should be both vocationally qualified and professionally qualified to be suitable to facilitate NCV programmes. They are supposed to have in-depth practical and vocational knowledge that will enable them to interpret the vocational subject guidelines and assessment guidelines. They are also expected to be pedagogically knowledgeable in order to interpret schemes of work and be able to compile POE's (Portfolio of Evidence) and POA's (Portfolio of Assessment) files (Young, 2006: 157).

Papier (2011: 108) explains the dual identity of FET college lecturers as follows:

Vocational teachers are expected by policy initiatives to hold dual identities, those associated with their previous industry fields of practice, experience and expertise in trades, and that of a teacher. Thus a triple competence, subject specific knowledge, pedagogic knowledge and practical/ workplace knowledge

experience, is beginning to define what vocational teacher education ought to embody and is what sets vocational teachers apart from general academic school teachers.

Unfortunately, educators are either vocationally qualified or professionally qualified but not both. Gauteng's public FET colleges are equally affected like other colleges. Owing to the above arguments it can thus be accepted that a large percentage of lecturers in Gauteng's public FET colleges hold qualifications which are inappropriate (Papier, 2011: 108).

The educator's qualification crisis indicates that the initial training and professional education and development of FET college educators have been neglected. The fact that the FET college sector preferred artisans and technicians during its recruitment sessions discouraged educator training institutions to focus on the training of FET college educators (Papier, 2011: 104). The reason for the neglect of educator training in the FET college sector is outlined below:

The approach to the recruitment of FET college staff some from schools but most directly from industry meant that industrial experience has had much more emphasis than specialist pedagogic knowledge as the primary qualification for an FET college lecturer, especially for those in technical fields where the pedagogic demands have rarely been recognized (Young,2006:156).

The aforementioned argument highlights a serious challenge whereby the professional development of FET college educators is not catered

for in teacher training faculties of most teacher training institutions (universities and universities of technology), hence the decision by colleges to recruit educators directly from industries and schools. Gauteng has more institutions of higher learning than other provinces, yet the training of FET college educators in this province is a challenge.

Against the background of a lack of professional development for FET educators, it is no surprise that the results of the NCV programme since its inception in 2007 are poor. The poor state of the 2012 NCV examination result is outlined below as follows:

The government has pumped billions of Rand into the FET colleges but tens of thousands of student at South Africa's 50 FET colleges failed the 2012 end of year examinations so dismally that they will not progress to the next level or obtain an exit leaving qualification because they have failed to pass all seven subjects (The Sunday Times 2013, 13 January: 6).

The poor results of the public FET college sector are evidence of the lack of a national professional development programme for FET college lecturers. The professional development of lecturers belonging to the FET college sector is still neglected despite the fact that the sector dates back to the discovery of gold and diamonds in this country (see par. 2.3). With no national professional development programmes for technical or vocational lecturers, the colleges are therefore left with no option but to source lecturers directly from industry or schools. The reason for the lack of national professional development programmes for FET college lecturers is explained as follows:

- *The generally low status of FET colleges. This may account for the reason why in South Africa universities have been reluctant to offer FET related programmes.*
- *The absence of links between FET colleges and universities and between FET teacher education and school teacher education. This absence of FET college/university links underpins the lack of knowledge and experience of FET colleges among university based teacher educators and educational researchers.*
- *The approach to the recruitment of FET college staff some from schools but most directly from industry and the continued influence of the inflexible block release programmes linked to engineering apprenticeships. The block release legacy has meant that industrial experience has had much more emphasis than specialist pedagogic knowledge as the primary qualification for an FET college lecturer, especially for those in technical fields, where the pedagogic demands have rarely been recognized (Young,2006:156)*

Papier (2011: 104) concurs with Young as follows:

- *In the absence of a registered suite of national qualifications there is no mechanism that*

allows programmes designed for college lecturers to attract public funding.

- *In traditional faculties of education academic capacity is focused on school teacher training and there is little capacity for or experience in vocational teacher education.*
- *Faculties of education realize the low viability of designing and offering new vocational teacher qualifications because the sector is small in comparison with school teaching (around 8000 college lecturers compared to 500 000 school teachers).*
- *Faculties of education in South Africa have not engaged sufficiently with what vocational teacher education might be or what it means to be a vocational teacher.*

The argument advanced by Papier and Young above suggests that the deficit of appropriately qualified public FET college lecturers is beyond the sector's capability. The problem is evidenced by the sector's failure to appoint appropriately qualified lecturers despite the promulgation of the FET colleges Act of 2006 (no 16 of 2006) which empowers college councils to appoint lecturers of their choice based on qualifications and the recapitalization grant intended to fund the professional development of lecturers.

Colleges have failed to source appropriately qualified lecturers because there are no national programmes for professional development of vocational lecturers to date. With regard to the province of Gauteng, it is easy to fill vacant posts with vocationally qualified candidates from industries because there is a pool of such

candidates who are either unemployed or retrenched. Unfortunately the retention rate of such candidates is low due to the disparity in remuneration between the colleges and the industries. Candidates who are vocationally qualified have the tendency to return to the industrial sector (Department of Higher Education and Training, 2012a:26).

Thus, public FET colleges across the country including those in Gauteng are marginalized by the deficit of appropriately qualified lecturers to the extent that skills development is compromised and responsiveness of the province's public FET college sector to labour markets is also affected. Public FET colleges cannot be responsive to labour markets while contending with the challenge of lecturer's qualifications (Department of Higher Education and Training, 2012a:24).

3.3.2 The articulation of curricula and course contents to the skills needs of labour markets

The aforementioned contentions outline challenges that the public FET college sector is currently contending with, particularly the appropriateness of lecturer qualifications and the neglect of their professional development. The consequence of the neglect of the professional development of the sector's lecturers, which is evidenced by the high failure rate in NCV, was explored. This section focuses on the public FET college sector's articulation of its curricula and course content to the skills needs of the province's labour market.

It is important to point out again that the focus of the study remains the public FET college sector in Gauteng. It is equally important to note that the curriculum and the course content of the public FET colleges as per the Further Education and Training Colleges Act (no 16 of 2006)

are a competency of the National Education Department. However, the provincial education departments are responsible for implementing policy in their respective public FET colleges. In terms of the Further Education and Training Colleges Act (no 16 of 2006) the public FET colleges are regulated and administered by national legislation which is subsequently implemented by the provincial education departments. Against the above background the researcher frequently refers to legislation because it applies to all public FET colleges in the country including those in Gauteng.

The FET college curriculum and its appropriateness and relevance to the skills needs of labour markets has been the subject of intense discussions since the inception of the public FET college transformation landmarks (see par. 2.2). The public FET college sector was identified by the government as early as 2001 (see par. 1.1) to play a pivotal role in addressing the intermediate skills shortage that the labour markets are contending with. In line with the transformation of the public FET college sector, a review of its curriculum and course contents was undertaken. The public FET college sector has been facilitating NATED courses for decades. Consequent to the curriculum review process a call was made to review the NATED curriculum because it was perceived to be less responsive than expected (Department of Higher Education and Training, 2012a:22).

The public FET college sector in South Africa like the school system finds itself in a curriculum transformation process. Young (2006:155) contends that a vocational curriculum that strives to be successful in the emerging knowledge economy should be comprised of programmes that are both educational and occupational. Young (2006:155) defines the distinction between the educational and the occupational element of a vocational curriculum as follows:

Firstly it is sometimes claimed that identifying qualifications as occupational will mean that they will be more skill based, relate more to immediate employer needs and be more likely to contribute to economic growth. Programmes must be vocational and develop employment related knowledge and skills in specific occupational fields. They must also be educational and provide opportunities for both young people and older workers to progress to further and higher education.

In terms of the aforementioned arguments a vocational curriculum should be both educational and occupational. The educational element of the curriculum plays the role of imparting the necessary knowledge, the skills and values that will capacitate the student to progress to higher education. The occupational element of the curriculum should impart the knowledge, skills and values that will enable the student to venture into the world of work with appropriate knowledge and skills. It is therefore expected that the public FET colleges in Gauteng like their counterparts in other provinces should demonstrate their understanding of the dual nature of the vocational curriculum (Young, 2006:155).

Two main types of qualifications, namely National Certificate Vocational and National Technical Education, are currently offered by the public FET college sector. The National Certificate Vocational qualification was introduced in 2007 as a general vocational qualification. It comprises of 14 subfields offered at NQF levels 2, 3 and 4. According to the Green Paper for Post School Education and Training (The Department of Higher Education and Training, 2012a:

22), the National Certificate Vocational is a three year-course that is comprised of three fundamental subjects, three core vocational subjects and one vocational elective.

The NATED qualification was to be phased out with the introduction of NCV in 2007. A decision has since been taken against its removal consequent to concerns expressed by commerce and industry and the Minister of Higher Education and Training (The Department of Higher Education and Training, 2012a: 22). At present the NATED qualification will be offered till further notice pending its review. It comprises of levels known as N levels hence the name N courses. The N levels are offered from N1 to N6. Contrary to the NCV curriculum which comprises of three different types of subjects namely the fundamental, the core and the elective, the NATED curriculum is comprised only of vocational subjects which are occupationally orientated (The Department of Higher Education and Training, 2012a: 22).

The public FET college sector is in the process of redefining itself in terms its responsiveness and relevance to the skills needs of labour markets. In order for the sector to achieve the responsiveness and relevance to the skills needs of labour market, it is crucial that its curricula and course content be articulated to the skills needs of labour market. In a quest to redefine itself the sector phased out NATED courses and introduced a new curriculum known as NCV (Akojee, 2009:37). The transformation of the sector's curriculum is better outlined as follows:

The policy decision to phase out N4 to N6 qualifications and to confine FET college provision to NQF level 2 to 4 programmes was cemented by the

introduction of NCV as a parallel qualification to the NSC in the schooling sector (Cosser, 2011:71).

The radical revision of the curriculum as a result of the dysfunctional nature of the NATED courses is further explained below as follows:

In 2006 the national department undertook a radical revision of the curriculum, replacing the traditional NATED courses with a National Certificate Vocational. It was pointed out by the government that these programmes were designed with the intent of more closely aligning with the needs of business and labour in order to cohere more effectively with the economic needs of the country (Akoojee, 2009: 131).

The aforementioned arguments suggest that the new curriculum, namely NCV, was implemented with the intent to address the skills shortage that the NATED curriculum failed to remedy. The NATED curriculum is described by critics as occupationally orientated, narrow in scope and does not advance the process of progression to higher education (Angelis *et al*, 2001:165). A key disadvantage is its lack of a practical component; it was entirely theoretical by nature. Thus, it was criticized by those who accused it of failing to integrate theory and practice (Angelis *et al*, 2001:165).

According to Nzimande (2011a), the lack of a practical component resulted in students who completed the course and graduated with a NATED diploma being marginalized in terms of work opportunities, due to their lack of practical exposure. Technical college graduates were not attractive to labour markets. Critics therefore dwelt on the

curriculum's inability to impart practical skills to unemployed student, hence the call for its replacement.

Angelis *et al* (2001:165) contend that NATED courses did not meet the requirement of South African Qualification Authority (SAQA) nor the National Qualification Framework (NQF) because they were not unit standard based. According to Angelis *et al* (2001:182), SAQA describes curriculum development as comprising three inter-linked components, namely setting unit standards and qualification, designing, delivering and assessing these standards. SAQA registers all qualifications and place them at an appropriate NQF level based on the number of credits.

In view of the above assertions the NATED courses were not unit standard based and as such could not be pitched on the NQF levels. Another shortfall cited by critics was that the curriculum was input based instead of outcome based as required by SAQA and NQF (Angelis *et al*, 2001:165). The input nature of the curriculum resulted in summative and not formative assessment. Summative assessments are conducted only at the end of learning while formative assessments are continuous and inform learning. The assessments of NATED courses were also not diversified and examinations were seen as the sole mode of assessment. The input nature of the NATED Courses further advocates teacher-centered type of lessons contrary to learner-centered lessons.

As a result of research commission by Umalusi, Allais and Badat (2006:6) argued:

None of the four college subjects examined as part of this research prepare learners for degree study in

higher education, and if indeed it is important that college courses lead to higher education then these courses need to be redesigned.

In view of the aforementioned argument the change in technical college curriculum was effected with the aim of addressing responsiveness to labour markets with regard to skills development. The change was also necessary because the curriculum was not articulated to higher learning in both standard and content (Allais & Badat, 2006:6).

The new curriculum was hailed as a long awaited response to the national skills crisis because the NATED curriculum has been the focus of considerable concern, primarily for its lack of articulation with labour markets (Kraak & Hall, 1999; Cosser et al, 2003). The new NCV curriculum has been implemented in all public FET colleges in Gauteng with effect from 2007. The importance of the new curriculum in skills development is outlined below as follows:

The Further Education and Training (FET) college band identified as a primary driver of the country's skills development initiative, will receive more than R1billion. This will be used among others to conclude the far reaching capital rejuvenation of the country's 50 public FET colleges and to run the national exam based on a new curriculum in 2008/09" (Dibetle & Mohlala, Mail & Guardian, 2008: 1).

Despite the fact that the new curriculum was hailed as a milestone, there are concerns about its responsiveness, effectiveness and its appropriateness to the aspirations of labour markets as explained below:

Colleges were therefore discouraged from any entrepreneurial activity and were relegated to becoming alternative schools. The new curriculum has therefore by design inadvertently encouraged neither the lifelong-learning function of colleges nor their role as responsive demand led institutions. By ensuring their financial sustainability, the absence of the need for attracting alternative sources of income is likely to further isolate them from the needs of industry, making them even less responsive and innovative. Importantly the absence of a clearly defined work experience component means that graduates are still likely to need additional training to be certified for the workplace. In order to be certified candidates are required to undertake a trade test for artisan status (Akoojee, 2009:132).

The failure of the NCV curriculum to meet the grade of a vocational curriculum which addresses the needs of labour markets and prepares students for higher education is explained below:

The public FET college sector did not only experience institutional mergers but also a curriculum engineering, resulting in institutions that look more like schools with young student pursuing a set curriculum (NCV) pegged at basic school levels (grade 10-12) and on a full-time basis. In the context of the need in South Africa to develop intermediate level technical skills for technicians and associate professionals, a system that runs parallel to the NSC (National Senior Certificate) in

the schooling sector would not seem to be most appropriate. What is needed is a fully fledged technical education and training system that articulates with the labour market and higher education particularly with universities of technology. Such a system should, moreover be pegged not at levels 2 to 4 on the NQF but at levels 4 and 5, thus building a bridge between school and higher education for those on the technical/ vocational track (Cosser,2011:74).

The argument advanced by Cosser (2011: 17) and Akoojee (2009: 132) suggest that the new NCV curriculum failed to meet the occupational and the educational needs that are crucial in preparing students for both the world of work and higher education. In terms of the above assertions graduates of the NCV curriculum cannot progress to higher education nor practise as qualified artisans. Thus, as far as the public FET college sector curriculum development is concerned, we are at a crossroad. Decisions that were taken in 2005 to phase out the NATED courses are now being reversed (The Department of Higher Education and Training, 2012a: 22). NATED courses that were severely criticized for being too occupational rather than educational are now preferred by labour markets over the NCV.

The reason for retaining the NATED courses and reviewing the NCV is explained below:

A serious problem facing students who have completed the NCV is that universities do not normally admit NCV graduates even if their marks are good. This is another matter that the review of the NCV must consider as it is unacceptable for any qualification to

be a dead end which cannot lead to further qualifications. As discussed above until recently it was expected that N courses would be phased out by 2012 and replaced by NCV programmes. However, the new DHET (Department of Higher Education and Training) has extended the life of these programmes until the N courses are reviewed as the apprenticeship system continued in parallel to the learnership system (The Department of Higher Education and Training, 2012a: 24).

The argument advanced by the Department of Higher Education and Training concurs with Cosser's (2011: 17) view that the NCV curriculum failed to appeal to employers and universities. In terms of the above argument the NCV curriculum is neither educational nor occupational, hence the decision to review it. The fact that graduates of the new NCV curriculum must still undertake a trade test to be certified as artisans relegates colleges to glorified high schools. Thus, the new NCV curriculum is not as responsive to the skills needs of labour market as was proclaimed and fails to address the aspirations and needs of labour markets.

The public FET college sector in Gauteng is equally affected by the shortcomings of the NCV and NATED curricula that are currently under review. This is particularly unfortunate in the light of Gauteng's role as the economic engine of the country and the concomitant need to perform optimally in terms of skills development. Although the focus of the study remains the public FET colleges in Gauteng, the researcher continues to take a holistic approach because the administration of all FET colleges is a competency of the national government (Akoojee, 2009: 125).

3.3.3 The responsiveness of the Public FET College Sector to the skills needs of labour markets

The responsiveness of the public FET colleges to the skills needs of labour market is very crucial in the context of addressing the skills deficit that our labour markets are contending with. Nzimande (2009a), in his address to the National Assembly on skills development within a single post school education, outlined the importance of the relationship between the public FET colleges and labour markets in improving the responsiveness of FET colleges to labour markets as follows:

We will consolidate the institutional base for FET colleges in partnership with the skills development system and improve responsiveness to the needs of the economy. Programme offerings will be expanded, training partnerships with industry will be funded through SETAS, partnership with employers will be established and a work-placement programme for graduates of FET colleges will be set up. All these initiatives will make FET colleges more attractive and institutions of choice instead of the consolation prize.

Nzimande's comment highlights the significance of a positive relationship between labour markets and FET colleges to improve the responsiveness of colleges to the skills needs of labour markets. However, the Green Paper for Post School Education and Training (2012a: 26) contradicts Nzimande's (2009) assertions as follows:

Relationships between colleges and industries are, with some exceptions, weak. Most colleges have almost no formal linkages with industry, except where they are offering apprenticeships, learnerships or other skills programmes that have inherent practical workplace requirement. Unfortunately there is little interaction between the staff offering such programmes and the staff offering the main college qualifications. FET colleges will be encouraged to build partnerships with private providers to offer certain programmes where this is felt necessary. These partnerships, however, must use the strengths of both public and private partners and should help to build the capacity of the public colleges.

The argument advanced by the Green Paper for Post School Education and Training suggests that the Department of Higher Education and Training acknowledges that to date the responsiveness of FET colleges to the skills needs of labour markets and the fruitful relationship between colleges and labour markets have not yet been achieved. In 2011 prior to the publication of The Green Paper for Post School Education and Training, Nzimande concurred with the Green Paper as follows:

The capacity within our colleges is a matter of concern. A sparse analysis of the performance of our FET college graduates raises concerns. The success rate is low, the employability rate is low and the linkages between colleges and industry are few. There are concerns regarding the alignment between what is

being taught at the colleges and what industry needs
(Nzimande, 2011a)

This illustrates the lack of a relationship between the public FET colleges and labour markets. Even though the aforementioned refers to a national context, it also applies to the province of Gauteng. This further indicates the significance of such relationships in building the capacity of the public FET colleges. For public FET colleges to be responsive to labour markets a strong relationship between them and labour markets is a necessity. Such a relationship will pave the way for an understanding of each other's strength and needs. The absence of a healthy relationship between public FET colleges and labour markets signals the existence of serious challenges that hinder the attainment of the responsiveness to labour markets.

In the context of Gauteng where most public FET colleges are located, close to the mining companies, manufacturing industries and financial institutions (see par.1.6.2), it is surprising that the mutual relationship between these colleges and the labour market is nonexistent. The head offices of most national and international companies doing business in Southern Africa (see par. 3.1) are based in Gauteng. It is therefore accepted that the public FET college sector in Gauteng has the potential to build strong relations with labour markets owing to its location (Fisher *et al* 1998: 5). However, in spite of the location of the public FET college sector in Gauteng in the industrial heartland of the country, the national curriculum and its course content have failed to attract the labour market (Nzimande, 2011a)

3.3.4 Other challenges hindering the optimal performance of Public FET Colleges in Gauteng

3.3.4.1 The alignment of the FET college sector's curricula and its course content to higher education as well as the progression of its students to universities

In terms of the preamble of the Further Education and Training Act (no 98 of 1998) public FET colleges are supposed to play a dual role of preparing learners for a world of work while on the other hand focusing on preparing them for progression to higher education. Unfortunately public FET colleges seem to be struggling to fulfill both roles. According to Papier (2006:3), the new curriculum is leaning away from both responsibilities. The failure of public FET colleges to fulfill the two responsibilities is outlined as follows:

With a history of little or no articulation between FET colleges and higher education, and progression routes for vocational qualification still unclear, it may well be that FET qualifications will again satisfy neither the demands of the workplace or the requirements of higher education. A number of industries based FET College programmes have been registered on the NQF in terms of SAQA's 1998 regulations and have been running as learnerships with no indication as to their articulation prospect with higher education. A cursory glance at the public comment received on the vocational FET Colleges shows the concern and confusion of people in the system (Papier, 2006: 3).

It can thus be deduced that public FET colleges are unsuccessful in articulating their courses with institutions of higher learning and in developing progression to higher learning for their students. Gauteng has more public FET colleges and institutions of higher learning than

other provinces but due to lack of articulation and progression with institutions of higher learning, public FET college graduates find it difficult to access higher education as outlined above (Papier, 2006: 3).

The lack in articulation between the new public FET college curriculum (NCV) and institutions of higher learning is further outlined below as follows:

In the context of the need in South Africa to develop intermediate level technical skills for the technicians and associate professionals, a system that runs parallel to the NSC (National Senior Certificate) in the schooling sector would not seem to be most appropriate. What is needed is a fully fledged technical education and training system that articulates with the labour markets and with higher education particularly universities of technology (Cosser, 2011:74).

Lolwana (2010: 7) also contends that the transformation of public FET colleges which included institutional mergers and the introduction of the NCV resulted in institutions that look more like schools with young students pursuing a set curriculum (NCV) pegged at basic school levels (grades 10-12) and on fulltime basis. According to Cosser (2011:7), the NCV should not be pegged at levels 2 to 4 on the NQF, but at levels 4 and 5, thus building a bridge between school and higher education for those on the technical/vocational track

The new curricula consist of seven subjects of which four are vocational, and three (i.e., Mathematics/Mathematical Literacy, Life Orientation and English) are of fundamental nature. Most universities in Gauteng require that a student should study at least two languages to

be considered for admission; they do not recognize Mathematical Literacy for admission to their engineering studies. The fact that the new curriculum includes Mathematical Literacy and allows for only one language instead of two creates progression to university very difficult.

The lack of articulation and progression routes to higher education in public FET colleges has created an unfortunate situation in the country, particularly in Gauteng. According to Cosser (2011:70), the failure of public FET colleges to articulate themselves to higher learning and labour markets results in higher education seen as the only viable option for further learning contributing to the inverted triangle phenomenon in which a small FET college sector is secondary to a much larger higher education system. Against this background the legislation and financial support that the public FET sector received from government to develop intermediate skills and prepare young people for higher education is compromised by this lack of articulation and progression.

3.3.4.2 The national competence and provincial control

Public FET colleges in Gauteng are compromised and marginalized because they are a competence of the national Department of Education, whereas in terms of implementation, monitoring and control they are accountable to the provincial education department (Akoojee, 2009: 125). The challenge created by the concurrent responsibility is outlined as follows:

Colleges like schools are a national responsibility, under provincial management. Like schools colleges are a concurrent matter which makes them a joint national and provincial responsibility, with

implementation largely a provincial matter influenced considerably by provincial legislation. A practical implication of this governance structure is that the responsibility for provision is provincially determined by allocations from the national purse (Akoojee, 2009: 125).

Public FET colleges are compromised by being the responsibility of the national Department of Education while being managed and monitored provincially. Akoojee (2009:125) contends that higher education does not encounter the same challenges because it is a national competence under the jurisdiction of a national education department; this does not preclude responsiveness to local and regional imperatives. In other words, because institutions of higher learning (universities and universities of technology) enjoy considerable institutional autonomy and reside under a central national department, they are not affected by provincial and national education departments (Akoojee, 2009:125).

The joint administration of public FET colleges impacts negatively on the implementation of skills development policies. According to Akoojee (2009:126), joint administration often results in the buck being passed when it comes to implementation of policies. Skills development is a national responsibility and priority but the importance and significance attached to it, differs from province to province. For instance, in Gauteng public FET colleges get monitoring visits from both provincial and national departments. From such visits it became evident that the priorities attached to the public FET sector by the two departments differs. National monitoring visits are more intense and holistic and encompass specialist in both vocational (workshop) subjects and fundamental subjects. The visit covers all aspects of the

NCV course particularly the effective use of workshops and equipment which are pivotal to skills development. On the contrary, Gauteng monitoring visits dwell more on fundamentals, namely languages, mathematics and life orientation. The different foci during monitoring visits by the two departments reflect the differences in significance attached to the public FET sector. It seems that the provincial department foresees the vocational/practical component of the NCV course as a national competency and do not include individuals with vocational/practical expertise on their teams (Akoojee, 2009:126).

The dual reporting structure in the public college sector affects its efficiency and responsiveness to labour market because time and effort is spent attempting to satisfy both departments. Should they be a competency of one department like higher education, responsiveness and efficiency could be improved (Akoojee, 2009:126).

3.3.4.3 Contradictory legislative aspects

Not only does concurrent responsibility affect efficiency and responsiveness to labour markets in public FET colleges in Gauteng, but contradictory legislation also affects the public FET sector. Akoojee (2009:127) contends as follows:

The crucial role of skills development means that colleges need to be linked to skills development legislation, and perhaps more importantly to the agencies designed to respond to its implementation, the Sector Education and Training Agencies (SETAs). The lack of a clearly defined skills development link between FET colleges as a department of education responsibility and SETAs under the department of labour suggest that there is a disconnect between the

various arms of government regarding skills development.

In view of the above public FET colleges are a competency of the Department of Education, but skills development legislation and skills development agencies fall within the ambit of the Department of Labour. Agencies like SETAs which play a pivotal role in skills development and who work in close conjunction with labour markets in terms of skills training are a competence of the Department of Labour. Skills development legislation such as the Skills Development Act, The Skills Development Levies Act and The National Skills Development Strategy falls under the jurisdiction of the Department of Labour (Akoojee, 2009:127).

The fact that public FET colleges are expected to account to the Department of Education while on the other hand assigned to skills development which is a responsibility of the Department of Labour, serves as a drawback in terms of efficient skills development. This contradictory legislative aspect marginalizes FET colleges particularly with regard to the implementation of skills development policies.

Public FET colleges have been identified and mandated as institutions that are supposed to play a pivotal role in skills development (Pandor, 2006). Unfortunately skills development agencies, namely SETAs and skills development legislation, that play a very important role in skills development fall under the Department of Labour not the Department of Education (Akoojee, 2009:127). Thus, colleges exist outside of the labour market environment in which they operate. The contradictory messages received by the FET college sector from the two departments leave the sector unclear about the general policy direction and skill development is compromised.

3.3.4.4 The challenge posed by private FET colleges to the public FET college sector

Public FET colleges particularly in Gauteng have to compete with private FET colleges for recognition by labour markets. Many private FET colleges have been opened across the country particularly in major towns and cities (Akojee, 2005: 10). According to Akojee (2005: 17) the private FET college sector provision is far larger than the public provision. Akoojee (2005:10) further contends that the province of Gauteng accounts for 57% of the private FET colleges which comprises the system.

The supremacy of the private FET college sector over their public counterpart is better outlined below as follows:

It would seem that public FET colleges are not perceived to provide relevant credible programmes in sought after technical and vocational learning areas that will lead to employment at the higher level, private higher education appears to be filling a gap between schooling and public higher education provision. The failure of public FET colleges to offer programmes that articulate relevantly with the labour market is an indication of the inability of the public sector to compete credibly with private providers (Cosser, 2011: 72).

The private FET college sector is growing at the expense of the public FET colleges. In terms of the responsiveness to labour markets with regard to relevancy and credibility of programmes offered, private FET

colleges are superior to public colleges. This suggests that the private FET college sector is more appealing to labour markets than the public FET college sector because its courses are tailor-made for the labour markets (Cosser, 2011: 72).

According to Cosser (2011: 71), the policy decision to phase out the N1 to N6 qualifications and to confine FET college provision to NQF level 2 to 4 programmes alienated public FET colleges from labour markets. The private FET college providers capitalized on the phasing out of the NATED courses by the public FET sector and applied as per the FET College Act (2006) to facilitate them on fulltime basis. Further, private colleges were in demand from commerce and industry that required their assistance for employees who wanted to be trade tested (Cosser 2011: 71).

The growing private FET college sector also impacted negatively on public FET colleges because it absorbed most experienced staff members that opted for packages when the college councils were delegated to be employers of public FET college employees (Akoojee, 2009: 128). Akoojee (2009:128) further contends that the change in the employment status of lecturers from the Department of Education to FET colleges as per the FET College Act (no 16 of 2006) caused insecurity which led to experienced lecturers choosing to remain with the Department of Education rather opting for employment in the public FET colleges.

The strength of private FET colleges lies in the fact that they absorbed experienced lecturers who opted to leave the public FET colleges due to insecurity. Some of these lecturers were in management positions and they understand the sector very well. They contributed effectively to their new employers, namely private FET colleges. In a context

where policy in the public FET college sector is redefined, lack of lecturer continuity and resignations fuel the inefficiency of the public FET college sector (Akoojee, 2009:128).

3.4 CURRENT DEVELOPMENTS IN THE PUBLIC FET COLLEGE SECTOR

The education system in South Africa is engulfed by challenges that warrant immediate attention. In a quest to address these challenges the education and training landscape has seen a great deal of change. According to Cosser (2011: 70), the National Department of Education (DoE) was phased out in 2009 and replaced by two new education departments: the Department of Basic Education (DBE) and the Department of Higher Education and Training (DHET). Each of the two newly established education departments has its own minister and director.

The Department of Basic Education is strictly accountable for both primary and secondary education, whereas the Department of Higher Education and Training is responsible for Higher Education and Training (Cosser, 2011: 70). The establishment of the two new education departments is aimed at improving efficiency and responsiveness in education. Consequent to the restructuring, the FET colleges are now a competency of the Department of Higher Education and Training (Cosser, 2011: 70)

According to The Department of Higher Education and Training (2012a:10), the restructuring of the public FET college sector that commenced in 2001 has failed to yield the anticipated results. Despite the financial and legislative support it received since 2001, the sector

remains small and weak. The failure of public FET colleges to respond to the social and economic needs of the country is outlined as follows:

The College sector is small and weak. For the 2011 academic year the projected head count enrollment was 359 000 student. This figure is just a little over one third of the total university student enrollment. FET colleges are varied and diverse but with some notable exceptions they are mainly weak institutions. With their present capacity colleges can neither absorb significantly large numbers of students nor achieve acceptable levels of throughput. Their general vocational programmes have not had time to mature and be tested in the labour markets (Department of Higher Education And Training, 2012a: 10).

Furthermore, it is necessary to review the restructuring process that has been ongoing since 2001. The Department of Higher Education And Training is presently introducing drastic changes and reversing some of the crucial decisions that were taken earlier in the FET college sector (Department of Higher Education and Training, 2012a: 10).

According to the Department of Higher Education and Training (2012a: 10), the following changes in the FET college sector were effected in 2011 and 2012:

- The FET College Act (no 16 2006) was amended in 2011, it is awaiting enactment by parliament;
- The decision to phase out NATED courses was reversed in 2011 and FET colleges are now able to facilitate N1-N6;

- The National Student Financial Aid Scheme (NSFAS) and the National Skills Fund (NSF) was extended to public FET colleges in 2011;
- With effect from 2011, FET colleges are now a competency of DHET;
- .With effect from 2011, the Sector Education and Training Authorities (SETAS) and the National Skills Authorities (NSA) have been absorbed within the recently established DHET.

The developments outlined above suggest that the transformation of public FET colleges that commenced in 2001(see paragraph 1.1) failed to yield anticipated results. Skills development by the public FET sector is seriously affected by the failure of the sector to transform itself into a credible and efficient institution. The extension of NSFAS and NSF to the public FET college sector has the potential to grow the sector and make it attractive, particularly to student who cannot access universities due to financial challenges. However, the availability of bursaries alone will not stimulate and sustain growth, successful and progressive skills development programmes need to be implemented (Department of Higher Education and Training, 2012a: 19).

The fact that the sector will officially become the competency of the Department of Higher Education and Training once the amendment of the FET College Act 2006 (no 16 of 2006) is approved has the potential to add value to the sector. For instance, experienced lecturers who left the sector in 2008 due to insecurity arising from colleges becoming employers are likely to rejoin the sector(Department of Higher Education and Training, 2012a: 25).

3.5 CONCLUSION

The skills shortage poses a serious problem to the economic development of any developing country, such as South Africa. To counter the skills deficit, effective and efficient skills development strategies need to be devised and implemented. Such skills development strategies should be aligned to the skills needs of labour markets.

South Africa is currently faced with a serious challenge of a skills shortage that poses a threat to its economic development. To address the skills deficit particularly at intermediate level, the government identified public FET colleges as important role players that could develop skills for the labour markets (Department of Education, 2001:1).

Since 2001(see par. 1.1) legislation has been enacted to transform these colleges from dysfunctional institutions to effective and efficient institutions. Funds have been allocated to them in order to refurbish their ageing infrastructure and acquire new equipment. A new curriculum, namely the NCV, has been implemented to improve their responsiveness to labour markets. Legislation was passed to enable them to employ educators of their choice with relevant and appropriate skills, without interference from provincial education departments (Department of Higher Education and Training, 2012a: 25).

Despite the commitment and dedication by the government in transforming the colleges, serious challenges still inhibit them from fulfilling their national mandate of developing intermediate skills. The challenges range from the NCV curriculum to inappropriate

qualifications of educators. The public FET college sector in Gauteng is equally affected by these challenges. It is unfortunate that the public FET college sector in Gauteng which is expected to play a pivotal role in skills development is also affected.

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

The previous chapter focused on a literature review that articulated a disciplinary orientation within which the study is situated, and provided a theoretical framework for the study. To provide an appropriate theoretical framework, a literature review is supposed to make clear the theoretical context of the problem under investigation and how it has been studied (Babbie, 2004:113). The theoretical framework that resulted from the literature review assisted in the identification of key problematic areas within the public FET college sector in the context of skills development. The framework further highlighted the impact of skills shortage on the economy as a result of shortcomings in the development of skills by public FET colleges.

This chapter describes the research design with a focus on methodology, data collection techniques and sampling methods used in the study. The chapter takes us through a journey of how the population in the study was sampled and how data was collected from respondents with the intent to appropriately evaluate the role played by public FET colleges in the province of Gauteng.

4.2 RESEARCH DESIGN

The study employed a triangulation design approach whereby qualitative and a quantitative methods were combined. Johnson and Christensen (2004:212-213) contend that the triangulation approach emphasizes the notion that data should be collected in as many different ways and from as many different sources as possible. Patton

(2002:247-248) asserts that triangulation is a concept of using a combination of methods to validate and cross check the findings of a study whereby one method compensates for the weakness of the other.

According to De Vos (2011:17), most authors agree that in real life, social science researchers use both quantitative and qualitative methodology sometimes consciously, sometimes unconsciously. Thus, combining the qualitative and quantitative methods allows each method to compensate for each other's weakness and to validate and cross check findings when used together. Ritchie and Lewis (2003: 46) argue that the use of different methods in triangulation serves to check the integrity and inferences drawn from the collected data as well as clarifying research questions.

This study tapped into the strength of both qualitative and quantitative methods in terms of data collection and analysis. According to McMillan and Schumacher (2010:395), combining both approaches namely qualitative and quantitative strengthen the study and enhance its internal validity. Combining the two approaches further creates the potential to produce a holistic and insightful inquiry. The combination of the two methods enabled the researcher to understand and make sense of the complexity surrounding the development of skills by public FET colleges in the province of Gauteng.

- **The rationale for using triangulation**

Johnson and Christensen (2004:212) contend that when qualitative and quantitative methods are used together, they complement each other and this enables the researcher to collect diverse types of data which provides the best understanding for the research problem.

Creswell (2003:16) further asserts that the use of both approaches enables the researcher to investigate different issues simultaneously. Krathwohl and Smith (2005:6) also argue that a qualitative research orientation which formed part of triangulation in this study enables the researcher to understand people's behaviour and enhance his interpretation of data collected. Burns & Grove (2009:22) assert that the strength of the quantitative research orientation lies in its potential to provide quantifiable data and objective measurement. Creswell (2003:16) asserts that a quantitative research orientation is an enquiry into a social or human phenomenon that utilizes numerical data and statistical analysis to determine whether the predictive generalization of the theory hold true.

The researcher opted for a triangulation approach because it enabled him to gain greater insight and understanding of the role those public FET colleges in the province of Gauteng play in addressing the skills shortage deficit through skills development. The triangulation approach accorded him the opportunity to physically interact with the Gauteng's skills development stakeholders. Through interviews and observations the researcher physically interacted with stake holders and in the process gained more insight and understanding of the dynamics underlying their daily approach to skills development and training.

The triangulation approach through its combination of questionnaires, interviews and observations enabled the researcher to unearth a wealth of information pertaining to how skills are developed by Gauteng's public FET colleges and further added value to the study by sourcing information from other stake holders involved in skills development within the province. Data collection instruments, namely questionnaires, interviews and observations, were articulated to the study's research questions (see par. 1.4) as well as research aims and objectives. The link between the skills development by the province's

public FET colleges and the skills shortage engulfing the province's labour markets was explored and subjected to scrutiny through the use of multiple data collection instruments.

4.3 THE QUANTITATIVE METHOD

Creswell (2003:16) defines a quantitative research orientation as an enquiry based on testing a theory which is comprised of variables that are measured with numbers and analysed with statistical procedure in order to determine whether the predictive generalization of the theory hold true. Burns and Grove (2009:22) maintain that the strength of the quantitative research orientation lies in its potential to provide quantifiable data and objective measurement. Creswell (2003:16) further contends that a quantitative research orientation is an enquiry into a social or human phenomenon that utilizes numerical data and statistical analysis to determine whether the predictive generalization of the theory hold true. For the purpose of this study the researcher saw it fit to use a triangulation approach that fuses the qualitative and quantitative methods.

4.3.1 Rationale for using the quantitative method

According to De Vos (2011: 241), the quantitative paradigm aims to objectively measure the social world, test the hypotheses and control human behavior. Through its deductive approach of moving from known to unknown to verify the hypotheses as well as its use of questionnaires and scales, the quantitative approach has the potential to complement the qualitative method much to the advantage of the study.

The quantitative approach was deemed suitable for this study to provide quantifiable data and objective measurement of the data collected from students, lecturers, apprentices and skills development managers. The quantitative approach was further selected for the study to obtain more information about the development of skills by the public FET college sector in Gauteng and to examine its relationship with the provincial labour markets.

4.3.2 Target population

Parahoo (2006:256) defines a population as the entire set of individuals or objects with certain characteristics from which data could be collected. Monareng (2009: 124) defines a population as individuals, objects, events or experiences that are comprised of common characteristics to which the researcher has access and which meet the criteria for inclusion in a given universe.

For the purpose of this study the researcher used a triangulation approach which combined a qualitative and a quantitative research orientation. In terms of the target population the researcher used the same population for both research orientations (see par. 1.6.2) but used different data collection instruments. The researcher used interviews and observations to collect data qualitatively and opted for questionnaires in terms of quantitative data collection. For the purpose of this study the population is comprised of the following:

- Eight public FET colleges situated within the Province of Gauteng
- One college situated in Mpumalanga Province
- Six companies
- Indlela Training Centre

4.3.3 Sample

Monareng (2009: 124) defines sampling as a process of selecting a group of people, events, behaviours or other elements with which to conduct a study where the research population cannot be managed due to its size. Polit and Beck (2008:765) share the same view in defining a sample as a small portion of the total population or set of objects, events or person that comprises the subject to be studied. According to Sheppard (2004:93), sampling refers to the selection of a portion of a particular population in order to draw a conclusion about the entire population.

Owing to the triangulation nature of this study the population was sampled in accordance with two sampling methods, namely random and non random sampling. Non random sampling was used for the qualitative research orientation and the random sampling for the quantitative. In terms of the quantitative research orientation probability stratified random sampling was chosen. According to Polit and Beck (2008:763), probability random sampling is a kind of sampling that accords everybody the opportunity to be sampled.

For the purpose of this study the population was quantitatively sampled (see par. 1.6.2) as follows:

- Probability sampling particularly stratified random sampling was used to sample learners at exit levels namely NCV (National Certificate Vocational) level 4, and NATED (National Technical Education) level 6 in the nine colleges as well as the exit levels of skills courses. Stratified random sampling was used for

learners and employees under training because it accorded all of them the opportunity to be sampled and also because of their bigger number. According to figures obtained from all nine colleges there are 3000 exit level students. Ten percent of students at exit levels which amounted to 300 were randomly sampled. In terms of figures obtained from the six identified companies 200 of their employees are currently undergoing skills training. Ten percent of these employees which amount to 20 were randomly sampled. In terms of the above figures a total of 320 participants were randomly sampled to respond to questionnaires. In addition to the 320 questionnaires 24 questionnaires were also sent to deputy principals academic, HOD's and company's skills development managers who were non randomly sampled. One hundred (100) questionnaires were also sent to lecturers of the nine colleges who were also non randomly sampled.

4.4 DATA COLLECTION INSTRUMENTS

For the purpose of this study as cited in chapter one (see par. 1.6.4) questionnaires were used as a mode of collecting quantitative data. Questionnaires as quantitative data collecting instruments are described below.

4.4.1 Questionnaires

The study used questionnaires as one of its instruments to collect data because they give participants the opportunity to respond freely so that

desired factual information is collected (Hopkins, 2002:118). The questionnaires were henceforth chosen owing to their added advantage of being economical in nature. Leedy (2001: 198) argues that questionnaires enable people to respond to them with confidence and assurance that their responses will remain anonymous.

However, questionnaires also have shortcomings. To mention but a few, analysis of data collected in this way is time consuming and their effectiveness depends on the reading ability and comprehension of respondents (Hopkins, 2002:118). To counter such shortcomings all questionnaires used in this study were pilot tested and physically taken to respondents and collected by the researcher.

In summary, the choice of questionnaires were made because they are relatively economical, assure respondents with anonymity and accord them the opportunity to respond freely with confidence. Closed and open ended questions were used in the study (see appendix F-K). A total of 395 questionnaires were used in this study.

- **The rationale for using questionnaires**

Two types of questionnaires namely closed and open-ended questionnaires were used in this study to get clear insight about the topic in all its complexity and especially in context. With regard to close-ended questionnaires their usage was prioritized due to the ease with which the answering procedure is facilitated to complete as many questions as possible with a minimum of writing by the respondent. To complete the questionnaires the respondent only needed to circle the response considered most suitable.

Open-ended questionnaires were used to elicit the views and attitudes of participants involved in skills development. The participants' views

and attitude had a bearing on the evaluation of skills development particularly by Gauteng's public FET colleges and how these colleges are viewed by the province's labour markets. Welman and Kruger (2001:172-173) assert that open-ended questionnaires accord participants the preference and freedom to express themselves frankly and openly without restriction and in whatever form they choose. The open ended questionnaires accorded skills development managers, educators and students the opportunity to apply their minds and respond with much more clearer insight on skills development.

Public FET colleges were identified and mandated by the government as indicated in chapter one to counter the intermediate skills shortage. Funds were made available to them and a national development plan was implemented to assist them deliver on their national mandate by accelerating their skills development process. Unfortunately despite all the assistance and opportunities at their disposal, the skills shortage deficit to date shows no sign of improvement (Department of Higher Education and Training, 2012:20). The questions were aimed at soliciting views, attitudes and insight from participants as to challenges prohibiting public FET colleges to deliver on their national mandate. The questions were linked to the aims of the study which are as follows:

- The articulation of the province's public FET colleges' curricula and course contents to the skills needs of commerce and industry;
- The responsiveness of the province's public FET colleges to the skills demands of the province commerce and industry;
- The relevancy and the appropriateness of lecturer qualifications;

- The exploration of challenges hindering the implementation of the national education plan for public FET colleges;
- Quality compliance by public FET colleges in the province.

4.4.2 The validity and reliability of the instruments

Validity and reliability plays a significant role in establishing the quality of a data collection instrument (McMillan & Schumacher, 2006:324). According to Burns and Grove (2009:395) validity refers to the extent to which the data collecting instruments measures what it is intended to measure. Creswell (2003:196) maintains that the potential of a research design to achieve its objectives rests with the validity of its instrument.

The reliability and the validity of data collected in a research survey play a crucial role in determining the credibility of the research findings. It is therefore very important that the data gathered in a research survey be reliable and valid in order for the survey result to be deemed credible. According to McMillan and Schumacher (2006: 324), reliability refers to the degree to which the result of a survey is consistent in different context. Validity refers to the degree of accuracy of a measuring instrument, whereas reliability refers to the degree of consistency of a measuring instrument (Mason, 2006:12). Neuman (2003:179-184) defines two types of validity as follows:

- *Face validity refers to the degree to which the instrument measures what it is intended to measure. For the purpose of this study the researcher pilot tested the questionnaires to establish if they tested what they were intended to test. Pilot questionnaires were*

physically taken to non sampled participant to establish their degree of accuracy.

- *Content validity refers to the degree to which the contents of the instrument are representative of the research problem. To ensure content validity the researcher used data collected through literature review to construct questionnaires. The questionnaires were also given to the researcher's colleagues to review.*

According to Neuman (2003:179-184), reliability refers to the degree to which the result of a survey could be duplicated in similar surveys. McMillan and Schumacher (2006:183) argue that the reliability of an instrument refers to its consistency to yield similar results under constant conditions on all occasions. Neuman (2003:179-181) defines three types of reliability as follows:

- Stability reliability refers to the degree to which the result of a survey could be reproduced across different time intervals. To ensure stability reliability the researcher sent similar questionnaires to nine public FET colleges during different time intervals.
- Representative reliability refers to the degree to which the result of a survey could be reproduced across groups of people. To ensure representative reliability the questionnaires were administered to different companies operating under different contexts.
- Equivalence reliability refers to the degree to which several items of an instrument all measure the same construct.

4.4.3 The piloting of research instruments

Polit and Beck (2008:213) assert that a pilot study is a small scale study or trial run used by researchers to test the effectiveness and feasibility of data collecting instruments. De Vos (2011:158) outlines the importance of piloting as follows:

In all cases it is essential that newly constructed questionnaires be thoroughly pilot tested before being utilized in the main investigation. This ensures that errors of whatever nature can be rectified immediately at little cost. It does not matter how effective the sampling or analysis of the result is, it remains a fact that ambiguous questions lead to non comparable responses, leading questions lead to biased responses and vague questions lead to vague answers.

Piloting of data collection instruments is crucial. After data collection instruments, namely questionnaires and interview questions were formulated, they were pilot tested to assess their appropriateness, practicality and tenability. According to Polit and Beck (2008:213), the purpose of the pilot study is to determine how the design of the measuring instrument and its flaws could be improved. Questionnaires and interview questions were pilot tested with colleagues of the researcher in order to establish their reliability and validity. Respondents that were used for pilot testing were not used in the actual research. The pilot testing was administered personally by the researcher to attend to any immediate challenges.

4.4.4 Rationale for piloting

Piloting of research instruments plays a pivotal role in determining the credibility of the questions and their relevance to the main and sub themes (Polit & Beck, 2008:213). According to De Vos (2011:158), piloting determines the level of difficulty of questions and the time it will take to complete. Polit and Beck (2008:213) assert that piloting detects any ambiguity in the questions as well as establishing areas that needs refinement. For the purpose of this study pilot testing was administered on questionnaires to address the following questions:

- What is the length of the questionnaires?
- How relevant are questions to the research aims and objectives?
- Are the questions easy to follow and understand?

4.4.5 The ethical considerations

Ethics deals with matters that relate to right or wrong. According to McMillan and Schumacher (2006: 334) ethics has to do with the right of respondents to know what they are getting themselves into and their right to give or withhold their consent. Participants or respondents of a research study have the right to terminate their participation at any time, and a consent form that discloses to them that their participation is voluntarily should be made available (Cresswell, 2003:64). Ethical measures in this study were addressed as follows:

- **Informed consent**

The researcher informed participants of their right to participate freely in this study, and their right to terminate their participation at any time should they so wish. It is unethical to coerce prospective participants to participate in a research study without their consent (McMillan & Schumacher, 2006: 334). A consent letter was attached to all questionnaires (see appendix 4). Respondents were requested to carefully read the consent letter and sign it.

- **Anonymity and confidentiality**

The researcher assured participants of their anonymity and confidentiality by not disclosing their names and as a result no information was divulged to unauthorized individuals. In the questionnaire's instructions for completion, the researcher inserted a clause that assured participants of their anonymity and confidentiality. Anonymity refers to the protection of the participant's identity whereas confidentiality refers to the protection of the information divulged by the participants (Polit & Beck, 2008:213).

- **Maintenance of privacy**

Burns and Grove (2007:550) define privacy as the individual's right to freedom of determination of time, extent and general circumstances under which private information will be divulge or withheld from unauthorized individuals. The researcher ensured that privacy was maintained by conducting interviews in private.

4.4.6 The quantitative data analysis

Owing to the triangular nature of the study data was collected and analyzed qualitatively and quantitatively. From a quantitative

perspective the researcher used questionnaires as a mode of data collection. A total of 395 questionnaires (see par. 1.6.4) were physically taken to eight public FET colleges in Gauteng, one public FET colleges in Mpumalanga, six companies and the Indlela Training Centre. With regard to public FET colleges the questionnaires were directed at lecturers, exit level students, deputy principals and HOD's, whereas for companies questionnaires were directed at skills development managers and trainees.

Frequency distribution was used to analyze 395 questionnaires responses from the nine colleges, six companies and Indlela Training Centre. The responses were coded and arranged in terms of their frequencies on a table from low to high.

Mouton (2001:108) defines data analysis as a process of breaking up data into manageable themes, patterns, trends and relationships. According to Creswell (1994:154) as cited by Mashabela (2010: 139) the coding process is comprised of four steps as follows:

- Reading through the data received from questionnaires responses: In this study, the researcher familiarized himself with the data by reading and rereading received questionnaire responses while identifying main themes.
- Identifying coding categories from the data: In this study, the researcher compared questionnaires responses with main themes and grouped them in terms of similarities.
- Coding the data mass: In this study, the researcher marked the questionnaires responses and categorized them according to themes.

- Formulating themes in terms of common links and patterns: In this study, the researcher sorted the marked and coded questionnaires responses according to common links and patterns.

After the questionnaires responses were sorted into manageable themes, patterns, trends, and relationships, the researcher proceeded with the frequency distribution of the responses. The researcher arranged the questionnaire's responses on a frequency table in terms of their frequencies from low to high.

4.5 THE QUALITATIVE METHOD

According to Krathwohl and Smith (2005:6) the qualitative research orientation which was used in this study as part of triangulation enabled the researcher to understand people's behaviour and enhance his interpretation of data collected. The use of qualitative method in this study stemmed from the researcher's quest to understand the behaviour of all sampled intermediate skills development stakeholders and to enhance his interpretation of data collected. Burns and Grove (2009:22) contend that a qualitative research orientation is an inquiry process intended to explore and understand participants' lived experiences and uncover new insight. Polit and Beck (2008:99) describe the qualitative research approach as one that gives a full view of the phenomenon under study and further allows the expression of a full range of beliefs, feelings and behaviours. De Vos (2011: 243) describes a qualitative research orientation as a voyage of discovery rather than a process of verification, and such a voyage of discovery has the potential to stimulate new leads and avenues.

According to Polit and Beck (2008:99) a qualitative research orientation can assume an exploratory, descriptive or contextual nature. The researcher saw it fit to use both the exploratory and the descriptive approaches of a qualitative research orientation. The two approaches of the qualitative research orientations are described below:

- **Exploratory approach**

Polit and Beck (2008:19) define the exploratory approach as an approach that is applicable and suitable to investigations of phenomenon that are relatively unknown. According to Burns and Grove (2009:696), the exploratory approach is defined as an

exploration of an unknown phenomenon with the intent to understand its nature, how it manifests itself and possible alternative solutions to it. The exploratory approach encompasses interviews with sampled participants, observations and literature reviews.

The exploratory approach in this study is evidenced by the interviews and observations that the researcher conducted with sampled participants involved in the development of intermediate skills in the province of Gauteng. Interviews were conducted with sampled students, lecturers, HOD's and deputy principals of public FET colleges in Gauteng and skills development managers of sampled companies. The interviews and observations that were conducted accorded the researcher the opportunity to explore and understand the complexities and dynamics underlying the skills development deficit and how it affects the labour market in Gauteng. Through the literature review, interviews and observations the researcher explored the public FET college sector in Gauteng and gained insight into the challenges that hinder it from fulfilling its mandate of developing intermediate skills.

- **Descriptive approach**

Burns and Grove (2009:696) define the descriptive approach as an accurate description of a phenomenon within a specific context with the intent to generate a theory. According to Polit and Beck (2008:19) the descriptive approach intends to accurately describe the importance of a known phenomenon. In terms of the aforementioned argument as cited above, the objective of a descriptive approach is to generate a theory through the accurate description of a known phenomenon.

The descriptive approach in this study was evidenced by the researcher's clear description of the problem statement, objectives and

the research design that the study had used. The descriptive approach was further evidenced by the researcher's interaction with sampled participants through interviews and observations where the objectives and the research design were clearly defined and described. During the researcher's interaction with participants a theory was generated with regard to challenges faced by the public FET college sector and how such challenges impact on skills development.

4.5.1 The rationale for using the qualitative method

The significance of the qualitative method in this study is attributed to the following aspects:

- **The explorative aspect**

The explorative nature of the qualitative method accorded the researcher the opportunity to physically interact with sampled participants during interviews and observations. The physical interaction between the researcher and the participants enabled him to engage with participants who possessed firsthand experience and information about the development of intermediate skills in the province of Gauteng. According to Polit and Beck (2008:19), the exploratory approach through interviews and observations explores unknown phenomenon with the intent to understand them and how they manifest themselves. Through exploration this study explored the dimensions of the intermediate skills development landscape and the challenges engulfing it.

- **The descriptive aspect**

Polit and Beck (2008:19) define the descriptive approach as a process of accurately describing a known phenomenon within its context and importance. The descriptive approach describes a known phenomenon with the intent to generate a theory (Burns & Grove, 2009:696).

The significance of the descriptive approach in this study was evidenced by the researcher's accurate description of the study's problem statement, objectives and the research method during interviews and observations. Consequent to the accurate description

by the researcher during interviews and observations, the sampled intermediate skills development participants willingly described their lived experiences of skills development. The descriptive interaction of the researcher and the sampled participants enabled him to gain more insight and understanding of complexities and dynamics underlying the development of intermediate skills.

- **The inductive aspect**

De Vos (2011: 336) describes the inductive reasoning as a process whereby the researcher embarks on a research project without an explicit conceptual framework and merely uses general and vague guesses to guide the research. The objective of the inductive approach is to discover relationships and patterns through progression from the unknown to the known and by closely scrutinizing data collected during interviews and observations (Krathwohl & Smith, 2005:6)

The significance of the inductive approach in this study was evidenced by the researcher's exploration of the skills development landscape during interviews and observations from an unknown perspective to gaining insight and understanding of the skills development sector. The researcher interviewed students, academic deputy principals, HOD's and skills development managers. Prior to the interviews and observations the researcher's knowledge of the skills development landscape was minimal but his interaction with participants enhanced his understanding and insight of the sector.

4.5.2 Target population

According to Polit and Beck (2008:761) a population is comprised of all participants or members with certain characteristics from which data

could potentially be collected. Similarly, Burns and Grove (2009:324) define a population as a group of people who possesses common characteristics or conforms to a designated set of specifications from whom the researcher wants to draw a conclusion.

The population of this study was comprised of the following:

- Eight public FET colleges situated in Gauteng
- One College situated in Mpumalanga
- Six companies
- Indlela Training Centre

Skills shortage is a challenge that affects all the nine provinces that constitute the Republic of South Africa. The country's public FET colleges irrespective of the province in which they are situated were mandated by the national government to play a pivotal role in the development of skills in order to ease the skills shortage (see par. 1.1). The researcher saw it fit to restrict the population of this study to the province of Gauteng in order for the study to be cost effective, manageable and accessible to the entire research population. With the exception of the CN Mahlangu Campus of Nkangala FET College which is situated in Mpumalanga Province, the population in this study is restricted to the skills development entities in Gauteng.

4.5.3 Sample

A sample is a small portion of the total population or set of objects, events or person that comprises the subject to be studied (Polit & Beck, 2008:765). Sheppard (2004:93) asserts that sampling refers to selecting a portion of a particular population to draw conclusions about that entire population. Burns and Grove (2009:324) further contend that

the significance, meaningfulness and value of the information acquired from the inquiry have nothing to do with the size of the sample. It is the quality and richness of the information that counts not the size of the sample. The participants that constitute the sample of this study irrespective of the size of the sample were very informative and capable of reflecting on their experiences in the development of intermediate skills. The main consideration in sampling is representativeness (De Vos, 2011:193). The sample should be as representative to the population as possible. The population in this study was sampled in accordance with two sampling methods namely random and non random. In terms of random the study chose probability stratified random sampling (see paragraph 4.3.3), whereas with regard to non random sampling, non probability purposive sampling was chosen.

Probability random sampling is a kind of sampling that offers everybody the chance to be sampled (Polit & Beck, 2008:763). To achieve an unbiased or representative sample from a particular population is not always easy, but the most direct method is to sample at random in such a way that every member of the population has an equal chance of being in the sample (De Vos, 2011:195). The researcher saw it fit to use the stratified random sampling to accord everybody involved in the intermediate skills development from students, educators, trainees and company's skills development managers the opportunity to be sampled. The study used stratified random sampling to identify participants for questionnaires and to further accommodate the different student exit learning levels. Stratified random sampling was used to sample students in exit levels, namely N6 and NCV Level 4.

Non probability sampling, particularly purposive sampling, was used to identify participants in management positions at colleges, companies,

and the Indlela Training Centre who are in possession of valuable information in the development of intermediate skills. Purposive sampling is a sampling strategy whereby the researcher select participants based on his discretion of the quality and richness of the information that the participants possess (Polit & Beck, 2008:763). According to De Vos (2011:198), non probability sampling is used to identify participants with relevant knowledge to the study. De Vos (2011:195) further contends that non probability sampling is a kind of sampling where not all participants have equal chances of being sampled. In non probability sampling participants are selected because of their potential to provide relevant information needed by the study. Through non probability sampling the researcher in this study selected participants from apprentices, educators and skills development managers of several companies. These participants were selected on account of their wealth of experience in skills development within their respective sectors.

4.5.4 The rationale for sampling the following participants

- **Gauteng Province**

The province was selected for the study due to its status as the main economic hub of the country (see par. 3.1). Contrary to other provinces it has a huge diversified economy and labour markets that range from mining, manufacturing and agriculture (see par. 3.1). Though its economy relied mostly on mining it has since successfully diversified into other sectors. Skills development is at the core of its economic survival. According to the 2011 census report the province had overtaken Kwa Zulu- Natal province as the country's biggest province in terms of population (Statistic South Africa, 2012). The province's

population had grown from 9 million in 2001 to 12 million in 2011(Statistic South Africa, 2012). The province economic prosperity is evidenced by the rate of its growth. The rate at which skills are developed within the province should counter the rate at which skills are demanded by the province's labour markets. Its diversified economy requires a multifaceted skills development strategy that is articulated to the skills needs of its Labour market. The province contributes 38 % of the Gross Domestic Product (see par. 3.1). Against the aforementioned background the province was selected for the study.

- **Eight colleges in Gauteng**

The province's public FET colleges were selected for the study because they are all involved in skills development and are recipients of the government recapitalization grant (see par. 2.5). In 2007 the national Department of Education committed a once off R1.9 billion recapitalization grant to the country's public FET colleges for the revamp of their infrastructure (Akojee, 2009:131). The province's public FET colleges were further selected because they are located in a huge diversified labour market that requires a diversity of skills.

Public FET colleges within the Ekurhuleni Metro formerly East Rand, namely Ekurhuleni West and Ekurhuleni East, are located in a mining, avionic and manufacturing industrial region (See par. 1.6).The skills demand in this region is more inclined towards the three aforementioned industrial sectors. It is therefore expected of the two colleges to articulate their skills development to the skills need of their region's labour market. South West Gauteng College situated in the south-west of the Johannesburg Metro is also located in a manufacturing and mining region. Colleges in the Tshwane Metro,

formerly Pretoria namely Tshwane North and Tshwane South, are located in the proximity of automotive assembly plants. For instance Rosslyn industrial area west of the Tshwane Metro is home to automotive car assembly plants such as BMW, FIAT and LAND ROVER. FORD and MAZDA; the MITSUBISHI assembly plant is situated in Silverton east of the city. The Sedibeng College in the south of the province formerly Vaal triangle is situated in a chemical and steel industrial area. ISCOR and ESCOM's Lethabo power generating plant are located in the Sedibeng region.

The study sampled all eight public FET colleges in the province of Gauteng because they are located in a diversified labour market that varies in terms of industrial orientation and skills demand. The province's labour markets rely on these public FET colleges for the supply of intermediate skills. The location of public FET colleges in a highly industrialized region makes them suitable and ideal for this study. They have been mandated by the government to play a pivotal role in balancing the development and supply of skills against the skills demand by the province's labour markets (see par. 2.5). They were thus selected for the study due to these important reasons.

- **One College in Mpumalanga**

In addition to Gauteng's eight public FET colleges one campus of Nkangala FET college situated in Mpumalanga was included in the study: the CN Mahlangu campus. It is situated in Siyabuswa, a village in the former Kwa Ndebele Bantustan. The Kwa Ndebele Bantustan was incorporated into Mpumalanga Province in 1994 (Kwa Ndebele South African homeland, 2013). Although the main focus is on Gauteng's public FET colleges, the researcher included the CN Mahlangu Campus due to its unique characteristics that contrast with

those of its counterparts in Gauteng. Public FET colleges in Gauteng are situated in city centers, towns and townships. Their proximity to labour markets exposes them to prospective employers much to the advantage of its students. They are accessible owing to a well-developed and integrated transport network of trains, taxis and buses.

On the contrary the CN Mahlangu Campus is situated in a rural village with no employment prospects and far from the country's labour markets that are concentrated in the province of Gauteng. It was established and managed by a Bantustan government until 1994. Despite its challenges as cited above, the CN Mahlangu Campus is expected to contribute effectively and equally to the intermediate skills development like its counterparts in the province of Gauteng. The Campus is expected to place its students in employment and arrange for work based training for both its lecturers and students. It is precisely because of the aforementioned background that the researcher saw it fit to include this Campus despite the fact that it belongs to a different province.

- **Six companies**

The six companies as outlined in chapter one (see par. 1.6.2) were selected owing to their proximity to the sampled public FET colleges. The purpose of this study is to evaluate the role that public FET colleges in the province of Gauteng are playing in response to the skills shortage and skills demand by the province's labour markets. The researcher selected them because each one is located next to a public FET college. What makes these companies suitable and ideal for the study is their proximity to the public FET colleges and their reliance on public FET colleges for the supply of intermediate skilled labour. The companies are in need of skilled labour which the colleges are

supposed to provide. The evaluation of these colleges is carried out in the context of their responsiveness to the skills needs of the province's labour markets. The relationship between the labour markets and the public FET colleges with regard to the development of intermediate skills is explained as follows:

The capacity within our colleges is also a matter of concern. On the other hand industry is raising concerns with regard to skills shortages especially of the middle level skills, but industry is also saying it is ready and willing to support teaching and learning in FET colleges. There are concerns regarding the alignment between what is being taught at the colleges and what industry needs, and therefore the employability of college graduate is low (Nzimande, 2011a).

The six companies were considered for the study because of the role they play in the development of intermediate skills and their skills development relationship with public FET colleges. Public FET colleges rely on companies with regard to work placement for their student and work base training for their lecturers. On the other hand industry relies on public FET colleges for the supply of skilled labour.

- **The Indlela Training Centre**

The Indlela Training Centre was previously a Department of Labour training and trade test facility. It used to conduct trade tests under the former Manpower Training Act. As a result of the new developments and transformations in the education landscape, the institution has now been transferred from the Department of Labour to the new Department of Higher Education and Training (Department of Higher

Education and Training, 2012a: 83). It has been transferred together with SETAS from the Department of Labour to the newly established Department of Higher Education and Training (Department of Higher Education and Training, 2012a: 83).

The institution's key responsibility is to conduct trade tests on apprentices in different trades. Apprentices who successfully pass the trade test graduate with a trade diploma in their respective trades. From then onward they become tradesman or artisan and be classified as skilled labour. The trade test is summative in nature because an apprentice can only write a trade test at the end of his or her three years' training. An apprentice undergoes a theoretical training and a practical training for the duration of his or her apprenticeship and is only allowed to write a trade test on completion of his or her training. The test itself is more practically orientated as opposed to being theoretical. Companies register their apprentices with the Department of Labour.

Registered apprentices are expected to obtain a minimum of NTC 2 (National Technical Certificate) to be allowed to write a trade test. The NTC 2 qualification is obtainable from FET colleges hence the mutual relationship between FET colleges and labour markets. The researcher saw it fit to include the institution owing to its mutual relationship with labour markets and public FET colleges with regard to skills development. Through workshop placement programmes public FET colleges place their students in companies for employment and companies register them as apprentices and refer them to the institution for the trade test. For these reasons the institution was selected for the study.

4.6 DATA COLLECTION INSTRUMENTS

Owing to the triangulation nature of the study data was collected qualitatively and quantitatively. In terms of the qualitative approach, the researcher used interviews and observations to collect data.

4.6.1 Interviews

According to Welman and Kruger (2001:159), there are three types of interviews namely telephonic, personal and mail.

- **Telephonic interview**

In a telephonic interview a telephone is used as a mode of communication between the researcher and the interviewee (Welman & Kruger, 2001:159). This type of interview draws its strength from the fact it is time and cost effective, and free from bias. The interviewee is free to express his views without any pressure from the interviewer. However this type of interview method was not selected for this study owing to its drawback of being brief in nature and henceforth limiting the extraction of further information.

- **The mail interview**

Welman and Kruger (2001:159) describe the mail interview as a kind of interview conducted through post mail or electronic mail. Similar to telephonic interview this type of interview is cost effective and free from bias. The interviewee is free from any pressure that might be exerted by the interviewer. The mail interview was not considered for this study owing to its high risk of non responses (Welman & Kruger, 2001:159).

- **The personal interview**

For the purpose of this study the researcher saw it fit to use the personal interview. De Vos (2011:297) defines the personal interview as an enquiry method where information is extracted and transmitted from the interviewee to the interviewer through a face to face encounter. De Vos (2011:297) further argues that the face to face context in which the interview is conducted maximizes the flow of valid and reliable information while minimizing the distortion of the interviewee's recollection of events.

Creswell (2003:16) depicts an interview as a two-way conversation between the interviewer and the interviewee, whereby the interviewer asks questions to collect data about ideas, beliefs, opinions and behaviours of the interviewee with the aim of seeing the world through the eyes of the interviewee. According to Patton (2002:226), the strength of a qualitative method and its data collecting instruments of interviews is that it permits inquiry into selected issues in great depth with careful attention. Krathwohl and Smith (2005: 6) further contend that a qualitative research orientation through its interviews enables the researcher to understand people's behaviour and enhance the interpretation of data collected.

Interviews were conducted at the participants' premises namely colleges, companies and Indlela Training Centre. As the purpose of this study is to evaluate public FET colleges in Gauteng with regard to their role in skills development, the interview questions were guided and informed by the aims and the research questions (see par.1.4). To source appropriate, relevant and in depth information on skills development the study focused on skills development managers, lecturers and students. These sampled respondents are important to the study owing to their experience as skills development managers,

implementers of skills development strategies and quality assures. The respondents were asked to provide information about their views and experience on the role played by public FET colleges in the province of Gauteng as skills development stakeholders.

- **The rationale for using interviews**

The use of interviews accord both the interviewee and the interviewer the opportunity to engage and elaborate on issues and questions with more insight while clarifying the meaning of statements as their dialogue unfold (Burns & Grove, 2009:696). Burns and Grove (2009:696) explain that the advantage of interviews as data collecting instruments rests in their capability to enables interviewers to follow up ideas, probe responses and investigate motives and feelings of interviewees. Interviews enable the researcher to probe more information from participants and gain a greater insight and in depth knowledge about the topic (Krathwohl & Smith, 2005:6). These aforementioned factors strengthen the argument that information gathered from interviews is unlikely to be misinterpreted.

As the purpose and aim of this study is to investigate and evaluate the role of Gauteng's public FET colleges in the development of intermediate skills against the skills shortage faced by the labour market, the interviews played a pivotal role in unearthing valuable information from participants. Interview questions that were articulated to the aims of the study assisted the researcher to gather information that enabled him to understand the experiences and attitudes of participants namely skills development managers, educators and students. The interviews further assisted him to establish what meaning these participants attached to the public FET colleges as skills development entities.

The study had conducted 20 interviews and five observation sessions (see par. 1.6.3). The interviews and observations accorded the researcher a better understanding of the complexities and dynamics underlying the skills development and training by public FET colleges in the province of Gauteng. All interviews were conducted at the respondent's premises to save time and costs. **All the interviews were scheduled for 30 minutes.**

4.6.2 Observations

Research observation is defined as the watching of behavioural patterns of subjects to be studied in certain situations to obtain information about the phenomenon of interest (Johnson & Christensen, 2004:186) According to Mitchell and Jolley (2007:220), there are three basic types of observations: laboratory, naturalistic (non participant) and participant. Naturalistic and participant observations share something in common because they involve observation of real behaviour in a real world (Johnson & Christensen, 2004:186). In contrast, laboratory observation as the name suggests occurs in laboratories. De Vos (2011:281) defines laboratory observation as a kind of observation where the environment is not natural but is created and manipulated by the researcher.

For the purpose of this study non participant naturalistic observation was used to observe apprentices in their company's workshops, students in college's workshops and trade test candidates at Indlela Training Centre. The observations accorded the researcher the opportunity to observe how vocational and technical skills are imparted to students and apprentices on the workshop floor. The observation further enhanced the researcher's evaluation of lecturers' vocational

and pedagogic skills. The differences between the two observation methods are discussed below:

- **Participant observation**

According to Johnson and Christensen (2004:186), participant observation requires the researcher to become a member of the group being investigated. Mitchell and Jolley (2007:220) maintain a similar view in their assertion that participant observation studies require researchers to immerse themselves physically and socially and acclimatize themselves in to the surroundings of the group that they observe.

Participant observation requires researches to physically engage in activities while simultaneously observing physical aspect of the situation. The reason why participant observation was not chosen for this study is because it requires the researcher to be part of the group being observed, unfortunately that limits his note-taking role.

- **Non participant naturalistic observation**

In non-participant naturalistic observation the researcher need not be part of the activities nor be one of the participants. He watches events in their wholeness and the natural setup while recording activities as they unfold. The researcher assumes the role of an observer in the true sense of observing without any involvement in the group being observed. According to De Vos (2011:280), non-participant naturalistic observation is unobtrusive in nature and it creates an atmosphere where the participants present their natural behavior and interaction patterns at all times. This accorded the researcher ample opportunity to observe apprentices, students and lecturers in workshops without

being part of them. It did not require that the researcher be physically involved in the workshop as a student or apprentice. His non participant role enabled him to focus on observing and writing notes.

4.7 MEASURES TO ENSURE TRUSTWORTHINESS

Polit and Beck (2004:430) define trustworthiness as a way in which qualitatively collected data is evaluated against the criteria of credibility, dependability, confirmability and transferability. Norrish (2011: 152) cites Krefting (1991:215) who contends that trustworthiness refers to the quality of the qualitatively collected data and the true state of the human experiences from which it was collected.

Norrish (2011: 152) further contends that trustworthiness is to a large extent dependent on the type of criteria against which collected data is evaluated. According to Norrish (2011:152), in the event where data is collected quantitatively, the criteria of validity and reliability are used to evaluate the trustworthiness of data collected. In the case of qualitatively collected data the criteria of dependability, credibility, confirmability and transferability are used. The nature and purpose of qualitative and quantitative studies differ, hence the difference in the criterion against which data collected is evaluated to determine trustworthiness. According to Krefting (1991:215) as cited by Norrish (2011: 152) the term validity, when used from a qualitative perspective, refers to the degree of understanding about the nature of the phenomenon under investigation. From a quantitative perspective it refers to the degree to which the instrument measures what it is designed to measure. Owing to the triangulation nature of the study the researcher applied the criterion from both the qualitative and the quantitative perspective. Below is a description of criteria used against data that was collected qualitatively

4.7.1 Credibility

Norrish (2011: 153) defines credibility as the degree of confidence that one might have in the truthfulness of the data. Polit and Beck (2004:430) maintain that credibility refers to the confidence in the truth of data collected and its interpretation.

According to Maja (2002:169), credibility is to a large extent dependent on the researcher's activities that make it possible for credible findings and interpretations to be produced. For the purpose of this study the researcher applied the following aspects to enhance the credibility of the study:

- **Prolonged engagement**

Prolonged engagement with participants serves to bolster their trust and confidence in the researcher and further demonstrates that their trust would not be betrayed (Maja, 2002:169). To enhance credibility the researcher spent sufficient amount of time with participants during interviews and observations in order to establish a mutual relationship that is based on trust. According to Krefting (1991:215) as cited by Norrish (2011: 152) the time spent with participants enables them to trust the researcher to the extent of freely divulging sensitive information.

- **Persistent observation**

Norrish (2011: 154) contends that persistent observation refers to the in-depth and the salience of the data that the researcher gathered and recorded. Maja (2002:169) argues that credibility from a persistent observation point of view is achieved through rephrasing, repeating

and expanding questions on different occasions. The researcher during his prolonged engagement with participants ensured that interview questions were rephrased, repeated and expanded to enhance the depth and the salience of the enquiry.

- **Triangulation**

According to Ritchie and Lewis (2003:46) as cited by Mashabela (2010:136) triangulation refers to the use of different methods and sources to check the integrity of the data collected and the inferences drawn from such data. Mashabela (2010:136) defines triangulation as the act of using more than one source of data to corroborate, elaborate and illuminate the research question. Triangulation enhances the credibility of the data collected by collecting data through the use of qualitative and quantitative methods of questionnaires, interviews and observations. The researcher used a triangulation method (see par. 1.6) to acquire an in-depth knowledge about the development of intermediate skills and to further evaluate the credibility of the data collected from students, lecturers and skills development managers.

4.7.2 Transferability

According to Lincoln and Guba (1985:316) as cited by Maja (2002:171), transferability refers to the transfer of research findings to another similar context or setting while still preserving the meaning, interpretations and inferences from the completed research. Polit and Beck (2004:435) contend that transferability refers to the degree to which the findings can be applied to another context. To accommodate transferability in this study the researcher had provided enough descriptive data in order to allow for comparison.

4.7.3 Dependability

Polit and Beck (2004:435) define dependability as the stability and consistency of the findings. For the purpose of this study the researcher used the inquiry audit to assess the dependability of the research findings. It is important to confirm the dependability of the study in order to clear doubts about its finding's validity. To confirm the dependability of the study, the study and its findings were subjected to an external audit by an independent and qualified researcher who has sufficient knowledge and expertise. The independent researcher examined the process of inquiry, data collection and the study findings.

4.7.4 Confirmability

Polit and Beck (2004:435) defines confirmability as the degree to which two or more independent researchers would agree with regard to the relevance and the meaning of the data utilized to arrive at the study findings. Streubert Speziale and Carpenter (2007:49) as cited by Norrish (2011: 154) define confirmability as the degree to which a researcher strives to articulate an audit trail such that any independent researcher will be able to follow the same trail and either confirm or dispute the study findings. An audit trail comprises of physical records of all activities and findings of the study that the independent researcher could retrace as he or she audits the study. According to Norrish (2011: 154), there are different types of records that an audit trail is dependent on to establish the confirmability of the study. For the purpose of this study the audit trail was comprised of the following records (Norrish (2011: 154) :

- Raw data that was recorded on tape and field notes and interview transcripts that were written by the researcher.

- Reconstructed and reduced data such as, interpretations, relationships, inferences and conclusions.
- Process notes such as methodological notes and observational notes as well as notes relating to credibility, dependability and confirmability.
- Records that explain the researcher's intentions and descriptions such as the researcher personal notes and his reflection on intentions
- Records that provides evidence of the researcher's effort to maintain reliability, validity and trustworthiness.

The independent researcher examined the aforementioned records to establish the confirmability of the study.

4.8 DATA ANALYSIS

For the purpose of this study the researcher opted to use a triangulation approach that combines the quantitative and the qualitative research orientations, because of its potential to expand the scope of the study. According to Patton (2002:247-248), different aspects of reality lend themselves to different methods of inquiry. Ritchie and Lewis (2003:46) define triangulation as the use of different methods and sources to check the integrity of inferences drawn from data.

From a qualitative perspective the researcher used interviews and observations to collect data. A total of 43 interviews were conducted with skills development managers namely Head of Departments (HOD) and deputy principals of the nine colleges as well as skills development managers of the six companies and Indlela Training Centre. Group

interviews were also conducted with lecturers and students of the nine colleges. The interviews were conducted as follows:

- Nine interviews with nine deputy principal academics of the nine colleges.
- Nine interviews with nine Head of Departments (HOD) of the nine colleges.
- Nine group interviews with lecturers of the nine colleges
- Nine group interviews with exit level students of the nine colleges
- Six interviews with six skills development managers of the six companies.
- One interview with an assessment manager at Indlela Training Centre.

Data collected from interviews and observations as cited above was analyzed qualitatively. According to Patton (2002: 381) data analysis refers to coding and categorizing primary patterns in the data collected. Data collection and analysis was done sequentially meaning that during interviews transcripts and field notes were marked with codes according to similarities to prepare them for data analysis later. The researcher read all the interview scripts and field notes arranging them according to similarities and differences as per the different codes allocated to them. Data collected by means of audiotape was also transcribed verbally and coded

The researcher used Tesch's (1990) eight -step method of analyzing data (Kgole, 2009:42 and Creswell, 1994:155) as follows:

- The researcher listened to the tapes repeatedly and transcribed their content verbatim. Thereafter he read the

transcripts over and over with the intent to identify the main themes.

- The researcher then chose the transcripts of one interview at a time and read through it to understand the underlying meaning.
- After reading all the transcripts the researcher proceeded to sort, group, and classify the transcripts into themes and sub themes
- After the transcripts were classified and categorized into themes and sub themes the researcher marked them and coded them.
- Once the transcripts were coded the researcher reduced them by grouping them into related entities.
- The researcher then proceeded to arrange the coded transcripts alphabetically in order to interpret them with ease.
- The researcher then formulated the coded transcripts into main themes and sub themes.
- The researcher finally draw conclusions based on these themes and sub themes.

4.9 CONCLUSION

This chapter focused on the research design and the research method adopted for the research enquiry. The chapter began with the description of the triangulation approach that combined the qualitative and the quantitative approaches. The significance of the triangulation approach to this study which is enhanced by the integration of the qualitative and the quantitative data collecting methods was discussed in depth.

The research methodology focused on describing the study's population, sampling techniques, data collection and analysis methods

as well as ethical considerations. The data analysis method and the accompanying steps were also described in detail. This chapter further reflected on the trustworthiness of the study with special attention to credibility, dependability, transferability and confirmability. The reliability and the validity of the study were also discussed.

CHAPTER FIVE

RESEARCH ANALYSIS

5.1 INTRODUCTION

Chapter four outlined the entire research design and the manner in which the study was conducted. It presented the mixed method research design that encompasses the qualitative and the quantitative research paradigms. The rationale for the choice of the triangulation methodology, the techniques used in data reduction, and the significance of analyzing collected data were outlined. For the purpose of this study as explained in chapter four (see par. 4.2), the researcher employed a combination of research instruments from a quantitative and a qualitative research paradigm in order to obtain the most comprehensive and credible findings. The use of different methods served to check the integrity and inferences drawn from the collected data as well as clarifying research questions (Ritchie & Lewis, 2003: 46).

Chapter five outlined and detailed the data analysis process. The detailed outlining of the process to be applied enhanced the researcher's successful attainment of the smooth and credible data analysis and interpretation (Crist & Tanner, 2003: 202). Owing to the triangulation nature of the study as explained in chapter four, the analysis of data was undertaken qualitatively and quantitatively. Quantitative analysis preceded the qualitative analysis. The precedence of the qualitative approach by the quantitative approach is due to the latter's capability to explore and test variables (Robert & Sari, 2003:43). The focus of the study remained to be the public FET college sector in the province of Gauteng except for CN Mahlangu

Campus which was included due to its uniqueness (see paragraph 1.62).

5.2 QUANTITATIVE DATA ANALYSIS

The process of quantitative data analysis was carried out simultaneously with data collection activities. For the purpose of this study quantitative data analysis refers to the categorizing, ordering, summarizing of data and the description of result in meaningful terms (Johnson & Christensen, 2004:212-213). According to Burns and Grove (2009:22) the strength of the quantitative research orientation lies in its potential and capability to provide a quantifiable data and objective measurement. Creswell (2003:16) asserts that a quantitative research orientation is an enquiry into a social or human phenomenon that utilizes numerical data and statistical analysis to determine whether the predictive generalization of the theory hold true. Johnson and Christensen (2004:212-213) maintain that a quantitative research orientation draws its strength from its use of numbers in analyzing and interpreting data collected.

According to Macmillan and Schumacher (1993:191) as cited by Lekhetho (2003: 162) the use of numbers or statistics in data analysis and interpretation appears to be a distinguishing feature of the quantitative research method. Lekhetho (2003:162) further contends that the use of statistics is intended to ensure that the samples selected for the study are representative of the target population so as to eliminate errors in the interpretation and analysis of data. The questions reflected in the questionnaire's items extracted, explored and put into perspective the respondent's personal opinions, feelings and experiences with regard to the development of intermediate skills by the public FET college sector in the province of Gauteng.

For the purpose of this study and from a quantitative perspective, the population of the study was comprised of nine public FET colleges, six

companies and one skills training centre (see par. 4.3.2). A total of 395 questionnaires were physically taken and collected from the nine colleges, six companies and one training centre. The student's questionnaires responses from the nine colleges were first analyzed individually per campus, and then later cross analyzed. On the contrary the questionnaires responses from the six companies, training centre, HODs and deputy principals were only cross analysed. The responses from the different colleges, companies and training centre were given code names in order to protect the identity of all respondents and the institutions.

5.2.1 Individual analysis of different college's student responses

A total of 300 student's questionnaires were sent to all nine colleges. Each college received 33 questionnaires except for Central Johannesburg College that received 36 questionnaires due to its size. The identity of the college's respondents were protected hence the allocation of code names to their responses.

5.2.2 Central Johannesburg College (CJC)

Central Johannesburg College owes its name to the city of Johannesburg. It is situated in the CBD (Central Business District) of the city of Johannesburg. The name Central Johannesburg defines its geographic location within the city. It comprises of the following six campuses:

- Alexandra Campus
- Crown Mines Campus
- Ellis Park Campus

- Langlaagte Campus
- Park Town Campus
- Riverlea Campus

CJC campuses like other colleges in Gauteng are managed by campus managers who report to the College principal. The principal oversees the college from its head office situated at Park Town in Johannesburg. The executive management of the College comprises of the principal and three deputies who are responsible for the portfolios of finance, academic and corporate services (Campuses-Central Johannesburg College, 2012). The study had chosen Ellis Park Campus because it is the college's biggest campus. It facilitates both NCV and NATED courses. It is a strictly engineering campus facilitating only engineering courses. It is centrally located and easily accessible by road and rail to most communities of the three metros that constitute the province of Gauteng.

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5.2.3 Questionnaires responses from CJC students

Central Johannesburg College received 36 questionnaires and the other eight colleges received 33 questionnaires each. The questions reflected in the questionnaires were based on the research questions, aims and objectives of the study. (See paragraph 1.3).

The questionnaires distributed to CJC students were adequately and appropriately answered except for the few that were returned unanswered. However, the numbers of unanswered questionnaires were not significant enough to pose a threat to the credibility and reliability of the questionnaires. Frequency distribution was used to analyze the 36 questionnaires responses. The responses were coded and arranged in terms of their frequencies on a table from low to high.

Table 5.1 Response rate of returned questionnaires (n=36)

Questionnaires	N	%
Distributed	36	100%
Returned	30	83.33%
Completed	30	83.33%

Table 5.2 Students' responses on campus contribution to skills development (n=30)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
Strongly agree	3	10%	10%
Agree	4	13.3%	23.3%
Undecided	5	16.7%	40%
Disagree	7	23.3%	63.3%
Strongly disagree	11	36.7%	100%
TOTAL	30	100%	100%

In terms of table 5.1 above, 83.3% of questionnaires taken to CJC's Ellis Park campus were appropriately completed and returned. With regard to table 5.2 indications are that 36.7% of the respondents strongly disagree that the province's public FET colleges are responsive to the skills needs of labour markets. On the contrary only 10% of the respondents strongly agree that the province's public FET colleges are responsive to the skills needs of labour markets.

5.2.4 Ekurhuleni East College (EEC)

The college bears a geographical name owing to its geographical position within the Ekurhuleni Metro. It is situated in the east of Ekurhuleni Metro hence the name Ekurhuleni East College. The Ekurhuleni Metro in which the campus is located is comprised of gold mining towns and industrial hubs (see paragraph 1.6.2). The college is well placed in terms of prospective employers for its graduates and

work based placement for its lecturers. The College is comprised of five campuses as follows:

- Benoni Campus
- Brakpan Campus
- Daveyton Campus
- Kwa Thema Campus
- Springs Campus

The study had chosen the Kwa Thema campus because it facilitates both NCV and NATED courses in engineering and business studies. The campus inherited the premises of the former East Rand College of Education which was closed down in the early nineties due to the national government higher education restructuring programme. It is the college biggest campus that hosts the college head office.

5.2.5 Questionnaires responses from EEC students

Thirty-three (33) questionnaires were taken by the researcher to EEC's Kwa Thema campus and collected a week later by him. A frequency distribution table was used to analyze the questionnaire responses based on the research questions, aims and objectives of the study. The responses were coded, sorted and arranged in terms of their frequencies on a table from low to high. The frequency tables are reflected below as follows:

Table 5.3 Response rate of returned questionnaires (n= 33)

Questionnaires	N	%
Distributed	33	100%
Returned	26	78.8%

Completed	24	72.73%
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Table 5.4 Students' responses on campus contribution to skills development (n=24)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
Strongly agree	2	8.33%	8.33%
Agree	3	12.5%	20.83%
Undecided	5	20.83%	41.66%
Disagree	5	20.83%	62.49%
Strongly disagree	9	37.5%	100%
TOTAL	24	100%	100%

Table 5.4 above illustrates that 20.83 % of the 72.73% respondents that appropriately completed the questionnaires are undecided about the role that public FET colleges plays in the development of skills. The table further illustrates that 37.5 % of the respondents strongly disagree as opposed to the 8.33% that strongly agree that the colleges are playing a pivotal role in the development of intermediate skills.

5.2.6 Ekurhuleni West College (EWC)

Ekurhuleni West College came into being as a result of the merger (see par. 1.6.2) of six former technical colleges. Two of the college's campuses namely Tembisa and Kathorus are former Historically Disadvantaged Institutions (HDI) and the other four are Historically Advantaged Institutions (HAI). Like its counterpart namely Ekurhuleni East College it is named after the Ekurhuleni Metro, hence the name Ekurhuleni West. It bears a geographical name due to its geographical

position within the Ekurhuleni Metro. Owing to its proximity to a huge industrial base the college is also well placed in terms of employment opportunities and work based placements for its lecturers. The college is comprised of six campuses as follows:

- Alberton Campus
- Boksburg Campus
- Germiston Campus
- Kathorus Campus
- Kempton Campus
- Tembisa Campus

Germiston campus was chosen because it is the college’s biggest campus, centrally located and easily accessible by rail and road to most communities within the Ekurhuleni Metro. The campus facilitates NCV and NATED courses in both engineering and business studies.

5.27 Questionnaires responses from EWC students

Thirty-three (33) questionnaires were taken to the campus and collected one week later by the researcher.

Table 5.5 Response rate of returned questionnaires (n= 33)

Questionnaires	N	%
Distributed	33	100%
Returned	30	90.9%
Completed	30	90.9%

Table 5.6 Students' responses on campus contribution to skills development (n=30)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
Strongly agree	4	13.3%	13.3%
Agree	5	16.7%	30%
Undecided	6	20%	50%
Disagree	7	23.3%	73.3%
Strongly disagree	8	26.7%	100%
TOTAL	30	100	100

According to table 5.5 above the questionnaire response and return rate were positive. 90.9% of the questionnaires were appropriately completed and returned. About a quarter of the respondents (26.7%) felt strongly that their college is not responding effectively to the skills needs of labour markets and is not doing enough to address the national skills shortage; 20% of the respondents were undecided with regard to the contribution of the province's public FET colleges in the development of skills.

5.2.8 Sedibeng College

Sedibeng College is comprised of four campuses. Three of its campuses are Historically Advantaged Institutions (HAI) and one campus namely Sebokeng, is a Historically Disadvantage Institution (HDI). Sebokeng campus is the least advantaged owing to its disadvantaged background. The college is situated south of the Johannesburg Metro (see par. 1.6.2) in an area formerly known as the Vaal Triangle. The Vaal Triangle area in which the college is situated is

comprised of coal mines and a huge steel and chemical industrial sector.

Sebokeng campus was chosen due to its former HDI status. Contrary to the other three campuses that are situated in the Central Business Districts (CBD) of their respective towns, Sebokeng campus is situated within the proximity of disadvantaged communities of Sebokeng, Sharpeville and Evaton townships. The four campuses that constitute the college are as follows:

- Heidelberg
- Sebokeng
- Vanderbijlpark
- Vereeniging

5.2.9 Questionnaires responses from Sedibeng students

Sebokeng Campus received 33 questionnaires which were taken to the campus by the researcher and collected a week later by him.

Table 5.7 Response rate of returned questionnaires (n= 33)

Questionnaires	n	%
Distributed	33	100%
Returned	28	85%
Completed	25	76%

Table 5.8 Students' responses on campus contribution to skills development (n=25)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE

Strongly agree	3	12%	12%
Agree	3	12%	24%
Undecided	5	20%	44%
Disagree	6	24%	68%
Strongly disagree	8	32%	100%
TOTAL	25	100%	100%

In terms of table 5.8 above, 12% of the respondents felt strongly that their college is contributing effectively to the development of skills. On the contrary 32% of the respondents felt strongly that their college is not responsive to their skills needs and that of the labour markets. Only 20% of the respondents were undecided with regard to the role played by their college in the development of skills.

5.2.10 South West Gauteng FET colleges

South West Gauteng FET colleges owe its name to the geographical position that it occupies within the province of Gauteng. As the name implies the college is situated in the South West of the Gauteng Province. Like its counterparts, South West Gauteng FET College owes its origin to the merger of five former technical colleges which have since transformed to campuses. The college is comprised of five campuses as follows:

- Dobsonville Campus
- George Tabor Campus
- Molapo Campus
- Roodepoort Campus
- Technisa Campus

Technisa campus was chosen due to its success in correspondence and distance learning before the merger. The campus has been a distance learning centre with support offices all over the country serving employed students long before its incorporation into South West Gauteng FET colleges. The campus is still facilitating correspondence and distance learning courses. Lately the campus had introduced fulltime courses. Thirty-three (33) questionnaires were physically taken to the campus and collected by the researcher a week later.

5.2.11 Questionnaires responses from South West Gauteng FET colleges

Frequency distribution was used to analyze the questionnaire's responses based on the research questions. The responses were coded and arranged in terms of their frequencies on a table from low to high.

Table 5.9 Response rate of returned questionnaires (n= 33)

Questionnaires	n	%
Distributed	33	100%
Returned	27	82%
Completed	22	67%

Table 5.10 Students' responses on campus contribution to skills development (n=22)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
Strongly agree	2	9%	9%
Agree	5	23%	32%
Undecided	0	0%	0%
Disagree	7	32%	64%
Strongly disagree	8	36%	100%
TOTAL	22	100%	100%

Table 5.10 indicates that only 9% of the respondents are happy and satisfied with the role that their college plays in developing their skills and responding to the skills needs of labour markets. There were no respondents that were undecided with regard to the role played by their

college in the development of skills. Thirty-six percent (36%) of the respondents strongly disagree that their college prepares them adequately for the world of work.

5.2.12 Tshwane North College

Tshwane North FET College is situated in the North of the Tshwane Metro. Like its counterpart in the province of Gauteng its executive management is comprised of the principal and three deputies. The three deputies are deputy principal academic, deputy principal corporate services and deputy principal financial affairs. The college is comprised of five campuses. Three of its campuses are former Historically Disadvantaged Institutions (HDI) and the other two are former Historically Advantage Institutions (HAI). Mamelodi, Temba and Soshanguve campuses are former HDI institutions. On the contrary Pretoria and Rosslyn campuses are former HAI. The five campuses are as follows:

- Mamelodi Campus
- Pretoria Campus
- Rosslyn Campus
- Soshanguve Campus
- Temba Campus

Mamelodi Campus was chosen due to its former HDI status and its facilitation of NCV courses and NATED courses in both engineering and business studies.

5.2.13 Questionnaires responses from Tshwane North College

Mamelodi campus received 33 questionnaires which were taken to the campus by the researcher and collected a week later by him. Frequency distribution was used to analyze the questionnaire's responses based on the research questions. The responses were

coded and arranged in terms of their frequencies on a table from low to high.

Table 5.11 Response rate of returned questionnaires (n= 33)

Questionnaires	N	%
Distributed	33	100%
Returned	30	91%
Completed	30	91%

Table 5.12 Students' responses on campus contribution to skills development (n=30)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
Strongly agree	2	6.6%	6.6%
Agree	4	13.3%	19.9%
Undecided	5	16.7%	36.6%
Disagree	8	26.7%	63.3%
Strongly disagree	11	36.7%	100%
TOTAL	30	100%	100%

Table 5.11 illustrates that 91% of the questionnaires were appropriately completed and returned. A third (36.7%) of the respondents strongly disagree that their college is contributing effectively to their intermediate skill's development and that of labour markets. Only 6.6% of the respondents are strongly convinced that their college is playing a pivotal role in skills development.

5.2.14 Tshwane South College

The college owes its name to its geographical location within the Tshwane Metro. As the name implies, the college is situated in the

south of the Tshwane Metro. It comprises of the following four campuses:

- Atteridgeville Campus
- Centurion Campus
- Odi Campus
- Pretoria west Campus

The study had chosen Centurion campus because it had succeeded in building and managing very expensive and advanced workshops that are accredited by SETAS (Sector Education and Training Authority) for conducting trade tests.

5.2.15 Questionnaires responses from Tshwane South College

Table 5.13 Response rate of returned questionnaires (n= 33)

Questionnaires	n	%
Distributed	33	100%
Returned	30	91%
Completed	27	82%

Table 5.14 Students' responses on campus contribution to skills development (n=27)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
Strongly agree	3	11,1%	11.1%
Agree	4	14.8%	25.9%
Undecided	5	18.5%	44.4%
Disagree	7	25.9%	70.3%

Strongly disagree	8	29.6%	100%
TOTAL	27	100%	100%

According to table 5.14 above 18.5% of the respondents are undecided about the role that their respective college is playing in the development of skills. Further, 29.6 % of the respondents strongly disagree that their college is playing a crucial role in the development of intermediate skills against the 11.1% of the respondents who are strongly convinced that their college is playing a significant role in skills development.

5.2.16 Western College FET (WESTCOL)

Western College FET is situated in the West Rand hence the name Western College. The West Rand area where the college is situated is an area West of Johannesburg. The area is comprised of gold mining towns of Randfontein, Krugersdorp, Roodepoort and Carletonville (see paragraph 1.6.2). The college is well placed in terms of employment opportunities for its graduates and work based exposure for its lecturers due to its proximity to the goldmines. The college is comprised of the following five campuses:

- Amandelbult
- Carletonville
- Krugersdorp
- Randfontein
- Thuba Makote

The study had chosen Krugersdorp campus. The campus facilitates NCV courses and NATED courses in both engineering and business studies.

5.2.17 Questionnaires responses from Western College FET

Table 5.15 Response rate of returned questionnaires (n= 33)

Questionnaires	n	%
Distributed	33	100%
Returned	26	79%
Completed	24	73%

Table 5.16 Students' responses on campus contribution to skills development (n=24)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
Strongly agree	2	8.3%	8.3%
Agree	3	12.5%	20.8%
Undecided	4	16.7%	37.5%
Disagree	7	29%	66.5%
Strongly disagree	8	33.3%	100%
TOTAL	24	100%	100%

Table 5.15 above illustrates that of the 79% of the responses that were received back, 73% were appropriately completed and returned. In terms of table 5.16 as reflected above 33.3 % of the respondents felt strongly that their college is not doing enough to prepare them

adequately for the world of work and it is not contributing effectively to the development of intermediate skills.

5.2.18 CN Mahlangu Campus of Nkangala FET colleges

The campus is situated at Siyabuswa in the former homeland of Kwa Ndebele which has since been incorporated into Mpumalanga Province (see par.1.6.2). Despite the fact that the focus of the study remains on public FET colleges in the Province of Gauteng, CN Mahlangu Campus was included due to its potential to contribute valuable information to the study. CN Mahlangu campus received 33 questionnaires which were taken to the campus by the researcher and collected by him. The questionnaires responses were coded and arranged in terms of their frequencies on a table from low to high.

5.2.19 Questionnaire responses from CN Mahlangu Campus

The focus of the study remained to be the public FET college sector in the province of Gauteng except for CN Mahlangu Campus which was included due to its uniqueness (see paragraph 1.62).

Table 5.17 Response rate of returned questionnaires (n= 33)

Questionnaires	n	%
Distributed	33	100%
Returned	33	100%
Completed	30	91%

Table 5.18 Students' responses on campus contribution to skills development (n=30)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
Strongly agree	3	10%	10%
Agree	4	13.3%	23.3%
Undecided	5	16.7%	40%
Disagree	7	23.3%	63.3%
Strongly disagree	11	36.7%	100%
TOTAL	30	100%	100%

Tables 5.17 and 5.18 above illustrates that 91% of the questionnaires were appropriately completed, and 36.7% of the respondents strongly disagree that their college is responsive to the skills needs of labour markets. Only 10% of the respondents strongly agree that their college is preparing them appropriately for the world of work and it is contributing positively to the development of skills.

5.2.20 Cross analysis of quantitative student responses

Owing to the triangulation nature of this study, student's responses were both quantitatively and qualitatively analyzed. Quantitative student's responses were first analyzed per college and then later cross analyzed. Tables 5.19 and 5.20 below reflect the quantitative cross analysis of the student's responses. (See Appendix N).

Table 5.19 Response rate of returned questionnaires (n= 300)

Questionnaires	N	%
Distributed	300	100%
Returned	260	87%
Completed	242	81%

Table 5.20 Students' responses on campus contribution to skills development (n=242)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
Strongly agree	24	10%	10%
Agree	35	14%	24%
Undecided	40	17%	41%
Disagree	61	25%	66%
Strongly disagree	82	34%	100%
TOTAL	242	100%	100%

For the purpose of this study quantitative cross analysis of the students' responses refers to the adding up of all the students' responses from the different colleges in accordance with the different ratings and their plotting on one frequency table. The cross analysis of

the responses as reflected by the two tables above illustrates mixed reactions. According to the above analysis as per the frequency tables, some students felt strongly that their colleges are contributing to their wellbeing while some disagreed. In terms of frequency table 5.20 the majority of students felt strongly that the colleges are not doing enough to contribute to the development of intermediate skills. In terms of table 5.19 above 34% of the students that responded to the questionnaires strongly disagreed that the public FET colleges are impacting positively on their goals of becoming competitive skilled employees in future. On the contrary only 10% of the respondents felt strongly that their colleges are contributing positively to the development of skills.

5.2.21 Quantitative data analysis of trainees' responses

Employees who are in training such as apprentices and those involved in learnerships are graduates of the FET college sector (see par. 1.6.2). They are exposed to the manner in which skills are developed by both the public FET college sector and their respective companies. They were included owing to their experience in skills development and training by the two sectors namely FET colleges and industry. Twenty (20) questionnaires were physically taken to the six companies by the researcher and collected by him a week later. With the exception of the South African Airways Technical (SAAT) which received five questionnaires, the other companies received three questionnaires each.

The questionnaire responses of the six companies were cross analyzed. All the questionnaire responses from the various companies were coded and tabled on a single frequency table from low to high. Tables 5.13 and 5.14 reflect the trainees' responses to the questionnaires.

Table 5.21 Response rate of returned questionnaires (n= 33)

Questionnaires	N	%
Distributed	33	100%
Returned	30	90.9%
Completed	28	84.8%

Table 5.22 Trainees' responses on colleges' contributions to skills development (n=28)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
Strongly agree	3	11%	11%
Agree	4	14%	25
Undecided	5	18%	43
Disagree	6	21%	64
Strongly disagree	10	36%	100%
TOTAL	28	100%	100%

Tables 5.21 and 5.22 illustrate the trainees' responses to the questionnaires. In terms of table 5.21 above 84.8% of the questionnaires were appropriately completed and returned. According to table 5.22 above 36% of the trainees who responded to the questionnaires strongly disagree that colleges are responding positively to the skills needs of labour markets.

5.2.22 Quantitative analysis of lecturers' responses

The students' questionnaire responses were first individually analyzed per college. The responses from each college were coded and arranged in terms of frequencies on a frequency table from low to high.

The individual college's responses were then integrated and cross analyzed on a single frequency table to reflect a final analysis of the students' responses.

The lecturer's questionnaire responses from the different colleges were only cross analyzed as opposed to the individual college's analysis that was applicable to students' responses. The lecturers' responses from the different colleges were coded and arranged on a single frequency table. The lecturers' questionnaire items were similar to those of students in that they extracted and explored and put into perspective the respondent's personal opinions, feelings and experiences with regard to the development of intermediate skills by the public FET college sector in the province of Gauteng.

A total of 100 lecturers' questionnaires (see par. 4.3.3) were physically taken to the nine colleges by the researcher and collected a week later by him. Each college received 11 questionnaires except for CJC that received 12 questionnaires. Tables 5.23 and 5.24 below reflect the lecturers' responses to the questionnaires.

Table 5.23 Response rate of returned questionnaires (n= 100)

Questionnaires	n	%
Distributed	100	100%
Returned	92	92%
Completed	92	92%

Table 5.24 Lecturers' responses on colleges' contribution to skills development (n=92)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE
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			PERCENTAGE
Strongly agree	5	5%	5%
Agree	11	12%	17%
Undecided	20	22%	39%
Disagree	25	27%	66%
Strongly disagree	31	34%	100%
TOTAL	92	100%	100%

In terms of tables 5.23 and 5.24, 92% of the lecturers' questionnaires were appropriately completed and returned. Table 5.24 illustrates that 34% of the lecturers who responded to the questionnaires felt strongly that the public FET colleges are not responsive to the skills needs of labour market. On the contrary 5% of the respondents felt strongly that the public FET colleges are indeed responsive to the skills needs of labour markets and are appropriately skilling their students for the world of work; 22% of the respondents are undecided about the role that their colleges are playing in the development of skills.

5.2.23 Quantitative analysis of deputy principals and HOD's responses

Questionnaire responses of deputy principals and HOD's of the different colleges were only cross analyzed. All the responses from the various colleges were coded and tabled on a single frequency table from low to high. Eighteen questionnaires for deputy principals and HOD's were physically taken by the researcher to the nine colleges and collected by him a week later. Each college received two questionnaires: one for the deputy principal and one for the HOD.

The questions reflected in the questionnaires extracted, explored and put into perspective the respondents' personal opinions, feelings and experiences with regard to the development of intermediate skills by the public FET college sector. Tables 5.25 and 5.24 reflect the deputy principals and HOD's responses to the questionnaires.

Table 5.25 Reliability of returned questionnaires (n= 18)

Questionnaires	N	%
Distributed	18	100
Returned	18	100
Completed	18	100

Table 5.26 HODs and deputy principal's responses on college's contribution to skills development (n=18)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
Undecided	1	6%	6%
Disagree	2	11%	17%
Agree	3	17%	39%
Strongly disagree	6	33%	67%
Strongly agree	6	33%	100%
TOTAL	18	100%	100%

The HODs and deputy principals' responses as reflected in tables 5.25 and 5.26 contradict those of students. Contrary to the students' responses where the majority felt that the colleges were not doing enough in terms of skills development, table 5.26 illustrates that HODs and deputy principals view their respective college's role differently. Table 5.26 illustrates that 33% of the respondents felt strongly that their respective colleges are responsive to the skills needs of labour markets as opposed to the other 33% who are of the opinion that their colleges are not responsive.

5.2.24 Quantitative analysis of skills development managers' responses

The researcher saw it fit to cross analyze and interpret the questionnaire responses of skills development managers of the six companies and Indlela Training Centre. The questionnaires responses of the skills development managers of companies and Indlela Training Centre were coded and placed on a frequency table from low to high.

The skills development managers are hands on with regard to skills development hence their sampling. They are in charge of the skills development budgets of their respective companies.

Companies recruits FET college graduates as trainees and develop their skills capability to suit their skills needs. Indlela Training Centre on the other hand completes the skills development cycle by assessing the trainees through a trade test. Owing to the skill development manager's hands on approach on skills development, they have the potential to contribute effectively to the study hence the separate analysis of their responses. Seven questionnaires were physically taken to the six companies and Indlela Training Centre by the researcher and collected a week later by him. Tables 5.27 and 5.28 reflect the questionnaires responses of the skills development managers.

Table 5.27 Response rate of returned questionnaires (n= 7)

Questionnaires	n	%
Distributed	7	100%
Returned	7	100%
Completed	7	100%

Table 5.28 Skills development manager's responses to colleges contribution to skills development (n=7)

RATING	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
Disagree	1	14%	14%
Agree	1	14%	28%
Undecided	0	0%	28%
Strongly	2	29%	57%

agree			
Strongly disagree	3	43%	100%
TOTAL	7	100%	100%

Table 5.27 above illustrates that all the questionnaires that were taken to the six companies and Indlela Training Centre were completed and returned, hence the 100% completed and returned rate. In terms of table 5.28 above none of the respondents are undecided with regard to the contribution of the province's public FET colleges in the development of intermediate skills. On the contrary 43% of the respondents strongly disagreed that the public FET college sector in the province is responsive to the skills needs of labour markets. However, 29% of the respondents are strongly convinced that the province's public FET college sector is doing well in terms of intermediate skills development.

5.3 QUALITATIVE DATA ANALYSIS

Giorgi (2000:11) as cited by Moleki (2008:103) describes data analysis as the laying of cards on the table for inspection so that the reader can check and trace the steps followed. Bogdan and Biklen (2003:145) define qualitative data analysis as the synthesizing and the breaking up of data into manageable units in a quest to identify patterns and make sense of the data. In similar vein Patton (2002: 381) defines data analysis as the coding and the categorizing of the primary patterns in the data collected.

For the purpose of this study a total of 43 interviews were conducted. The interview sessions comprised of Head of Departments (HOD) and deputy principals of the nine colleges, skills development managers of

the six companies and lecturers and students of the nine colleges. (See par.4.8). Owing to the larger number of students and lecturers sampled for the interviews, group interviews were employed in the case of students and lecturers. Lecturers and students of identified campuses were interviewed in groups as per their respective campuses.

In addition to the 43 interviews as outlined above six observation sessions were included (see paragraph 4.6.2). The six observations were conducted at three colleges and three companies. During the six observations that the researcher recorded data in the form of field notes and identified contrasts and comparisons. He developed codes from the notes and aligned them to the research questions, aims and objectives (see paragraph 1.4). The researcher cross analyzed data collected through observations from the three colleges and the three companies as opposed to the individual analysis which applied to the students' responses.

The 43 interviews were conducted as follows (see par.4.8):

- Nine interviews with 9 deputy principal academics of the nine colleges.
- Nine interviews with 9 Head of Departments (HOD) of the nine colleges.
- Nine group interviews with lecturers of the nine colleges
- Nine group interviews with exit level students of the nine colleges
- Six interviews with six skills development managers of the six companies.
- One interview with an assessment manager at Indlela Training Centre.

Data collected qualitatively through interviews and observations from the nine colleges was only cross analyzed, owing to similarities in emerging themes and categories. The researcher read through all interview scripts and field notes collected from the nine colleges and the six companies (see par.4.8) and arranged them according to codes allocated to them. The interpretation of data was preceded by the analysis. Data collected through audiotapes during interviews and observations was verbally transcribed to ensure the accurate account of the participants' responses and to enhance the credibility and reliability of the study.

The analysis of data collected qualitatively through interviews from the nine colleges, six companies and Indlela Training Centre(see par. 4.8) was guided by the use of Tesch's (1990: 95-97) eight-step method as cited by Kgole (2009:42). This has been fully described in paragraph 4.8. The analysis of qualitative data collected through interviews was guided by the research questions, aims and objectives of the study. For the purpose of this study the research questions, aims and objectives of the study formed the basis for themes and subthemes that enhanced the analysis and interpretation of the qualitative data. The interview questions besides being in accordance with the research questions extracted, explored and put into perspective the respondents' personal opinions, feelings and experiences with regard to the development of intermediate skills.

The analysis and interpretation of qualitative data was undertaken based on the research questions (see par. 1.3) which are aligned to the research aims and objectives. The research questions were allocated alphabet codes (see table 5.29) from A-E to enhance and simplify data

interpretation and analysis and for use in frequency tables later in the study.

Table 5.29 Research questions and their alphabet codes

Code	Research Question
A	Is the curricula and course content of the province’s public FET colleges articulated to the skills needs of the province labour market?
B	Are the province’s public FET colleges responsive to the skills needs of labour markets?
C	Do educators hold appropriate qualifications?
D	Are there challenges that affect the efficiency of the province’s public FET colleges in the development of intermediate skills? What are they?
E	Do the province’s public FET colleges comply with national quality standards?

5.3.1 The analysis of interview responses to research question

A

Research question A

Code	Research Question
A	Is the curricula and course content of the province’s public FET colleges articulated to the skills needs of the province labour markets?

5.3.2 Lecturers’ responses

Lecturers' interview responses from the nine colleges were cross analyzed based on the research questions. With regard to research question A, the responses were classified and categorized into themes and subthemes based on this question. During the interview sessions with lecturers and during the process of sorting their responses it emerged again (see par. 1.2) that many lecturers are inappropriately qualified within the public FET college sector.

During interview sessions, lecturers who are vocationally qualified and in possession of industrial experience, and who have been in the employ of the public FET college sector for more than six years, acknowledged that they are no longer conversant with the developments in commerce and industry. Their argument was supported by the responses of lecturers who attended the work based exposure programmes in various companies. These lecturers acknowledged that there is a huge difference between what companies are doing and what colleges are doing in terms of skills development and training.

Lecturers who visited companies acknowledged that in terms of machinery, infrastructure, equipment and facilities companies invest more in recent technology and prioritize quality. The lecturers' responses to research question A were classified according to themes and subthemes and reflected in table 5.28 below.

Table 5.30 Lecturers' interview responses

Rating of responses to research question A	%	Researcher's comment
Undecided	10%	Neutral
Agree	40%	View the question as a true reflection

Disagree	50%	Disagree to the question
TOTAL	100%	Majority view colleges not articulated

Sorting out interview responses in accordance with research question A highlighted a difference of opinion with regard to this research question. Some responses indicated that the curricula and course contents are articulated to the skills needs of labour market while some disagreed. In terms of table 5.30 above 50% of the respondents disagree that the course contents are articulated to the skills needs of labour markets. On the contrary 40% of the respondents felt strongly that the course contents are articulated to skills needs of commerce and industry.

5.3.3 Student responses to research question A

Students' interview responses like those of lecturers were cross analyzed. They were classified according to themes and subthemes. The responses to research question A are reflected in table 5.29 below.

Table 5.31 Student interview responses

Rating of responses to research question A	%	Researcher's comment.
Undecided	20%	Neutral
Agree	30%	View the question as a true reflection
Disagree	50%	Disagree with the question
TOTAL	100%	Majority view colleges not articulated

Table 5.31 above illustrates that 50% of the respondents disagree that the course content of the province’s public FET college sector is articulated to the skills needs of labour markets. Twenty percent (20%) of the respondents are undecided and 30% of the respondents agree that the course contents are articulated to the labour markets.

5.3.4 HOD’s and deputy principals’ interview responses

The research questions that formed the basis for themes and subthemes were formulated in accordance with the research questions (see par. 1.3). The interview questions for HOD’s and deputy principals extracted, explored and put into perspective their personal opinions, feelings and experiences with regard to the development of intermediate skills by their respective colleges. Their interview sessions were individual in nature, hence the use of open ended questions. The open ended questions with HOD’s and deputy principals accorded the researcher a free flow conversation with them. The open ended questions allowed for clarification, probing, rephrasing and cross checking of responses and questions.

Table 5.32 HOD’s and deputy principal’s interview responses

Rating of responses to research question A	%	Researcher’s comment.
Undecided	20%	Neutral
Agree	40%	View the question as a true reflection
Disagree	40%	Opposed to the question
TOTAL	100%	Equally shared responses

Table 5.32 above illustrates that 40% of HODs and deputy principals disagree that their respective colleges are responsive to the skills needs of labour markets by virtue of their course contents which are not articulated to labour markets. On the contrary 40% of the respondents felt strongly that their college's course contents are articulated to labour markets in terms of intermediate skills.

5.3.5 Skills development managers and Indlela Training Centre's interview responses

Skills development managers play a crucial role in the recruitment and development of skills for employees belonging to their respective companies. The identification and development of appropriate skills that are significant to the skills needs of their respective companies is key to their success as skills development managers. Individual interview sessions indicated that they do not have knowledge of the course contents of the public FET colleges in their vicinity. Some acknowledged further that they do not have a formal skills training relationships with public FET colleges except for recruitment purposes. The skills development managers' responses to research question A are reflected in Table 5.6 below.

Table 5.33 Skills development managers' interviews responses

Rating of responses to research question A	%	Researcher's comment.
Agree	0%	No positive response to the question
Undecided	20%	Neutral
Disagree	80%	Opposed to the question

TOTAL	100	Majority view colleges not articulated
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In terms of table 5.33 above 80% of the skills development managers disagree that the province’s public FET colleges are responsive to the skills needs of labour markets. But 20% of the skills development managers are undecided regarding the role that the province’s public FET college sector plays in skills development.

5.3.6 The analysis of interview responses to research question B

Research question B

Code	Research Question
B	Are the province public FET colleges responsive to the skills needs of labour markets?

5.3.7 The student interview responses to research question B

The students’ responses to research question B highlighted a difference of opinion with regard to whether public FET colleges are responsive to the skills needs of labour markets or not. Those who were fortunate to be exposed to companies through Work Based Exposure (WBE) pointed out that they found the experience exciting and challenging as compared to that of their colleges. They acknowledged that what they do at their respective colleges differs to what companies do in terms training. Their responses are reflected in table 5.34.

Table 5.34 Student interview responses

Rating of responses to research question B	%	Researcher's comment.
Undecided	0	Neutral
Agree	40%	View the question as a true reflection
Disagree	60%	Opposed to the question
TOTAL	100%	Majority view colleges not responsive

Table 5.34 indicates that 60% of the respondents disagree that their respective colleges are responsive to the skills needs of labour markets.

5.3.8 Lecturers' interview responses to research question B

During the interview sessions it emerged that the public FET college sector, particularly at intermediate skills level, has no formal relationship with local labour markets. The lack of formal relationship with local labour markets put the sector at a disadvantage and denies it the opportunity to know what skills are in demand by the labour markets. Most lecturers acknowledged that their colleges had minimal relationship with local companies. The kind of relationship that existed involved recruiting graduates for employment purposes or donating equipment. There are no formal partnerships that involve joint planning regarding skills development. Table 5.6 below reflects the lecturers' interview responses to research question B.

Table 5.35 Lecturers' interview responses to research question B

Rating of responses to research question A	%	Researcher's comment.
Undecided	10%	Neutral
Agree	30%	View the question as a true reflection
Disagree	70%	Opposed to the question
TOTAL	100%	Majority view colleges not responsive

In terms of table 5.35 above 70% of the respondents disagree that their respective colleges are responsive to the skills needs of labour markets.

5.3.9 HOD's and deputy principals' interview responses to research question B

The HOD's and deputy principals' responses to interview questions were coded and grouped into themes and subthemes in accordance with research question B. The themes in which the responses were grouped indicated a difference of opinions in the way the respondents view their college's role in responding to the skills needs of labour markets. While some respondents acknowledged that their college's skills training programmes are not labour market driven, others were not sure. Table 5.36 below reflects the HOD's and deputy principal's interview responses to research question B.

Table 5.36 HOD's and deputy principal's interview responses to research question B

Rating of responses to research question B	%	Researcher's comment.
Undecided	10%	Neutral
Agree	40%	View the question as a true reflection
Disagree	50%	Opposed to the question
TOTAL	100%	Majority view colleges not responsive

Table 5.36 above illustrates that 40% of the HODs and deputy principals agree in contrast with 50% who disagree.

5.3.10 Skills development managers and Indlela Training Centre's responses to research question B

Contrary to lecturers, HOD's and deputy principals whose responses were divided with regard to research question B, the skills development managers' responses reflect the opposite view. Their responses indicated that the course contents of public FET colleges are outdated and not flexible. They decry the lack of formal skills development forums between them and the public FET sector. Their responses are reflected in table 5.35 below.

Table 5.37 Skills development managers' interview responses to research question B

Rating of responses to research question B	%	Researcher's comment.
Undecided	0	Neutral

Agree	30%	View the question as a true reflection
Disagree	70%	Opposed to the question
TOTAL	100%	Majority view colleges not responsive

In terms of table 5.37 above 70% of the respondents disagree that the public FET college sector in the province of Gauteng is responsive to the skills needs of labour markets.

5.3.11 The analysis of interview responses to research question C

Research question C

Code	Research question
C	Do educators hold appropriate qualifications?

5.3.12 Student interview responses to research question C

The coding and grouping of students' responses into themes and subthemes in line with research question C highlighted the challenge of the FET college sector in Gauteng regarding staffing. Students' responses hinted at dissatisfaction in the way vocational subjects are taught. During interview sessions, students pointed out that lecturers are more confident in handling the theory parts of the vocational subjects, but struggle to teach the practical components. Students' responses to research question C are tabled in table 5.38.

Table 5.38 Students' interview responses to research question C

Rating of responses to research question C	%	Researcher's comment.
Undecided	10%	Neutral
Agree	40%	View the question as a true reflection
Disagree	50%	Opposed to the question

Table 5.38 above illustrates that the majority of student respondents disagree that lecturers in their respective colleges are in possession of appropriate and relevant qualifications.

5.3.13 Lecturers' interview responses to research question C

The classification and grouping of lecturers' responses to research question C into themes and subthemes highlighted that qualifications in the public FET college sector are a challenge. During the interview sessions it was pointed out that most lecturers particularly in the engineering studies are vocationally qualified but have no pedagogic qualification. Some are pedagogically qualified with no vocational qualifications or industry experience. Lecturers with both vocational and pedagogic qualifications are in the minority. The lecturer's interview responses to research question C are tabled below.

Table 5.39 Lecturers' interview responses to research question C

Rating of responses to research question C	%	Researcher's comment.
Undecided	0%	Neutral
Agree	40%	View the question as a true reflection
Disagree	60%	Opposed to the question
TOTAL	100%	Opposed to the question

In terms of table 5.39, 40% of the lecturers' respondents agree that lecturers in their respective colleges are in possession of appropriate and relevant qualifications; 60% of the respondents disagree that lecturers are appropriately qualified.

5.3.14 HOD's and deputy principals' interview responses to research question C

During interview sessions, HOD's and deputy principals acknowledged that the public FET college sector in Gauteng contend with a shortage of appropriately qualified lecturers. Their lecturers are either vocationally qualified or pedagogically qualified but not both as required by the NCV curriculum. The HOD's and deputy principal's responses to research question C are reflected below:

Table 5.40 HOD's and deputy principals' interview responses to research question C

Rating of responses to research question C	%	Researcher's comment.
Undecided	10%	Neutral
Agree	40%	View the question as a true reflection
Disagree	50%	Opposed to the question
TOTAL	100	Majority view educators not appropriately qualified

Table 5.40 indicates that 50% of the respondents are opposed to the notion that a majority of lecturers in the province's public FET college sector are in possession of appropriate and relevant qualifications.

5.3.15 The analysis of interview responses to research question D

Research question D

Code	Research Question
D	Are there challenges that affect the efficiency of the province's public FET colleges in the development of intermediate skills?

5.3.16 Student interview responses to research question D

The student's interview responses to research question D were coded, grouped and categorized in terms of themes and subthemes. Their responses are reflected in table 5.41 below:

Table 5.41 Student interview responses to research question D

Rating of responses to research question D	%	Researcher's comment.
Undecided	0%	Neutral
Disagree	40%	Opposed to the question
Agree	60%	View the question as a true reflection
TOTAL	100%	Majority agree

Table 5.41 illustrates that 60% of the respondents feel that colleges face challenges that prohibit them from effectively developing intermediate skills.

5.3.17 Lecturers' interview responses to research question D

During interview sessions, lecturers complained about the lack of support displayed by their respective college's management. Their complaints ranged from delays in fixing or replacing broken equipment and machinery to the non-approval of work based training sessions. They further complained about the calibre of students that the public FET college sector attracts. Lecturers felt that students registered for the NCV programme which requires a grade 9 qualification as an admission criteria do not cope, hence the high failure and dropout rate. The lecturers' responses to research question D are reflected below:

Table 5.42 Lecturers' interview responses to research question D

Rating of responses to research question D	%	Researcher's comment.
Undecided	10%	Neutral
Disagree	40%	Opposed to the question

Agree	50%	View the question as a true reflection
TOTAL	100%	Majority agree

According to table 5.42, half the respondents (50%) agree that their respective colleges are encountering challenges that make it difficult for them to perform to their ultimate best.

5.3.18 HOD's and deputy principals' interview responses to research question D

During the interview sessions, deputy principals and HOD's accepted that the public FET college sector in Gauteng faces challenges that inhibit their success in the development of intermediate skills. They pointed out that as much as they try, they are not successful in matching the skills demand of local labour markets. Their responses are reflected in table 5.43.

Table 5.43 HOD's and deputy principals' interview responses to research question D

Rating of responses to research question D	%	Researcher's comment.
Undecided	10%	Neutral
Disagree	40%	Opposed to the question
Agree	50%	View the question as a true reflection
TOTAL	100%	Majority agree

Table 5.43 indicates that 50% of the respondents agree about challenges that restrain the province's public FET college sector from performing optimally. On the other hand 40% of the respondents disagree that there are challenges engulfing their respective colleges and preventing them from effectively developing intermediate skills.

5.3.19 Skills development managers and Indlela Training Centre's responses to research question D

The interview responses of skills development managers to research question D were coded and grouped into themes and subthemes. The interview questions were in line with the research questions, hence the grouping of themes and subthemes in accordance with the research questions. Their responses are tabled as follows.

Table 5.44 Skills development managers' interview responses to research question D

Rating of responses to research question D	%	Researcher's comment.
Undecided	0%	View the question as a true reflection
Disagree	20%	Opposed to the question
Agree	80%	View the question as a true reflection
TOTAL	100%	Majority agree

According to table 5.44, 80% of the respondents agree that there are challenges that inhibit the effective development of skills by the public FET college sector in Gauteng. Only 20% of the respondents disagree that the public FET college sector is engulfed by challenges that restrain it from effectively developing intermediate skills.

5.3.20. The analysis of interview responses to research question E

Research question E

Code	Research Question
E	Do the province public FET colleges comply with national quality standards?

5.3.21. The student interview responses to research question E

During the interview sessions with students it emerged that quality compliance and assurance measures were adhered to. Assessments were moderated at both campus and college level. Internal and external auditing was in fact taking place. The student's responses are tabled in table 5.45 below:

Table 5.45 Students interview responses to research question E

Rating of responses to research question A	%	Researcher's comment.
Undecided	0%	Neutral
Disagree	40%	Opposed to the question
Agree	60%	View the question as a true reflection
TOTAL	100%	Majority agree

In terms of table 5.45, the majority of students view quality assurance and compliance in their respective colleges as something that is taken very seriously. 60% of the respondents agree that quality is complied with and adhered to in their respective colleges against the 40% that disagree.

5.3.22 Lecturers' interview responses to research question E

During the interview sessions lecturers acknowledged that quality assurance measures have been implemented. They confirmed the student's assertions that assessments are being moderated at campus and college level. They further confirmed that their colleges are being internally and externally audited. Their responses are tabled below.

Table 5.46 Lecturers' interview responses to research question E

Rating of responses to research question E	%	Researcher's comment.
Undecided	10%	Neutral
Disagree	20%	Opposed to the question
Agree	70%	View the question as a true reflection
TOTAL	100%	Majority agree

Table 5.46 above illustrates that quality assurance is taken seriously by the province's public FET college sector. 70% of the respondents agree that quality compliance is observed and adhered to. Only 20% of the respondents are not convinced that quality is adhered to and complied with.

5.3.23 HOD's and deputy principals' interview responses to research question E

The HOD's and deputy principals pointed out during interview sessions that Gauteng's provincial government had implemented quality measures in conjunction with UMALUSI. The assessment files are verified and moderated each year by the province and national education departments. Their responses are reflected below.

Table 5.47 HOD's and deputy principals' interview responses to research question E

Rating of responses to research question E	%	Researcher's comment.
Undecided	10%	Neutral

Disagree	20%	Opposed to the question
Agree	70%	View the question as a true reflection
TOTAL	100%	Majority agree

During the interview sessions with HODs and deputy principals academic, it emerged that quality compliance is a priority in the province's public FET college sector. Lecturers have been trained and certificated as assessors and moderators. All assessments are assessed and moderated by qualified moderators and assessors. In terms of table 5.44 above 70% of the respondents agree that quality compliance is a priority at their respective colleges.

5.4 CONCLUSION

Chapter five outlined and detailed the data analysis process. Due to the triangulation nature of the study as explained in chapter four, the analysis of data was undertaken qualitatively and quantitatively. Quantitative analysis preceded qualitative analysis. The rationale for quantitative analysis to precede qualitative analysis is based on its capability to explore and test variables (Robert & Sari, 2003:43). Tables 5.1 to 5.47 illustrated the respondents' responses in terms of their frequencies. Through the use of the frequency tables the chapter succeeded in arranging the responses in terms of their frequencies from low to high in order to articulate and put into perspective the respondents' views with regard to the development of skills by the public FET college sector in the province of Gauteng. The detailed projection and illustration of the responses through the frequency tables enhanced the researcher's successful attainment of the smooth and credible data analysis.

CHAPTER SIX
DATA INTERPRETATION, DISCUSSION OF FINDINGS,
CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

Chapter five explored and discussed data analysis with reference to the literature review, research questions, aims and objectives of the study. Data elicited from the questionnaires, interviews and observations was categorized summarized and described in more meaningful terms. The data analysis process further conceptualized the lived experiences of sampled respondents with regard to the credibility and responsiveness of the public FET college sector to the skills needs of labour market with in the province of Gauteng.

Due to the triangulation nature of the study data analysis was conducted quantitatively and qualitatively. The blending of the quantitative and qualitative analysis was significant for the study given their enriching nature when fused together (Johnson & Christensen, 2004:212-213).The significance of the integration of the two research paradigms in data analysis is evidenced by their complementary nature in terms of strength and weaknesses.

Chapters six outlined the interpretation of analyzed data, and further commits to the recommendations and the drawing of conclusion. In light of the fact that data was analyzed in terms of quantitative and qualitative paradigms, the researcher saw it fit for data interpretation to also follow suit. The interpretation of quantitative data preceded that of qualitative data. The quantitative and qualitative interpretation of data was informed by data analysis which in turn was informed by the

research questions, aims and objectives of the study. This chapter furnished the reader with valuable information pertaining to the interpretation, recommendation and the drawing of conclusion regarding the study.

6.2 DATA INTERPRETATION

6.2.1 The quantitative data Interpretation

Data analysis in the quantitative paradigm entails the breaking down of data into constituent parts in order to obtain answers to research questions and to test the hypothesis (Mouton, 2001:108). Patton (2002: 381) argues that data analysis and interpretation are applied in sequence owing to their complimentary nature to each other. The two are closely intertwined because a person automatically interprets as he analyses in order to reach a meaningful conclusion. However, data analysis precedes data interpretation because its purpose is to reduce data to an intelligible and interpretable form that enables the relations of the research problems to be studied, tested and to draw conclusions (De Vos, 2011:203).

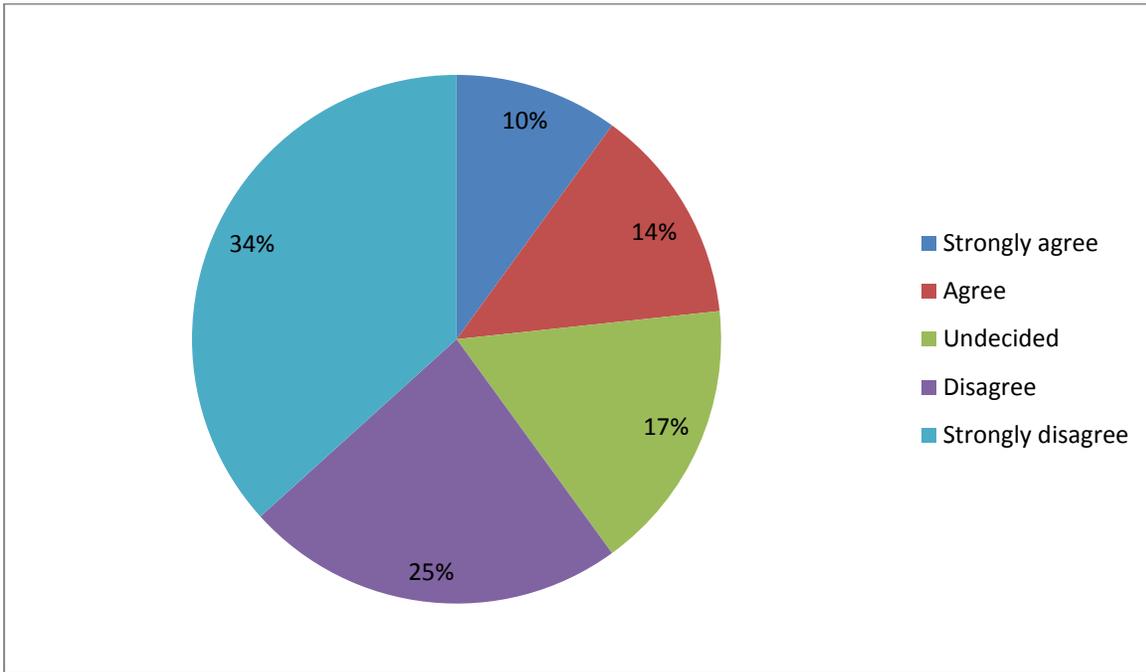
Against the above background De Vos (2011:203) asserts that data analysis in itself does not furnish answers to the research questions, but interpretation does. De Vos (2011:203) further contends that data interpretation entails taking the results of analysis, making inferences pertinent to the research relations and drawing conclusions about these relations.

6.2.2 The interpretation of students' questionnaire responses

Tables 5.1 to 5.18 (see par. 5.2) reflect the analysis of the student's responses to the questionnaire's questions which were in accordance

with the research questions, aims and objectives of the study. The responses were first individually analyzed and then cross analyzed. Tables 5.19 and 5.20 illustrates the cross analysis of the students' responses. Figure 6.1 below illustrates the cross analysis of the students responses. The figure must be read in conjunction with table 5.20 (see par. 5.2).

Figure 6.1 The cross analysis of students' responses



In terms of figure 6.1, 34% of the students who responded to the questionnaires strongly disagree that their respective colleges are contributing effectively to their skills needs and skills development, and to the skills needs of labour markets. On the contrary 10% of the respondents strongly agree that their colleges are responsive to their skills needs and that of the labour market. In terms of the analysis as reflected in figure 6.1 above, the majority of the students are not satisfied or happy with the manner in which their respective colleges develop their skills and prepare them for the world of work. Their discontent as reflected in their responses to the questionnaire's questions which are in accordance with the research questions, aims and objective of the study are deep seated. In terms of the analysis their concerns range from dissatisfaction with the standard and quality of tuition, lack of synergy between their course content and the skills

needs of labour markets, poorly equipped workshops and lack of practical training.

Given the fact that the FET colleges Act (No 16 Of 2006) made provision for college councils to preside as employers (see par. 2.5.1.6); it is a matter of concern if tuition in Gauteng's public FET colleges is identified by students as a challenge. The FET College Act (No 16 of 2006) empowered college councils to employ highly skilled personnel based on the needs analysis of their respective colleges (see par. 2.5.1.6).

It is also a matter of concern if the synergy of the public FET colleges' course content to the skills needs of labour market is questioned by students. Figure 6.1 illustrates that the majority of the students are not convinced that their respective college's course contents are articulated to the skills needs of labour markets. In 2007 the introduction of NCV was hailed as a milestone (see par. 2.5.3) in terms of addressing the dearth of synergy between the public FET colleges' course contents and the skills needs of labour markets. On the contrary figure 6.1 illustrates the opposite of what NCV was meant to address.

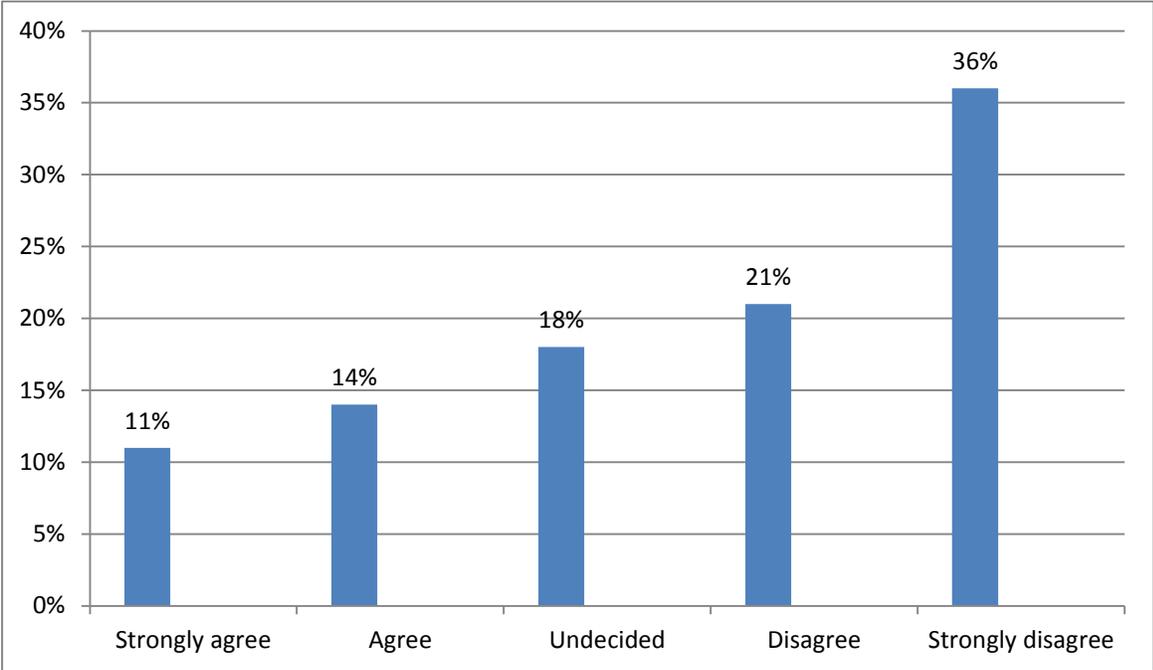
The fact that 10% of the respondents strongly agree, 14% agree and 17% are undecided illustrates that there are students who believes that the public FET college sector is better positioned to equip them for the world of work.

6.2.3 The interpretation of trainees' questionnaire responses

Tables 5.21 and 5.22 (see par. 5.2.1.2.1) illustrate trainee's responses to questionnaires. According to table 5.22 (see par. 5.2.1.2.1), 11% of the respondents strongly agree that public FET colleges are indeed

doing a great job regarding the development of skills. In addition to the 11% of the respondents that strongly agree, 14% also agree that the public FET sector in Gauteng is responsive to the skills needs of its students and to that of the labour markets. On the contrary table 5.22 further illustrates that 36% of the respondents strongly disagree that public FET colleges in Gauteng render a qualitative service that is relevant and responsive to the skills needs of their students and that of labour markets. Trainees are comprised of apprentices and employees involved in learnerships who are graduates of FET colleges. These trainees are familiar with the skills development methods and strategies of the public FET college sector and their employers. Figure 6.2 below illustrates the trainee's questionnaire responses.

Figure 6.2 Questionnaires responses for trainees



In terms of figure 6.2 above 36% of the trainees strongly disagree that public FET colleges are qualitative, responsive and articulated to commerce and industry, in terms of appropriate skills, it is likely that

their responses as reflected in figure 6.2 were influenced by their experience of skills training by their former colleges and their current employers. When these trainees graduate from their respective FET colleges to the world of work, they are confronted by a different training environment. The difference between what companies are doing and what public FET colleges are doing in terms of skills development and training was emphasized by Nzimande (2011b) during his address to the Kwa-Zulu Natal inter-cluster forum(see par.3.3.2). According to Nzimande, public FET college graduates do not appeal to labour markets due to their level of training. In light of the above background it is therefore not surprising that the majority of trainees felt strongly that public FET colleges are not responsive to the skills needs of labour markets.

6.2.4 The interpretation of lecturers' questionnaire responses

In terms of table 5.23 and table 5.24 (see par. 5.2.1.22), 34% of the lecturers who responded to the questionnaires strongly disagree that their respective colleges are contributing effectively to the development of skills and in addressing the skills shortage. Figure 6.3 below illustrates the lecturers' responses to questionnaires.

Figure 6.3 Questionnaires responses for lecturers

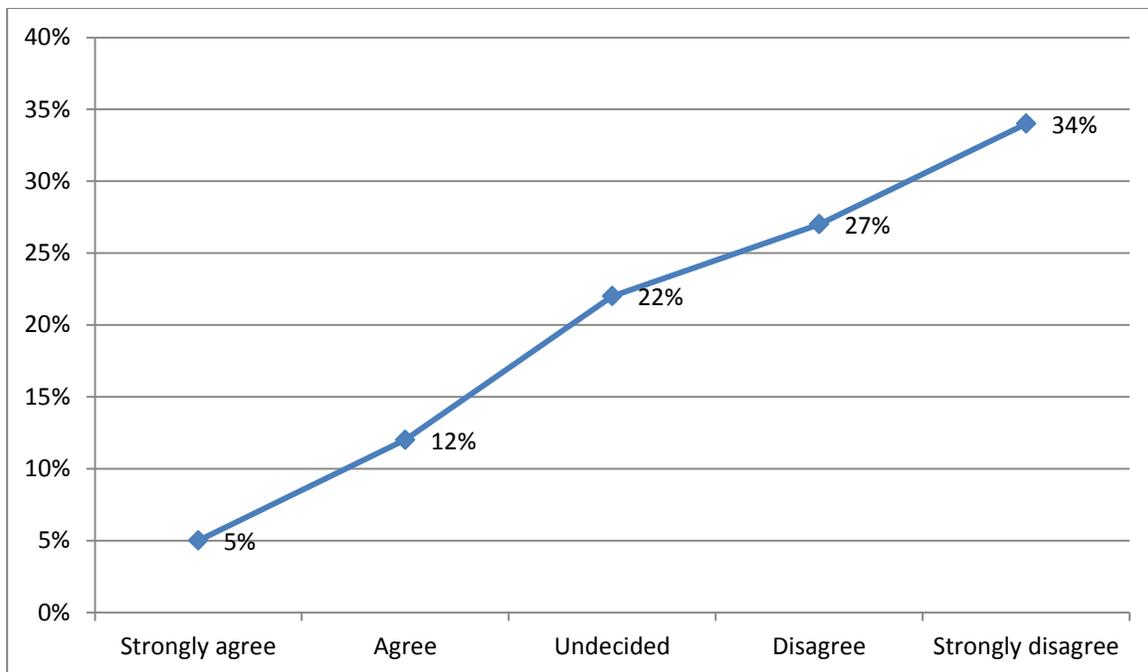


Figure 6.3 above clearly captures the views of lecturers with regard to their respective college's contributions to the development of skills. 34% of the lecturers as reflected in figure 6.3 strongly disagree that their respective colleges are qualitative, responsive and articulated to the skills needs of labour markets. According to Bisschoff and Nkoe (2005:203-210), the process of merging colleges destabilized the lecturing community within the public FET college sector (see par. 2.2). Bisschoff and Nkoe (2005:203-210) further contend that the merging process was improperly handled by the government resulting in unnecessary animosity and power struggles amongst lecturers.

The unhappiness of lecturers within the public FET college sector was also echoed (see par. 2.5) by the Green Paper for Post School Education and Training (Department of Higher Education and Training, 2012a: 20-22). According to the Green Paper for Post School Education and Training (see par. 2.5), most colleges are weak

institutions as evidenced by a poor national NCV success rate of 4% throughput rate and a 12% net certification rate.

In light of the above background it is likely that the responses of the lecturers were influenced by the development within the public FET college sector as reflected in the Green Paper and in Bisschoff and Nkoe's assertions.

6.2.5 The interpretation of HOD's and deputy principals' questionnaire responses

Figure 6.4 HOD's and deputy principals' questionnaire responses.

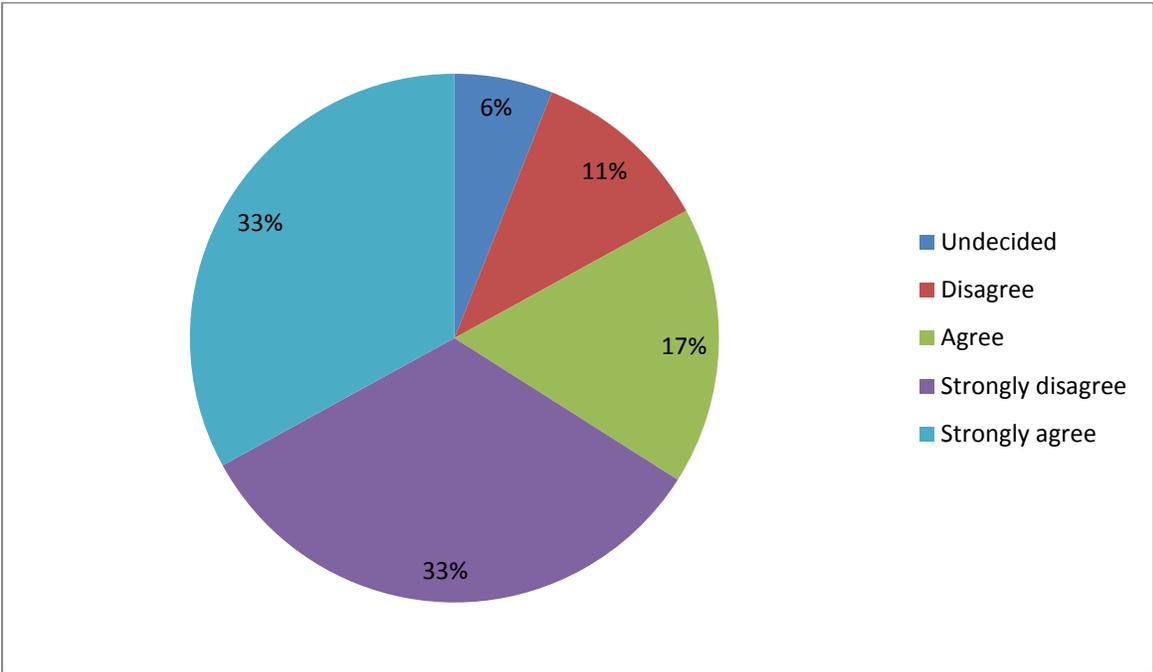


Figure 6.4 above illustrates the views of HOD's and deputy principals on the role that their respective colleges play in the development of skills. Figure 6.4 must be read in conjunction with table 5.26 (see par. 5.2.1.23). In terms of figure 6.4, 33% of the HOD's and deputy principals who responded to the questionnaires strongly agree that

their respective colleges are efficient, responsive and articulate to the skills needs of labour markets. On the contrary 33% of the respondents strongly disagree that the public FET college sector in Gauteng is contributing positively to the development of skills and reducing the skills shortage. The number of HOD's and deputy principals who strongly agree that colleges are responsive to labour markets is countered by the same margin by those who strongly disagree.

HOD's and deputy principals are not classroom based. HOD's form part of campus management and deputy principals constitute college executive management. The difference of opinion amongst respondents is likely to have been influenced by their respective former HDI and HAI status still prevalent within the public FET college sector. Former HAI colleges have forged strong relations with companies in their vicinity for decades, particularly former state companies such as SA Railways, Telkom, SASOL and ESKOM (see par. 2.5). HAI colleges were prominent in apprentice training hence their strong relations with labour markets. The difference of opinion between the former HDI and HAI colleges in terms of their role in skills development is likely to be the reasoning behind the responses as reflected in fig 6.4 above.

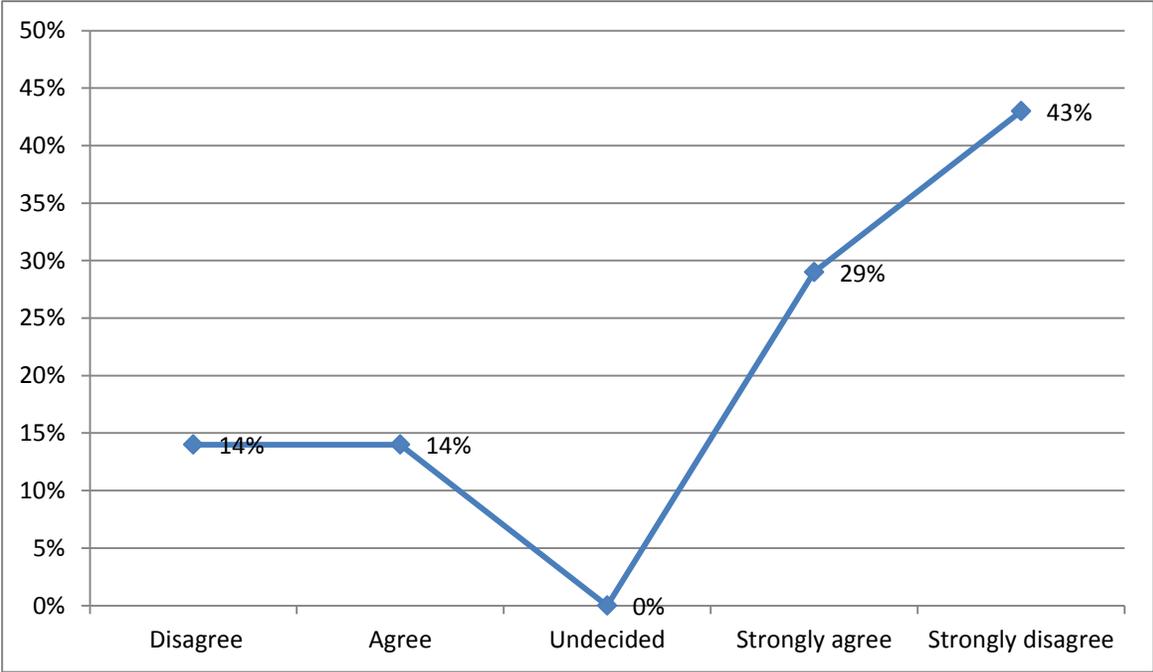
6.2.6 The interpretation of skills development managers' questionnaire responses

Table 5.28 (see par. 5.2.1.24) illustrates the questionnaires responses of the skills development managers. The questionnaire questions were structured in accordance with the research questions, aims and objectives of the study. The questionnaire questions extracted valuable information from the skills development managers with regard to their views and knowledge of the role played by the public FET college sector in Gauteng in the development of skills.

The sampled companies which employ the skills development managers have been involved in skills development for decades. These companies and their skills development managers are acquainted with the pros and cons of skills development within the labour market landscape and the public FET college sector. They have recruited and trained public FET college graduates (see paragraph 1.6.2) for decades.

In light of the above background, they are conversant with the strengths and weaknesses of the public FET college sector regarding skills development. Figure 6.4 below illustrates the responses of these skills development managers.

Figure 6.5 Skills development managers' questionnaire responses



In terms of figure 6.4 above 43% of the respondents strongly disagree that the public FET college sector in the province of Gauteng is

responsive and articulated to the skills needs of labour markets. In addition to the 43% that strongly disagree, 14% of the managers disagree with the perception that the public FET college sector is contributing effectively in addressing the skills deficit. On the contrary 29% of the managers strongly agree that the public FET college sector is responsive to the skills needs of labour markets.

In light of the above background and as evidenced by figure 6.4, the majority of skills development managers are opposed to the notion that the public FET colleges are responsive to the skills needs of labour markets. The views expressed by the majority of the skills development managers were also expressed by the Green Paper for Post School Education and Training (see par. 2.5).

The Green Paper for Post School Education and Training decries the inefficiency and weakness of the public FET college sector with regard to the skills development. The dissatisfaction as expressed by the Green Paper for Post School Education and Training is further confirmed by the National Skills Development Strategy III (NSDIII) (Department of Higher Education and Training, 2010:12). According to the NSDIII (see par. 2.2), the country's pool of intermediate skills, particularly artisan skills, is too low to support national and sector development growth despite the massive financial and legislative support to the skills development institutions. The NSD III further contends that the workforce is not keeping up with the skills needed to remain competitive in an increasingly knowledge based economy.

6.3 THE QUALITATIVE DATA INTERPRETATION

In light of the triangulation nature of the study data analysis and interpretation were conducted qualitatively and quantitatively. The

quantitative and qualitative data interpretations were sequentially conducted. The interpretation of data collected quantitatively preceded that of data collected qualitatively. The researcher opted to start with the quantitative paradigm in terms of data analysis and data interpretation due to its deductive approach of moving from known to unknown in verifying the hypotheses (Burns & Grove, 2009:22)

The qualitative data was analyzed in accordance with the research questions that were allocated alphabetic codes (see table 5.29 in par. 5.3).The interpretation of data collected qualitatively through interviews and observations was also guided by the research questions as reflected in table 5.29.

6.3.1 The interpretation of the student interview responses

The student interview responses to research questions A-E (see paragraph 5.3) are summarized in table 6.1 below. The table illustrates the summary of the student interview responses to research questions A-E as per the frequency tables in chapter 5. It must be read in conjunction with table 5.29 and paragraph 5.3 in chapter 5.

Table 6.1 A summary of student interview responses to research questions A-E

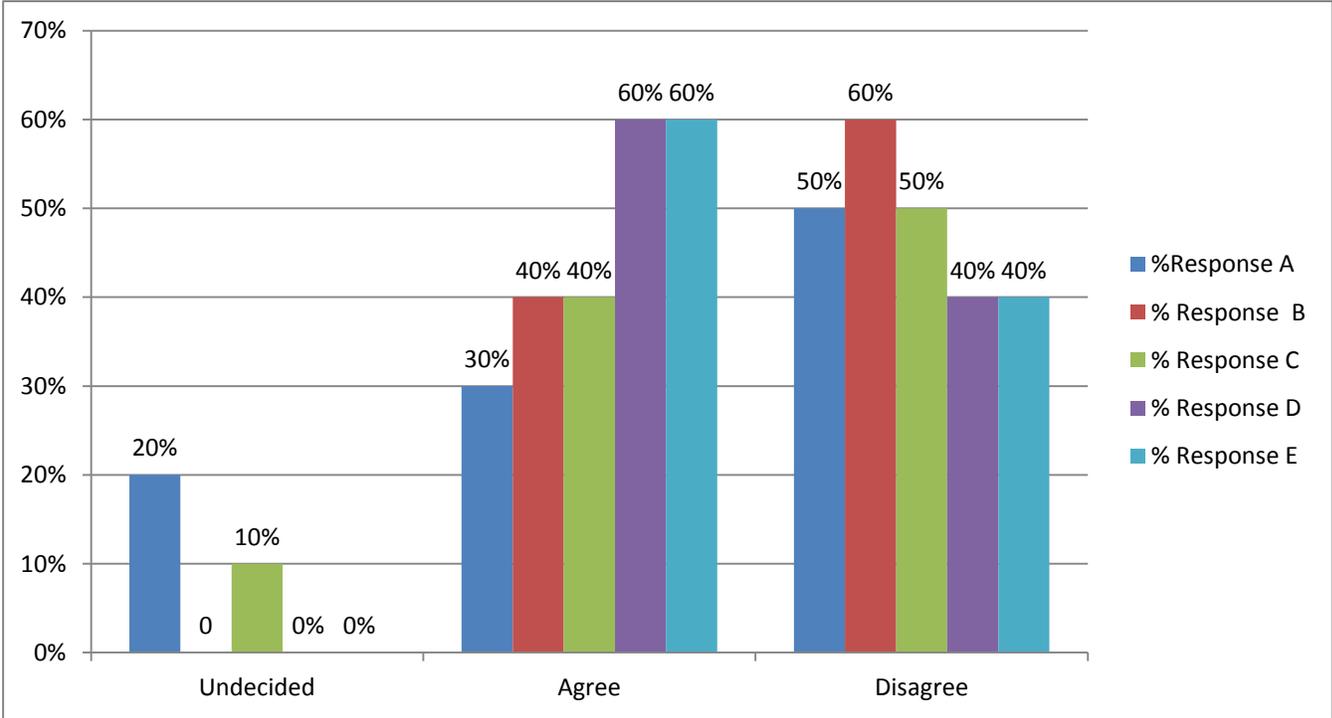
Rating	%Response A	% Response B	% Response C	% Response D	% Response E
Undecided	20%	0	10%	0%	0%
Agree	30%	40%	40%	60%	60%
Disagree	50%	60%	50%	40%	40%

Table 6.1 above illustrates the student’s interview responses to research questions A-E. It must be read in conjunction with table 5.29

(see par. 5.3). In terms of table 6.1 as illustrated above, 50% of the students disagree with research question A that their respective college’s curricula and course contents are articulated to the skills needs of labour markets. On the contrary 30% of the respondents agree that their college’s curricula and course content are relevant and articulated to the skills needs of labour markets. With regard to research question B, 60% of the students further disagree that their respective colleges are responsive to the skills needs of labour markets. Table 6.1 further illustrates that 50% of the students disagree with research question C that their lecturers are convincingly competent and qualified particularly with regard to vocational and practical expertise. Figure 6.6 illustrates the students’ interview responses to research questions A-E.

Figure 6.6 Students’ interview responses to research questions A-

E



In light of the above background the majority of students disagree that their respective colleges are responsive to the skills needs of labour

markets, as evidenced by their responses to research questions A and B. The responses further indicate that they are unhappy with the quality of tuition they received due to the vocational expertise of lecturers in the employ of their respective colleges. The students' responses are likely to have been influenced by the college's success rate. The NCV success rate since its inception in 2007 (see par. 2.5) is low. Nzimande (2011a) concurs with the students' responses to research questions A-C by contending that the success rate of the public FET colleges is low, the employability rate of their students is low and the linkages between them and labour markets is a matter of concern.

6.3.2 The interpretation of lecturers' interview responses

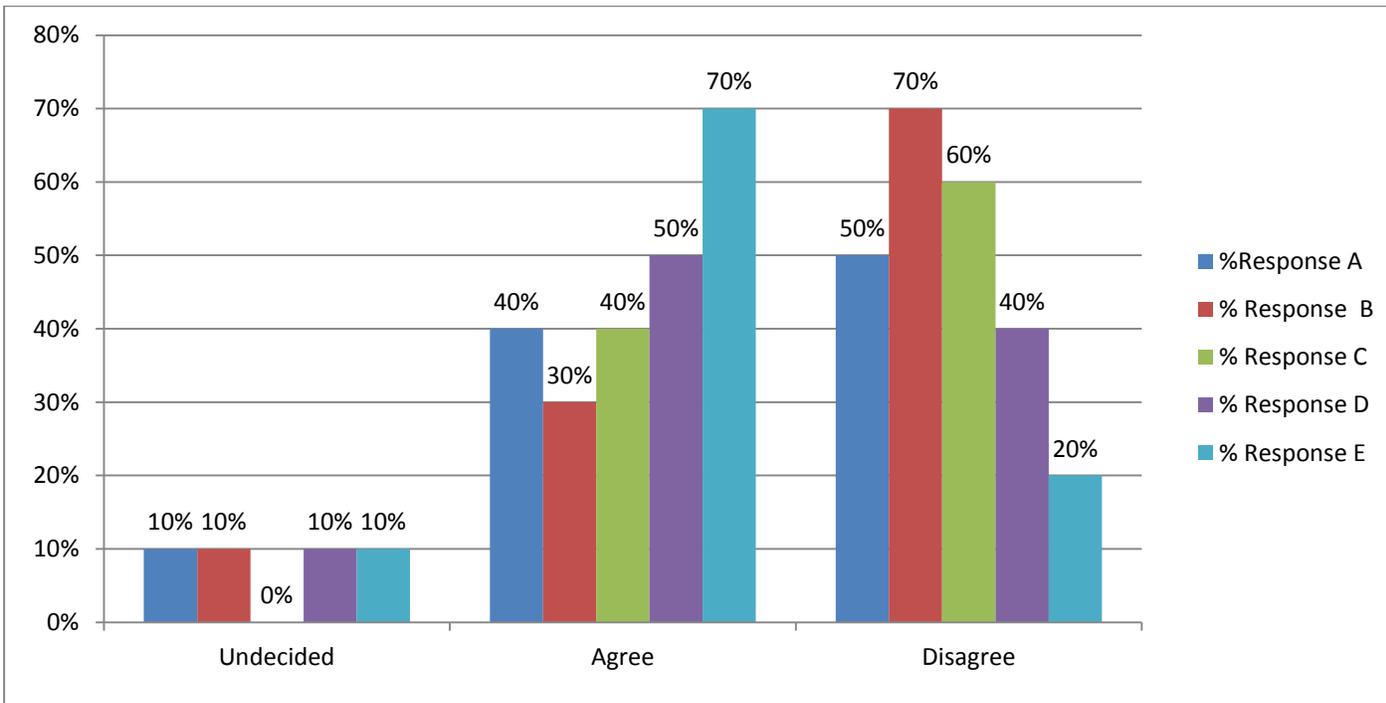
Table 6.2 a summary of lecturers' interview responses to research questions A-E

Rating	%Response A	% Response B	% Response C	% Response D	% Response E
Undecided	10%	10%	0%	10%	10%
Agree	40%	30%	40%	50%	70%
Disagree	50%	70%	60%	40%	20%

Table 6.2 above illustrates the lecturer's responses to research questions A-Z. This table must be read in conjunction with table 5.29 (see par. 5.3). Table 6.2 indicates that the majority of lecturers disagree that their respective college's curricula and course contents are articulated to the skills needs of labour markets and their colleges are responsive to the skills needs of labour market. Their disagreement is evidenced by their responses to research questions A, B and C. Their responses to research questions D and E indicate that the majority agree that their colleges are engulfed by challenges that affect their efficiency and are compliant to quality norms and standard.

The lecturers' interview responses to research questions A, B and C concur with those of students (see par. 6.3.1). They are not convinced that the public FET colleges are contributing effectively in addressing the skills shortage. They disagree that the colleges are responsive and articulate to the skills needs of labour markets. Figure 6.7 below illustrates the lecturer's responses.

Figure 6.7 Lecturers' interview responses



6.3.3 The interpretation of HODs and deputy principals' interview responses

The academic deputy principals play pivotal roles in the academic wellbeing of their respective colleges. They preside over all academic related forums and undertakings and report directly to the college principal. They are tasked with planning and making representation to the college academic board on all matters relating to academic affairs. They head a portfolio that is central and key to the wellbeing of colleges. Other portfolios such as corporate service, human resource and finance are supporting entities to academic. The academic portfolio is central to the success or failure of the college. HODs also play crucial roles at campus level. They are tasked with all academic activities at campus level. It is precisely because of the above background that the deputy principals and HODs were sampled. Table 6.3 below reflects the deputy principal and HODs interview responses.

Table 6.3 HOD's and deputy principal's interview responses to research question A-E

Rating	%Response A	% Response B	% Response C	% Response D	% Response E
Undecided	20%	10%	10%	10%	10%
Agree	40%	40%	40%	50%	70%
Disagree	40%	50%	50%	40%	20%

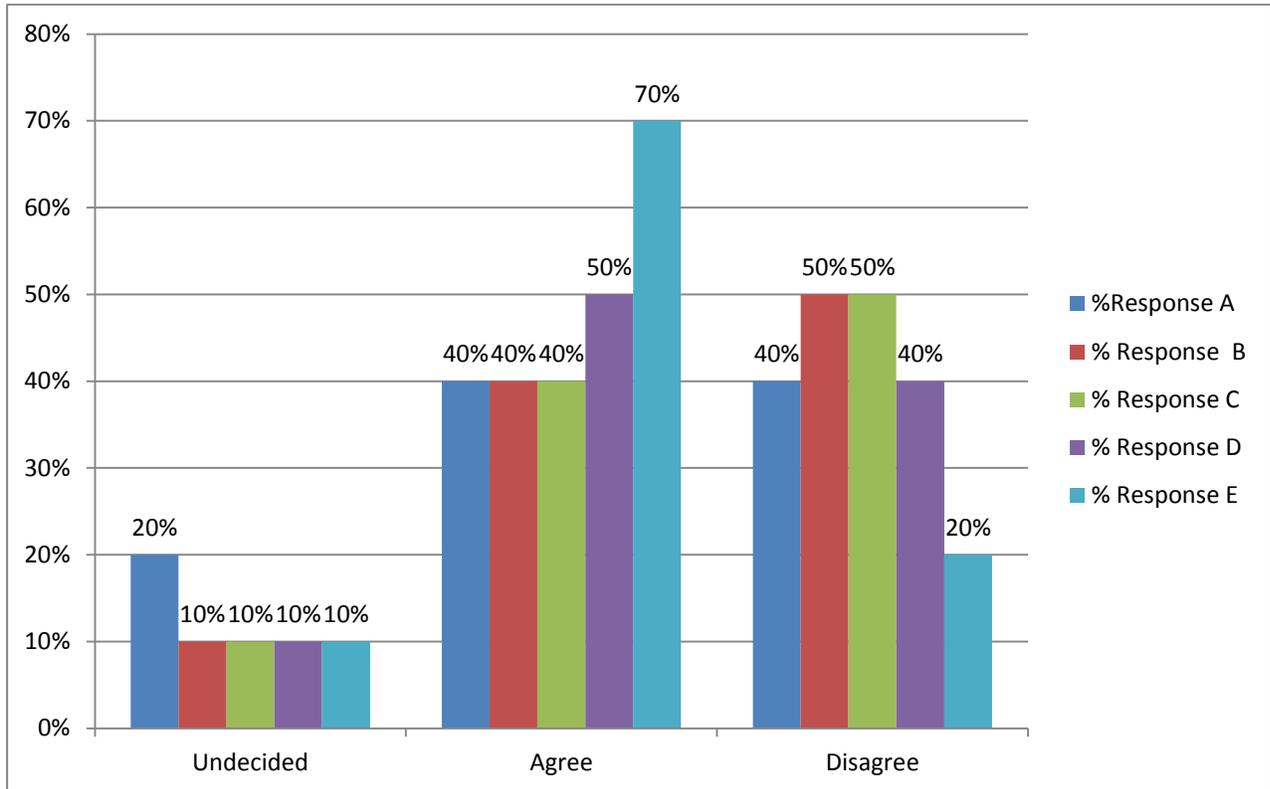
Table 6.3 above reflects a summary of the interview responses of HODs and deputy principals on research questions A-E. Table 6.3 must be read in conjunction with table 5.29 in chapter 5. Table 5.29 reflects a summary of the research questions with their alphabet codes.

Table 6.3 illustrates that 40% of the respondents to research question A and B agree that the curricula and course content of public FET colleges are articulated to the skills needs of labour markets and that these colleges are responsive to labour markets. On the contrary 40% of the respondents disagree that the colleges are responsive and their curricula and course contents are in accordance with the skills needs of labour markets.

It is surprising that 40% of the respondents view the curricula and course content as relevant to labour markets whereas the Green Paper for Post School Education and Training (see par. 3.3.2) calls for the review of both the NATED and NCV curriculum owing to their lack of articulation and synergy to higher education and labour markets. The argument advanced by the Green Paper for Post School Education and Training with regard to responsiveness and lack of articulation to labour market was further emphasized by Cosser (2011:17) in his arguments that the NCV curriculum failed to appeal to employers (see par. 3.3.2)

hence the decision to review it. The views of the HODs and deputy principals are illustrated in fig 6.8 below.

Fig 6.8 HOD's and deputy principals' interview responses to research question A-E



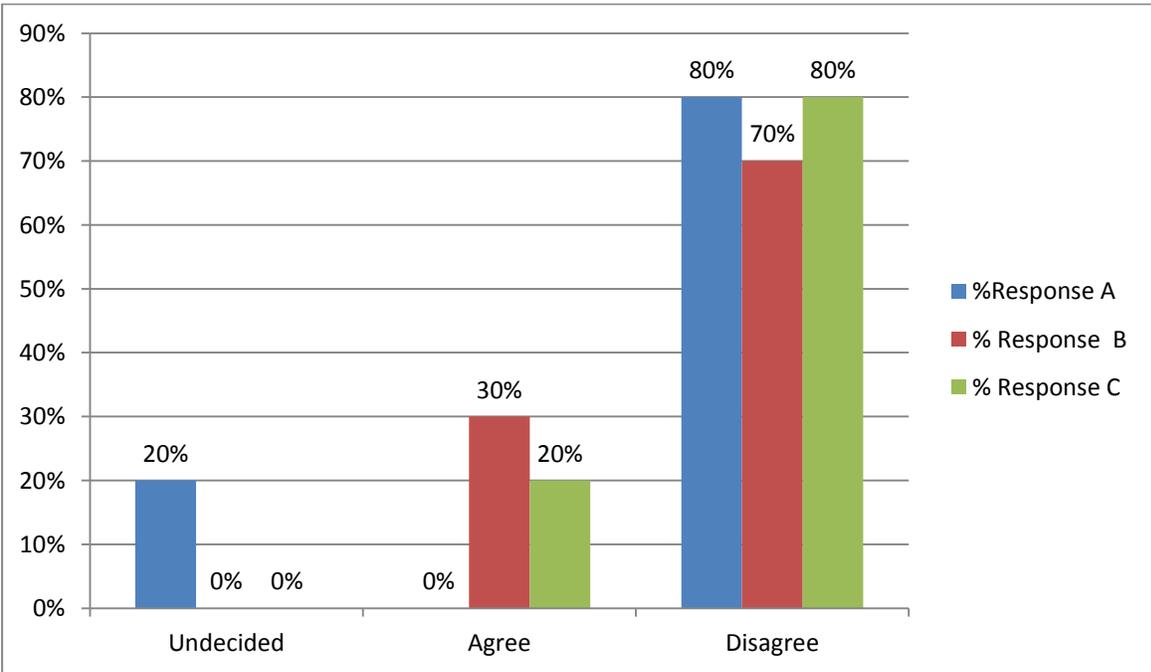
It is likely that the response by HODs and deputy principals was influenced by the publication of the Green Paper for Post School Education and Training. The balance of the difference in opinions with regard to whether public FET colleges are articulated and responsive to labour market or not featured strongly in the Green Paper for Post School Education and Training. The responses could be a reflection of their submissions and input to the Green Paper for Post School Education and Training.

6.3.4 The interpretation of skills development managers' interview responses to research question A, B and E

Table 6.4 Skills development managers' responses to research questions A, B and E

Rating	%Response A	% Response B	% Response C
Undecided	20%	0%	0%
Agree	0%	30%	20%
Disagree	80%	70%	80%

Fig 6.9 Skills development managers' responses to research questions A, B and C



The significance of the skills development managers in the development of skills have been outlined in paragraph 6.25. The researcher saw it fit to interpret the skills development managers'

responses to research questions A, B and D only. The reason was that research questions A, B and D are more relevant to skills development managers.

Table 6.4 illustrates that 80% of the respondents feel strongly that the public FET college sector in the province of Gauteng does not contribute to the skills development and its courses contents and curricula are not articulated to the skills needs of labour markets. 70% of the respondents also feel strongly that public FET colleges in the province of Gauteng are not responsive to the skills needs of the province labour market.

Table 6.4 further illustrates that 80% of the respondents are convinced that the public FET college sector in Gauteng province is engulfed by challenges that inhibit it from playing a pivotal role in the development of skills.

During the interview sessions it emerged that these companies harbour the same view that graduates of public FET colleges do not meet the grade in terms of skills competencies during their induction stage. The tuition and training provided by the public FET college sector is not informed by the skills needs of labour markets. The lack of articulation between these colleges and labour markets is evidenced by the dearth of formal skills development relations between them.

6.4 DISCUSSIONS OF FINDINGS

In this section discussions of the study's major findings are furnished. The discussions are drawn from the literature review, data analysis and data interpretation. The discussions follow the main themes that emerged from the research questions, coding and the reduction of data

gathered through the qualitative and quantitative research paradigms. The findings indicate whether the set aims and objectives of the study have been realized. Briefly this section attempts to answer the research questions for this study.

The findings are discussed in accordance with the research questions. The research questions were given alphabet codes (see table 5.29) in order to simplify their usage in frequency tables during data analysis and interpretation. The research questions and their alphabet codes are as follows:

- A: *Is the curricula and course content of the province's public FET colleges articulated to the skills needs of the province labour market?*
- B: *Are the province public FET colleges responsive to the skills needs of labour markets?*
- C: *Do educators hold appropriate qualifications?*
- D: *Are the challenges affecting the efficiency of the province public FET colleges in the development of intermediate skills?*
- E: *Do the Province public FET colleges comply with national quality standards?*

6.4.1 Findings relating to research question A

Are the curricula and course content of the provinces' public FET colleges articulated to the skills needs of the province labour market?

The legislative and financial support that the government pledged to the public FET college sector was aimed at capacitating and changing the sector for the better (see par. 2.5). The repeal of the Further Education and Training Act (No 98 of 1988) and the enactment of the Further Education and Training Colleges Act (No 16 of 2006) illustrate the government commitment to the public FET college sector since 1998. In April 2005 the government pledged R1.9 billion to the recapitalization of public FET colleges to capacitate them to respond to the skills needs of commerce and industry (see par. 2.5).

The responses of students, lecturers, HODs, deputy principals and company's skills development managers to research question A (see par. 6.2 and 6.3) illustrate that the majority disagree that the course content and curricula of the colleges are articulated to the skills needs of labour markets. Despite the legislative and financial support that the government pledged to the public FET college sector since 1998, the findings indicate that the colleges are not yet successful in aligning their course content and curricula to the skills needs of labour markets. During the interview session one company's skills development manager remarked: " *With regard to the alignment of the college's skills development and training to that of our company's level, we are not yet there.*"

6.4.2 Findings relating to research question B

Are the province's public FET colleges responsive to the skills needs of labour markets?

The findings of this study indicate that the public FET college sector is not yet responsive to the skills needs of labour markets. 70% of lecturers who were interviewed and 70% of skills development

managers disagreed that the public FET colleges are responsive to the skills needs of labour markets (see figures 6.7 and 6.9). The same views were illustrated in the students' responses (see figure 6.6) where 60% disagreed that their respective colleges are responsive to the skills needs of labour markets.

The findings indicate that the curriculum and the programmes that the FET colleges are facilitating are not yet informed by the skills needs analysis of labour markets. There is no synergy between the training conducted by the colleges and that of labour markets. The lack of formal skills development partnerships between colleges and labour markets frustrates the government effort to transform these colleges to efficient institutions capable of contributing to intermediate skills development. The findings confirm The Green Paper for Post School Education and Training published in 2012 outlined the FET college sector's shortcomings as follows:

The college sector is small and weak. With their present capacity, colleges can neither absorb significantly large number of students nor achieve acceptable levels of throughput. The sector general vocational programmes have not had time to mature and be tested in the labour market (Department of Higher Education and Training, 2012a: 10).

The Green Paper for Post School Education and Training further describes the relationship between public FET colleges and labour markets as follows: “*Relations between colleges and industry are, with some exceptions weak. Most colleges have almost no formal linkages with industry*” (The Department of Higher Education and Training, 2012a:26).

The above assertions by the Green Paper for Post School Education and Training published in 2012 support the findings that the public FET colleges are not yet responsive to the skills needs of labour markets.

6.4.3 Findings relating to research question C

Do educators hold appropriate qualifications?

The findings reveal a serious problem with regard to qualifications possessed by lecturers in the public FET college sector. Responses to research question C by lecturers, students, HODs and deputy principals (See par. 6.2 and 6.3) confirm that lecturers in the public FET college sector in the province of Gauteng particularly in vocational subjects are inappropriately qualified. 50% of the students interviewed (see table 6.1) disagree that lecturers are in possession of appropriate qualifications particularly those involved in vocational subjects. The student' views on the qualifications of lecturers are confirmed by the lecturers' responses. 60% of the lecturers disagree (see table 6.1) that lecturers in the public FET college sector particularly those involved in vocational subjects are appropriately qualified.

The appropriateness of lecturer's qualifications in the public FET college sectors is better explained below:

FET college teachers need to be specialists in a number of senses. First they must be specialist in areas of knowledge related to specific occupational fields such as construction, financial services, tourism, electronics, etc. Secondly they will need familiarity, not just with different branches of technical knowledge but

with the broader disciplinary underpinning of such knowledge (Young, 2006: 157).

The appropriateness of lecturer's qualifications in the public FET college sectors is further explained below:

In the past many college lecturers were qualified in the trades and occupations they were teaching but did not have appropriate qualifications. Much has been done to address this in recent years. Now, however the problem is that although having education qualifications, many lecturers lack occupational qualifications, relevant occupational work experience and industry contacts. Such a situation creates serious difficulties for FET colleges' efforts to align programmes to industry needs (Department of Higher Education and Training, 2010:16).

The Green Paper for Post School Education and Training has this to say about lecturers in the public FET college sector:

College lecturers in technical fields have, through the years, been recruited from industry. They usually possess technical qualifications as well as workplace experience and knowledge, but little pedagogical training. Many lecturers are also college graduates who have completed their N6 courses or graduates from universities of technology who have completed a National Diploma. Many of these lecturers have limited subject content knowledge and little if any

workplace experience (Department of Higher Education and Training, 2012a: 24).

In light of the above arguments the public FET college sector faces the challenge of inappropriately qualified lecturers. The findings put into context the state of lecturers' qualifications in public FET colleges.

6.4.4 Findings relating to research question D

Are there challenges affecting the efficiency of the province public FET colleges in the development of intermediate skills?

The findings reveal that the public FET college sector in the province of Gauteng is engulfed by challenges that restrict its performance in terms of skills development and training. Tables 6.1 - 6.4 (see par. 6.3) illustrate that students, lecturers, HODs and deputy principals agree that the public FET college sector is contending with challenges that inhibit it from performing optimally.

The findings revealed that the dearth of appropriately qualified lecturers and lack of articulation of its courses to labour markets (see par.3.3) are central to its inefficiency. Moreover, the two programmes (i.e., NCV and NATED) do not prepare students adequately for the world of work hence the decision for their review.

The poor state of the public FET college sector's examination result is decried as follows:

The government has pumped billions of Rand into the FET colleges but tens of thousands of student at South Africa's 50 FET colleges failed the 2012 end of

year examinations so dismally that they will not progress to the next level or obtain an exit leaving qualification because they have failed to pass all seven subjects (Govendor, 2013; The Sunday Times 13 January: 6)

In terms of the findings and the above background, the public FET college sector in the province of Gauteng faces challenges that frustrate its effort to contribute effectively in addressing the skills deficit.

6.4.5 Findings relating to research question E

Do the province's public FET colleges comply with national quality standards?

The findings regarding research question D reveal that the province public FET college sector comply and adhere to national quality norms and standards. In terms of tables 6.1 – 6.3 students, lecturers, HODs and deputy principals agree that the public FET college sector in province of Gauteng is compliant to quality norms and standards. The findings reveal that all public FET colleges in the province of Gauteng are audited by SABS auditors. The findings also reveal that all the colleges in the province have trained lecturers as assessors and moderators. The training of these lecturers was conducted by accredited external service providers. Consequent to the training all assessment is assessed and moderated by qualified assessors and moderators.

6.5 CONCLUSIONS BASED ON THE FINDINGS OF THE RESEARCH

The researcher opted for a triangulation approach that was explorative, descriptive and contextual in order to understand the intermediate skills development landscape by direct inquiry from those who are living the experience. The researcher aimed to explore, describe and contextualize the development of skills particularly the intermediate skills by the public FET college sector in the province of Gauteng. The main aim of this study was to evaluate the facilitation of skills development by the public FET college sector in the province of Gauteng and the pertinent contribution of this sector in addressing the intermediate skills deficit. The thrust of the study was henceforth aimed at unearthing the underlying challenges and dynamics that hinder the province's public FET college sector to perform to its ultimate best with regard to its responsiveness, relevancy and articulation to the skills needs of commerce and industry.

The researcher henceforth presents his conclusion based on the research questions and the study findings. The conclusion is presented in accordance with the research question and study findings as follows:

- *Are the curricula and course content of the provinces' public FET colleges articulated to the skills needs of the province labour market?*

In terms of the findings (see par. 6.4.1) the study indicates that the public FET college sector's curricula and course content are not articulated to the labour markets. Figures 6.1 - 6.3 and figure 6.5 illustrate that students, lecturers and companies skills development managers strongly disagree that public FET colleges in Gauteng province are articulated to the skills needs of labour markets in terms of curricula and course content. During the interview sessions students, lecturers and skills development managers argued that in terms of

articulation of courses and curricula the public FET colleges are not yet where they are expected to be.

- *Are the province's public FET colleges responsive to the skills needs of labour markets?*

The study had succeeded in revealing that the public FET college sector in the province of Gauteng is not responsive to the skills needs of labour markets (see par. 6.4.2). In terms of the findings the public FET college sector remains weak and small. Figures 6.1-6.5 illustrate that the majority of the respondents disagree that the public FET college sector in the province of Gauteng is responsive to the skills needs of labour markets. In light of the findings the study concludes that responsiveness to the skills needs of labour markets by public FET colleges in the province of Gauteng is a challenge that needs urgent attention.

- *Do educators hold appropriate qualifications?*

The findings of the study revealed that (see par. 6.4.3) qualifications of lecturers in the employ of the public FET college sector in Gauteng present a challenge. Figures 6.1 - 6.5 illustrate that the appropriateness of lecturers' qualifications needs attention. The study henceforth concludes that the appropriateness of lecturers' qualifications is a challenge that needs attention and this contributes to the lack of responsiveness and inefficiency of public FET colleges in Gauteng.

- *Are there challenges affecting the efficiency of the province public FET colleges in the development of intermediate skills?*

The study revealed that there are challenges engulfing the public FET college sector in the province of Gauteng that inhibit it from performing to its ultimate best in terms of its mandate of developing intermediate skills. Figures 6.1-6.9 illustrate that challenges ranging from inappropriate lecturer qualifications, lack of articulation with labour markets to irrelevant course contents and curricula contribute to the inefficiency of public FET colleges in Gauteng (see par. 6.3). In light of the findings of the study (see par.3.3.4), the researcher concludes that challenges that affect the efficiency of the public FET colleges in the province of Gauteng need attention.

- *Do the province's public FET colleges comply with national quality standards?*

The findings of the study revealed (see par. 6.4.5) that in terms of quality compliance the FET college sector in the province of Gauteng is doing well. Figures 6.1-6.9 illustrate clearly that all the participants in this study are in agreement that the sector is doing well in terms of quality compliance and it needs to be encouraged and supported. Based on the aforementioned findings, the study concludes that quality compliance and adherence are in good standing and the sector deserves to be commended.

6.6 RECOMMENDATIONS

The recommendations presented in this section are based on the findings of this study. These recommendations have significant implications in the development of intermediate skills and in addressing the skills deficit. These recommendations are not prescriptive but are relevant to the skills development landscape and the public FET college sector in the province of Gauteng. Future research should

improve on this study and explore relevant issues in greater depth. Based on the findings, the researcher makes the following recommendations:

6.6.1 Recommendation 1

The articulation of the curricula and course contents to the skills needs of labour markets

The public FET college sector has been identified by the government as far back as 1989 (see par. 2.5) to play a pivotal role in the development of intermediate skills, with the view to ease the skills deficit. Thus, curricula and course contents of public FET colleges should be articulated to the skills needs of labour markets. To reach this milestone of easing the skills deficit the public FET college sector is supposed to be credible and competitive in terms of skills development and training.

The sector should assume the role of a breeding ground for skilled labour. The lack of articulation in terms of course contents and curricula between the public FET college sector and the labour markets has been the subject of discussion in this study and its findings. The researcher recommends as follows:

- It is a positive development that the FET college sector is now a competency of the Department of Higher Education and Training (see par. 3.4). The fact that all skills development entities including the FET colleges, SETAs, Skills Development Act and the Skills Development Levy now also fall under The Department of Higher Education and Training (see par. 3.4) could auger well for articulation. Belonging to one department

is likely to enhance coordination between these skills development entities. For instance the SETAs understand the pros and cons of labour markets in terms of the type of skills in demand. They further disburse funds from the skills development levy to the skills development trainings such as apprenticeships and learnerships.

- Higher education institutions particularly Universities of Technology teach courses similar to those facilitated by public FET colleges but at diploma, higher diploma and degree level. These institutions are capable of developing curricula as evidenced by their tried and tested programmes that have been facilitated for decades. They could contribute optimally in the development of public FET college sector's curricula and its articulation to higher education and labour markets. The researcher therefore recommends that the coordination between all these skills development agencies that henceforth belong to one department be formalized and enforced in such a way that it could be evaluated. For instance SETAs could be evaluated based on the number of learnerships and apprenticeships they brokered between public FET colleges and labour markets as well as funds they disbursed to colleges. FET colleges could also be evaluated based on the number of credible formal skills development partnerships they managed to secure with labour markets and how many graduates they managed to place in labour markets.
- In terms of the findings of this study and the Green Paper for Post School Education and Training (see par. 2.5.3) both the NCV and the NATED programmes are perceived by labour markets and higher education institutions as not meeting

expectations hence their review. The development of the public FET college sector's curricula and the course content is the competency of the Department of Higher Education and Training. The lack of articulation in terms of curricula and course content is not of the public FET college sector's making. Respective public FET colleges do not develop curricula, but the Department of Higher Education and Training does on their behalf. Shortcomings in terms of lack of articulation cannot be blamed squarely on the public FET college sector alone, the Department of Higher Education and Training is partly to blame. The researcher recommends that curriculum development be made flexible and accommodative of all skills development entities. For instance, the phasing out of NATED programmes and the subsequent reversal of that decision (see par. 3.4) are evidence of the lack of consultation and coordination amongst all skills development entities.

6.6.2 Recommendation 2

The responsiveness to the skills needs of labour markets

While articulation of the public FET college sector's curricula and course content refers to the appropriateness and relevancy of the sector's curricula and course content to the skills needs of labour markets, responsiveness refers to the balance between the supply of skills by the colleges and the needs of skills by labour markets. This balance of skills needs with skills demands calls for a mutual and credible relationship between all skills development agencies. For instance labour markets cannot assume that colleges know what they want in terms of skills needs; they must engage the colleges and communicate their needs to them. In the same light colleges cannot

assume that labour markets know their capability and what they facilitate, they too should engage labour markets. The researcher recommends as follows with regard to the responsiveness of the public FET college sector to the skills needs of labour markets:

- The coordination and formal relationship at national level between all skills development stake holders who are a competency of the Department of Higher Education and Training should be emphasized once again, as it was the case with recommendation 1. The skills needs analysis of labour markets at regional, provincial and national level should be presented to the Department of Higher Education and Training for discussion by its skills development sectors including the higher education institutions, the public FET college sector and the SETAs.
- A response to these labour market skills needs as per the skills analysis be jointly coordinated and undertaken by all the Department of Higher Education and Training skills development agencies. Tabling of this skills needs and skills analysis of labour markets to the Department of Higher Education and Training and its skills development agencies will auger well for both articulation and responsiveness to the skills needs of labour markets. The researcher recommends that the public FET college sector ceased from being a standalone entity in skills development and be part of a broader and more credible skills development team that responds to the labour market skills needs based on the skills analysis.
- In the same light that the labour market's skills development analysis should be used to inform the joint response of the

Department of Higher Education and Training's skills development agencies, the National Skills Development Strategy III (NSDS III) should also be subjected to discussion by these skills development agencies. The lack of coordination between the skills development entities (see par. 1.2 and 2.5) cost the public FET college sector dearly during the preparation of the 2010 Soccer World Cup. The sector was left out entirely during the massive infrastructure revamp meant for the World Cup. If coordination was in existence by then, the sector could have benefitted and secured skills development partnerships. The sector could have placed both students and lecturers in work based placement in those projects.

The NSDS III has goals that seek to achieve relevance, quality and sustainability of skills training (see par. 2.5). The NSDS III is a competency of the Department of Higher Education and Training. Its presentation by the Department of Higher Education and Training to its skills development agencies would enhance the relevancy of the FET college sector to the skills needs of labour markets. The FET college sector by virtue of it being part of a skills development entity will benefit from the collective endeavor.

- Another crucial factor that affects the efficiency of the public FET college sector is the acquiring and maintenance of training equipment. The recapitalization grant that was used to purchase the equipment was a once off financial assistance to the colleges. As we speak, it had run its course. There is an argument about whether colleges should buy expensive training equipment such as CNC machines, central lathes, and milling machines or to lease them whenever the need arises. The risk of buying is that equipment becomes outdated and

irrelevant to labour markets as technology advances and changes. Further, equipment is expensive to maintain once their warranty expires.

In light of the above argument the researcher recommends that expensive equipment be leased rather than be purchased. Leasing outweighs all the challenges coupled to buying. The colleges will no longer be responsible for the expensive maintenance of the equipment and they will have access to latest equipment in the market.

6.6.3 Recommendation 3

The appropriateness of lecturer qualifications

In the same light that the lack of articulation in terms of curricula and course content could not be blamed solely on the public FET college sector, the same applies to the appropriateness of lecturer qualification. According to a 2010 HSRC report, 57 % of lecturers (see par.1.2) in the employ of the public FET college sector are under qualified and in possession of inappropriate qualifications. One of the objectives of the recapitalization programme as outlined in paragraph 1.2 was to up skill lecturers in the employ of the public FET college sector in order to enhance responsiveness, articulation and relevancy of the sector to the skills needs of labour markets.

According to Young (2006:156) for the above ideals to be realized, the sector needs to ensure that those responsible for the facilitation of its programmes are also credible in terms of qualifications. However, according to the findings of this study, the appropriateness of the lecturer qualifications is still a challenge despite the funds provided by

the recapitalization programme. With regard to the appropriateness of the lecturer qualifications the researcher recommends as follows:

- Both practical industrial experience and pedagogical knowledge should be emphasized as prime requirements for lecturers' employment in the public FET college sector. Nationally recognized practical vocational qualifications such as artisanship diplomas, National N diploma or National engineering diploma should be strongly emphasized for vocational lecturers. Lecturers who are in possession of these vocational diplomas should be assisted financially to obtain pedagogic qualifications. In terms of the findings of this study and the literature review (see par. 2.5.2) 57% of the lecturers employed in the public FET sector are in possession of either a vocational qualification or pedagogic qualification but not both. It is very important that lecturers be qualified in both fields in order for the public FET college sector to be relevant, responsive and credible to the skills needs of labour markets.
- A mechanism should be devised to assist lecturers with National N diplomas and technical teacher's qualifications to write a trade test. Such lecturers should be placed in companies during college vacations to meet the required contact practical period deemed as prerequisite for acceptance to a trade test. Once their trade test applications are approved such lecturers should be financially assisted to undergo trade test preparations at trade test preparation centers. In terms of the findings of this study the practical knowledge possessed by these two categories of lecturers is narrower in scope as compared to that of artisans.

For a National N diploma to be issued a proven practical experience of 18 months or more in a relevant and respective industry is required. Unfortunately there is no practical assessment administered to assess the vocational practical competency of applicants prior to the issuing of the diploma. The same applies to the technical teacher's diploma. The study found that they are more theoretically inclined and as such the practical component is limited and narrower in scope. The diploma is issued without any industrial technical experience.

- The fact that all skills development role players including institutions of higher learning are now a competency of the Department of Higher Education and Training augers well for addressing the shortcomings relating to lecturers qualification. The challenges relating to lecturer qualifications in the public FET college sector are better explained below:

Few universities have taken the initiative to design programmes for the vocational teaching sector. Consequently there is as yet no specific, nationally recognized set of qualifications for vocational teachers in South Africa. Several reasons apply: First, in the absence of a registered suite of national qualifications there is no mechanism that allows programmes designed for college lecturers to attract public funding. Second in traditional faculties of education academic capacity is focused on school teacher training and there is little capacity for or experience in vocational teacher education. Third faculties of education realize the low viability of designing and offering new vocational teacher qualifications because the sector is small in comparison with school teaching (8000

college lecturers compared with 500000 school teachers). A fourth and probably critical factor is that faculties of education of education in South Africa have not engaged sufficiently with what vocational teacher education might be, or what it means to be a vocational teacher (Papier, 2011: 104).

In view of the above arguments the researcher recommends that challenges relating to lecturer qualifications should not be left solely to universities to address. They should be addressed collectively by all the skills development entities falling under the Department of Higher Education and Training. For instance SETAs are familiar with apprenticeship and learnership training as well as modules of skills development programmes facilitated by different training providers. SETAs further understand the pros and cons of labour markets with regard to skills development. The FET college sector on the other hand is familiar with current FET colleges' curricula which are under review. Institutions of higher learning possess the expertise in curriculum development. The collective undertaking and joint planning by all these skills development role players with the view to develop a curriculum for lecturer qualifications could address the challenge.

6.6.4 Recommendation 4

Challenges hindering progress and efficiency

The Green Paper for Post School Education and Training in (The Department of Higher Education and Training,2012a:32) argues that the private FET college sector is substantial and expanding (see par. 3.3.4.4) because it has bridged the responsiveness and articulation gaps by designing customized courses based on the needs of clients

and employers. The Green Paper for Post School Education and Training further contends that the private FET college sector enjoys a positive relationship with its clients and employers because it is flexible and driven by the skills needs of labour markets. On the contrary, the same cannot be said about public FET colleges who are contending with poor image, lack of capacity and consequently remaining small and weak (Cosser, 2011:72). The advantage of the private FET college sector over its public counterpart is outlined below:

It would seem that public FET colleges are not perceived to provide relevant credible programmes in sought after technical and vocational learning areas that will lead to employment at the higher level, private higher education appears to be filling a gap between schooling and public higher education provision. The failure of public FET colleges to offer programmes that articulate relevantly with the labour market is an indication of the inability of the public sector to compete credibly with private providers (Cosser, 2011: 72)

In light of the above argument, the private FET college sector outperforms its public FET counterpart in terms of responsiveness, articulation, credibility and efficiency. Despite the fact that the private FET college sector is not funded by the state and it has never been the beneficiary of the recapitalization grant, yet it outperforms its public counterpart. The researcher recommends as follows with regard to challenges hindering progress and efficiency.

- The public FET college sector should encourage and provide financial assistance to lecturers in its employ to study Master's

and Doctoral degrees. Such lecturers should be encouraged to opt for research that is inclined towards the public FET college sector. In so doing the sector could create a pool of researchers who understand the sector very well and whose research could be of prime importance to the sector. Such a FET college inclined research could unearth underlying challenges that hinder the optimal performance of the public FET college sector.

- The public FET college sector should guard against being manipulated by companies who may use them to further their own goals. Such companies capitalize on the lack of knowledge of college management on labour markets dynamics. For instance some companies convince colleges to be signatories and service providers in learnerships and apprenticeship programmes. Instead of assigning some modules to these colleges as signatories to the learnership, these companies sideline them but claim training funds from the skills levy. In the end these colleges do not benefit and their students are left destitute with no one to turn to.

To counter the aforementioned challenges the researcher recommends that any skills development partnership that colleges enter into with companies should be credible and benefit both parties particularly the students. The researcher recommends that public FET colleges should refrain from operating as standalone entities, but operate as collective clusters or units. The significance of cooperating and operating collectively as clusters is that colleges will be afforded the opportunity to tap into the wealth of knowledge and experience at their disposal across the collective clusters.

Experienced and knowledgeable personnel across the collective could be selected and used to broker credible partnerships with labour markets. For instance one college may have an employee who worked in a particular industrial sector prior to joining the college and possess a wealth of specialized knowledge about the sector. Such an employee could be used across the collective cluster in brokering Memorandums of Understanding (MOU's) involving companies belonging to such industrial clusters. Such employees with specialized knowledge could also be used across the collective cluster during the mass purchasing of training equipment as well as in tuition and as such manipulation could be averted.

6.7 CONCLUDING REMARKS

Chapter six outlined the interpretation of analyzed data and presented the findings, recommendations and conclusions of the study. Owing to the triangulation nature of the study the researcher saw it fit to interpret the respondents' responses in terms of quantitative and qualitative approaches. The interpretation was informed by data analysis outlined in chapter five. This chapter further presented recommendations informed by the study findings. The recommendations have the potential to contribute to the development of intermediate skills and in addressing the national skills deficit.

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APPENDIX A:
INTERVIEW SCHEDULE FOR COMPANY'S SKILLS
DEVELOPMENT MANAGERS

INFORMED CONSENT:

This interview session is meant only for research purposes. Please be assured that the information you provide will be treated with absolute confidentiality and you will remain anonymous.

(1) How often do you communicate with neighbouring public FET colleges on matters relating to employment or skills development?

Field notes:

.....

(2) Are you in any formal partnership with neighbouring FET colleges on matters relating to skills development?

Field notes:

.....

(3) Are you in any formal partnership with neighbouring FET colleges on matters relating to student workplace placement?

Field notes

.....

(4) Does the curricula or course content of your neighbouring public FET collegesarticulate to your skills needs?

Field notes:

.....

(5) Do employees recruited from FET colleges meet your basic skills needs?

Field notes:

.....

(6) Is the quality and standard of employees sourced from neighbouring public FET colleges relevant to your skills needs?

Field notes:

.....

(7) Do you consider neighbouring public FET colleges when recruiting apprentices and learnership trainees?

Field notes:

.....

(8) Will you recommend your neighbouring public FET colleges to other employersfor the recruitment of trainees?

Field notes:

.....

APPENDIX B
INTERVIEW SCHEDULE FOR FET COLLEGE'S DEPUTY
PRINCIPAL (ACADEMIC)

INFORMED CONSENT:

This interview session is meant only for research purposes. Please be assured that the information you provide will be treated with absolute confidentiality and you will remain anonymous.

- (1) How often do you communicate with local labour markets on matters relating to employment, skills development and training?

Field notes:

.....

- (2) Are you in any formal partnership with local labour markets on matters relating to skills development and training

Field notes:

.....

- (3) Are you in any formal partnership with local labour markets on matters relating to student workplace placement that seeks to introduce them to a world of work?

Field notes:

.....

- (4) Are you in any formal partnership with local labour market on matters relating to lecturers workplace placement that seek to upgrade their expertise in their respective field of work?

Field notes:

.....

- (5) Are your vocational lecturers professionally qualified in their respective vocational fields (Relevant vocational qualifications)?

Field notes:

.....

- (6) Are your technical and workshop lecturers professionally qualified in their respective technical fields (artisans or technicians)?

Field notes:

.....

- (7) How many of your lecturers are both vocationally qualified and professionally qualified as educators.

Field notes:

.....

(8) Do you have any formal procedure to assist lecturers who are not professionally qualified as educators to qualify as educators?

Field notes:

.....

(9) How many lecturers who are only vocationally or technically qualified have been assisted to qualify professionally as educators?

Field notes:

.....

(10) Are your skills development programmes and occupational programmes guided by the skills needs of local labour markets?

Field notes:

.....

(11) Are your curricula and course contents responsive and articulated to the skills needs of local labour markets?

Field notes:

.....

.....

.....

(12) Is your college affiliated to any skills development forum of local labour markets?

Field notes:

.....
.....
.....

(13) Are you currently in any formal learnership agreement with a SETA?

Field notes:

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.....
.....

(14) Are your workshops fully equipped with modern equipment that is relevant to labour markets?

Field notes:

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.....
.....

(15) Are all your workshops accredited by relevant SETAS?

Field notes:

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.....

(16) Do you have a formal service contract with an accredited workshop equipment servicing company?

Field notes:

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.....
.....

(17) Are you in any formal partnership with institutions of higher learning (Universities and Universities of technology) for the sake of your student's progression?

Field notes:

.....
.....
.....

(18) Are your final year students adequately trained and ready for a world of work?

Field notes:

.....
.....
.....

APPENDIX C
INTERVIEW SCHEDULE FOR LECTURERS.

INFORMED CONSENT:

This interview session is meant only for research purposes. Please be assured that the information you provide will be treated with absolute confidentiality and you will remain anonymous.

- (1) Are you professionally qualified as an educator?

Field notes:

.....

- (2) Are you vocationally or technically qualified (Artisan, Technician or vocational specialist)?

Field notes:

.....

- (3) Are you both vocationally qualified and professionally qualified as an educator?

Field notes:

.....

- (4) Are you up to date with new technology and field developments in your respective technical/vocational field?

Field notes:

.....

- (5) Does your college have a formal lecturer workplace placement partnership with local labour market for you to upgrade your vocational and technical skills?

Field notes:

.....

- (6) Does your college have a formal student workplace placement partnership with local labour market that seeks to expose them to a world of work?

Field notes:

.....

- (7) Do you often communicate formally with local labour markets on matters relating to new technological development in your respective field, skills development and training?

Field notes:

.....

- (8) Does your college duly assess the skills needs of local labour markets and articulate its skills development programmes to such needs

Field notes:

.....

- (9) Are your college course contents, occupational and skills programmes guided by the skills needs of commerce and industry.

Field notes:

.....

- (10) Are your college assessment and moderation of assessment tasks conducted by qualified moderators and assessors?

Field notes:

.....

- (11) Are your college workshops fully equipped with modern and relevant equipment that are accredited by relevant SETAS?

Field notes:

.....

- (12) Are your college workshop equipment fully operational and duly serviced by accredited service providers?

Field notes:

.....

(13) Are your final year students adequately trained and ready for a world of work?

Field notes:

.....

APPENDIX D
INTERVIEW SCHEDULE FOR FINAL YEAR STUDENTS

INFORMED CONSENT:

This interview session is meant only for research purposes. Please be assured that the information you provide will be treated with absolute confidentiality and you will remain anonymous.

- (1) Does the tuition that you receive at your college prepares you adequately for a world of work

Field notes:

.....

- (2) How do you rate the quality of tuition at your college in both theory and practical?

Field notes:

.....

- (3) Is tuition at your college efficient and duly monitored by college management?

Field notes:

.....

(4) Is your assessment marked, moderated and returned to you on time?

Field notes:

.....

(5) Are you accorded an individual feedback session for your assessment?

Field notes:

.....

(6) Are your educators vocationally or technically well informed and knowledgeable in their respective fields?

Field notes:

.....

(7) Does the college expose you to the world of work?

Field notes:

.....

(8) Are your college workshops fully equipped with modern and relevant equipment that are operational?

Field notes:

.....

(9) Are your college workshop equipment fully operational and duly serviced by accredited service providers?

Field notes:

.....

APPENDIX E
INTERVIEW SCHEDULE WITH TRAINING MANAGERS AT INDLELA

INFORMED CONSENT:

This interview session is meant only for research purposes. Please be assured that the information you provide will be treated with absolute confidentiality and you will remain anonymous.

- (1) How do you rate the standard of skills training at public FET colleges?

Field notes:

.....

- (2) Does public FET colleges plays a pivotal role in skills development and training

Field notes:

.....

- (3) Do public FET colleges contribute effectively to apprenticeships and learnerships contracts and partnerships?

Field notes:

.....

- (4) Are the course contents and skills development programmes of public FET colleges guided by the skills shortage and needs of the country's labour markets?

Field notes:

.....

(5) Are public FET colleges accessing funds from respective SETAS to fund their skills training?

Field notes:

.....

APPENDIX F
INTERVIEW SCHEDULE FOR FET COLLEGE'S HOD's

INFORMED CONSENT:

This interview session is meant only for research purposes. Please be assured that the information you provide will be treated with absolute confidentiality and you will remain anonymous.

- (1) How often do you communicate with local labour markets on matters relating to employment, skills development and training?

Field notes:

.....

- (2) Are you in any formal partnership with local labour markets on matters relating to skills development and training

Field notes:

.....

- (3) Are you in any formal partnership with local labour markets on matters relating to student workplace placement that seeks to introduce them to a world of work?

Field notes:

.....

.....

.....

- (4) Are you in any formal partnership with local labour market on matters relating to lecturers workplace placement that seek to upgrade their expertise in their respective field of work?

Field notes:

.....

- (5) Are your vocational lecturers professionally qualified in their respective vocational fields (Relevant vocational qualifications)?

Field notes:

.....

- (6) Are your technical and workshop lecturers professionally qualified in their respective technical fields (artisans or technicians)?

Field notes:

.....

- (7) How many of your lecturers are both vocationally qualified and professionally qualified as educators.

Field notes:

.....

(8) Do you have any formal procedure to assist lecturers who are not professionally qualified as educators to qualify as educators?

Field notes:

.....

(9) How many lecturers who are only vocationally or technically qualified have been assisted to qualify professionally as educators?

Field notes:

.....

(10) Are your skills development programmes and occupational programmes guided by the skills needs of local labour markets?

Field notes:

.....

(11) Are your curricula and course contents responsive and articulated to the skills needs of local labour markets?

Field notes:

.....

(12) Is your college affiliated to any skills development forum of local labour markets?

Field notes:

.....

(13) Are you currently in any formal learnership agreement with a SETA?

Field notes:

.....

(14) Are your workshops fully equipped with modern equipment that are relevant to labour markets?

Field notes:

.....

(15) Are all your workshops accredited by relevant SETAS?

Field notes:

.....

(16) Do you have a formal service contract with an accredited workshop equipment servicing company?

Field notes:

.....

(17) Are you in any formal partnership with institutions of higher learning (Universities and Universities of technology) for the sake of your student's progression?

Field notes:

.....

(18) Are your final year students adequately trained and ready for a world of work?

Field notes:

.....

APPENDIX G
QUESTIONNAIRES SCHEDULE FOR COMPANIE'S SKILLS
DEVELOPMENT MANAGERS

The following statements require your opinion on skills development by public FET colleges. There are no right or wrong answers. Your opinion is very important. Please indicate your answer with an X. The numbers in the square have the following meaning:

1	2	3	4	5
Strongly disagree	Disagree	Undecided	Agree	Strongly agree

1	You are familiar with subjects and assessment guidelines used at your neighbouring FET colleges.	1	2	3	4	5
2	The curricula and course content of neighbouring public FET colleges are articulated to your skills development needs.	1	2	3	4	5
3	Neighbouring public FET colleges are equipped with modern training equipment and infrastructure relevant to local labour markets.	1	2	3	4	5
4	Employees sourced from neighbouring public FET colleges meet your basic skills development needs.	1	2	3	4	5
5	Most of your apprentices and learnership trainees are sourced from neighbouring FET colleges.	1	2	3	4	5
6	Your company has a formal skills development partnership with neighbouring public FET colleges.	1	2	3	4	5
7	Your company often communicates with neighbouring public FET colleges on matters relating to skills development.	1	2	3	4	5
8	The quality and standard of employees sourced from neighbouring public FET colleges are relevant to your skills needs.	1	2	3	4	5
9	You prefer students sourced from public FET colleges over those from other vocational institutions such as private FET colleges or technical high schools.	1	2	3	4	5
10	You can recommend neighbouring public FET colleges to other companies for trainee recruitment.	1	2	3	4	5

APPENDIX H
QUESTIONNAIRES SCHEDULE FOR FET COLLEGE'S
DEPUTY PRINCIPALS (ACADEMIC)

The following statements require your opinion on skills development by public FET colleges. There are no rights or wrong answers. Your opinion is very important. Please indicate your answer with an X. The numbers in the square have the following meaning:

1	2	3	4	5
Strongly disagree	Disagree	Undecided	Agree	Strongly agree

1	Your college has a formal skills development and training partnership with local labour markets.	1	2	3	4	5
2	Your college has a formal skills development and training partnership with relevant S	1	2	3	4	5
3	Your college often communicates with local labour markets on matters relating to skills development.	1	2	3	4	5
4	Your college is an affiliate of local labour markets skills development and training forum.	1	2	3	4	5
5	Your college skills development and training programmes are informed by the skills needs of local labour markets.	1	2	3	4	5
6	Your college curricula and course contents are in line with the skills needs of local labour markets.	1	2	3	4	5
7	Your college assessment and moderation of assessment tasks are conducted by qualified assessors.	1	2	3	4	5
8	Your college duly assesses the skills needs of local labour markets and articulate its skills development programmes to such needs.	1	2	3	4	5
9	Your college vocational and technical lecturers are both vocationally/ technical and professionally (teacher qualification) qualified.	1	2	3	4	5
10	Your workshop practicals and vocational/ technical subjects are facilitated by vocationally and technically qualified lecturers.	1	2	3	4	5
11	Your college has a workplace placement partnership with local labour market for educators to upgrade their vocational and technical skills.	1	2	3	4	5
12	Your college facilitates only SETA accredited skills and occupational programmes.	1	2	3	4	5
13	Your college workshops are fully equipped and accredited by SETAs.	1	2	3	4	5

14	Your college workshop equipment is duly serviced by accredited service providers.	1	2	3	4	5
15	Your workshop equipment service certificates are up to date.	1	2	3	4	5
16	Your workshops SETA accreditation certificates are all valid.	1	2	3	4	5
17	The college workshops are fully equipped and accredited by relevant SETAs.	1	2	3	4	5

APPENDIX I

QUESTIONNAIRES SCHEDULE FOR FET COLLEGE LECTURERS

The following statements require your opinion on skills development by public FET colleges. There are no rights or wrong answers. Your opinion is very important. Please indicate your answer with an X. The numbers in the square have the following meaning:

1	2	3	4	5
Strongly disagree	Disagree	Undecided	Agree	Strongly agree

1	You are vocationally or technically qualified (Trade Tested).	1	2	3	4	5
2	You are professionally qualified (Teacher Qualification).	1	2	3	4	5
3	You are both professionally and technically qualified.	1	2			
4	You are up to date with new technology and development in your respective technical/vocational field.	1	2	3	4	5
5	Your college provides training for you to keep up with modern and changing technology in your vocational or technical field.	1	2	3	4	5
6	Your college has a workplace placement partnership with local labour market for you to upgrade your vocational and technical skills.	1	2	3	4	5
7	The curricula and course content of the program that you facilitate is articulated and informed by the skills needs of local labour market.	1	2	3	4	5
8	The college occasionally conducts a skills shortage analysis of local labour market and articulate its programmes to the skills needs.	1	2	3	4	5
9	The college occasionally arranges work placement for its lecturers to keep in pace with modern technological development.	1	2	3	4	5
10	Your immediate seniors are well vested in their respective technical or vocational field and are capable of mentoring and guiding you. Professionally	1	2	3	4	5
11	You receive professional assistance and support from your immediate seniors.	1	2	3	4	5
12	Your assessment are quality assured and moderated by accredited moderators.	1	2	3	4	5

APPENDIX J

QUESTIONNAIRES SCHEDULE FOR NC (V) L4 AND N6 Students

The following statements require your opinion on skills development by your public FET colleges. There are no rights or wrong answers. Your opinion is very important. Please indicate your answer with an X. The numbers in the square have the following meaning:

1	2	3	4	5
Strongly disagree	Disagree	Undecided	Agree	Strongly agree

1	Your college has a workplace placement program meant to expose you to the world of work.	1	2	3	4	5
2	You have been to a local factory through a workplace placement program.	1	2	3	4	5
3	The tuition that you receive at your college prepares you adequately for a world of work.	1	2	3	4	5
4	You are confident of matching the operational and production standard of local labour markets	1	2	3	4	5
5	You are assured of employment on completion of your studies.	1	2	3	4	5
6	Your college has a vocational guidance program meant to guide you about opportunities in opportunities in local labour markets.	1	2	3	4	5
7	Your college workshops are fully equipped with relevant and operational equipment.	1	2	3	4	5
8	Your workshop and vocational lecturers are highly competent and master the equipment and course content very well.	1	2	3	4	5
9	Your college practical training is of high standard.	1	2	3	4	5
10	Tuition at your college is efficient and duly monitored by college management.	1	2	3	4	5
11	You receive your learning material on time.	1	2	3	4	5
12	On registration you were assisted and guided about programmes that are in demand by local labour market.	1	2	3	4	5

APPENDIX K
QUESTIONNAIRE SCHEDULE FOR INDLELA TRAINING CENTRE'S
SKILLS TRAINING MANAGER.

The following statements require your opinion on skills development by public FET colleges. There are no rights or wrong answers. Your opinion is very important. Please indicate your answer with an X. The numbers in the square have the following meaning:

1	2	3	4	5
Strongly disagree	Disagree	Undecided	Agree	Strongly agree

1	You often communicate with public FET colleges on matters relating to skills development and training.	1	2	3	4	5
2	You are in a formal partnership with some public FET colleges on matters relating to skills development and training.	1	2	3	4	5
3	The skills development programmes of public FET colleges are informed by the skills needs of local labour markets.	1	2	3	4	5
4	The standard and quality of skills development and training of public FET colleges match that of private training providers.	1	2	3	4	5
5	Public FET colleges are flexible and responsive to the country's skills Shortage.	1	2	3	4	5
6	Public FET colleges contribute effectively in addressing the country's skills shortage.	1	2	3	4	5
7	The workshops of public FET colleges are well equipped with modern equipment that are relevant to skills training and development.	1	2	3	4	5
8	Public FET colleges workshops are safety compliant and accredited by relevant SETAS.	1	2	3	4	5
9	Public FET colleges employ lecturers who are appropriately qualified and suitable for skills training and development.	1	2	3	4	5
10	Former Public FET colleges trainees perform very good in trade test and learnerships	1	2	3	4	5

APPENDIX L
QUESTIONNAIRES SCHEDULE FOR FET COLLEGE'S HOD's

The following statements require your opinion on skills development by public FET colleges. There are no rights or wrong answers. Your opinion is very important. Please indicate your answer with an X. The numbers in the square have the following meaning:

1	2	3	4	5
Strongly disagree	Disagree	Undecided	Agree	Strongly agree

1	Your college has a formal skills development and training partnership with local labour markets.	1	2	3	4	5
2	Your college has a formal skills development and training partnership with relevant SETAs.	1	2	3	4	5
3	Your college often communicates with local labour markets on matters relating to skills development.	1	2	3	4	5
4	Your college is an affiliate of local labour markets skills development and training forum.	1	2	3	4	5
5	Your college skills development and training programmes are informed by the skills needs of local labour markets.	1	2	3	4	5
6	Your college curricula and course contents are in line with the skills needs of local labour markets.	1	2	3	4	5
7	Your college assessment and moderation of assessment tasks are conducted by qualified assessors.	1	2	3	4	5
8	Your college duly assesses the skills needs of local labour markets and articulate its skills development programmes to such needs.	1	2	3	4	5
9	Your college vocational and technical lecturers are both vocationally/ technical and professionally (teacher qualification) qualified.	1	2	3	4	5
10	Your workshop practicals and vocational/ technical subjects are facilitated by vocationally and technically qualified lecturers.	1	2	3	4	5
11	Your college has a workplace placement partnership with local labour market for educators to upgrade their vocational and technical skills.	1	2	3	4	5
12	Your college facilitates only SETA accredited skills and occupational programmes.	1	2	3	4	5

13	Your college workshops are fully equipped and accredited by SETAs.	1	2	3	4	5
14	Your college workshop equipment is duly serviced by accredited service providers.	1	2	3	4	5
15	Your workshop equipment service certificates are up to date.	1	2	3	4	5
16	Your workshops SETA accreditation certificates are all valid.	1	2	3	4	5
17	The college workshops are fully equipped and accredited by relevant SETAs.	1	2	3	4	5

APPENDIX M
QUESTIONNAIRE SCHEDULE FOR TRAINEES.

The following statements require your opinion on skills development by public FET colleges. There are no rights or wrong answers. Your opinion is very important. Please indicate your answer with an X. The numbers in the square have the following meaning:

1	2	3	4	5
Strongly disagree	Disagree	Undecided	Agree	Strongly agree

1	The knowledge you acquired at FET colleges is relevant to your training	1	2	3	4	5
2	You will encourage parents to register their children at public FET Colleges	1	2	3	4	5
3	The skills development programmes of public FET colleges are informed by the skills needs of local labour markets.	1	2	3	4	5
4	The standard and quality of skills development and training of public FET colleges match that of private training providers.	1	2	3	4	5
5	Public FET colleges are flexible and responsive to the country's skills Shortage.	1	2	3	4	5
6	Public FET colleges contribute effectively in addressing the Country's skills shortage.	1	2	3	4	5
7	The workshops of public FET colleges are well equipped with modern equipment that are relevant to skills training and development.	1	2	3	4	5
8	Public FET colleges workshops are safety compliant and accredited by relevant SETAS.	1	2	3	4	5
9	Public FET colleges employ lecturers who are appropriately qualified and suitable for skills training and development.	1	2	3	4	5
10	Former Public FET College graduates perform better in their training	1	2	3	4	5

APPENDIX N

SUMMARY OF STUDENT RESPONSES TO QUESTIONNAIRES

Responses	CJC	EEC	EWC	S Sedibeng	South West Gauteng	Tshwane North	Tshwane South	WESTCOL	CN Mahlangu
Workplace placement	37%	35%	36%	40%	35%	38%	45%	40%	30%
Visit to local factories	30%	30%	35%	33%	35%	34%	38%	36%	28%
Standard of tuition	55%	53%	55%	52%	50%	53%	55%	51%	50%
Employment prospects	45%	43%	45%	40%	45%	40%	45%	43%	38%
Workshop Equipments	65%	60%	60%	65%	63%	60%	60%	65%	62%
Lecturer's competency	55%	45%	50%	50%	50%	50%	53%	50%	50%
Vocational Guidance	35%	35%	33%	35%	30%	33%	35%	38%	33%
Availability of training materials and consumables	70%	65%	65%	60%	64%	65%	70%	68%	60%
Assistance during registration	60%	63%	60%	58%	60%	60%	65%	64%	60%

ANNEXURE O: PERMISSION LETTER FROM THE DEPARTMENT OF
HIGHER EDUCATION AND TRAINING (DHET)

ANNEXURE P: PERMISSION LETTER FROM EKURHULENI WEST
COLLEGE

ANNEXURE Q: PERMISSION LETTER FROM SEDIBENG COLLEGE

ANNEXURE P: PERMISSION LETTER FROM TSHWANE NORTH
COLLEGE



**higher education
& training**

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Mr John Matae
32 Zuurfontein Road
Cresslawns
KEMPTON PARK
1619

By email: johnm@ewc.edu.za

Dear Mr Matae

REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN PUBLIC FET COLLEGES

I acknowledge receipt of your request for permission to conduct research in 8 public FET Colleges in Gauteng province, as part of your studies towards a PhD degree at the University of South Africa, Faculty of Education Management.

Subsequent to evaluation of your request, I have a pleasure in informing you that your request for permission to undertake the research has been granted, subject to your commitment on research ethics in the application form. You are advised to obtain further permission from the Principals of the FET Colleges concerned before commencing any research activities.

You are reminded to provide the approved research report to the Department as soon as it is available. It will also be appreciated if you could share the tools you are using to evaluate FET Colleges, with the Department.

I wish you all of the best in your studies.

Yours sincerely

Mr GF Qonde
Director-General

Date: 26/08/2013

