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Traut, Nadia

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A CRITICAL ANALYSIS OF QUALITY ASSURANCE OF OCCUPATIONAL LEARNING IN SOUTH AFRICA

NADIA TRAUT

(Student Number: 675378)

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Supervisor: Dr S. M. Allais

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DECLARATION

I, Nadia Traut, declare that this research report is my own work. It is submitted for the degree of Master of Education to the University of Witwatersrand. It has not been submitted before for any other degree or examination to any other university.

Nadia Traut

31 July 2014

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Abstract

The introduction of the National Qualifications Framework (NQF) brought with it decentralised learning and assessment practices and associated quality assurance systems that have been extensively critiqued over the past 19 years.

This research utilised the case study approach to examine quality assurance of occupational education in South Africa in respect of three quality assurance cases of occupational learning. The analysis was conducting using a Quality Assurance Analytic Tool developed for this study that included analytic categories of 'Purpose'; 'Map of Qualifications'; 'Bureaucracy'; and 'Agreements'. Despite each case providing unique data in terms of the model implemented, a recurring pattern emerged: while quality assurance is necessary to provide accountability to the stakeholders and is ultimately obligated to support the objectives of the NQF and ensure consistency across provision sites, definitions of quality were lacking and this creates a barrier to evaluation.

This research agrees with literature which argues that quality assurance is justified as the custodian of quality in order to satisfy public accountability. However, quality must be defined and shared, so that all role players are aware of the goals and measurements. The study also argues that quality assurance should ensure consistency of output of education and training and as such, standardised curriculum, centralised assessment and associated quality assurance mechanisms should be put in place.

Finally, recommendations are made for the improvement of the Quality Assurance Analytic Tool that was able to effectively evaluate what was working broadly in respect of the categories investigated and was able to conclude that effective evaluation is largely dependent on the articulation of clear and specific objectives for quality assurance and definitions of quality, but was not able to evaluate achievement of quality assurance in great detail.

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Acronyms

ANC	African National Congress
AQP	Assessment Quality Partner
CEO	Chief Executive Officer
COO	Chief Operating Officer
COSATU	Congress of South African Trade Unions
DHET	Department of Higher Education and Training
DOL	Department of Labour
DQP	Development Quality Partner
ETQA	Education and Training Quality Assurance body
EQA	External quality assurance
FASSET	Finance and Accounting Services Sector Education and Training Authority
FET	Further Education and Training
FFP	Fitness For Purpose
GFETQF	General and Further Education and Training qualifications sub-framework
HEQF	Higher Education qualifications sub-framework
HOD	Head of Department
OQF	Occupational qualifications sub-framework
HEQC	Higher Education Quality Council
MerSETA	Manufacturing, Engineering and Related Services Sector Education and Training Authority
NAMB	National Artisan Moderation Body
NLRD	National Learner Records Database
NQF	National Qualifications Framework
NSA	National Skill Authority
NSB	National Standards Body
QAB	Quality Assurance Body

QAP	Quality Assurance Partner
QCTO	Quality Council for Trades and Occupations
SAQA	South African Qualifications Authority
SDA	Skills Development Act
SETA	Sector Education and Training Authorities
SGB	Standards Generating Body
TVET	Technical and vocational education and training (formally Further Education and Training (FET) Colleges)
UNESCO	United Nations Educational, Scientific and Cultural Organisation

Chapter 1: General Introduction

1.1 Introduction

This study explores the South African system for quality assurance of occupational education - the sector based training that is guided by labour market needs and licensed by Sector Education and Training Authorities (SETAs).

Occupational education is distinct from both academic education - which is traditionally divided in South Africa between basic education in schools and higher education in universities - and vocational education which is delivered by technical and vocational education and training (TVET) colleges (formally Further Education and Training Colleges) and is broadly aligned to vocations (DHET, 2013a, p. 13). Occupational education is supposed to be specifically aligned to workplace needs and in many cases includes work experience components.

Occupational education, like vocational Education, has been plagued by public denigration and "has, almost everywhere, had lower status socially than academic education" (Allais, 2003, p. 2). Ironically, the skills developed through technically inclined training have been labelled by "governments... [as] 'useful' skills, which they have believed will decrease unemployment" (Allais, 2003, p. 2). But the elaborate national quality assurance system in South Africa, established to ensure accountability of occupational education to the state has, after 19 years, failed to make any documented impact in relation to the quality of occupational education.

Therefore, this study explores the rationale and efficacy of the quality assurance structures put in place to assure the quality of occupational training and their apparent lack of impact on the public perception of status and credibility of occupational education. An evaluative framework is also proposed to enable measurement of the quality assurance systems.

This line of enquiry is important in the context of the significant public and political criticism of the South African quality assurance system. However, the critique has been informal and emotive with little empirical research to show whether quality assurance has resulted in clear gains or deficiencies. In general, quality assurance has been criticized as being overly-bureaucratic and complicated with costly compliance exercises that generally require information in specific formats and end up diverting energy and resources from addressing actual quality improvements (Allais, 2009, p. 13; Allais, 2012a, p. 12). Furthermore, "the parts of education systems which are the easiest to measure may not be the most important" (Allais, 2009, p. 27), and so, quality assurance may have little to show for its efforts.

Yet quality assurance was established as a means of providing accountability of provision to the public that would protect both public funds and also the learners themselves from

unscrupulous providers. Even if the current system is inadequate, it remains desirous for the state and its representative agencies to be able to make sound judgements about the quality of educational provision. This research was motivated by the practical concern in respect of how to measure and enable accurate judgements about the systems that have been established to provide quality assurance in occupational education.

1.2 Context

After democracy in 1994, South Africa introduced an outcomes-based National Qualifications Framework (NQF), as well as a series of associated quality assurance structures, with the intention of improving access to quality education, and specifically to quality occupational education. In light of consistent criticism, the NQF was reviewed at length, and in 2007 this review process culminated in extensive recommendations. Included amongst these was the requirement to make provision for three Quality Councils to manage a sub-divided qualifications framework that differentiates between academic (basic and higher) and occupational education.

The subsequent legislative changes resulted in the restructuring of the quality assurance landscape and the establishment of the Department of Higher Education and Training (DHET) – uniting all post-school education and training entities (from educational providers to the levy-grant institutions[1]) under a single ministry for the first time in South Africa's history. Additionally, the NQF was expanded from 8 to 10 levels and the Quality Council for Trades and Occupations (QCTO) was established to manage quality assurance of occupational learning - previously the domain of sectoral quality assurance bodies.

According to the Department of Labour (DOL) (2008), where skills development historically resided before the establishment of the DHET, the QCTO was conceptualised to address a number of issues related to the original implementation of the NQF. These included: the overly complex structure and number of role-players in quality assurance; the absence of work experience in learning programmes; the lack of alignment of education and training to the actual skills required in the workplace; the absence of a planned curriculum with the specification of learning outcomes and the consequent variation in the interpretation by training providers of learning outcomes; the barrier of the fundamental numeracy and literacy component of these qualifications; and the multitude of quality assurance agencies, their differing accreditation requirements and the lack of standardized assessment leading to the low credibility of occupational certificates.

[1] Levy-grant institutions include the Sector Education and Training Authorities (SETAs) and the National Skills Fund (NSF) who each receive income generated by constituent employer levies, collected by the South African Revenue Service (SARS) as legislated by the Skills Development Levies Act (No 9 of 1999) for purposes of supporting skills development.

In addressing these issues, the “envisaged structure and functions of the QCTO reflect a new approach to quality assurance” (DOL, 2008, p. 5) that is based largely on an “improved qualification model that suits occupational learning” (DOL, 2008, p. 6) and includes, on the one hand, standardised design and development of curriculum, and on the other hand, an external assessment of occupational competence.

What the QCTO prescribes is, to some extent, an external, standardized (but decentralised) assessment of centralized curricula: “[A]ssessment of occupational competence is conducted by registered assessors applying nationally standardised assessment instruments and procedures at accredited assessment centres or registered sites” (DHET, 2011a, p. 9). This external assessment intends to impose one standard of competence to ensure the credibility of occupational certification, and will “promote consistency and credibility of the occupational qualifications” (DHET, 2011a, p. 9). However, unlike most standardised assessment which consists of written examinations, assessment here is conducted by individual assessors making judgements about individual learner’s demonstrated (including written or practical) performance. What are centralized are the prescribed curricula and the assessment tools.

Changes to quality assurance are being made accordingly in that policies are being drafted and new QCTO qualifications are being developed. Yet, to date no research has been conducted to assure the public and its officials that quality assurance in any form is necessary and, if it is, that the proposed QCTO model is in fact the most appropriate for occupational learning.

In the context of a transitioning national quality assurance system for occupational learning, to a relatively under-researched model and in light of the fact that the real impact of the NQF and its quality assurance structures remains contested, it seems that we have not sufficiently interrogated the learnings of the previous system, nor adequately evaluated the proposed quality assurance system. And this is precisely what this research attempts to do.

As a professional in the education and training environment, currently working for an Education and Training Quality Assurance Body (ETQA) responsible for the quality assurance of occupational learning in the financial services sector, the lack of adequate justification for, and impact of, quality assurance has left me frustrated and ambivalent about the implementation of yet another quality assurance model. Therefore, it is my hope that by engaging with the system in an honest and critical manner I can contribute to policy debate and credible implementation of the proposed quality assurance model.

1.3 Problem Statement

The history of quality assurance in the field of education and training is filled with contestation and critique with little validation or research in support of its value. The QCTO are proposing a specific quality assurance approach and are developing regulations and structures in support. As a practitioner in the field of quality assurance, I am concerned

about whether or not the model established by the QCTO will enable evaluations of educational quality. In order to critically reflect on this, the first step is to acquire an understanding of what does seem to be working, and why.

In grappling with the uncertainly around a new quality assurance model, it is evident there is a knowledge gap in terms of how the evaluation of education and training is *itself* evaluated. There exists no tested evaluative framework by which to judge a quality assurance system and there has been little research into the quality assurance of occupational learning on which to base any further inquiry.

1.4 Purpose Statement

This research aims to gain insight into the quality assurance of occupational education. In addition, it aims to address the knowledge gap created by the lack of an evaluative framework with which to judge quality assurance systems. Hence, it proposes a Quality Assurance Analytic Tool, informed by literature and experience that has been applied to three cases of quality assurance, in order to evaluate their impact.

1.5 Research Questions

My main research question is: *What is working in occupational quality assurance systems, and why*?

For each of the occupational quality assurance systems that I have explored, I used the following more specific questions to guide the research;

1. What is the justification behind quality assurance in occupational learning?
2. What is expected of quality assurance and is it achieving these goals?
3. How can quality assurance systems be effectively evaluated?

In answering these questions, I hope to provide input into the debates about the emerging QCTO quality assurance model.

1.6 Outline of the Research Report

In this chapter, I have provided an overview of the structures and problems inherent in the quality assurance of occupational education in South Africa. Due to the lack of research in support or opposition of quality assurance approaches, I have problematized the evaluation of current quality assurance practices.

Chapter 2 provides a review of the relevant literature and focusses specifically on the quality assurance of occupational education. It is immediately apparent that literature on the subject is scarce and mostly concerned with higher education. Quality assurance approaches and

models that are pertinent to occupational learning in South Africa are then explored and critiqued and then the review considers what quality assurance should be expected to achieve and what it has achieved over the past 19 years. Finally, some suggestions for evaluating quality assurance systems are suggested.

Chapter 3 explains the design of this qualitative study of three quality assurance cases. The case study approach was chosen as appropriate because the nature of the inquiry is subjective and context-dependent, and a case study approach would allow for the problematising of occupational education in the South African context as guided by social imperatives and thus enables an enquiry into the 'impact' and 'perceptions of credibility' in relation to quality assurance.

Chapter 4 presents the data from the three cases and analysis to illustrate the level of alignment to the categories conceptualised in the analytic framework. Finally, general emergent patterns are discussed.

Chapter 5 concludes the study with insights derived from the study for consideration by current practitioners and future quality assurance system architects.

Chapter 2: Literature Review

2.1 Introduction

This chapter provides an overview of the literature on quality assurance internationally and in South Africa, specifically. It starts by considering why access to quality education was such an important issue in South Africa. It then takes a step back to review the literature on the genesis of quality assurance, and the approaches and models adopted for quality assuring education and thereafter, provides a broad overview of the policy interventions which were introduced through the National Qualifications Framework (NQF).

The review introduces the South African National Qualifications Framework and its associated quality assurance structures, and then turns to consider, in more detail, the decentralised assessment and external assessment models of quality assurance.

From this review, it becomes clear that there exists no comprehensive body of research demonstrating the effectiveness of the policies introduced in relation to education in South Africa and this leads to a discussion of the significant critiques.

Finally, some recent changes to national policy framework are discussed, with some recommendations on how to define 'quality assurance' in the education and training landscape.

2.2 Background

> Education is the great engine of personal development. It is through education that the daughter of a peasant can become a doctor, that the son of a mineworker can become the head of the mine, that a child of farmworkers can become the president of a great nation. It is what we make out of what we have, not what we are given, that separates one person from another. (Mandela, 1995)

Education and skills acquisition (usually termed: 'training') have always been associated with accessing, and progressing, within employment and consequently, has come to be seen as a "means of acquiring social status" (Gipps, 1999, p. 357). This is also true to South Africa whose deep cultural scars of racial inequality and poverty were caused by the perversion of the inherent power of education by segregating races through, amongst other measures, discriminatory education, labour and social practices, under the apartheid regime:

> By denying access to education, by providing poor quality education to most black people, by providing poor quality training to black teachers and by controlling the content of syllabuses to reflect the interests of the apartheid state, the education system reinforced the social and economic inequalities which underpinned apartheid. (Umalusi, 2007b, p. 7)

The official policy of segregating citizens according to racial demographics was enforced after the election of the National Party (NP) to power in South Africa in 1948. Under the apartheid (loosely translated from Afrikaans as: 'separation') regime, education in South Africa was used as a 'social-sorting mechanism' in a horrific production line that produced citizenry divided according to race:

> the infamous apartheid education system ….was explicitly designed not only to provide separate education for different race groups, but also to indoctrinate children with 'Christian nationalism', and to prepare black children for a role as inferior citizens and as workers. (Umalusi, 2007b, p. 6)

During apartheid, education had been metered out on a 'need to know' basis, with the white ruling party determining the 'need' according to race and subjecting the black majority to what was known as 'Bantu Education'. This was formalised in legislation and was intended to prepare them for a lifetime of menial labour while their white counterparts were groomed to become professionals and skilled artisans. The following explication is provided by South African History Online:

> Bantu Education Act No 47 of 1953. A pillar of the apartheid project, this legislation was intended to separate black South Africans from the main, comparatively very well-resourced education system for whites. Authored by Dr H. F. Verwoerd (then Minister of Native Affairs, later Prime Minister), it established a Black Education Department in the Department of Native Affairs. They were tasked with the compilation of a curriculum that suited the "nature and requirements of the black people". African children students were to be educated in a way that was appropriate for their culture. No consultation occurred on this. All the definitions of culture, appropriate education content and levels, all the decisions about purpose and outcomes of the system were controlled by the apartheid government. Its stated aim was to prevent Africans receiving an education that would lead them to aspire to positions they wouldn't be allowed to hold in society. Instead Africans were to receive an education designed to provide them with skills to serve their own people in the Bantustan 'homelands' or to work in manual labour jobs under white control. This legislation was condemned and rejected as inferior from the time of its introduction. This cornerstone of apartheid ideology-in-practice wreaked havoc on the education of black people in South Africa, and deprived and disadvantaged millions for decades. Its' devastating personal, political and economic effects continue to be felt and wrestled with today. (South African History Online, n.d.)

The legacy of Bantu Education lives on in the highly publicized deficiencies of local education departments and schools, and is particularly ubiquitous in the rural areas where it pervades the socialisation of new generations who are kept captive in environments of familial poverty that recycles the apartheid legacy of using education as a vehicle for social

stratification. SAQA (2012, p. 2) laments that “many of the present issues within training and education are the results of apartheid policies, practices and mindsets” which have resulted in a “system [that] has failed to provide the country with a large, productive workforce matched to the needs of employment” (SAQA, 2012, p. 2).

The advent of democracy brought with it the need for a total transformation of the education system that had for decades “reinforced the social and economic inequalities which underpinned apartheid” (Umalusi, 2007b, p. 7). This transformation was achieved through the introduction of an outcomes-based qualifications framework and associated quality assurance structures.

2.3 What is Quality Assurance?

Allais (2009, p. 9) describes the genesis of quality assurance in “large-scale manufacturing” which expanded from craftspeople creating a product from start to finish, to a production system where individuals became responsible only for a specific part of the production cycle in that “they had no control over the end product, and had less interest in it” (Allais, 2009, p. 10). Thus, inspectors were introduced to check samples of the final products in order to reduce defects, “usually referred to as quality control mechanisms” (Allais, 2009, p. 9) and progressively, quality control became known as ‘quality assurance’ “out of attempts to *prevent* defects from occurring” (Allais, 2009, p. 10, emphasis added). Sallis (1996) confirms that:

> quality assurance is different from quality control [which is detection and rejection after production]. It is a before and during the event process. Its concern is to prevent faults occurring in the first place… the quality of the food or service is assured by there being a system in place… which lays down exactly how production should take place and to what standards. (Sallis, 1996, p. 19)

Allais (2009) agrees that quality assurance is associated with “total quality management” (Allais, 2009, p. 10) that examines all the constituent processes and not just the final product.

In the South African context, the quality assurance of education is defined as the “sum of activities that assure the quality of products and services at the time of production or delivery” (SAQA, 2001a, p. 6). Similarly, in Europe, “[q]uality assurance is taken to be a deliberate process to check, evaluate, and make judgements about quality and standards. It may also indicate directions for enhancement and improvement” (Crozier et al., 2013, p. 9).

While usually perceived as an externally imposed audit, quality assurance can be aimed at the external evaluation of educational providers, or it can be internally conducted, aimed at improving educational provision; ultimately, the difference is that external “quality assessment produces a decision about quality. It has a summative function. In contrast,

quality improvement is non-judgemental, future orientated and relatively informal. It has a formative function" (Barnett, 1994, p. 167).

So, quality assurance can be defined as the sum of activities that are intended to assure that a product or service is aligned to its specification, and may result in a judgement of quality or a developmental recommendation. However, quality assurance of education is not that straightforward. The specification of what constitutes *quality education* is never clear, is commonly interpreted subjectively - with varying results - and is often articulated in manners that are easy to measure but mostly irrelevant.

2.4 Quality Assurance Approaches

According to Luckett (2003), anyone involved in quality assurance would concede that 'quality' is a contested notion. Definitions of quality "invariably result in circular arguments… because quality is a dependent concept that takes its meaning from the purpose of the goods or service in question" (Luckett, 2003, p. 1), thus, the argument is made that quality is achieved when purpose is achieved. Harvey (2010) agrees, by indicating that "analysis of quality should not be detached from purpose and context" (Harvey, 2010, p. 4).

Sallis (1996) adds that quality in relation to education is a difficult concept to define because "it has such a variety of meanings and the word implies different things to different people" (Sallis, 1996, p. 12). Unlike the absolute definition of quality in a production setting – where things of 'quality' are of the highest standard, expense and scarcity, the concept of quality in education is a 'relative concept' (Sallis, 1996, p. 14).

Baijnath, Maimela and Singh (2001, p. 71) admit that there is "general agreement that an objective definition for quality in HE [higher education] does not exist. Quality is seen as context bound and as multi-dimensional". While some may argue that a relative definition may hardly be called a definition, the other perspective is that:

> defining quality as FFP [fitness for purpose] is a liberating idea because of its enormous flexibility. It does not restrict us to prior notion of what quality should be, but encourages the identification of a whole range of purposes, and then a striving to achieve them. (UNESCO, 2011, p. 12)

Considering the varied stakeholders of higher education, and utilizing the Fit for Purpose (FFP) approach, UNESCO (2011) conceptualises quality in higher education as being relative to both the context and expectation of the stakeholder. Mhlanga (2008) concurs, indicating that "a blend of customer satisfaction and the fitness for purpose conceptions of quality seem to form a significant dimension of the conception of quality for most institutions" (Mhlanga, 2008, p. 25). Similarly, "it is important to stress that EQA [external quality assurance] is not only about defined objectives, but also about the different actors' expectations" (Crozier et al., 2013, p. 22). This is a useful construction of quality assurance because it allows the present research to position itself within the perspective of policy

maker and thus narrows the definition of quality to one that is aligned with the context and purpose of the policy maker.

While Sallis (1996) states that "quality can be defined as that which best satisfies and exceeds customers' needs and wants" (Sallis, 1996, p. 17), he also argues that "being 'relative' and 'context-dependent' are well and good, but quality remains nebulous… we all know quality when we experience it, but describing and explaining it is a more difficult task" (Sallis, 1996, p. 1).

When defining quality as the 'achievement of purpose', the resultant quality assurance approach ties up neatly with the 'fitness for purpose' approach where quality is deemed to have been attained when its stated service or product is achieved. The FFP approach is "suitable in systems where other mechanisms ensure that pre-determined or threshold-level standards are met by the institutions or programmes... in systems with good self-regulation mechanisms, where institutional diversity is promoted… and where institutions are granted a high level of autonomy" (UNESCO, 2011, p. 24). In contrast, quantifying quality as "conformance to standards'… pre-determined specifications or expectations" (UNESCO, 2011, p. 10) lends itself towards validation quality assurance approaches.

The problem remains that quality in education is more complex than manufacturing. This is because customers do not always know what they want, or need, of education and sometimes expectations are not realistic. In addition, education serves at least three categories of customers (the state, the labour market and the learners themselves) - all with very different ideas of what quality education should deliver. Quality assurance is therefore expected to deliver against varying and sometimes contradictory expectations.

2.5 Conceptualising the NQF and Quality Assurance

SAQA (2007) describes the phase of South African educational history, just prior to democracy in 1994, when the credibility of the apartheid system was destroyed but its structures remained, as a "period of structural stasis and cultural malaise" (SAQA, 2007, p. 25). As the previously disadvantaged majority waited and the previously advantaged minority fretted, "one of the most, if not *the* most, ambitious qualifications framework" (Allais, 2011, p. 343) in the world was being conceptualized within the liberation movement. The ensuing years saw democratic freedom and a "manifestation of policy in the emergence of new structures, role players and authoritative bodies" (SAQA, 2007, p. 25) as South Africa sought to rebrand itself and its previously discriminatory education and training system.

Initial discussions and working groups related to transforming education and training were held and the interests of the "shadow state representatives", the alliance of the Congress of South African Trade Unions (COSATU) and the African National Congress (ANC), "dominated the agenda… their view was that the new education and training strategy should address the concerns of economic reconstruction and growth, should lead to active labour market policies and should address injustices and inequities in domains of learning" (SAQA,

2012, p. 32). The concept of a ‘unified’ national framework was proposed to organize and replace existing apartheid-associated qualifications and to enable the recognition of workers’ skills in line with “COSATU’s proposals in the early 1990s for career pathways for workers” (Young, 2001, p. 33). The involvement of the ‘shadow state representatives’ ensured that “discourses of equity and redress, part of the liberation movement, [were] woven into regulatory frameworks” (Christie, 2006, p. 376).

The immediate challenge was to create a “unified system from the multitude of educational bodies which [had] governed South African education and training” (SAQA, 2012, p. 1) that would recognise learning from formal and informal educational settings equally and thus allow access to further education and training or the labour market itself.

So, the introduction of the NQF and its associated quality assurance structures was a direct response to the inequalities of the past and thus “in South Africa, quality assurance was linked not just to improvement of higher education but the transformation of the post-apartheid state” (Harvey, 2010, p. 7).

Just a year into democracy, the South African Qualifications Authority Act (SAQA) (no 58 of 1995) was promulgated, establishing a system to develop and oversee an NQF comprised of:

> three structural elements; the coordinating structure, the South African Qualifications Authority; bodies registered by the South African Qualifications Authority to set standards in particular areas of learning, generally referred to as National Standards Bodies [NSB’s]; bodies accredited by the South African Qualifications Authority to ensure that the standards set are in fact delivered. These bodies are generally referred to as Education and Training Qualification Authorities [ETQAs]. (SAQA, 2012, p. 5)

SAQA was the apex organisation charged with the development and maintenance of a national unified qualifications framework, on which NSB developed qualifications and criteria would be registered and against which ETQAs would ‘assure quality’ of service provision.

2.6 The South African National Qualifications Framework

The South African NQF shares many general characteristics with its international counterparts, including “a single system of levels for all qualifications; qualifications based on learning outcomes; modular/unitized qualifications; assessment based on explicit criteria” (SAQA, 2007, p. 44), and, taken holistically, the NQF “provides the context for provision, assessment, certification and quality assurance” (DHET, 2012, p. 61).

The NQF is at its most basic level a framework; a conceptual register that is organised as a “series of levels of learning achievements, arranged in ascending order from one to ten” (DHET, 2012, p. 71). It is intended to enable judgements of equivalence between

qualifications according to level descriptors and thus support movement into and within the NQF context. Based on the assumed parity of esteem established by the NQF between formal and informal learning, as well as the assumption that a qualifications framework would plot equivalences between qualifications to maximize horizontal and vertical mobility" (Christie, 2006, p. 378-9), it was envisaged that "opportunities would be opened for the disadvantaged, and learners would be able to progress through articulated qualification levels and coherent career paths" (Allais, 2011, p. 345).

The objectives of the NQF, from its conception, include the intention to

> create an integrated national framework for learning achievements; facilitate access to, and mobility and progression within education, training and career paths; enhance the quality of education and training; and accelerate the redress of past unfair discrimination in education, training and employment opportunities whilst contributing to the social and economic development of the individual and thus the nation. (DHET, 2012, p. 70)

The NQF was thus envisaged as a 'transformative policy' that was intended to extend access to quality occupational education by replacing all existing qualifications with outcomes-based qualifications (Allais, 2011; Allais, 2012a; Allais, 2012c; Cosser, 2001; Harvey, 2010). The architects of the NQF believed that by specifying outcomes instead of knowledge-based content, provision would become competitive and providers would be able to design programmes based on contextually relevant content that could be assessed comparably against outcomes. Further, it was hoped that knowledge would be emancipated by the framework: "the NQF was designed to remove the power of defining knowledge and skills from formal institutions; they would no longer define the benchmarks of what was worth knowing, nor be the only arbiters of what learners had achieved" (Allais, 2011, p. 346; Shalem, Allais & Steinberg, 2004, p. 5).

Learning outcomes would thus become the official "starting point in curriculum design and a mechanism for improving quality" (Allais, 2012a, p. 12). These learning outcomes were the new standard that deposed the old 'ivory tower' knowledge previously taught, they were "derived from an analysis of work functions, as an alternative to 'knowledge-based' curricula" (Allais, 2012c, p. 208).

The claim was that by focusing on outputs or outcomes of learning rather than the inputs of learning, the NQF promoted greater 'flexibility and autonomy' for sectoral qualification development (SAQA, 2007, p. 28). Further, it was hoped that the quality of learning would be positively influenced by outcomes which would allow for standardized, competitive learning regardless of institution, "because all providers would be offering programmes leading to the same outcomes" (Allais, 2011, p. 345) and "any provider could compete" (Allais, 2012c, p. 208). Outcomes would thus allow for emerging providers to start gaining market share whilst maintaining the credibility of achievement through the specification of standards.

Learning outcomes were seen as key to quality because "it was believed that because the learning outcomes would clearly contain the standard to be assessed against, qualifications would have credibility" (Allais, 2011, p. 347). So SAQA established "12 National Standards Bodies (NSBs) with many hundreds of standards generating bodies (SGBs) beneath them" (Allais, 2012a, p.12) to create national (as opposed to institutional) qualifications and unit standards based on learning outcomes. The outcomes were believed to "capture a 'sameness', or disclose an *essence* which is or could be achieved through a variety of different curricula and learning experiences" (Allais, 2012b, p. 3).

2.7 The South African Quality Assurance structures in relation to occupational learning

To regulate 'comparable' provision against these national standards, quality assurance bodies - Education and Training Quality Assurance bodies (ETQAs) - were established to quality assure occupational education[2] within twenty-three economic sectors under the SAQA Act (no 58 of 1995) and these existed as independent entities within Sector Education and Training Authorities (SETAs) and professional bodies;

> Education and Training Qualification Authorities ensure that assessment is carried out in accordance with the standards as they have been defined by the National Standards Bodies; that various assessors carry out their evaluation of learners consistently and fairly; and that individual providers of education and training deliver quality learning. (SAQA, 2012, p. 20)

Umalusi and the Higher Education Quality Committee (HEQC) were 'deemed accredited by the "General and Further Education and Training Quality Assurance Act" (SAQA, 2012, p. 113), to quality assure general and further education and higher education respectively,

[2] From the ETQA regulations R 1127 (Ch. 2, 9.1) of the SAQA Act (no 58 of 1995) the responsibilities of an ETQA were to;

a. accredit constituent providers for specific standards or qualifications registered on the National Qualifications Framework;
b. promote quality amongst constituent providers;
c. monitor provision by constituent providers;
d. evaluate assessment and facilitation of moderation among constituent providers;
e. register constituent assessors for specified registered standards or qualifications in terms of the criteria established for this purpose;
f. take responsibility for the certification of constituent learners;
g. co-operate with the relevant body or bodies appointed to moderate across Education and Training Quality Assurance Bodies including but not limited to, moderating the quality assurance on specified standards or qualifications for which one or more Education and Training Quality Assurance Bodies are accredited;
h. recommend new standards or qualifications to National Standards Bodies for consideration, or modifications to existing standards or qualifications to National Standards Bodies for consideration;
i. maintain a data-base acceptable to the Authority;
j. submit reports to the Authority in accordance with the requirements of the Authority, and
k. perform such other functions as may from time-to-time be assigned to it by the Authority.

And currently, ETQA responsibilities are delegated by the QCTO, very similar to the SAQA functions but *with quality promotion inexplicably absent*.

"these bodies were constituted as independent statutory bodies through dedicated parliamentary acts… [and] while they were *supposed* to comply with SAQAs accreditation requirements, they had the power to do their work independently" (Allais, 2012a, p. 19) and technically were not subject to de-accreditation (and thus, compliance with models prescribed) by SAQA.

Thus, the SAQA quality assurance approach was characterised by its focus on standard setting through the NSBs, on one hand, and quality assurance of learning aligned to these standards, on the other hand, and overall compliance to policy environments set up by the quality management systems; "the credibility of credits and certificates is entirely dependent on [this] assurance" (SAQA, 2012, p. 19).

The promulgation of the Skills Development Amendment Act (Act. 37 of 2008), the NQF Act (Act. 67 of 2008) and the repeal of the SAQA Act (Act No. 58 of 1995), in 2008, caused a huge upheaval within the quality assurance environment. ETQAs no longer existed (since they were established by R 1127 of the SAQA Act), having been replaced by Quality Councils of which there were only three; the already established Umalusi and CHE (Council on Higher Education and Training) and the newly established QCTO, mandated with the development of standards and quality assurance within three specific sub-frameworks of the NQF.

The QCTO was established by Government Gazette on 1 April 2010 and brought with it delegation of relationships and the apparent exclusion of the SETAs[3] from the new occupational education landscape that was being conceptualised. After many highly charged working groups, the QCTO agreed that SETAs would be considered for delegation based on merit and not be generally excluded. In addition, the SETAs were delegated the role of providing quality assurance[4] of the previously NSB-generated qualifications until they naturally expired in 2015, thus providing for the dual quality assurance landscape that we find ourselves in during the period of this research; SETAs are applying SAQA guidelines to NSB generated qualifications, while also working as delegated development and assessment partners within the QCTO landscape of standardised curricula and external assessment.

[3] Excerpt from minutes of ETQA/ QCTO forum 12 April 2012 includes the decision to request that SETAs be allowed to apply for delegated quality assurance roles in opposition of the initial decision that they would be excluded; 18 April 2012 motivation: 'The approval of SETAs and other ETQAs would enable quicker implementation of the QCTO process as the capacity and resources are already in place - Proposal for the motivation of SETA ETQAs as AQPs to be submitted to the 20 June [2012 QCTO] Council meeting".

[4] The QCTO confers on the SETA the following quality assurance functions for 'legacy qualifications'

a. Accredit providers for the qualifications or part qualifications as delegated by the QCTO
b. Monitor the provision of providers of learning programmes leading to qualifications or part qualifications in order to ensure that the accreditation criteria are being complied with
c. Evaluate learner assessment and the facilitation of moderation of learner assessment by provider
d. Register assessors to undertake assessment for specialised qualifications or part qualifications
e. Certify qualified learners
f. Maintain a comprehensive learner information management system
g. Upload learner data to the NLRD according to the NLRD load specifications
h. Perform such other functions consistent with the NQF and SDA as the QCTO may allocate to the SETA in writing

The South African National Qualifications Framework, like many others, has been through initial iterations and has recently been sub-divided, "through the National Qualifications Framework Act (No. 67 of 2008) to consist of three 'sub-frameworks' – one each for; higher education, general and further education, and trades and occupations" (DHET, 2012, p. 71), with a Quality Council, responsible for quality assurance within each sub-framework.

Figure 1 below provides a visual representation of the South African NQF and the intended parity between the General and Further Education and Training qualifications sub-framework (GFETQF), the Higher Education qualifications sub-frameworks (HEQF) and the Occupational qualifications sub-framework (OQF):

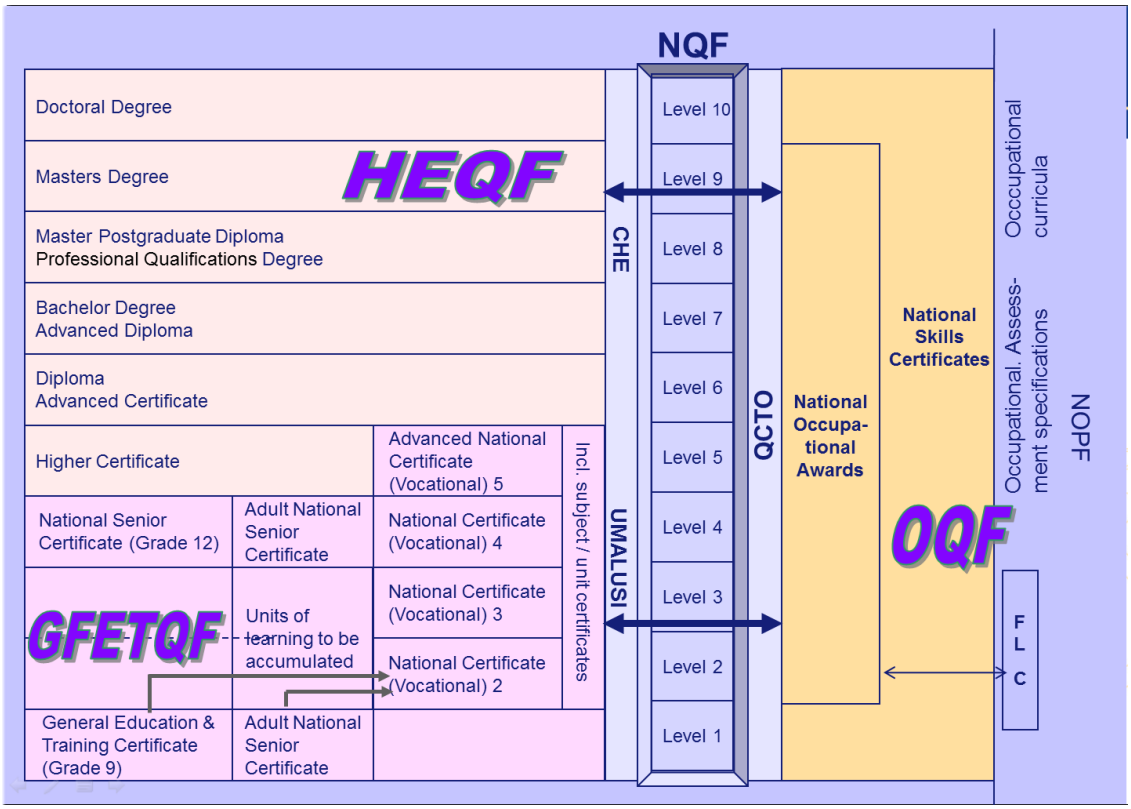


Figure 1: The South African NQF (Vorwerk, 2009)

The QCTO is thus ultimately responsible for quality assurance of occupational education but may, in terms of Section 26I (2) of the Skills Development Amendment Act (SDA) 37 of 2008, and the QCTO delegation policy of 2011, delegate any functions to a SETA.

Accordingly, the QCTO has formally delegated the quality assurance of the 'legacy' NSB generated qualifications to the SETA's until such time as these qualifications expire or are replaced by the new QCTO qualifications.

This means that although the QCTO have effectively replaced ETQAs, they have delegated the quality assurance of the 'legacy' system and its qualifications back to the original

custodians who should ensure the system comes compliantly and without undue disruption, to its natural end.

2.8 Quality Assurance Models

Firstly, a distinction between the notions of 'approach' and 'model' is required. Simons (2009) explicitly supports the use of the term 'approach' in relation to case studies as indicative of an "overarching … intent and methodological (and political) purpose" (Simons, 2009, p. 3). While the original statement pertains to case study research, the principles are adopted here to distinguish between a quality assurance approach and model, the latter understood in relation to Simons (2009) 'method', "reserved for techniques of research, such as interviewing and observing" (Simons, 2009, p. 3).

Likewise, this research conceptualises the difference between a quality assurance approach and model as the 'overarching intent and social purpose' and the 'implemented system', respectively. The techniques that are intended to assure learning constitute the quality assurance model that is guided by the overarching intent and purpose of its approach. It is thus the approach that informs the model that in turn, operationalizes the intent and purpose of the approach.

For Harvey and Newton (2004), models of quality assurance or "external evaluation falls into four types of activity: accreditation, audit, assessment and external examination" (Harvey & Newton, 2004, p. 150). As they briefly explain:

> accreditation refers to a process resulting in a decision that warrants an institution or programme; audit explores internal processes; assessment passes a judgement (often with a grading) usually about the quality of a teaching or research subject area; and external examination checks standards (be they academic, competence, service or organisational). (Harvey & Newton, 2004, p. 150)

Young and Allais (2004) also conceptualised four models but focussed on those that were most relevant to the South African context at the time, namely "examinations, validation, inspectorate, and the systemic evaluation model" (Young & Allais, 2004, p. 2). The first model is the nationally standardised examination used for exit from secondary schooling - the Further Education and Training band - and quality assurance is focused on achieving alignment between assessment and syllabus. For example: "syllabi are set nationally and subjects are examined nationally/provincially or through examination bodies" (Young & Allais, 2004, p. 2).

Young and Allais (2004, p. 2) then turned to the "validation model of quality assurance" which includes the conceptualization of decentralised "assessment as a site-based activity, which is moderated by a quality assurance agency" (Young & Allais, 2004, p. 3) for validation against the 'standard'. The third is the "inspectorate models" (Young & Allais, 2004, p. 2), used historically in primary schooling - the General Education and Training band - and is associated with provider accreditation, and the absence of a national exam.

Finally, systemic evaluation is evaluation at systems level and the review of the NQF between 2001 and 2007 is a typical example.

A scan of the current landscape reveals that there are two prevalent models for quality assurance of occupational education in South Africa. On the one hand, external assessment is used for school exit and to confer a 'license to practice' against trades and professions, and on the other hand, the "ETQAs …operate primarily with validation models" (Young & Allais, 2004, p. 3) that assures alignment to outcomes, not curricula and "following from the notion of validating assessment of outcomes achieved by students, with no notion of prescribed syllabus or central examination, comes the notions of provider accreditation and programme approval" (Young & Allais, 2004, p. 3). While accreditation is not a requirement of validation, ETQAs have followed a model of accreditation and validation of de-centralised assessment.

The two models pertinent to occupational learning are further discussed below under the broad headings of Decentralised Assessment as implemented by SAQA-accredited ETQAs and External Assessment as conceptualised by the QCTO.

2.8.1 The Decentralised assessment model

SAQA's conceptualisation of an outcomes-based national qualifications framework "introduced a decentralized approach to assessment and quality assurance, based on the idea that nationally prescribed learning outcomes should be the basis for course design, assessment and quality assurance" (DHET, 2012, p. 17). Hence, quality assurance should theoretically validate the alignment of assessment anywhere in the country against national learning outcomes. The SAQA model went a step further, prescribing an accreditation requirement for license to practice against a 'promise' of adherence to outcomes and in doing so hoped to promote standardisation while providing an 'assurance' of credibility.

Similarly, the European assumption is that accreditation:

> provides a way for the government to guarantee a quality threshold. Society at large is asking for a validation of the quality of study programmes since some public funds are going into it. Accreditation, as an appendix to EQA [external quality assurance], operates in this regard as a label, informing stakeholders and society. This is only possible because accreditation is a 'hard power', able to stop programmes that perform below a certain quality threshold. (Crozier et al., 2013, p. 23)

For the purpose of this review, the conceptual SAQA quality assurance system is informed by both Harvey and Newton's (2004) 'accreditation model' as a licence to practice and the 'validation model of quality assurance' (Young and Allais, 2004, p. 2) for monitoring the quality of decentralised, individual assessment.

The decentralised assessment hierarchy is depicted in the flow chart in Figure 2 below:

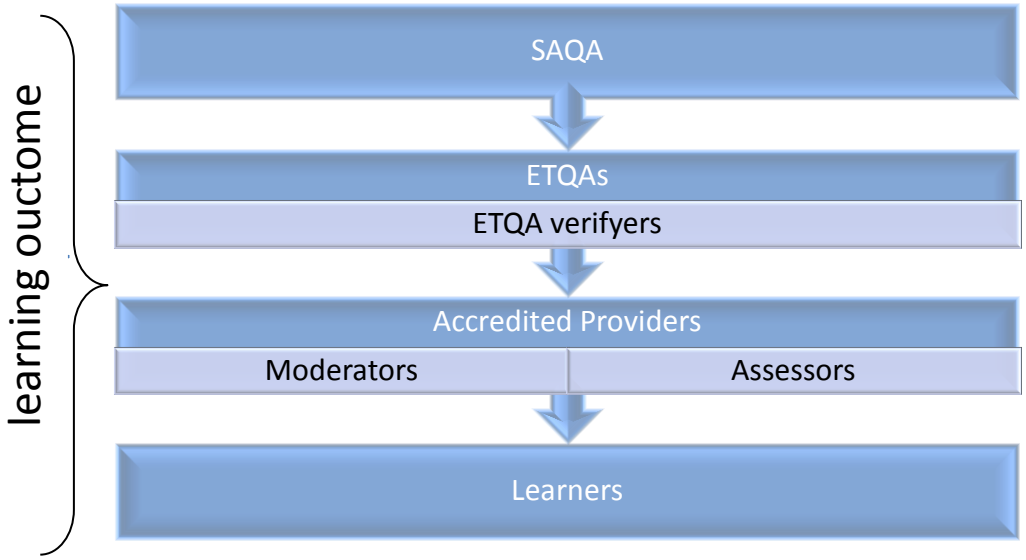


Figure 2: Decentralised Model Hierarchy

In order to assure quality in a decentralized system, a multi-layered model has evolved. SAQA-accredited ETQAs awarding institutional accreditation based on compliance with SAQA's core criteria to institutions to provide learning and assessment throughout the country. Validation activities were also included to verify that the site-based assessment of learning as conducted by individually registered assessors and moderators operating under the auspices of accredited training providers was aligned to learning outcomes and assessed accordingly.

This hierarchy of quality assurance precariously rested on the notion that learning outcomes could "hold the standard… [and] capture the essence of what would be taught across different learning programmes" (Allais, 2012b, p. 4). Therefore, it was assumed that by aligning learning programmes to a specified standard, learners would receive comparable quality of learning and quality assurors would be able to evaluate and ensure that the quality across provisioning sites was similar.

While mutually exclusive concepts, accreditation and validation have together, come to be synonymous with the SAQA quality assurance model.

2.8.2 Problems with Decentralised Assessment

Problems with the SAQA model and its outcomes-based assurance soon emerged. Christie (2006) states, in relation to the NQF, that:

> in policy terms, major weaknesses were soon apparent: first, as ideal-type frameworks, they did not have strategies for transforming actual conditions on the ground; and second, they tended to require greater capacity to implement than has

> been available in the bureaucracies and schools. There is not an education writer who omits to point out the gap between idealist policies and actual experiences. (Christie, 2006, p. 379)

Generally, the *idea* of a national outcomes-based system to improve access to quality learning, and the *reality* of the NQF, did not align: “if the National Qualifications Framework was first envisaged in terms of enhancing mobility and flexibility, how did it come to take shape as a rigid, codified system of control?” (Christie, 2006, p. 380)

Also, compliance with the envisaged system was fragmented and inconsistent, with ETQAs bureaucratically applying the SAQA accreditation and validation requirements, and Umalusi and HEQC providing quality assurance of their constituencies very differently; using external assessment for school exit and peer review for higher education, respectively.

The ETQA systems included many layers of audit, progressing systematically from ‘registered assessors’, to ‘registered moderators’ to ‘registered verifiers’, (Allais, 2012c, p. 213). These layers and their associated technical discourse have been criticized - in particular by the very labour movement that fought for transformation in occupational learning - as being too complicated and bureaucratic to navigate.

In addition, the registered assessors, moderators and verifiers were meant to enable standardization of the quality of outputs in the decentralized assessment system, but appear to have failed to achieve parity in reality, because the very standards against which they were making judgements are subject to different interpretation, and remain difficult to work with, narrow and technicist. Ultimately, quality assurance is “the exercise of informed judgement on the part of education professionals” (Crozier et al., 2013, p. 19) and if these professionals are not competent, fit or fair, quality assurance may become bureaucratically administrative and inconsistent.

This problem is compounded by the additional problem that “sometimes the people doing audits are not experts in the thing that is being done, but rather are experts in the quality management system that they are using” (Allais, 2009, p. 13). This, I would argue is a consequence of ETQA practitioners who follow a career path of movement between ETQAs instead of within economic sectors.

Shalem et al. (2004) provide a further critique in respect of the fact that the:

> internal coherence and the substance of a learning programme that are produced, in the main, by the logic of the discipline knowledge that informs it, cannot be externally regulated by a quality assurance process that condenses knowledge into learning outcomes. (Shalem et al., 2004, p. 2)

This revives the debate around the prioritising of learning outcomes at the expense of content knowledge. Shalem et al. (2004) dispute the claim that learning outcomes enable the sharing of meanings across contexts and argue that “judging whether a learning programme

meets the stipulate outcomes and enables students to attain them" (Shalem et al., 2004, p. 7), is by no means a clear-cut exercise, because education does not create a mass producible object but unique citizens, each of whom experience education and demonstrate competence differently.

Shalem et al. (2004) claim that by aligning to outcomes, knowledge is discounted as 'theory' in the pursuit of application skills that are developed from the 'straightforward' derivation of content from outcomes as opposed to the complex creation of cognitive distance which could allow learning to be de-contextualised and transferable. Due to the de-prioritising of the knowledge content, the authors claim that instead of achieving the NQF goal of transparency, outcomes in fact, create ambiguity and thus become barriers to progression.

Young and Allais (2004) agree, indicating that since the SAQA model has centralized outcomes only, it ensures compliance through accreditation and validation procedures. However, the absence of standardized curricula and assessments in the model "is likely to lead to a very un-standardised public system" (Young & Allais, 2004, p. 10) with too much reliance on institutions in terms of programme design. This problem is exacerbated when one considers that, in theory, training requires nothing more than registered individuals to assess and moderate learning as a site-based, contextualised assessment of individually demonstrated competence that could be 'validated' against a national outcome in theory but in practice produced very differently skilled individuals.

Another common critique argues that the SAQA model leads "to an organization putting all its energy into compliance, in order to get accreditation with one of the total quality management systems, instead of thinking creatively and consciously about quality" (Allais, 2009, p. 12). Compliance consumes time (and generally also a considerable amount of capital) and, as cautioned by Allais (2009, p. 13) "too much focus on compliance with process specifications can lead to individual workers not using their judgement and expertise appropriately". This is a pervasive criticism of the SAQA quality assurance system that is consistently accused of being bureaucratic without adding value to the provision of occupational education.

Finally, the highly specified outcomes and quality assurance criteria has led to a system that is unmanageable in large numbers as quality assurance bodies cannot evaluate large numbers of providers as meaningfully as they could smaller numbers.

2.8.3 External assessment

In dealing with the significant criticism of the variation between site-based assessment in the SAQA quality assurance system and with consideration of a quality objective of 'sameness', the conceptualisation of the QCTO has from the outset been concerned with the credibility of the certification of occupational training. The QCTO have responded by introducing planned curricula and national external summative assessments to prevent variation in content and quality of learning; "the purpose of an external summative assessment… is to promote consistency and credibility of occupational qualifications" (DHET, 2011a, p. 10).

The proposal for a quality assurance model based on external assessment has been met with positive curiosity by quality assurance bodies and welcomed by a labour market made wary by the varying competence of 'graduates'. This is certainly true in the experience of this researcher in relation to the financial services market that has long required board exams and regulatory exams for designations and 'license to practice'. The introduction of the external assessment will ostensibly shift the focus from bureaucratic quality assurance of the administration of learning to the end point of learning thus ensuring that exit from learning is strictly quality assured by administering identical tests under equal circumstances.

This move to external assessment for certification of occupational competence is fitting in the current climate of low confidence in education, where a large proportion of the labour market (and certainly the entire, highly regulated, financial services industry) filters out applicants at a minimum level of Matric. The introduction of a national external summative assessment for occupational qualifications gives credibility to the occupational learning pathway alongside the externally examined Matric which is currently the only (dubious) national marker of basic education achievement. Arguably, "Matric is a threshold because the labour market considers this standardized and externally moderated national exam to be a credible signal of quality and productivity" (Van der Berg et al., 2011, p. 9). Thus, the introduction of the external assessment model in occupational education should also bring with it, an extension of this credibility:

> the sudden jump in wages and the likelihood of employment at Matric and higher levels may be attributable to the perceived quality of the externally assessed and monitored national Matric examination versus the noisy and unreliable information in internal assessments. (Van der Berg et al., 2011, p. 9)

Generally, occupational certification leads to employment or progression, so assessment of occupational competence is automatically high-stakes and the introduction of external assessment should contribute to the creation of a pool of similarly competent occupational learning graduates – a feat not yet accomplished in this country.

While external assessment is certainly a step towards standardisation or sameness, the question to be asked is: 'whose sameness'? Gipps (1999, p. 370) cautions that assessment is intrinsically "value-laden and socially constructed". This is because "intelligence is defined by [the dominant group] and measured according to their characteristics" (Gipps, 1999, p. 361). Consequently, if the standard and requirements for achievement are written from a culturally positioned perspective, then the 'failure' to perform at such tests may continue to perpetuate the cycle of inequality justifying the distribution of "social roles that are not all equally desirable" (Gipps, 1999, p. 360).

Mons (2009) while supporting standardized assessment which, she claims, is typically used in response to a reputational crisis in education – redolent of the NQF situation - laments the lack of work in standardized assessment, stating that "little work has been done on the

educational theory underpinning standardized assessment… theories seldom explain exactly which processes in the standardized assessment model are intended to boost pupil attainment" (Mons, 2009, p. 11).

2.9 Why Quality Assure?

If we are unable to define quality, why do we bother to quality assure education? The most compelling reason for external quality assurance is that of 'accountability'. For example, in the Netherlands:

> the demand for accountability has become intensified for two reasons. First, democratic societies expect governments and those using public funding, such as higher education institutions, to ensure and to give evidence of optimum use of public funds. Providing proven quality not only in education but in all activities including research and services to society is part of any such undertaking to demonstrate fair use of tax revenues. (Kristensen, 2010, p. 153)

Barnett (1994, p. 178) concurs, indicating that "one benefit [of external quality assurance] is in it providing a measure of accountability to society as a whole, especially to the taxpayers who are ultimately meeting most of the bills for higher education".

Similarly, Allais (2009) reminds us of the public investment in South African education and the attendant responsibility of the education system to produce results and improve educational performance through effective quality assurance mechanisms. So quality assurance should assure the public and their political leaders of the 'quality' of education and training provision. Baijnath et al. (2001) add that quality assurance is important "nationally [because], it is the main way to ensure accountability to major stakeholders" (Baijnath et al., 2001, p. 83), likewise, Luckett (2007) indicates that "accountability for the expenditure of public money should be recognised as a basic democratic principle that, in a new democracy, such as South Africa, should be asserted and upheld" (Luckett, 2007, p. 111). Harvey and Newton (2004), agree claiming that:

> accountability has been the dominant underlying rationale for introducing quality evaluation… accountability is required because of the cost of massification, the need to account for and prioritise public expenditure, and hence the pressure to ensure value for both private and public monies… a second aspect of accountability is to students: assurance that the programme of study is organised and can run properly, and that an appropriate educational experience is both promised and delivered…. A third accountability purpose is the generation of public information about the quality of institutions and programmes. (Harvey & Newton, 2004, p. 151)

Moreover, Baijnath et al. (2001) elevate the issue of accountability from just a monetary issue, stating that "there is much pressure to measure whether higher education is fulfilling its role as an agent of social transformation" (Baijnath et al., 2001, p. 81). So we begin to see

a secondary accountability goal of quality assurance – that of assuring transformation - as well as quality.

Luckett (2007) supports the assertion that education is accountable to the transformation agenda:

> in South Africa, external quality assurance has been proposed as one mechanism of the state for achieving greater efficiency, effectiveness, equity and responsiveness in the higher education system (the 'transformation agenda'). In particular, quality assurance is seen as a means of ensuring high quality teaching and learning opportunities for all students, that is, contributing to the state's provision of equal opportunities for all. (Luckett, 2007, p. 98)

On a much smaller scale, the literature indicates that quality assurance can support self-improvement, that is: "external quality monitoring started with the expectation from the national level that the institutions themselves would develop internal processes leading to quality enhancement" (Kristensen, 2010, p. 154). This belief is shared in South Africa:

> external quality assurance will lead to the improvement of higher education management capacity, which will provide the conditions for high quality provision which in turn will produce large numbers of high quality (especially black) graduates, which will lead to national economic and social development. (Luckett, 2007, p. 98)

However, Harvey and Williams (2010) conclude "that accountability, compliance and, in some countries, control, are much more frequent rationales for external monitoring than improvement" (Harvey & Williams, 2010, p. 104).

Whether for accountability or self-improvement, problems arise because the quality assurance system is confounded by the "misalignment of the 'concept of quality' in reality with the 'operation of quality assurance processes'" (Harvey, 2010, p. 1).

Since quality in relation to education and training is unformulated the assurance thereof is equally hazy, therefore, circular argument is the order of the day. In fact, "both outside and inside academia, questions are raised about what constitutes quality, how to measure it and how to ensure that it is delivered" (Baijnath et al., 2001, p. 81).

In South Africa, almost two decades of quality assurance appears at most, to have no tangible deliverable that may be attributed to its activities. At the very least, there is certainly no documented measurement of its impact on quality education and social transformation. The following section will discuss what quality assurance can practically be expected to accomplish.

2.10 What should Quality Assurance be expected to do?

If we accept that external evaluation or quality assurance in South Africa is linked to a transformative policy aimed at redressing past inequalities, then quality assurance should be the sum of activities in place to ensure transformation in relation to the national transformational indicators.

But perhaps a more realistic purpose, and one that is also linked to this obligation, is simply to ensure that outcomes really are consistent across providers. If nothing else, quality assurance should ensure similar quality (even if quality itself remains undefined). This study argues that standardised curricula and validation of external assessment should be central to any attempt at standardising the quality of learning outputs.

The findings of the Umalusi (2007a) report suggest that "if it is felt desirable to have common standards across the system, there needs to be commonly developed specifications of content, concepts, and learning outcomes which are tested through a common, externally-set assessment" (Umalusi, 2007a, p. 46). So, for standardisation, on the one hand, "prescribed curriculum statements" (Umalusi, 2007a, p. 46) are required to provide direction to the educators and an external assessment on the other hand to ensure that exit from learning (and entry to the labour market) is dependent on comparable competence.

Harvey and Williams (2010) agree that curriculum and assessment are important, but add that "social, economic, political and personal contexts are powerful influencers and for quality monitoring to have an impact on student learning, the emphasis must be on curriculum, learning, teaching and assessment" (Harvey & Williams, 2010, p. 105). Quality assurance should, arguably, also ensure that standards of content and assessment and the manner of transfer is representative of the labour market requirements if it is to enable a redress of past discriminatory labour practices.

The only conclusion can be that quality assurance must accomplish what it sets out to do, whether determined internally or externally, and that this objective must address the element of 'sameness'. Further, if standardisation is to be achieved, then the model should be based on centralised curricula and external assessments and not decentralised delivery.

2.11 What has been the impact of the past 19 years of the NQF and Quality Assurance?

Jansen (2004) in SAQA (2012, p. 128) asks:

> How did such a good idea fall on such hard times? The idea of access and mobility; of quality and redress; of integration and achievement; of personal and social development; of progression and opportunity… how did such good ideas struggle to find expression in the practice of education and training? (SAQA, 2012, p. 128)

Certainly, the overwhelming sense from both the literature and personal experience is that the impact of quality assurance on the quality and redress of education has not been significant. Europe faces the same dilemma in relation to external quality assurance (EQA). Crozier et al. (2013, p. 22) states that "one methodological difficulty when measuring the impact of EQA on the quality of programmes: [is that] one cannot easily isolate the impact of EQA". There are so many extraneous variables impacting on the assimilation and construction of knowledge of the individual that the casual relationship between quality assurance and quality is not always clear. The other issue that plagues impact studies in relation to quality assurance of education, is that the conceptualisation of *impact* itself is not always clear - in fact, stakeholders expectations, and thus perceived impact, may vary significantly, leading one to wonder: 'whose definition of impact' and 'whose definition of quality' is being evaluated?

According to Jansen (2004) in SAQA (2012), one reason why

> the NQF has had minimal impact in the South African education and training system is quite simply that the NQF promised what it could never deliver in practice. This in part has to do with the nature and complexity of practice, but it has a lot to do with the idealism and euphoria of policymaking in the years immediately preceding and following the formal installation of a democratic government in 1994. Put bluntly, we got carried away. (SAQA, 2012, p. 128)

Jansen (2004) in SAQA (2012) continues to say that

> the NQF was to address 'employment opportunities' as well as 'economic development' as well as 'career paths' and of course 'redress past unfair discrimination.' I know of no policy in the world that can address all of these things in the ways envisaged, let alone all at the same time. (SAQA, 2012, p. 128)

These numerous and lofty ideas, borne out of generations of discrimination and representative of the hopes and expectations of a bitter majority found their expression in the transformative policy that was the NQF, while its logic may be disputed, its ideals were exemplary. Unfortunately, these ideals did not find fulfilment in the implementation of the NQF "because it lacked a credible *theory of action* that would take these good ideas and implant them in educational practice" (SAQA, 2012, p. 129).

This is a grave indictment when one considers that the

> South African NQF was conceived in the democratic labour movement… to deal with the legacies of job reservation and retrogressive and discriminatory training practices in the South African labour force by creating ladders of opportunity or learning and career pathways. (DOL, 2007, p. 1)

While proclamations of enhancing quality abound regarding "the principal role of each Education and Training Qualification Authority…to ensure the maintenance of quality"

(SAQA, 2012, p. 19), the reality is that ETQAs are caught up in the administration of ensuring compliance with their regulated functions, they themselves are audited with instruments that do not enhance quality but tend towards empty statements of compliance instead of engaging directly with the issue of quality of learning. The validation points of quality assurance appear to be the *administration of learning (*the quality management system and staffing, assessment system, the moderation process etc.) and not the quality of learning itself. This situation has led to significant critique that quality assurance is ineffective. Although I would argue that there are no clear criteria against which such a judgement can be made, as it is not clear what quality or effectiveness should look like. In the absence of a guiding statement for quality achievement and a specific and measurable (and achievable) means of engaging with the actual quality of provision, quality assurance bodies are condemned to implementing a model of bureaucratic compliance.

This conclusion is consistent with the fact that "most impact studies reinforce the view that quality is about compliance and accountability and has contributed little to any effective transformation of the student learning experience" (Harvey & Newton, 2004, p. 157). Inherent in this statement is the lack of engagement with the learning experience itself. Indeed "what is less often examined is what the approach adopted is supposed to do" (Harvey & Newton, 2004, p. 150)… and also 'who decides'?

Crozier et al. (2013) concludes that "the quality revolution has been marked by a lack of 'impact' research, particularly the impact of quality assurance processes on academic practice" (Crozier et al., 2013, p. 13) and Harvey (2010) agrees, stating that "quality assurance has avoided any real examination of the intrinsic nature of quality" (Harvey, 2010, p. 8).

The South African story mirrors that of Europe where the process of assuring quality is "seen by system-users and policy recipients as being more about improved systems and better bureaucracy, than improving the quality of learning and teaching" (Crozier et al., 2013, p. 10). Thus, whether assuring quality will lead to better bureaucracy or improved quality remains unclear.

2.11 Evaluation of Quality Assurance

Quality assurance is a relatively new practice in South Africa, and consequently, there is no objective benchmark with which to judge various quality assurance systems. This research attempts to iteratively create an analytic framework by which to evaluate quality assurance itself in order to contribute to broader debate and research about emerging quality assurance systems.

Young (2001, p.31) postulates that qualifications frameworks are comprised of three components, these are: a 'map of qualifications', a 'bureaucracy' and "agreements underpinned by mutual trust between users'. If one accepts the assertion of SAQA that "essentially the NQF is about quality assurance" (SAQA, 2012, p. 84) then Young's (2001)

components of a qualifications framework (the South African NQF in this case), can be argued to be the components of quality assurance also. These components provide a useful basis on which to construct an evaluative framework for quality assurance systems.

Young's (2001) first component, the "map of all the qualifications" (Young, 2001, p. 31) is the register of all national qualifications and is bounded by this study to include those developed and registered according to official processes only. The second component of the model is 'bureaucracy' and refers to the structures responsible for "registering qualifications, establishing standards, accreditation, quality assurance and monitoring of assessment" (Young, 2001, p. 31). The final component according to Young (2001) is the most intangible - that of "agreements" (Young, 2001, p. 31) which refers to institutional arrangements and agreements that are based on 'patterns of trust' and allow for successful transactions between the other components of the system.

In addition to the three indisputable components of quality assurance, another component that emerges from the literature is that of quality assurance being 'fit-for-purpose' (UNESCO, 2011, p. 11). This idea of purpose essentially renders quality assurance meaningless without a well-defined and explicit purpose. The fitness-for-purpose aspect focuses on institutional purpose, and deems 'quality institutions' to be those "that achieves the goals and objectives it has set for itself" (UNESCO, 2011, p. 23).

The judgment of 'quality' thus becomes aligned and relative to whatever has been stated as the purpose of the service. But to work within this approach depends on a well specified purpose, which is not always available and likely to be the root cause of quality deficiencies. Thus, in a context with varied definitions of quality, it is incumbent on any quality assurance agency, in this particular instance, the QCTO, to ensure that the definition of quality is clearly specified, as quality assurance practices and procedures will follow from the notion of 'quality'.

Barnett (1994, p. 168) cautions that "of any form of evaluation, a key question to ask is: who is in control?" Care must therefore be taken when considering the stated purpose of quality assurance models because of its 'political' nature, and consideration must be taken of: "Who will determine the purpose?' and What are appropriate purposes?" (UNESCO, 2011, p. 11).

In order to unpack the now weighted 'purpose', Barnett's (1994, p. 172) distinction between "power and enlightenment" model in relation to the nature of quality assurance is useful; the power axis ranges between external or internal control that is categorised as 'bureaucratic' and 'collegial' (Barnett, 1994, p. 172) respectively. The second axis, 'enlightenment*'* indicates "systems of evaluation which are intended to produce a measure of enlightenment" (Barnett, 1994, p. 174).

Barnett's (1994) 'Power and Enlightenment' model is depicted in Figure 3 below:

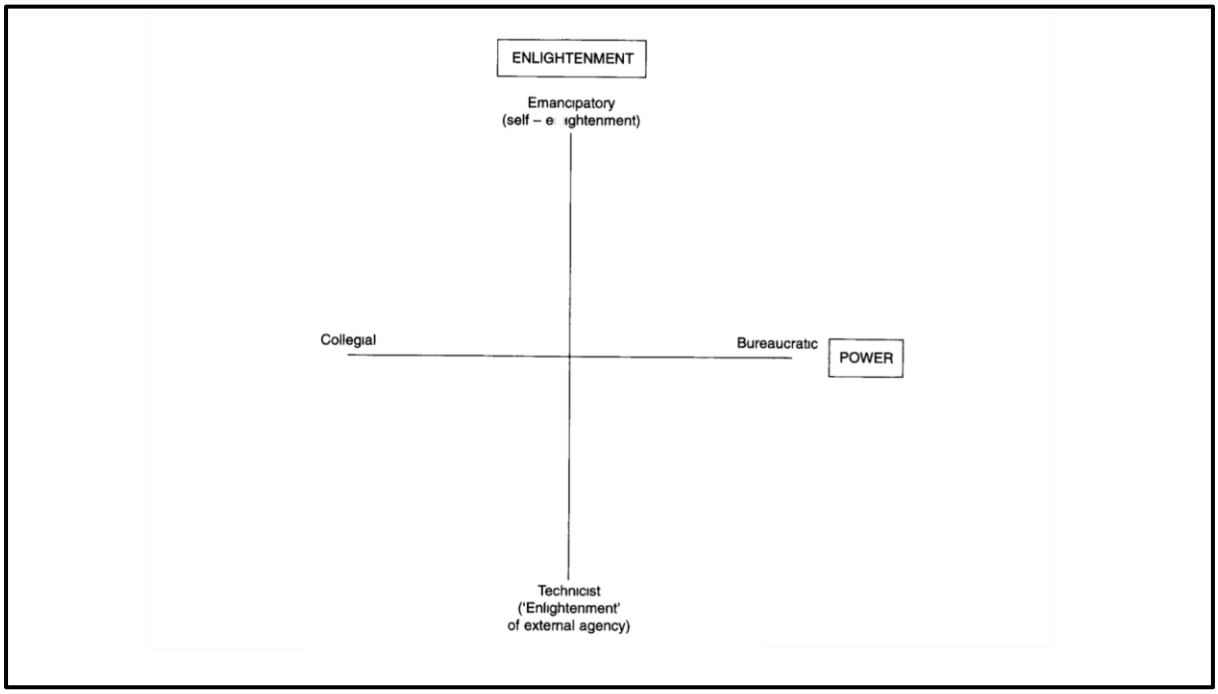


Figure 3: Barnett's (1994, p. 176) Power and Enlightenment Model

This framework was later updated to change the 'enlightenment' axis to 'purpose' (Luckett, 2007, p. 99), which provides broadly for the framework to be used here. For this study, 'purpose', on Barnett's vertical axis (Luckett, 2007, p. 99) is conflated with 'power' to establish whose interests are reflected in the purpose of quality assurance and thus enable the classifying of the 'purpose' of a quality assurance model as 'self-improvement' if internally motivated or 'accountability' if externally imposed.

In order to distinguish between accountability and self-learning, Barnett (1994) suggests considering "whether the actors *give an account* of themselves to others or [whether it] is it a vehicle by which the actors learn more about themselves?" (Barnett, 1994, p. 168) When the target audience is external, "the dialogical structure is contoured by unequal power relationships" (Barnett, 1994, p. 168).

2.12 Conclusions

In this chapter I have provided an overview of the available quality assurance literature. Like Barnett (1994), this research argues for the "possibility that we can begin to gain some *general* understanding of the alternative forms of quality assurance" (Barnett, 1994, p. 172, emphasis in original) and therefore explores quality assurance in education generally and quality assurance of occupational education in South Africa specifically.

This review provides an overview of the occupational education system in South Africa and the transformative imperatives that guided the establishment of its NQF. Although studies have been conducted in respect of outcomes-based education in South Africa and quality assurance of higher education specifically, it becomes apparent that research and analysis of the elaborate quality assurance system of occupational education established by SAQA and now transferred to the QCTO has undergone little, if no, direct evaluation, and that is the subject matter of this research.

The review also provided justification for quality assuring public education. This is in line with the argument of external power requiring assurance of 'accountability' for the expenditure of public funds as an on-going and powerful justification for quality assurance.

In relation to what quality assurance should be tasked with and whether it has achieved its objectives, the consistent emergent theme is the lack of a clear definition of what constitutes quality in general, and quality in education and training specifically, making it difficult to evaluate the quality assurance systems set up to promote and monitor quality.

Luckett (2007) helps by suggesting that

> an attempt to set up a conceptual framework for analysing quality assurance systems should focus not so much on how quality gets defined formally, as was on the agenda in the early 1990s, but rather on whose interests the quality assurance system serves. (Luckett, 2007, p. 99)

In the South African state-controlled education context, it can therefore be concluded that 'quality' is the achievement of the expectations of its primary stakeholder - the state. In the South African context, the state's interests have supported the notion of outcomes-based education (OBE) driving standardised quality of decentralised provision and assessment through the validation of assessment against outcomes and it can therefore be inferred that a key indicator of quality should be 'sameness'.

When considering the specifics of the systems introduced in South Africa after 1994, what is clear from the literature is that neither the accreditation nor the validation of provision against pre-specified learning outcomes have served the purpose of improving the quality or consistency of learning and assessment.

One of the main purposes of this research was the development and testing of an Analytic Framework with which to evaluate quality assurance systems. This review has provided the basis of the framework which will be further elaborated in the following chapter.

From UNESCO's (2011) fitness for purpose approach to quality assurance, that deems 'quality' education as that which achieves its stated purpose, and strengthened by the arguments of Luckett (2003) and Harvey (2010) who both agree that any evaluation of quality must first establish the purpose of the service, this review proposes '*Purpose'* as a key category for analysis. Purpose in this sense is made up of the 'rationale' for quality

assurance and is influenced by power – which Barnett (1994), described as the internal or external locus of control over quality assurance. Therefore, determining the power polarity should in turn provide insight into the purpose of the particular quality assurance model, as either "enhancing self improvement [or]… as state surveillance mechanisms [that] serve accountability purposes" (Mhlanga, 2008, p. 62).

The second level of analysis takes its cue from Young (2001) who describes a qualifications framework as inclusive of a **'***Map of qualifications'*. For the purpose of this research, this 'map' or register of qualifications can be understood as the NQF itself and is made up of the qualifications registered on the NQF and intended to enable *judgements of equivalence* in order to enable movement within the NQF. This is important for any evaluation of quality assurance because the map of qualifications is the standard against which provision is quality assured in order to support the objectives of the NQF in providing access and mobility (particularly for those previously disadvantaged).

The third emergent category that of '*Bureaucracy'* is also based on Young (2001) and understood as the quality assurance structures that assures learning and assessment:

> Essentially the NQF is about quality assurance. Access must be established to quality lifelong learning. It is quality that makes the difference. And quality does not happen by accident. Without a quality assurance system, the NQF's objective to enhance the quality of education and training is unattainable. (SAQA, 2012, p. 84)

Quality assurance thus takes on the role of assuring accountability – to the state and the public – of the provision of quality education and training. In line with Young's (2001, p. 31) explication that bureaucracy included the structures or bodies responsible for quality assurance, this research includes SAQA established structures with functions of setting standards, accrediting providers and monitoring assessment in the category of bureaucracy. Christie (2006, p. 379) adds that qualifications frameworks require substantial capacity and as such, indicators for capacity have been included in the category of bureaucracy, noting Allais' (2009, p.13) caution that even when capacity is available, those individuals involved in quality assurance may not be experts the service they are quality assuring.

Young's (2001) '*Agreements'* component has been included as the final category and refers to the trust relationships that bring education and training role-players (be they involved in provision or quality assurance) together and enable coherence and articulation within the NQF.

This category was thought useful as an indicator of the arrangements that should be in place to ensure effective implementation of an idealistic framework that in many respects was never really intended to realise what it set out to achieve. Clear roles and responsibilities as well as the context within which the NQF was implemented are further indicators of the extent to which the expectations set for the NQF could reasonably be achieved, in line with

the literature that argues that quality is relative; “context bound and … multi-dimensional” (Baijnath et al., 2001, p. 71).

These categories, *together*, make up the conceptual Analytic Framework.

This framework hopes to address the problem of measuring the tenuous notion of quality by acknowledging that quality is relative and linked to its “purpose and context” (Harvey, 2010, p. 4). Particularly when conceptualising quality within a fitness for purpose approach, quality is allowed to take on the characteristics expected of it. In this research, with the understanding that the notion of quality is being formulated by and for, a quality assuror, quality is most notably conceptualised as ‘sameness’ in line with the guiding principles of the NQF as intended to enable judgements of equivalence and comparable provision through “outcomes [that] were believed to capture a[n essence of] ‘sameness’ (Allais, 2012b, p. 3).

While many more interesting papers were accessed, from vocational education research in Europe to South African policy reform research conducted by the HSRC, it would appear that the vital and nuanced information in terms of this area of interest is limited and will need to be supplemented by an engagement with communities of expert practitioners, and of course, by analysing the official documents representative of each case. Much of what I would like to uncover will be around the expectations and purposes of measurement of quality assurance systems as opposed to empirical data regarding the actual evaluation of the implementation of these systems. Therefore, I turn now to a consideration of the research design.

The next chapter will explain the research design and methods and provide detailed information regarding the proposed evaluative framework.

Chapter 3: Research Design and Methodology

3.1 Introduction

In this chapter, I explain the research design and methodology followed. Firstly, the research question and case study design and method will be explained, then the Quality Assurance Analytic Tool will be discussed and finally ethical issues will be considered.

3.2 Research Question

Whilst conducting a preliminary literature review, there was a notable absence of evidence of impact or even evaluation, of 19 years of quality assurance in South African occupational education. In discussing quality assurance in general, Barnett (1994) provides some explanation for why this should be the case, stating that "there is a range of rival methodologies, connected with contrasting vocabularies, and all with plausible claims for our attention, although with no obvious way of deciding between them or of prioritising them" (Barnett, 1994, p. 172). This is a key problem as the concept of quality and the assurance thereof remains unclear and unjustified, respectively. What seems to be required is a relatively objective (yet non-bureaucratic) study of the systems that claim to evaluate quality.

This research is broadly about providing insight for future and emerging quality assurance models, and thus I wanted to know: *what is working in occupational quality assurance systems, and why*?

3.3 Research Design

This research aims to provide clarity in respect of the broad area of enquiry by engaging with three research questions. The previous section has attempted to understand the reasons for, and the achievements of quality assurance. This chapter provides the design of the qualitative study of the three selected cases that exemplify the two quality assurance approaches i.e.: the QCTO's external assessment model and the SAQA's decentralised assessment approach. Then the chapter attempts to provide an evaluative framework against which to measure emergent models of these approaches.

The case study approach was chosen as appropriate because the nature of the research is subjective and context-dependent and a case study approach would allow for the problematizing of occupational education in the South African context as guided by social imperatives and thus facilitate an enquiry into the impact and perceptions of credibility in relation to quality assurance.

Data from each case was analysed to identify the factors that have led to its success and in so doing, contribute to generating insights that may be generalizable in similar contexts,

noting of course that case studies produce “detailed, specific accounts of particular circumstances rather than broad, generalisable findings” (McMillan & Schumacher, 2010, p. 345). In the context of the paucity of research in respective of the quality assurance of occupational learning, these limitations are acceptable.

3.4 Case Study Approach

McMillan and Schumacher (2010, p. 24, emphasis in original) explain that a “case study examines a *bounded system*, or a case, over time in depth, employing multiple sources of data found in the setting”. They assert further that “whether we use the term *system, event,* or *case*, the emphasis is on a single instance of something or a single entity, not a methodology” (McMillan & Schumacher, 2010, p. 344-345, emphasis in original).

Thus, the need to explore the quality assurance phenomenon in detail led to the decision to use the case study approach to get to “know how results were achieved. Why some succeeded where others did not, and what the key factors were in the particular setting that led to the precise outcomes” (Simons, 2009, p. 14-15).

In the absence of evidence-informed practice, this research attempts to retrospectively piece together the rationale and justification for the emerging national quality assurance policy.

It was hoped that the case study approach would also allow the development of a general theory from the inductive analysis of data, context and emerging themes to inform the evolution of the proposed Analytic Tool.

The case study approach allows for multi-faceted engagement with the issues of quality assurance as these are manifested within specific models. The researcher was therefore able to engage with documents, policies, anecdotes and even high-ranking officials who “shape pertinent quality assurance issues, listen to their interpretation of their practice and [make] sense of what prevails in their world in terms of quality assurance” (Mhlanga, 2008, p. 68) in order to evaluate the different approaches (or cases) to quality assurance. This is in line with McMillan and Schumacher (2010), who propose that the benefit of case studies for purposes of policy analysis is to provide “a more complete understanding of complex situations, identify unintended consequences, and examine the process of policy implementation, which is useful for future policy choices” (McMillan & Schumacher, 2010, p. 440).

Like Mhlanga (2008) who looked at quality assurance of higher education in South Africa through comparative cases based in South Africa, Botswana and Zimbabwe, this study compares models across contexts in a “multi-site study” (McMillan & Schumacher, 2010, p. 24) and in so doing, the contextual (including rationale) variances that had influenced the initial conscious preference and continued or perceived credibility of the implemented quality assurance model were identified.

Finally, it must be noted that the researcher is a 'participant observer' in the national quality assurance system, due to being an 'insider' in the context of quality assurance in occupational learning. As a SETA ETQA employee, the researcher has access to 'inside information' and has well-established networks with high-ranking officials in the systems being researched, thus, there is an inherent advantage over any outsider who would attempt to replicate this research. Due to this insider status, appropriate reflexivity in terms of conscious efforts to "minimize predispositions" (McMillan & Schumacher, 2010, p. 333) was employed during data gathering and analysis to ensure that the research remained as objective as possible.

However, Barnett (1994) cautions that the researcher's own perceptions and manner of processing data

> spring from more deep-seated beliefs as to what counts as quality. But, more significantly, these beliefs over what counts as quality themselves derive from even more fundamental assumptions as to the ideal nature of higher education [which]… will generate a particular view of what counts as quality, and that in turn will prompt us to use some forms of evaluation methodology and arm ourselves with certain performance measures rather than others. (Barnett, 1994, p. 171-172)

Therefore, throughout this research it was important to be conscious of, and accept, that "discussions about quality, evaluating quality and improving quality cannot be seriously accomplished as a value-free enquiry" (Barnett, 1994, p. 172).

3.5 Method

This research follows the case study approach by using the process outlined in McMillan and Schumacher (2010):

> An extensive description is given of the case[s] and its context, based on a wide variety of data sources. A few key issues are presented so that the reader can appreciate the complexity of the case. These issues are drawn from a collection of instances in the data to detect issue-relevant meanings. Finally, the researcher develops summaries (i.e. patterns) or 'lessons learned', which are useful to participants or to readers when applied to similar cases. (McMillan & Schumacher, 2010, p. 383-384)

In order to present these cases, McMillan and Schumacher's (2010, p. 368) process was adapted, as follows:

> Phase 1: Field work (recording data)
>
> Phase 2: Transcribing data and collating case data

Phase 3: Analysing and interpreting data

Phase 4: Narrative representation of findings

Phase 5: Discovering patterns: “a pattern becomes an explanation only when alternate patterns do not offer reasonable explanations central to the research problem” (McMillan & Schumacher, 2010, p. 380)

All three cases were developed iteratively using data collected via interviews and document analysis.

3.6 Selection of Cases

A non-probability approach was used to select three cases that “happen to be accessible or who may represent certain types of characteristics” (McMillan & Schumacher, 2010, p. 136). Cases were purposively selected to reflect:

a) perceived credibility (based largely on National Learner Records Database – NLRD - performance reports) and;

b) specific permutations of the centralised and decentralised assessment quality assurance approaches.

The benefit of using the case study approach was that cases could be purposefully selected as “instrumental cases [to] provide insight into a specific theme or issue” (McMillan & Schumacher, 2010, p. 345). Convenience sampling (McMillan & Schumacher, 2010, p. 137) then narrowed the selection of cases based on “practical constraints, efficiency and accessibility” (McMillan & Schumacher, 2010, p. 137) and ensured that selected cases also happened to be conveniently accessible due to proximity or collegiality.

Two cases were selected to represent the SAQA Decentralised Assessment Approach; one implementing what I have designated the ‘Accreditation and Validation’ model and another, the ‘Delegation and Validation’ model. The former conducting all quality assurance activities as delegated by SAQA and now the QCTO and the latter, assigning its delegated quality assurance activities (to professional bodies) while retaining accountability for these activities in terms of the delegation. One final case was selected to represent the QCTO’s centralised assessment approach. Each case was selected on the basis of how they exemplify the approaches in different ways and contexts.

a) The SAQA Decentralised Assessment Approach
    - MerSETA: Accreditation and Validation model
    - FASSET: Delegation and Validation model
b) The QCTO Centralised Assessment Approach
    - NAMB (National Artisan Moderation Body): Trade Test model

Individual respondents from each case institution were sourced by contacting the head of institution or as applicable, the Quality Assurance Head of Department (HOD), and formally requesting a representative to be interviewed on behalf of the institutional model - in two of the three cases, the HOD themselves volunteered (and consented) to participate.

Originally, the research was conceptualised to include a professional body with delegated quality assurance functions and an interview was requested and conducted with the head of training. However, this was not successful, either because the interview schedule at the time was too technical or because the delegated assurance role was not quite the same as the statutory accountability for that pervasively elusive characteristic, 'quality'. The professional body was therefore excluded from this analysis but the interview conducted was critical for informing updates to the interview schedule which proved to be initially conflated and ambiguous.

3.7 Data Collection

The data collection strategy included a variety of methods for gathering multiple data for each case in order to provide several points of information. Data was collected through documents obtained from participants themselves, through internet searches (in particular for approved policies) and academic database searches as well as directly through interviews and questionnaires.

The first step was a preliminary literature review to establish what research existed in relation to quality assurance and to inform the analytic framework. Thereafter, the official and working policies and official documents governing quality assurance were analysed and finally, interviews – the primary source of data - were conducted and the follow-up questionnaires were distributed. Each of the steps is explicated further below.

3.7.1 Documentary Analysis

Policy, regulation and 'official documents' - as generally defined by McMillan and Schumacher (2010, p. 361) as informal and formal documents such as "minutes, working papers [and] newsletters, brochures… public statements and news releases" - respectively, as well as data gathered from participants themselves in semi-structured interviews, was analysed by applying the Quality Assurance Analytic Tool *(*Appendix 1) described further below.

In particular, the quality assurance policies of each institution were analysed to identify, and in some cases to validate, the implementation of the quality assurance model. In the case of NAMB, which is a newly-established entity, dependent on the structures and policies of the QCTO, it was difficult to access documents. This may have been because of an absence of official website and official documents (draft documents could be accessed from SETA websites but remained third-party accounts and while informing evaluation were not included for direct analysis). The absence of approved policies and the various draft or pending

versions accessed via the SETA websites was a concern and is further explored in the case analysis provided in Chapter 4.

Finally, national documents that contained guiding imperatives, such as the DHET (2012) Green Paper on Post-school Education and Training and the subsequent DHET (2013a) White Paper on Post-school Education and Training as well as minutes and papers from national quality assurance structures all informed the analysis conducted.

3.7.2 Semi-structured Interview

The interview questions (Appendix 2) were developed with consideration of the Analytic Tool, piloted with a peer from a professional body with quality assurance functions, and then used to gather data related to the three cases. The first (subsequently excluded) interview with a professional body also played the role of a pilot as the original pilot tested the interview with a peer practitioner who was very familiar with the language and phrasing used and therefore was able to respond easily to convoluted concepts which were later simplified for ease of understanding and response.

The interview schedule semi-structured, including questions "phrased to allow for individual responses" (McMillan & Schumacher, 2010, p. 206), contained prompts for clarity and allowed for flexibility.

The interviews were conducted at either the premises of the institution selected for the case study or, in one case, at a coffee shop. Each lasted between 45 minutes to an hour and all were audiotaped with written consent. The Information and consent letters that were used are attached in Appendix 4. The recordings were then transcribed for coding and analysis.

The interview with the professional body was the first interview to be conducted and immediately raised issues of interview veracity. Firstly, the respondent had not answered the questions in the sequence required, responding instead to a range of questions in one lengthy narrative. This raised another issue: I was over-confident in my ability to type, and needed to audio-record the interview for capturing later. Using an electronic schedule pre-populated with the interview questions and space for response also proved challenging when the respondent provided information to more than one question which necessitated toggling through the schedule to capture responses in the appropriate section. This distracted me, as researcher, from engaging with the participant during the interview.

Consequently, the professional body interview was excluded from the research but this experience enabled a more authentic piloting of the interview tool. Changes to the interview were immediately made and certain questions were changed and clarified (for example: I picked up that I was asking two questions in one question). Other questions were added for context, such as: 'What does your sector look like'. Finally, the researcher decided not to capture responses directly into a computer, but rather to transcribe after the interview from audio recordings to allow for adequate engagement.

The final schedule covered the areas of standard setting, quality assurance process, objectives and structures to provide data on the 'map of qualifications', 'bureaucracy', 'purpose' and 'agreements' respectively.

3.7.3 Follow-up questionnaire

A follow-up questionnaire was also developed (Appendix 3) and updated after the professional body interview. It asked specific questions around standard setting, assessment and objectives of quality assurance to provide additional data against the same components focused on in the interview. In each case, the interview was followed up by the electronic request to submit the questionnaire with attachments, electronically, within a month.

The questionnaire was aimed at gathering more data around the same categories interrogated through interview in order to triangulate data. Although all three questionnaires were submitted, this proved to be weak strategy due to insufficiency of response (in some case not all the questions were answered in full or at all) and validity (in others, responses did not tie up with the question).

I attribute this problem to the fact that I did not pilot the questionnaire. For the most part, the data from the questionnaires (although it was analysed) was eventually excluded as irrelevant.

3.7.4 Participant Observation

A participant observer is defined as a "researcher who both observes and takes part in group activities" (McMillan & Schumacher, 2010, p. 350) thereby gathering naturally occurring information. While the pure observation method was not employed, by the very nature of the researcher's work, discussions about quality assurance policy is frequent during quality assurance forums and for this reason these observations and recollections have also been included.

It needs to be noted that observation was not the primary method used for this study. The primary method of data collection was, as above, the interviews.

3.8 The Analytic Tool

Quality assurance is a relatively new practice in South Africa, and consequently, there is no objective benchmark against which to judge quality assurance systems. This research has iteratively created a proposed Quality Assurance Analytic Tool to facilitate judgements about quality assurance itself, in order to contribute to broadening the debate and research about emerging quality assurance systems. This was both a tool used in, and after improvements and refinements during the research process, an outcome of, the research.

Operationalising the qualifications framework as quality assurance systems is useful as it allows for the borrowing of categories from the overarching framework and thus provides the measurement indicators for the subsequent data analysis. Therefore, Young's (2001) three

components; the 'map of qualifications', 'bureaucracy' and 'agreements' and the UNSECO's (2011) notion of purpose that was influenced by Barnett's (1994) and Luckett (2007), have been used to construct and refine the Quality Assurance Analytic Tool.

This analytic tool will be used to mediate between ideas about quality assurance and the data that is gathered as it attempt to measure the current and proposed models of quality assurance.

The analytic framework is visually represented below in Figure 4:

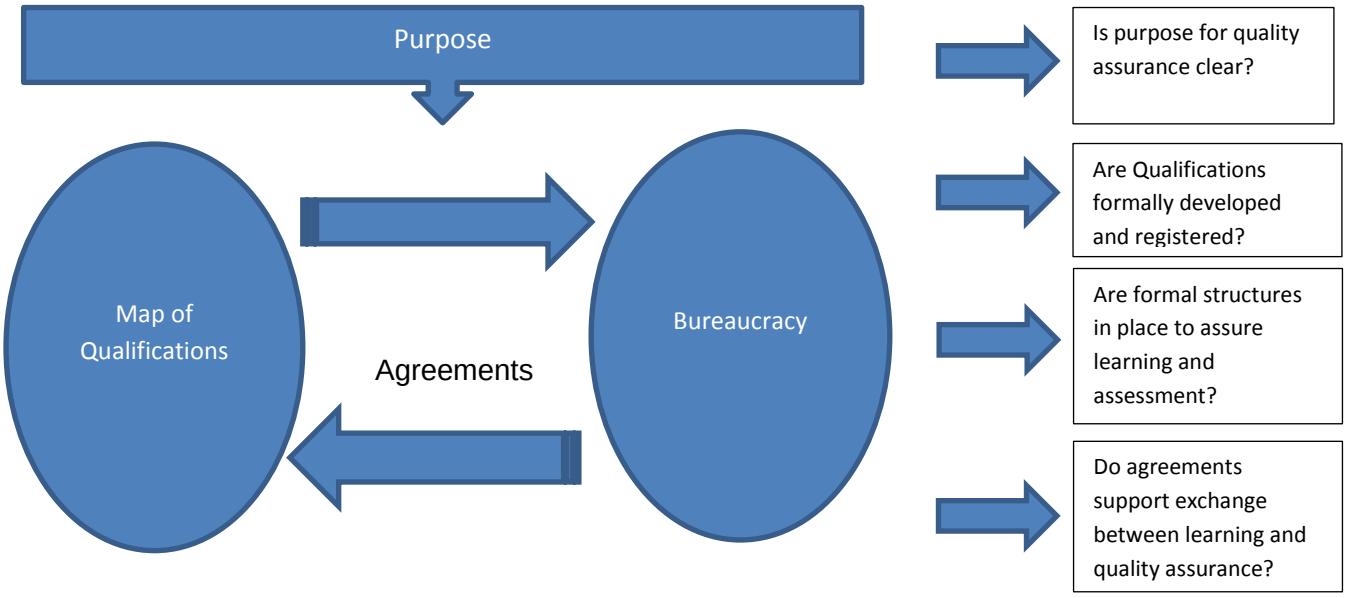


Figure 4: Quality Assurance Analytic Framework

An assumption is made that applying the four questions above to the selected quality assurance systems could elicit a judgment as to their effectiveness and in doing so, enable certain recommendations for the emerging national quality assurance model.

The analytic framework provides a set of categories, as well as demonstrating the relationships between them, on which to model an analytic tool to evaluate the quality assurance systems. The decision was made to work at the level of system as this encompasses both the intended approach and implemented model. This decision was taken to accommodate evaluation of the emerging QCTO approach, which is currently still being conceptualised and piloted. It is hoped that the higher level of analysis will also enable the development of indicators against which to either evaluate or develop a proposed occupational learning quality assurance system.

Category 1: Purpose

The category of purpose was aligned to UNSECO's (2011) notion of purpose as influenced by Barnett's (1994) 'power and control' concept that was later updated by Luckett (2007).

The codes used for the category are listed below;

Category	Code
Purpose **Is the purpose for quality assurance clear?**	P1. **Rationale for Quality Assurance is clear** – identifies whether rationale/ purpose for implementing quality assurance is explicit, understood and available.
	P2. **Quality Assurance is aligned to NQF principles** – the NQF intended to enable judgements of equivalence amongst "standardised, competitive learning" (Allais, 2012c, p. 208) based on "outcomes [that] were believed to capture a 'sameness' (Allais, 2012b, p. 3) even though provision and assessment was decentralised under SAQA. This code checks the level of 'sameness' that is enabled through quality assurance activities (in particular, institutional accreditation and verification of assessment) and external assessment under the QCTO model.
	P3. **Definition of quality** - checks whether a definition for quality is available against which achievement may be measured through quality assurance activities.
	P4 **Internal control (interests of the academics: self-improvement)** – identifies whose interests are reflected in the purpose. If actors are learning more about themselves then the quality assurance is internally controlled for purposes of self-improvement.
	P5 **External control (tax payer/ government: surveillance)** – identifies whose interests are reflected in the purpose. If actors are giving an account of themselves to external bodies then the quality assurance is externally controlled for accountability purposes.

'Purpose' refers to the stated reasons for quality assurance and what it is trying to accomplish. Specific analysis will be conducted to determine the 'purpose' of the quality assurance model and to identify the definition of 'quality' that underlies the purpose. This will then lead to analysis of internal logic as the purpose and practice of quality assurance should relate to each other.

Purpose will also be evaluated according to a 'power analysis', based on Barnet (1994) who proposes a model of categorising the nature of quality assurance that is premised on the distinction between "power and enlightenment" (Barnett, 1994, p. 172). The power-axis ranges from external to internal control categorised as 'Bureaucratic' at one pole and 'Collegial' (Barnett, 1994, p. 172) at the other, respectively.

All the selected cases (and in fact, all NQF-registered education and training) are subject to external control as they were all established as a "state surveillance mechanism" (Mhlanga, 2008, p. 62) to assure provision education and training. Understanding that the locus of power of quality assurance is external and thus linked to 'accountability' will provide insight into how and why the set objectives should be achieved.

Barnett (1994) provides the sole indicator used in this study to determine the locus of power, and thus, whether the quality assurance system is one of 'Accountability' or 'Self-Improvement'. Barnett (1994) explains that the target audience of the quality assurance signals where the power lies and when the audience (and power) is external, "the dialogical structure is contoured by unequal power relationships" (Barnett, 1994, p. 168). The locus of power is thus determined according to whether "the actors *give an account* of themselves to others or [whether it] is it a vehicle by which the actors learn more about themselves" (Barnett, 1994, p. 168).

Purpose (and its associated 'power analysis') will influence the remaining three components of the quality assurance system, and in supporting the purpose, the internal logic of these components will be sought and measured to establish if these are effective.

Category 2: Map of qualifications

The category of map of qualifications was taken from Young's (2001) conceptualisation of the components of a qualifications framework.

The codes used for the category are listed below;

Category	Code
Map of Qualifications **Are qualifications formally developed and registered?**	Q1. **Qualifications are registered on the NQF** – the literature review discusses the NQF as a framework or 'conceptual register' that is intended to enable 'judgements of equivalence'. This means that qualifications must be formally registered to allow for the 'parity of esteem' that quality assurance is purported to facilitate. This code validates the registration of qualifications through a search of the NQF itself.
	Q2. **Standards are set through official structures** – as above, if the NQF is to enable 'parity of esteem' then the setting of standards must be comparable and within a singular model. In fact, the setting of 'learning outcomes' is fundamental to the SAQA system – as these outcomes "became the official starting point in curriculum design and a mechanism for improving quality" (Allais, 2012a, p. 12) because they are assumed to enable standardised delivery since they contained the "standard to be assessed against" (Allais 2011, p. 347). The QCTO model similarly

	prescribes a formal standard setting process for nationally registered learning outcomes. This code seeks to gather information regarding standard setting.
	Q3. **Standards are linked to career pathway** – the concept of a unified national framework… to organise and replace existing Apartheid-associated qualifications and to enable the recognition of workers skills is associated with "COSATU's proposals in the early 1990s for career pathways for workers" (Young, 2001, p. 33). It was the advocacy of the trade unions for transforming education and training in line with economic reconstruction and redress that resulted in the outcomes-based (and work-aligned) nature of the NQF standards and qualifications. According to Allais (2012c, p. 208), learning outcomes "were derived from an analysis of work functions". This code checks the alignment between standards and careers.

The 'Map of qualifications' can be understood as the NQF itself but for the purposes of this study, it is the qualifications registered on the NQF and allocated for quality assurance to the particular Quality Assurance Body (QAB) – each map is therefore an excerpt from the total set of qualifications registered on the NQF.

In terms of this category, data will be generated in terms of the development through official structures and NQF registration of learning standards that are linked to career pathways. The official development and registration is important because it provides assurance of 'Accountability' to the public and state, while the connection to career pathways is equally important, as this study focuses on occupational learning and the emerging QCTO quality assurance model that was conceptualised to address a number of issues related to the original implementation of the NQF, among these is the lack of alignment of education and training to workplace skills requirements.

Category 3: Bureaucracy

The category of bureaucracy was also taken from Young's (2001) conceptualisation of the components of a qualifications framework.

The codes used for the category are listed below;

Category	Code
Bureaucracy **Are formal structures in place to assure learning and assessment?**	B1. **Policy and process for quality assurance functions is available** – Young (2001, p. 31) refers to quality assurance bodies (such as SAQA) responsible for "registering qualifications, establishing standards, accreditation, quality assurance and monitoring of assessment" as the 'bureaucracy'. These quality assurance responsibilities are implemented through systems and structures such as that which SAQA set up in terms of the NSBs and ETQAs. This code therefore identifies whether there are in fact formal structures (and if they have systems and policies) in place to quality assure learning and assessment as required by SAQA (and now, the QCTO).
	B2. **Quality assurance is aligned to national requirements** – SAQA introduced a "decentralised approach to assessment and quality assurance, based on the idea that nationally prescribed learning outcomes should be the basis for course design, assessment and quality assurance" (DHET, 2012, p. 17) and prescribed an accreditation requirement for license to implement nationally prescribed outcomes. The QCTO on the other hand, introduced external assessment into the model and this code checks the bureaucracy's adherence to the prescribed model (decentralised or decentralised with external assessment).
	B3. **In whose interests are judgement made** – according to Luckett (2007, p. 99) the evaluation of quality assurance systems should focus on "whose interests the quality assurance system serves" and this code was included under this category – and not purpose – because it aimed to look at how the implemented quality assurance system (as opposed to the proposed purpose), enabled the interests of one group over another. Mhlanga (2008, p. 62) also indicated that "quality assurance systems are replete with power tensions".
	B4. **Resources are adequate/ appropriate to implement quality assurance** – this code seeks to establish whether the bureaucracy's resources are adequate and appropriate, in line with Christie's (2006, p. 379) contention that qualifications frameworks "require greater capacity to implement than has been available in the bureaucracies and schools" and Allais' (2009, p. 13) caution that even while capacity may be available, "sometimes the people doing audits are not experts in the thing that is being done, but rather are experts in the quality management system that they are using", respectively.

'Bureaucracy' in terms of Young (2001), is the actual quality assurance structure that assures learning and assessment. In this study, it is understood as a category that encompasses the structures, policies and practices of the quality assurance model - when policies and procedures were publically available and accessible (on the relevant websites), the coding indicated strong bureaucracy. This category also looked at the alignment between the quality assurance model and national requirements – this being decentralised assessment through accredited providers or external assessment through the NAMB model. Additionally, this category looked at the resources of the quality assurance structure to determine adequacy and appropriateness.

Category 4: Agreements

The category of agreements was also taken from Young's (2001) conceptualisation of the components of a qualifications framework.

The codes used for the category are listed below;

Category	Code
Agreements **Do agreements support exchange between learning and quality assurance?**	A1. **Institutional arrangements in place** – Young (2001, p. 31) explains that these are the "practices and agreements that underpin the trust on which the role of qualifications in progression, promotion and transfer of learning is based." Subsequently, if the NQF is to enable progression, then the qualifications that are registered on the framework must be underpinned by trust relationships between and amongst providers and quality assurance structures established to monitor and support the progression. This code checks the delegated or statutory arrangements that underpin learning and quality assurance thereof.
	A2.**Responsibility of Quality Assurance Body (QAB) is clear** – In line with contention above that quality assurance should enable agreements for progression, comes the requirement that the bodies responsible for quality assurance understand their unique responsibilities within the cycle of learning and quality assurance and execute activities in line with a clear mandate.
	A3. **Responsibility of quality assured is clear** - In line with the contention above that agreements should enable mobility and progression, comes the requirement that the training providers being quality assured understand their unique responsibilities within the cycle of learning and quality assurance and execute activities in line with a clear mandate.
	A4. **Context** – the literature review discusses the notion of quality as

	relative – "context bound and … multi-dimensional" (Baijnath et al., 2001, p. 71) and Harvey (2010, p. 4) adds that the "analysis of quality should not be detached from purpose and context". Therefore, this code sought to identify the quality assurance context in relation to the expectations of stakeholders and further to establish whether context had any adverse or positive effect on the trust arrangements that enabled progression, i.e. would a more professional environment naturally result in more effective agreements?

'Agreements' here is understood as the formalised institutional arrangements (from the delegation or legislative mandate for quality assurance, to the accreditation relationship) that bind provision and quality assurance to the broader objectives of the NQF. These arrangements are based on 'patterns of trust' that enable transactions between different components of the system. The bodies responsible for each component should additionally have a clear understanding of their responsibility in respect of these arrangements. Finally, the category also looks at the context within which the arrangements are formalised, linking back to the literature that claims that the analysis of quality of education and training is context dependent.

3.9 Data Analysis

This research used the "focused synthesis" (McMillan & Schumacher, 2010, p. 439) method of analysis in which a variety of data and "sources beyond published articles" (McMillan & Schumacher, 2010, p. 439) was analysed in order to gather and synthesize information about each of the three cases holistically.

The data included: interview transcriptions; responses to a follow up questionnaire; approved policies and regulations; official website publications and audited annual reports. An inverse coding analysis was conducted wherein the desired categories; 'map of qualifications', 'bureaucracy', 'purpose' and 'agreements' were detailed as indicators such as "Qualifications are registered on the NQF" for 'Map of qualifications. The data was then coded according to pre-determined categories. The patterns that emerged were aligned to categories and those that did not were rejected as inconsistent and the codes were iteratively refined. The final set of codes per category looks markedly different and has much fewer indicators than originally developed. However having fewer indicators may have diluted the analysis because each indicator then had to be used for various data.

According to McMillan and Schumacher (2010, p. 367), "qualitative data analysis is primarily an inductive process of organizing data into categories and identifying patterns and relationships among the categories". While inductive analysis was not widely used, it certainly was useful when considering responses to the interview in particular, that did not

neatly fit into the pre-determined categories. This inductive analysis generated patterns of ‘sameness’ and ‘size of sector’.

Comments and patterns were soon overwritten with new comments, proving that “the process is iterative and recursive, going back and forth between different stages of analysis” (McMillan & Schumacher, 2010, p. 367). Whilst completely disheartened at first, I accepted that predetermined conclusions may not be neatly validated. Instead I realised that inductive analysis is the process through which qualitative researcher’s synthesize and make meaning from the data, starting with specific data and ending with categories and patterns. In this way, more general themes and conclusions could emerge from the data rather than being imposed prior to data collection (McMillan & Schumacher, 2010, p. 367).

3.10 Validity and Reliability

Case studies are often disparaged as being too subjective and lacking generalizability, but are ideal when “a holistic, in-depth investigation is needed” (Tellis, 1997, p. 1). In order to ensure the rigor of research, issues of validity and reliability must be considered.

To resolve the concern for validity, Tellis (1997) proposes the use of “multiple sources of evidence as the way to ensure construct validity” and this was accomplished by gathering interview, documentary and naturally occurring evidence. This cross-validation is referred to as triangulation which is defined as “a means of cross-checking the relevance and significance of issues or testing out arguments and perspectives from different angles to generate and strengthen evidence in support of key claims” (Simons, 2009, p. 129). Tellis (1997) goes further to say that “triangulation increases the reliability of the data and the process of gathering it” (Tellis, 1997, p. 9). Mouton (2001, p. 150) supports the notion that case studies have inherently high construct validity if multiple, verifiable evidence sources are considered.

Validity was enhanced by the use of “mechanically recorded data” (McMillan & Schumacher, 2010, p. 330) for the direct and accurate transcription of the participant interviews.

Finally, reliability was established to a certain degree by the replication, or reference to a similar project - Mhlanga (2008) - which focused on quality assurance of higher education in South Africa through comparative cases based in South Africa, Botswana and Zimbabwe.

3.11 Strengths

A strength of the case study approach is that it allows for a multi-faceted perspective to be developed from a collection of policy analysis, vignettes and quotes and thus enables participant’s “co-construction’ of [their] perceived reality” (Simons, 2009, p. 23). A particular strength of the approach for this research is the flexibility of case studies that allow the utilisation of varied methods of data collection. Further, the fact that the researcher was in

possession of data collected during years of professional engagement with quality assurance structures and policy at a national level allowed for further insights. The status of the researcher as a 'peer' allowed the researcher access to closed national quality assurance forums and high level officials and documents within established networks.

3.12 Weaknesses

An inherent weakness of the approach is that generalisability is limited. However, in this case, by looking at different models in the same context, common trends may become more prominent. Nonetheless, the results of these differentiated cases cannot be widely applied as they are most relevant to the specific context and operations under study. So, like Mhlanga (2008) stated: "the findings of my study can best be transferable to similar institutions rather than generalized" (Mhlanga, 2008, p. 73).

Furthermore, case studies often do, and this research certainly did, produce huge amounts of data that is either not directly relevant or "difficult to process" (Simons, 2009, p. 24).

Finally, subjectivity is inherent in a process that uses inductive analyses and depends largely on the participant's perspective. Interviews are also particularly subjective (McMillan & Schumacher, 2010, p. 205) and are guided by the researchers' values and interests. Thus, due to the qualitative nature that relies on interpretation and validated opinion, the values and biases of the researcher could also have skewed data analysis and produced invalid results.

Also, in this case study, the respondents may have withheld information that they believed the researcher was already aware of (through work engagement) and therefore may not have responded as fully and comprehensively as they may have with an unfamiliar researcher. They may equally have withheld information that they believed may have cast their institution, or themselves, in a bad light.

3.13 Ethical Issues

According to Cohen, Manion and Morrison (2000), there are three main areas of ethical concern (Cohen et al., 2000, p. 292) that can impact on interviews, namely; "informed consent, confidentiality, and the consequences of the interviews" (Cohen et al., 2000 Cohen 292).

In this respect, written informed consent was obtained at the level of HOD of quality assurance as well as informed consent of the participant. While confidentiality could not be guaranteed due to the nature of the research, pseudonyms were used to assure a certain level of anonymity. The refusal to participate in this study was offered but not taken up by any participant.

Another ethical issue considered was that the researcher is currently in the employ of an ETQA and thus represents one of the models under investigation. This concern was moderated by awareness of the researcher's positions and professionalism on the part of the researcher whose primary interest was in informing an improved quality assurance approach, which is in fact in the best interest of the ETQA and researcher anyway.

Due consideration was also taken of the inherent power, influence or collegial relations between the researcher and the respondents, as the occupational learning space is small and practitioners are generally familiar with each other. This led to an additional concern that practitioners could have been responding in a manner that masked deficiencies, or withheld information relevant to the success or failure, of a quality assurance system in order to 'protect' themselves, their organisation and even the researcher. While this is always a risk when interviewing human subjects, the researcher drew comfort from each participant's professional credibility.

3.14 Conclusion

In this chapter I have outlined the case study design of this research as well as provided an overview of the proposed Quality Assurance Analytic Tool that was designed to inform data analyses. The following chapter presents analyses and discusses the data from the three case studies.

Chapter 4: Findings and Discussion

4.1 Introduction

This chapter presents the findings of the three instrumental cases evaluated against the Quality Assurance Analytic Tool in respect of the broader question: *What is working in occupational quality assurance systems, and why*?

The discussion begins with the case of MerSETA, a powerhouse in the SETA landscape and a high performing ETQA that implements the SAQA decentralised assessment model. The focus is then turned to FASSET, the financial sector SETA whose ETQA also implements the decentralised assessment model, but where quality assurance functions are further delegated to professional bodies. Finally, the case of NAMB is explored. NAMB represents the quality assurance model of the QCTO and is the statutory assessment partner for all listed trades.

Semi-structured interviews[5] with high ranking quality assurance officials from each case formed the basis for analysis, which was corroborated with policies, annual reports and where relevant, official websites.

[5] Full transcripts of interviews are on record at the University of Witwatersrand and the page numbers refer to these transcripts.

4.2 The Case of MerSETA

Situated in Melville, in South West Gauteng, the MerSETA building is a magnificent and contemporary glass and stone structure that announces itself proudly to an artistic local audience who assumedly are not familiar with or interested in its doings. The physical MerSETA structure has an aura of formality that is mirrored by the professional component of its impressive staff complement of 221 permanent employees (MerSETA, 2013, p. 59).

According to its website, "MerSETA, the Manufacturing, Engineering and Related Services Sector Education and Training Authority is one of the 23 SETAs established through the Skills Development Act (no. 96 of 1998)"[6] and has remained licensed through the transition to the current structure of 21 SETAs.

As the name implies, MerSETA looks after the skills development interests of the manufacturing and engineering sector, a large and varied economic sector that includes both professions such as engineering and trades such as motor mechanics. The SETA is made up of 'five chambers', representing the following subsectors:

- Metal and engineering;
- Auto manufacturing;
- Motor retail and component manufacturing
- Tyre manufacturing; and
- Plastics.[7]

Together these chambers

> *"comprise approximately 44000 companies, with a workforce of approximately 600 000"* (MerSETA Interview, p. 5).

Even through the economic downturns, the manufacturing and engineering sector has proved to be "one of the most resilient sectors in the country, doggedly accounting for 15% of South Africa's economy" (MerSETA, 2013, p. 13). This is consistent with interview statements of size of sector:

> *"we have a large sector… I'm not trying to market anything. We have a very large sector"* (MerSETA Interview, p. 13).

The sector's buoyancy is reflected in the increased levy income (which is a tax of 1% payroll in the sector): "the MerSETA levy income grew by 11% in the 2012/13 financial year over prior year to reach R1 021 billion" (MerSETA, 2013, p. 14).

In line with the size of the labour market it serves, MerSETA was (in the period April 2011–March 2012) one of the biggest contributors of skills to the national New Growth Path

[6] MerSETA (n.d.) retrieved from http://www.merseta.org.za/TrainingQualityAssurance.aspx accessed on the 24.12.2013
[7] MerSETA (n.d.) retrieved from http://www.merseta.org.za/AboutUs.aspx accessed 24.12.2013

Economic Development target of an additional 50 000 qualified artisans by 2015, certificating 2819 of the total 7 629 artisans certificated nationally in that period. This was almost a thousand more than their counterparts in the Mining sector and two thousand more than Indlela (DHET presentation – excerpt attached as Appendix 5), traditionally the single national trade test centre in South Africa (NAMB Interview, p. 4).

The SETA is acknowledged by its peers in various quality assurance forums as both effective and credible, with strong governance structures, and, this year, obtained "another unqualified financial report – the 13th since its establishment" (MerSETA, 2013, p. 13).

A search of their official website clarifies that as a statutory levy-grant institution that enables the training of required skills for its labour market, the "MerSETA does not train, instead it facilitates the process of training *by paying grants; registering moderators and assessors; identifying scarce skills; accrediting training providers; monitoring the quality of training and implementing projects to close the skills gap*".[8]

As an entity delegated quality assurance functions for by the QCTO (and previously accredited as a quality assurance authority by SAQA), the MerSETA has consistently been recognised as compliant and high performing by SAQA's National Learner Records Database (NLRD) division[9] that manages national learner achievement data and the upload of sectoral learner achievements from each ETQA, including Umalusi and the Higher Education Quality Council (HEQC).

4.2.1 MerSETA Data Analysis

All relevant quality assurance guidelines were downloaded from the MerSETA website and analysed according to the predetermined categories along with the interview transcripts.

The following is the data in respect of MerSETA's quality assurance model and evaluation of this model against the categories of the Quality Assurance Analytic Tool.

4.2.2 MerSETA Quality Assurance Model

The QCTO delegation is conferred on the SETA and not the division within the SETA that was previously accredited by SAQA as an ETQA. However, like all other SETAs, the delegation is assigned internally to the ETQA because the delegated functions and 'map of qualifications' are identical to that of the previous SAQA accreditation. This creates the continued context for the MerSETA to implement its decentralised assessment quality assurance model. According to the MerSETA participant:

> "*We accredit our providers as everybody else does"* (MerSETA Interview, p. 8).

Thus, implying that there is consistency with the SAQA process.

[8] MerSETA (n.d.) retrieved from http://www.merseta.org.za/TrainingQualityAssurance.aspx accessed on the 24.12.2013, emphasis added.

[9] NLRD performance records for three consecutive uploads are on record at the University of Witwatersrand.

The accreditation function is guided by the MerSETA criteria and guidelines that provide the basis for decentralising the provision of 122 full unit-standard based qualifications currently registered on the NQF and discussed in more detail below (MerSETA Interview, p. 5). Concurrently, MerSETA sees its role in quality assurance as "the complete or partial evaluation, validation, monitoring and auditing of all occupationally directed unit standards and qualifications related to the Manufacturing, Engineering and Related Services Sector as currently registered on the NQF" (MerSETA, n.d.a, p. 6).

Validation not only provides the physical verification of learning and achievements, but also confirms that all evidence is accounted for and checks the credibility of assessment, which, if compliant, recommends upload to the NLRD and provides the primary motivation for continued provider accreditation.

Accreditation applications are completed and supported regionally – first through the Client Liaison Officer (CLO) in the region (MerSETA interview, p. 8) and then verified on site by a Quality Assuror and finally recommended 'in committee' by the Review Committee chaired by the organisations Chief Operations Officer (COO) (MerSETA interview, p. 9).

Figure 5 below provides an overview of the accreditation process:



Figure 5: Accreditation Process[10]

[10] MerSETA, (n.d.) retrieved from http://www.merseta.org.za/TrainingQualityAssurance.aspx accessed on 24.12.2013

This is where objectives and process started to uncouple –the MerSETA itself has clearly articulated its aim to meet the NQF objectives in its organisational mission statement, and is obligated by both the original SAQA and the current QCTO delegation to do so. However, the objectives of the NQF are transformational statements, of redress, integration and access to quality, that have no comprehensive specification of the measurable outputs of these objectives. The apparent result, as outlined below, is detail-oriented *administrative* compliance, with very little quality assurance engagement at the level of provisioning *possible*.

The documentation that supports the accreditation process requires formal strategies and policies: "the company has a formal strategy for addressing the implementation of the NQF objectives" (MerSETA, n.d.b, p. 3), and it appears that, certainly at the application stage, administrative compliance is required against the set criteria and not necessarily with the advancement of the NQF objectives, and in particular, to the enhancement of 'access to quality education.'

Once accredited, providers may conduct site-based training and assessment. The MerSETA prescribes three stages of assessment, "the diagnostic assessment, formative assessment and summative assessment" (MerSETA, n.d.c, p. 8). Each stage is further elaborated; "the diagnostic assessment is specifically used to identify training needs and to compile the learner's development plan" (MerSETA, n.d.c, p. 8), while "formative assessments intends to measure whether the knowledge, skills, and attributes which were the intended outcomes of a learning intervention are transferred to the workplace" (MerSETA, n.d.c, p. 9). Finally, summative assessment is defined as "the final assessment against a national unit standard or a combination of unit standards to determine whether the learner has achieved integrated competence" (MerSETA, n.d.c, p. 9). It is important to note that all assessment, including the final summative assessment is de-centralised and developed and conducted under the banner of institutional accreditation by registered assessors and moderators.

After assessment, internal moderation is conducted at provider level as it is the responsibility of the provider "to ensure that all assessors who assess against a particular unit standard or qualification make use of comparable assessment guides and make similar and consistent judgements about a candidates competence against registered unit standards or qualifications" (MerSETA, n.d.c, p. 15).

External moderation (or 'verification') of the site-based assessment and moderation activity is then conducted by MerSETA verifiers to assure a national standard that is consistent across provisioning sites. Verifiers are professional quality assurors whose main function is to evaluate the assessment and internal moderation process:

> *"we have a group of 14 qualified artisans in the quality assurance team"* (MerSETA Interview, p. 11)

who specifically "monitors the performance of assessor and moderator" (MerSETA, n.d.c, p. 16) to ensure that "two or more constituent providers deliver the same standard of

consistency when assessing" (MerSETA, n.d.c, p. 15). The validation of these verifiers is direct and evidence-based (evaluating all learner assessment evidence) but is completely removed from the actual learning and assessment (or internal moderation) process. Due to the decentralised assessment (conducted on site by providers) this model is reliant on the competence and integrity of the agents in the assessment process.

The decentralised assessment model is equally reliant on credible moderation, both internal and external, to assure external stakeholders that the decentralised assessments of accredited providers result in similar enough, if not identical, levels of competence in graduates.

Category 1: Purpose

When considering whether MerSETA had a clear purpose, this study evaluated the following indicators:

- Internal or external control;
- Clarity of rationale for quality assurance;
- Definition of quality is available;
- Quality assurance promotes 'sameness.'

Control

In terms of whether the actors are giving *"*an account of themselves to others or [whether it] is it a vehicle by which the actors learn more about themselves" (Barnett, 1994, p. 168), the MerSETA case is undoubtedly a case of external quality assurance, in line with the 'accountability' approach, as it is an organisation that implements quality assurance functions (as delegated by the QCTO) in relation to providers of education and training. These providers are thus the actors that are providing an account of themselves to external agents.

The MerSETA itself is also responding to external delegation as the QCTO is now responsible for occupational quality assurance, including those traditionally quality assured by ETQAs. In respect of the QCTO delegation, the MerSETA's "ETQA Unit was formally delegated the quality assurance functions for all reregistered NQF qualifications [by the QCTO] for the next five years or until replaced by occupational qualifications" (MerSETA, 2013, p. 141).

Rationale is clear

MerSETA should then articulate a purpose which is aligned to that of the QCTO. Unfortunately, such a statement does not exist in the public domain as a search of the QCTO portal hosted on the SAQA website confirms that no stated purpose is available for the QCTO. However, the website does direct delegated partners to a code of conduct that includes advancement of the objectives of the NQF.

In addition, the delegation of quality assurance to SETAs included the condition that the performance by the SETA of its delegated function must advance the objectives of the NQF. This leads one to a reasonable conclusion that as directed by its delegation and enforced by the QCTO code of conduct, the purpose of the MerSETA quality assurance activities is to advance the objectives of the NQF.

In response, the MerSETA mission is based on that of the National Skills Development Strategy[11] which itself articulates the NQF objectives, "to increase *access* to high *quality* and relevant skills development and training opportunities in order to reduce *inequalities* and unemployment and to promote employability and participation in the economy"[12].

This statement includes the NQF objectives of access, quality, the redress of past discrimination and personal development towards economic and social development.

An additional focus – perhaps the more tangible – is that of artisan development;

> *"Our drive and our mission and our targets are all lined up and linked to artisans or, ja, towards artisans. I would say that's our main focus"* (MerSETA Interview, p. 3).

As an institution, MerSETA actively supports artisan development; evidenced in their Annual Report (MerSETA, 2013) that speaks of supporting the DHET '2013: Year of the Artisan' and providing evidence of their performance against artisan targets as well as stating that their CEO is chair of the national Artisan Development Forum.

What remains unclear is what quality assurance objectives are set in support of artisan development (this would be set as strategic operational goals and thus beyond the scope of this study) and whether the NQF objectives do in fact guide the activities quality assurance.

Definition of quality

No definitions of quality could be found in any of the MerSETA documents reviewed. This came as little surprise in the context of the national lack of definition. However, the participant's response in interview to a question about impact implied that there is an underlying assumption about quality that centres around

> *"…customer satisfaction, learner satisfaction, throughput rate and standardization"* (MerSETA Interview, p. 12).

While the above are all plausible indicators of quality the research cannot conclude that there were any comprehensive definitions of quality, as none were explicitly labelled as such, as was evident from the document analysis.

[11] The mission of the National Skills Development Strategy that directs all SETA activities, is "to increase access to high quality and relevant education and training and skills development opportunities, including workplace learning and experience, to enable effective participation in the economy and society by all South Africans and reduce inequalities" (NSDS III, 2011: 6)

[12] MerSETA (n.d.) retrieved from http://www.merseta.org.za/AboutUs.aspx, accessed on 24.12.2013, emphasis added

Quality assurance promotes 'sameness'

However, the criteria of 'sameness' was a strong theme in the MerSETA documentation;

> *"from the learning material all the way through to how we decide to make a judgement call on accreditation – is all done standardised and there's no subjectivity"* (MerSETA Interview, p. 12).

This statement was made in response to the question regarding the impact quality assurance has on learning and assessment. While not a direct response, it is apparent that the participant felt that the evidence of an effective quality assurance system was the ability to make objective judgements and thus enable consistency or standardisation of provision.

Additionally, the guidelines for assessment include the statement that moderation "exists to ensure that all assessors who assess against a particular unit standard or qualification make use of comparable assessment guides and make similar and consistent judgement about a candidate's competence against registered unit standards or qualifications" (MerSETA, n.d.c, p. 15) and includes in its outline of moderation, the external validation by the ETQA.

The research can therefore comfortably conclude that MerSETA's model of quality assurance does in fact support 'sameness'.

Category 2: Map of qualifications

When considering whether MerSETA had an adequate map of qualifications, this study evaluated the following indicators;

- Registration on the NQF;
- Standards linked to a career path;
- Standards set through official structures.

Qualifications are registered on the NQF

In respect of the 'Map of Qualifications' MerSETA quality assures 122 NQF- registered unit standard based qualifications (SAQA, n.d. attached as Appendix 6). The online search of the NQF was conducted by filtering the NQF search engine using the category 'Quality Assurance Body'– this generated a list of all *currently* registered NQF qualifications that are quality assured by MerSETA, regardless of delegation, level or type.

The MerSETA's 'Map of Qualifications' ranges between NQF levels 1 to 5, and comprises of mostly certificates (traditionally distinguished by a 120 credit minimum, equating to approximately 1200 learning hours) - but includes two diploma qualifications (distinguished by 240 minimum credits, equating to approximately 2400 learning hours), both on level 5; the National Diploma: Inspection and Assessment (Non-Metallic) and National Diploma: Rubber Technology.

Table 1 provides indication of the number and spread of the qualifications in the map of qualifications:

MERSETA

NQF LEVEL	TOTAL QUALIFICATIONS	RATIO
NQF 1	1	0.8%
NQF 2	30	24.6%
NQF 3	34	27.9
NQF 4	41	33.6%
NQF 5	16	13.1%
TOTAL	**122**	**100%**

Table 1: Merseta Map of Qualifications

Generally, MerSETA appears to be managing its 'Map of Qualifications' effectively. Records of the National Learner Records Database (NLRD) in relation to bi-annual ETQA uploads of sectoral achievement to SAQA's national register, show that in terms of general performance[13], MerSETA has managed to consistently maintain 'Green' status, which is a performance achievement of 75% or above.

Table 2 below provides a summary of MerSETA's performance over three NLRD upload cycles:

MERSETA NLRD PERFORMANCE	Sept 2012	March 2013	Sept 2013
Active Qualifications	120	121	127
Qualifications without learners to be de-registered	47	51	55
Qualifications without learners to remain registered	5	7	3
Total	**172**	**179**	**185**
Total CUMULATIVE learners uploaded	**97903**	**98132**	**109640**
Status	Green	Green	Green

Table 2: Merseta NLRD Performance 2012–2013

[13] NLRD Performance is calculated in terms of activity, learner uptake and performance against targets agreed with DHET. A separate report is issued for compliance – relating to timeous and consistent data uploads

Quality assurance activities resulted in the facilitation of 229 unique leaner uploads from accredited providers to the NLRD between September 2012 and March 2013 and another 11508 in the period until September 2013. It is assumed that the duration of artisan training (three years) prior to assessment, is the cause for the low upload number between 2012 and 2013 and using the same logic, the reason for the high upload number between March and September 2013.

Standards are linked to a career pathway

According to the participant, approximately 35 of the qualifications are aligned to listed trades:

> "*I stand to be corrected; about 34 to 35 listed trades"* (MerSETA Interview, p. 5),

while the qualifications supporting professions in the sector, such as Engineering, are quality assured by their respective professional body.

The levels of the qualifications support the notion that the MerSETA is focussed on artisan training (leaving professional skills development, associated with the NQF levels 5 and above, to the relevant professional bodies).

Further, the qualifications, when sampled, provided evidence of correlation of the qualifications to career pathways (or listed trades in this instance).

By way of example the following trades and NQF qualifications are linked; the Mechatronics Technician (listed as Trade 671203) and National certificate: Mechatronics NQF 3 (SAQA ID number 67609), Air-conditioning and Refrigeration Technician (listed as trade 642701) and the Further Education and Training Certificate: Air-conditioning, refrigeration and ventilation NQF 4 (SAQA ID number 65509), Plastics Manufacturing Machine Setter and Minder (listed as trade 714208) and Further Education and Training Certificate: Plastics manufacturing NQF 4 (SAQA ID 49451) are all examples of listed trades that have related qualifications registered on the NQF and quality assured by MerSETA.

Standards are set through official structures

In general, MerSETA had adequate qualifications registered on the NQF, all were developed according to the appropriate structures (evidenced by the indication of SGB on each registered qualification) and these qualifications when sampled, correlated to the list of Gazetted trades and therefore, to a career pathway. Finally, as indicated above, the MerSETA enjoys a high uptake of qualifications; this suggests that the qualifications have a high level of credibility with students and employers.

Category 3: Bureaucracy

When considering whether MerSETA had an effective bureaucracy, this study evaluated the following indicators:

- Policies and processes available;
- Resources are adequate and appropriate;
- Quality assurance is aligned to national requirements.

Policy and process for quality assurance is available

In respect of policies and procedures, MerSETA appears to be effective:

> *"we have our own QMS and our ISOE standard, we review our policies for effectiveness, stuff like that"* (MerSETA Interview, p. 12).

The policies accessed from the website were version controlled and clearly labelled – a testimony to the standard of the QMS. The Annual Report adds that "during the period under review, the unit successfully managed to maintain the ISO 9001: 2008 status after undergoing a three year circle assessment by PricewaterhouseCoopers. The certification has been extended from 30 August 2012 to 29 August 2015" (MerSETA, 2013, p. 145).

Resources are adequate and appropriate

The participant further stated that resources are adequate to serve the large sector:

> "*We have sufficient people out there in the field… if somebody in Kimberly wants accreditation on some or other trade that's not regularly used we have a group of 14 qualified artisans in the quality assurance team and we can then send them down there"* (MerSETA Interview, p. 11).

In addition, the organisation provides local services through the

> "*Client Liaison Officer (CLO) from the regional office*" (MerSETA Interview, p. 8).

There is an apparently well-functioning centralised administrative system that, according to the participant coordinates and collates information from the large regional presence.

In fact, in response to what made the quality assurance so effective, the participant responded:

> *"I think that our system allows for proper record keeping and this is all captured electronically and whatever is not electronically is kept in proper metro filing system. So I think the admin around it, the turn-around time and the flexibility… and the presence in the regions"* (MerSETA Interview, p. 11).

The centralised administration also provides for a separation of duties between the quality assurance functions and data and certification as all quality assurance reports are uploaded to the system for administrative evaluation:

> *"The individuals go through the moderation report and assessment reports, see if everything was clearly indicated and signed off as competent, is then declared a qualification obtained.*

> *And certification has now moved from quality assurance and it is also done by central admin*" (MerSETA Interview, p. 10).

While this additional check may be precisely what the detractors would label as 'overly bureaucratic', the truth is that quality assurance holds inherent power over providers that can 'make or break' a business; the 'fast-tracking' of applications or quality assurance endorsement without the proper evidence, could potentially increase the risk of corruption and the separation of quality assurance activity from award of certification in this case is highly commendable.

In similar fashion, accreditation decisions

> *"serve at a Review Committee that is made up of internal staff, under the chairmanship of the COO [Chief Operations Officer]"* (MerSETA Interview, p. 9).

Thus, ensuring that there is oversight at the highest level, over the power of quality assurance.

Quality assurance is aligned to national requirements

Criteria and guidelines were available for download from the website, covering accreditation, assessment and moderation (including external moderation) and the registration of assessment and moderation which are arguably the core functions delegated by the QCTO.

As already indicated, MerSETA employs an 'Accreditation and Validation' model to quality assure the decentralised provision and assessment within its scope. Accreditation is conferred for a period of five years (MerSETA, n.d.a, p. 6) based on compliance with the prescribed criteria, while validation

> refers to overall process by which it is determined by the merSETA whether or not assessment is fair, reliable and valid and leading to the acceptance or rejection of assessment results e.g. Verification, statistical analysis, examination of assessment instruments sampling of evidence of applied competence, observation of processes, site visits or interviews. (MerSETA, n.d.a, p. 4)

In conducting its functions, the aim appears to be to provide consistency across providers:

> *"we seldom find that providers say, 'don't send Mr X… he's too this or he's too that…' So, that in itself tells me that we have a standardized system there"* (MerSETA Interview, p. 11).

MerSETA appears to have adequate structures, systems and policies in place to conduct its delegated functions.

Category 4: Agreements

When considering whether MerSETA have effective agreements in place, this study evaluated the following indicators;

- Institutional arrangements are in place;
- Responsibility is clear;
- Context

Responsibility is clear

The MerSETA accreditation criteria indicates that ultimate responsibility for quality assurance lies with the QCTO, "the MerSETA is currently operating under the QCTO's delegation" (MerSETA, n.d.a, p. 5), which indicates that existing SAQA criteria and policy are still relevant.

MerSETA therefore accredits providers against SAQA's 8-core criteria[14] utilising a self-evaluation checklist for providers to complete on initial application for accreditation.

The document is similar to most SETA ETQAs and is, exactly what it is called; a 'checklist'. Providers offer responses that are sometimes validated on site and sometimes not. The link that these provider 'Self-evaluation' assurances have with the implementation of quality may not be robustly checked (verification is the validation of learning achievements after the fact) and evaluation of tuition was not discussed. This apparent lack of validation results from the assumption of OBE that learning outcomes will ensure quality and it based on the accreditation agreement - the promise of compliance.

14

SAQA's 8 core criteria	
Policy statement:	The organisation's aims, objectives and purposes are spelt out
Quality Management System:	Outlines procedures that implement quality management
Review mechanisms:	Outlines the ways in which the implementation of policies would be monitored
Programme delivery:	Outlines how learning programmes would be developed, delivered and evaluated
Staff policies:	Outlines policies and procedures for staff selection, appraisal and development
Learner policies:	Policies and procedures for the selection of learners are outlined, and learners are given guidance and support
Assessment policies:	Outlines policies and procedures for forms of assessments that are used and how they are managed
Management system and policies:	Indicates the financial, administrative and physical structures and resources of the organisation, as well as procedures of accountability within the organization

SAQA's 8-core criteria (SAQA, 2001a, p. 20)

Institutional arrangements are in place

Agreements include the statutory responsibility, institutional delegation or accreditation of bodies that supports the implementation of provision. As before, MerSETA have been formally delegated quality assurance by the QCTO for 122 qualifications.

Finally, MerSETA's website provides information regarding fifteen formal agreements, or Memoranda of Understanding (MOUs), signed between MerSETA ETQA and other ETQA's to enable its providers to provide training in other sectors.

These agreements are in place and appear to effectively delineate the responsibilities of all role players to enable effective quality assurance that enhances the quality of provision of training.

Context

MerSETA operates within a manufacturing and engineering sector that employs both artisans and professionals; however, the MerSETA itself focuses on the trade qualifications while professional bodies in the sector regulate the education and training of professions;

> *"However, it's obvious that our stakeholders will have qualified people, will have professional engineers in there... we have a professional body in the form of ECSA, that we work closely with… so that point is in there, but some of the professional designations or quality assurance takes place with them, we will typically not do quality assurance of an engineer. We will assist with the work integrated learning; we will facilitate that…"* (MerSETA Interview, p. 3).

4.2.3 Conclusion

MerSETA provides quality assurance of decentralised provision and assessment that is guided by national imperative and supports the model with adequate and national resources. The research has shown that MerSETA is a well-run organisation that is structured and resourced to service its stakeholders. The MerSETA bureaucracy appears effective and thorough, but, like most quality assurance bodies, necessarily translates into relatively compliance-driven processes.

MerSETA have a well-defined map of qualifications that aligns with and supports their focus on artisan development.

Generally, MerSETA did not adequately articulate a definition of quality, or a statement of purpose. However, as a body delegated functions by the QCTO, MerSETA is obliged to advance the NQF objectives and, while attempts to promote the vague and lofty principles of the NQF are identified (including the requirement of a formal strategy by the provider to advance the NQF objectives), no evidence is available in respect of how these objectives are supported and measured.

While it is clear that the MerSETA's quality assurance model is designed to reinforce the NQF objectives by requiring the alignment of provider activity to these objectives, further research in respect of adherence was not measured. However, it is clear that MerSETA

complies with its delegated functions that include the activities of accreditation, monitoring and registration of assessors and moderators, which in fact is what it has been explicitly told to do (as stated in the original SAQA accreditation and current QCTO delegation arrangements).

4.3 The Case of FASSET

According to its Annual Report for the period 2012/13, the Finance and Accounting Services Sector Education and Training Authority, or FASSET:

> is a public entity in terms of Schedule 3 (Part A) of the Public Finance Management Act (PFMA). We were established in 2000 and are responsible for activities within the finance and accounting sector, which consists of 3 600 levy and non-levy paying organisations and employs 114 500 people.
>
> Member organisations include the following sub-sectors:
>
> - Investment Entities and Trusts and Company Secretarial Services
> - Stockbroking and Financial Markets
> - Development Organisations
> - Accounting, Bookkeeping, Auditing and Tax Services
> - Activities auxiliary to Financial Intermediation
> - Business and Management Consulting Services
> - SARS and relevant Government Departments. (FASSET, 2013, p. 63)

As one of the 21 SETA's re-licensed in 2010 by the Minister of Higher Education and Training till 2016, FASSET operates within the ambit of the

> Skills Development Act (SDA Act 97 of 1998) and the Skills Development Levy Act of 1999 (as amended)… [which] provides an institutional framework for FASSET to develop and implement national, sectoral and workplace strategies in order to develop and improve the skills of the national workforce resulting in improvements in employability and productivity, while contributing to South Africa's competitiveness. (FASSET, 2013, p. 63)

In conducting its work, FASSET is led by a vision that compels the organisation "to influence the effective operation of the labour market, through effective skills development, so as to ensure the appropriate supply of competent labour necessary to compete in the global economy" (FASSET, 2013, p. 3).

This vision is articulated by a mission that includes the commitment, "to ensure the *quality* of training and education in the sector and to support the development of standards in line with the NQF and to actively promote these standards… [and] to enhance *access* to learning opportunities in the sector" (FASSET, 2013, p. 3, emphasis added).

Through this mission, the objectives of the NQF have been clearly articulated.

In reaching for its vision and mission, FASSET is structured as depicted in figure 6 below;

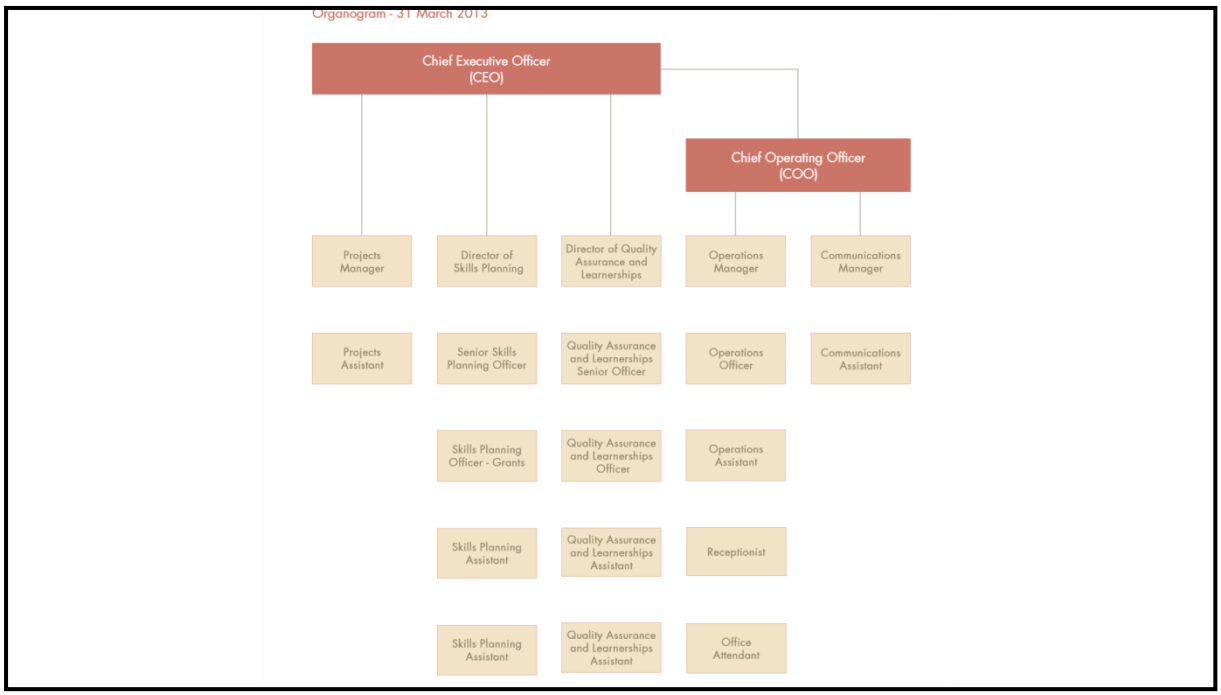


Figure 6: FASSET Organogram (Fasset 2013, p. 101)

While lean in structure, FASSET is an effective organisation, with strong governance of resources that resulted in the achievement of a "clean audit for the thirteenth year in succession" (FASSET, 2013, p. 7).

The sector is highly professional and levy income was reported at R349m (FASSET, 2013, p. 8).

> To evaluate the return on public fund investment, FASSET ran a "Tracer Study [that] assessed the impact that some of our Work Readiness Programmes have had over a ten year period. These programmes have achieved a very good success rate. The results confirm that we have managed to place many learners in employment who continue to be employed long after they have completed FASSET-funded programmes; most project beneficiaries have retained their positions and are progressing well in their careers. Most importantly 93.2% of employers believe these programmes provide beneficiaries with most of the soft and technical skills needed in the workplace; 89.2% expressed the same view for technical skills. (FASSET, 2013, p. 8)

While not paying lip-service to the NQF objectives, the above excerpt shows that FASSET's interventions have supported the achievement of the objective of 'facilitate[ing] access to, and mobility and progression within, education, training and career paths'.

4.3.1 FASSET Data Analysis

All relevant quality assurance guidelines were downloaded from the FASSET website and analysed according to the predetermined categories along with the interview transcripts.

The following is the data in respect of FASSET's quality assurance model and evaluation of this model against the categories of the Quality Assurance Analytic Tool.

4.3.2 FASSET Quality Assurance Model

Like MerSETA, FASSET has been delegated its quality assurance functions for all its qualifications (up to NQF level 8) by the QCTO and allocated the delegation within the quality assurance division; "the aim of the QCTO is to develop, design and quality assure qualifications that lead to occupations or professions. The QCTO has devolved quality assurance for currently registered qualifications back to the SETAs and former ETQAs"[15].

FASSET also follows a decentralised assessment model but employs a variation of the standard SAQA quality assurance approach. While directly conducting quality assurance, the quality assurance for most of FASSET's sectoral qualifications is in fact devolved to the relevant professional bodies that have to apply and "meet rigorous criteria, in order to perform quality assurance functions on *behalf* of Fasset QA"[16].

Once accredited, these Professional Bodies are known as:

> *"Quality Assurance Partners" (*FASSET Interview, p. 2)

referred to as 'partners' - and assume certain quality assurance functions for their 'own' qualifications or scope that applies to their profession. These partners are then able to accredit providers to:

> *"act as examination bodies"* (FASSET Interview, p. 7)

conduct site visits and monitoring visits. "However FASSET remains responsible for the verification of assessments and certification of learners"[17].

[15] FASSET (n.d.) retrieved from http://www.fasset.org.za/Learnerships/Learnerships_Quality_Assurance.aspx accessed on 24.12.2013
[16] FASSET (n.d) retrieved from http://www.fasset.org.za/Learnerships/ETQA.aspx accessed on 24.12.2013, emphasis added
[17] FASSET (n.d.) retrieved from http://www.fasset.org.za/Learnerships/ETQA.aspx accessed on 24.12.2013

The FASSET Quality Assurance model is depicted below in Figure 6:

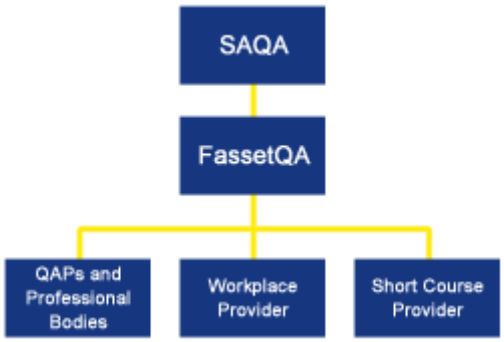


Figure 7: FASSET Partnership Model[18]

It is important to note that while FASSET categorises its partnership model as 'accreditation' and 'decentralised' (Questionnaire Response: 2.b), which is supported by the fact that they devolve quality assurance to entities that then *employ a decentralised external assessment approach*;

> "*professional bodies act mainly as examination bodies"* (FASSET interview, p. 7),

FASSET *also* uses an internal and external moderation model, the former to ensure consistency in assessment within the organisation and the latter is meant to ensure "that moderations are consistent within the provider organisation and are comparable and consistent externally within the sector/sub-sector"[19].

When asked what should be in place to support a delegated Partnership model, the response was that the model required structured measurement or an understanding of

> *"what you're looking for" (*FASSET Interview, p. 10)

without precluding the use of professional discretion.

The model also worked best with small numbers, which would allow for flexibility and contextualised intervention (FASSET Interview, p. 11) as opposed to a 'one-size-fits-all' approach. Additionally, the effectiveness of the model relied on having the

> *"right resources… [and] maturity"* (FASSET Interview, p. 11)

of systems to respond to differentiated needs.

Finally, the importance of effective quality assurance in this type of system was highlighted– because quality assurance bodies are essentially standing 'surety' for the stability and assessment practice of the entities they accredit to quality assure on their behalf, so any

[18] FASSET (n.d.) retrieved from http://www.fasset.org.za/Learnerships/Quality_Assurance_Model.aspx accessed on 24.12.2013

[19] FASSET (n.d.) retrieved from http://www.fasset.org.za/Learnerships/ETQA.aspx accessed on 24.12.2013

inability to function on the part of the accredited, would transfer the accountability to conclude any commitments of the accredited, back to the delegating authority:

> "*when things have gone a bit pear-shaped, because the other thing that we need to be concerned about is that there are then learners who would still get their qualification… be it a CIMA, an ACCA, an AAT... whatever... ok, they might be looking for the SAQA qualification as well and if we can't, if we haven't managed that quality assurance process, those learners then can't get their SAQA qualification"* (FASSET Interview, p. 9).

The participant also articulated an opinion that the greatest impact of quality assurance was on the assessment, but that in the partnership model, the impact of quality assurance did not necessarily filter through to learning as it would in a direct accreditation model where external validation is conducted directly on learner achievements and provides quality assurance feedback to the accredited provider:

> *"I'm not sure is always filters down into the quality of the learning because professional bodies act mainly as exam, examination bodies and the learning can happen in a number of ways, some of them are self-study… majority of them are self-studying learning which means even though the text book that is produced follows the same quality control procedure and is a really good text book, you have no control over how someone uses that text book, how effectively they use it, how well they understand the concepts that's in the text book"* (FASSET Interview, p. 7).

It was interesting to note that FASSET have also accredited a commercial entity as a delegated partner (i.e. an organisation that was not a professional body). This has proved to be problematic as the focus of 'for-profit' entities is on the bottom line and not necessarily, on the social imperative. Thus, a change in business needs resulted in loss of focus on compliance as the delegated Partner was

> "*an organisation that moves with business trends"* (FASSET Interview, p. 12).

While it would be easy to conclude that not-for profit organisations should be the only ones allowed delegation, the participant went on to state that the partner 'Champion' had moved companies and the absence of his driving force may have contributed to the decline in compliance (and may in fact not have anything to do with being a 'for-profit' organisation).

Category 1: Purpose

When considering whether FASSET has provided a clear purpose, this study evaluated data according to the following indicators:

- Internal or external control;
- Clarity of rationale for quality assurance;
- Definition of quality is available;
- Quality assurance promotes 'sameness.'

Control

Like MerSETA, FASSET quality assurance is externally controlled "the QCTO has devolved quality assurance for currently registered qualifications back to the SETAs and former ETQAs"[20] and additionally implement their delegated functions as an external activity in relation to their delegated Partners and directly accredited providers.

The quality assurance model adopted is therefore one of external control, with FASSET assuring the delegation or provision externally.

Rationale is clear

Again, similar to MerSETA, FASSET is obliged to advance the objectives of the NQF (as delegated by the QCTO and framed in its organisational vision and mission), however, the rationale for quality assurance is not explicit in FASSET's documentation, which either means that it is so well accepted by its market that it does not need explication or motivation, or it means that there does not exist a consistently applied purpose for quality assurance.

However, given that professional body quality assured designations are rated so highly, it can be concluded that the market value of these qualifications, and their link to employment in a highly regulated financial services sector, may be a key reason for quality assurance.

From the interview, it is apparent that the quality assurance of the delegated partner is primarily intended to assure their continued operation:

> *Participant:* *Correct, correct, because FASSET is responsible for the quality assurance of all the qualifications that are allocated to us on the NQF, but if there's a problem with the professional body and they not meeting their QAP requirements… we then either have to take over those responsibilities… which we really can't do in theory… because we don't set the exam, we don't do any of that... so that becomes the risk. The risk is that if it goes pear-shaped…*
>
> *Researcher:* *Ah… I see*
>
> *Participant:* *It a fantastic model when it works… it becomes an issue if it goes pear-shaped. And luckily we haven't had anything go pear-shaped, but that is the risk in this kind of a model.*
>
> *Researcher:* *That's the risk that you are controlling for and mitigating against…?*
>
> *Participant:* *Correct. And that's where the quality assurance comes in, which is why, for me, the quality assurance is so important* (FASSET Interview, p. 9).

Therefore quality assurance is in place to ensure that provision is uninterrupted and quality assurance activities are conducted regularly in order to identify potential problems before they occur.

[20] FASSET n.d. retrieved from http://www.fasset.org.za/Learnerships/Learnerships_Quality_Assurance.aspx accessed on 24.12.201

Further, quality assurance is seen as a manner of accounting to the public;

> *"…quality assurance is absolutely important and ultimately at the end of the day it is the learner that is at stake, the learners either not going to get tuition that is up to scratch or tuition that even meets the outcomes they were supposed to* (FASSET Interview, p. 4).

This statement provides support for accountability as justification.

Definition of quality

The Annual Report states that FASSET is responsible "to ensure the *quality* of training and education in the sector and to support the development of standards in line with the NQF and to actively promote these standards… [and] to enhance *access* to learning opportunities in the sector" (FASSET, 2013, p. 3, emphasis added).

Although no explicit definition of quality is provided, quality is discussed in relation to the professional bodies to which quality assurance functions had been devolved in the expectation that they provide:

> *"quality at the right standards"* (FASSET interview, p. 7).

The lack of definition of quality is again most likely due to lack of a national definition.

However, it appears that the definition of quality may actually lie with the professional body:

> *"Your standard is maintained at exam… your standard is not maintained at delivery of tuition. Because different people learn in different ways. Some people can't abide classroom teaching – they much prefer to do things on their own. So your quality control, or your quality standard, has to be at the exam"* (FASSET interview, p. 7).

Quality assurance promotes 'sameness'

The FASSET quality assurance model certainly promotes some level of 'sameness' in respect of provisioning in its sector:

> *"… and it's also about making sure that you're not that flexible that the end product looks nothing close to what you started with. And it's also about knowing when you need to be hard… there are times when there are certain non-negotiables... even in a flexible model. There are certain non--negotiables and it's about knowing what those are and really ensuring that the non-negotiables remain non-negotiables"* (FASSET interview, p. 11).

Inherent in the above statement is the notion of standardisation – that quality assurance is intended to ensure consistency of output by checking against certain 'non-negotiable' standards.

Further, in relation to internal and external moderation, the website states that moderation is "intended to ensure that the assessments are consistent within the organisation, between the organisation and across the industry"[21]. Finally, the FASSET 'Generic Employer

[21] FASSET (n.d.) retrieved from http://www.fasset.org.za/Learnerships/Learnerships_Quality_Assurance.aspx accessed on 24.12.2013

Assessment Policy and Guidelines' states that assessment systems are there to ensure "that there is consistency in the evaluation of the learning process through the use of objective and structured assessment against national registered standards" (FASSET n.d., p. 7).

Category 2: Map of Qualifications

When considering whether FASSET had an adequate map of qualifications, this study evaluated the following indicators;

- Registration on the NQF;
- Standards linked to a career path;
- Standards set through official structures.

Qualifications are registered on the NQF

In respect of the 'Map of Qualifications', FASSET quality assures 40 NQF-registered qualifications (SAQA, n.d. attached as Appendix 7). The search was conducted by filtering the NQF using the category; 'Quality Assurance Body'– this generated a list of all currently registered NQF qualifications that are quality assured by FASSET, regardless of delegation, level or type.

The qualifications range six levels of the NQF: from NQF 3 to NQF 8; providing affirmation of a professionalised sector – when compared to the Manufacturing sector, certainly – that require learning at levels equivalent to Pre-Matric (NQF 3), Matric (NQF 4) and up to Honours-equivalent levels (NQF 8).

Table 3 below provides data in respect of the number and ratio of the FASSET Map of Qualifications;

FASSET

NQF LEVEL	TOTAL QUALIFICATIONS	RATIO
NQF 3	4	10%
NQF 4	9	22.5%
NQF 5	7	17.5%
NQF 6	9	22.5%
NQF 7	5	12.5%
NQF 8	6	15%
TOTAL	**40**	**100%**

Table 3: FASSET Map of Qualifications

Generally, FASSET appears to be managing its 'Map of Qualifications' effectively. Records of the National Learner Records Database (NLRD) in relation to biannual ETQA uploads of

sectoral achievement to SAQA's national register, show that in terms of general performance[22], FASSET has maintained 'Green' status, which is a performance achievement of 75% or above.

Table 4 below provides a summary of FASSETs performance over three NLRD upload cycles;

FASSET NLRD PERFORMANCE	Sept 2012	March 2013	Sept 2013
Active Qualifications	35	37	36
Qualifications without learners to be de-registered	3	3	6
Qualifications without learners to remain registered	2	1	2
Total	**40**	**41**	**44**
Total CUMULATIVE learners uploaded	**13139**	**30714**	**34154**
Status	Green	Green	Green

Table 4: FASSET NLRD Performance 2012 – 2013 Table

The average of 36 active qualifications include those devolved to accredited Partners, providing for a manageable 'Map of Qualifications' in respect of size and required quality assurance capacity. Quality assurance activities resulted in the facilitation of 17 575 unique leaner uploads from accredited providers to the NLRD between September 2012 and March 2013 and another 3 440 in the period until September 2013.

Standards set through official structures

Of the 40 qualifications, only 10 are unit standard based, mainly at NQF 4 (six of the ten) and none at NQF levels 7 and 8 are unit standard based. This is interesting because it implies that the highly specified (and widely misinterpreted) unit standard route is not deemed appropriate for higher cognitive learning requirements. However a look at the 'non-unit standards based' qualifications confirms that outcomes are still retained; for the Diploma in Public Sector Accounting (20353) a non-unit standards based qualification at NQF 5 the following assertion is made: "The Qualification is a planned combination of Learning Outcomes that culminate in the competencies specified in the purpose statement. The

[22] NLRD Performance is calculated in terms of activity, learner uptake and performance against targets agreed with DHET. A separate report is issued for compliance relating to timeous and consistent data uploads.

Outcomes are grouped into Fundamental, Core and Elective components to allow for ease of articulation with other qualifications"[23].

This qualification includes exit level outcomes such as "take steps to recover debt"[24] and associated assessment criteria that are written with much the same level of specificity as unit standards themselves.

Standards are linked to a career pathway

All qualifications quality assured, and in particular those that where quality assurance is devolved to professional bodies, are linked an occupation. This is evidenced by the titles of the qualifications – all of which are linked to unique occupations e.g. National Certificate: Bookkeeping and National Certificate: Public Sector Accounting. The levels of the qualifications also support the notion that FASSET operates in a professional sector – with the majority of qualifications registered at NQF level 4 and 6, then NQF 5 and a very high percentage of qualifications registered at NQF 8.

Category 3: Bureaucracy

When considering whether FASSET had an effective bureaucracy, this study evaluated the following indicators;

- Policies and processes available;
- Resources are adequate and appropriate;
- Quality assurance is aligned to national requirements.

Policy and process for quality assurance is available

FASSET quality assures decentralised learning in a 'Delegation and Accreditation' model; In terms of bureaucracy, FASSET has a well-established model, structure, policy and resources to implement quality assurance. The model employed by FASSET is interesting as it delegates functions elsewhere;

> *"they get delegated, all of the ETQA functions, barring certification, which FASSET retains"* (FASSET Interview, p. 2).

Policies and procedures could be accessed on the official website and were not overly technical or lengthy.

Quality assurance is aligned to national requirements

Accreditation is standard, as informed by national policy:

[23] SAQA (n.d.) retrieved from (http://regqs.saqa.org.za/viewQualification.php?id=20353 accessed on 10.02.2014
[24] SAQA (n.d.) retrieved from (http://regqs.saqa.org.za/viewQualification.php?id=20353 accessed on 10.02.2014

"all of SAQA's requirements are then put together, in the accreditation application form and it really covers all the basic things that SAQA requires and that we would need to report on to SAQA." (FASSET Interview, p. 4)

However, the validation of learning is somewhat unique as it focuses on process and not achievements, for example:

"where we devolve the quality assurance to our quality assurance partner we look at verification from a systems perspective…" (FASSET Interview, p. 5).

Resources are adequate and appropriate

Also important to an effective bureaucracy is the balance between resources and activity, as the participant explained in relation to the quality assurance model;

"I think it's difficult to implement that, when you've got very large numbers that you working with.... We have a small number of QAP's, I think a total of 8, so it's much easier to have that sort of flexible approach… if we had 35 QAP's I'm not sure we would be as flexible.

So it's also about making sure that you have a manageable size - so you can have 35 QAP's if I had 5 or 10 specialists at FASSET. You know, you could manage it on that approach" (FASSET interview, p. 11).

In order for the partnership model to work, the participant further suggested that structure and a clear validation standard were important:

Researcher: *What must be in place for this approach to work?*

Participant: *For me what I also think needs to be in place is a good structure. You need to know what you're measuring against; what you're looking for; and within that structure have enough common sense to use your discretion. Because I don't think quality assurance should be hard and fast. It shouldn't be; if you don't have 'A'… you can't get 'B'... because maybe you can have 'C' and still achieve the same goal and get 'B'. It's about achieving the outcome, not about having a particular process in place. And the way I look at a process may be different to the way you look at a process. As long as it still achieves the same outcome… does it matter?* (FASSET Interview, p. 10)

The above statement implies that the resources employed at FASSET require and are afforded a high level of discretion based on their capacity to deliver professional quality assurance judgement.

Category 4: Agreements

When considering whether FASSET have effective agreements in place, this study evaluated the following indicators;

- Institutional arrangements are in place;

- Responsibility is clear;
- Context

Context

The professionalism of the sector appeared to have significant influence on the FASSET partnership model. Quality assurance is imposed on mature and entrenched professional systems that are not necessarily amenable to any other quality assurance model (for instance, the imposition of a centralised exam) other than accreditation which allowed them to run their own board exam, thereby maintaining the standard while FASSET simply validated the process, explained by a participant:

> *"The professional bodies wouldn't have allowed us to take over their process which is I'm sure what a lot of people would say, because again their reputation is at stake and they do it incredibly well, they also focus on their specific area where stuff that, because we've got so many qualifications to look after, would have a more generic approach, which is not going to benefit the learner or the professional body"* (FASSET interview, p. 6).

Institutional arrangements

Agreements include the statutory responsibility, institutional delegation or accreditation of bodies that supports the implementation of provision.

The delegated partnership model evolved as mutually beneficial middle ground. This resulted in a situation where the credibility of certification is linked to the devolved entities institutional credibility, as explained:

> *"[learners] really couldn't care less whether there's a FASSET logo on their certificate or not"* (FASSET Interview, p. 2).

Responsibility is clear

This model is supported by long-standing, credible professional bodies who may not want to relinquish their control of the standard of competence and supported by industry who is deeply devoted to the resultant designations. This situation ensures that roles are clear (through delegation) and that both FASSET and the partner are empowered to act on their unique responsibilities. However, this may result in some resistance from the professional bodies to the imminent changes in respect of centralising the control of quality assurance.

4.3.3 Conclusion

FASSET is a well-run, efficient SETA having received consecutive clean audits by the Auditor General of South Africa while maintaining above average performance on the NLRD uploads.

The study of the Map of Qualifications was fascinating as it provided affirmation in terms of the range and number of high level NQF registered qualifications, and that it shows that the

sector that FASSET serves is professional. It was also identified that only one quarter of FASSET qualifications are unit standard based. The majority of qualifications tending towards non-unit standards based qualifications.

In respect of bureaucracy, FASSET has a lean structure that is supported by agreements, guidelines, processes and adequately equipped staff. Policy statements and a submission guideline were located (on the official website). Therefore bureaucracy was effective and efficient. The purpose of quality assurance is ostensibly accountability which is in line with the literature. In relation to quality, no clear articulation is available, again most likely influenced by the lack of a national definition. This leads to the assumption that the notion of quality vests directly with the delegated partner. In relation to the specific partnership model, it appears that this agreement provides the key to FASSET's efficiency where professional bodies who have established structures and processes are delegated the authority to conduct quality assurance activities. This model must be further interrogated to establish its purpose and definition of quality and elucidate lessons that may be borrowed and implemented by other quality assurance systems as good practice.

4.4 The Case of the NAMB

The Minister of Higher Education and Training has lamented that “no single national standard and no national moderation of SETA quality assurance strategies… [has] resulted in a variety of confusing approaches to artisan development” (Sabinetlaw, 2010) and this has led to significantly varied competencies within trades.

To address the lack of a national standard that has resulted in disparate trade competencies, the National Artisan Moderation Body (NAMB) was, “established in terms of Section 26A (1)(a) of the Skills Development Act (SDA), Act 97 of 1998 [as amended] as an operational unit within the Department of Higher Education and Training with statutory functions[25]… on 30th November 2010” (DHET, 2013b, p. 3).

As a newly-established unit within the DHET

> the Director General of the Department of Higher Education and Training has implemented the process to operationalize the NAMB by allocating the NAMB to the Chief Directorate: INDLELA that is a Chief Directorate located at Olifantsfontein, Gauteng and falls within the Skills Branch of the Department of Higher Education and Training. (DHET, 2013b, p. 3)

The following figure 8 depicts the structure of DHET as a national department, and the position of Skills Development as a programme within the department;

[25] According to the QCTO’s delegation policy, (QCTO,2011: 9-10)
The Assessment Quality Partner must, in respect of the occupation/s specified in the Service Level Agreement:
(a) develop, maintain and apply a national data-bank of instruments for external assessment;
(b) develop and publish exemplars of external assessments;
(c) coordinate and manage external assessment processes;
(d) develop and maintain a national database of registered assessors and moderators from which assessors/moderators for the external summative assessments will be selected;
(e) record learner achievements;
(f) develop criteria for the accreditation of assessment centres or the approval of assessment sites;
(g) recommend to the QCTO assessment centres for registration;
(h) make recommendations to the QCTO on the withdrawal of accreditation of an assessment centre;
(i) recommend to the QCTO the accreditation of skills development providers for the knowledge and/or practical skills component using criteria and guidelines provided by the QCTO;
(j) verify that SETA workplace approval systems meet the standards set in the workplace experience curriculum component against the criteria and guidelines provided by the QCTO;
(k) implement an appeals policy as guided by an assessment policy;
(l) upload learner assessment achievements to the QCTO;
(m) recommend the certification of learners to the QCTO;
(n) ensure systems are in place to detect and address irregularities;
(o) conduct learner tracer studies;
(p) advise the QCTO as to the recognition of qualifications and part qualifications from other sub frameworks;
(q) promote continuous professional development of AQP associated practitioners;
(r) report to the QCTO on the performance of its functions in the form and manner required by the QCTO;

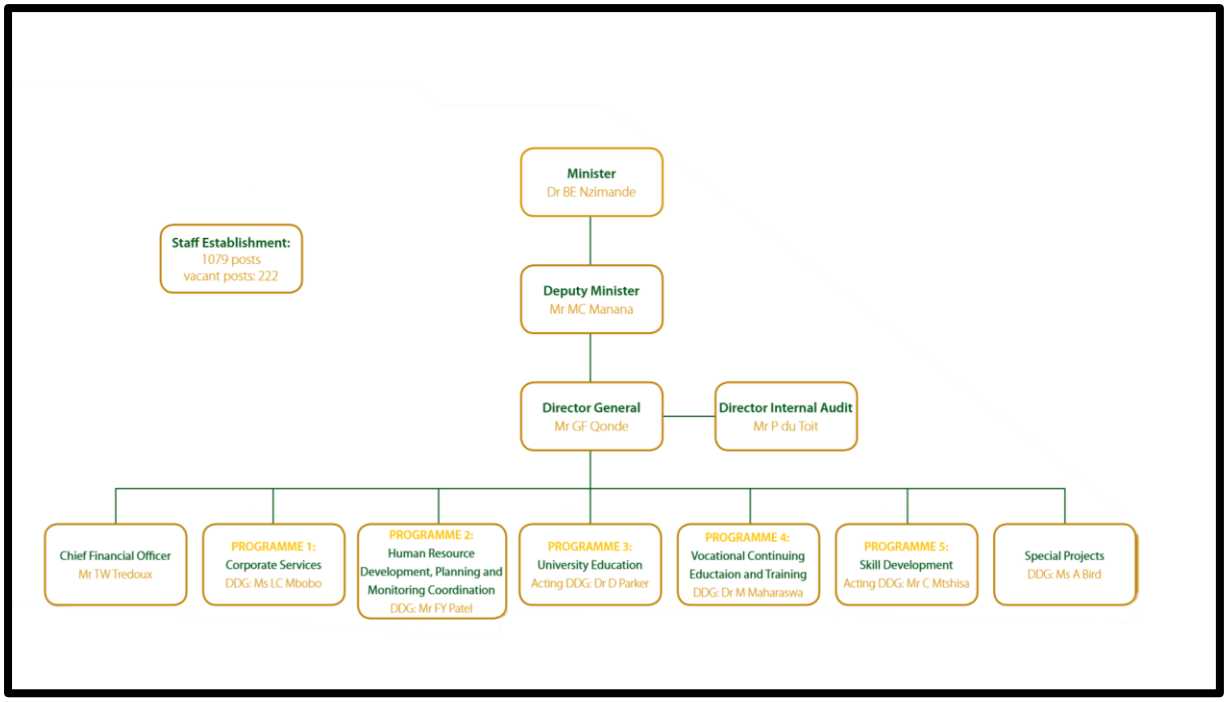


Figure 8: DHET (DHET, 2013c, p.21)

Unlike the previous SETA cases, NAMB is established by the state as a national department and as such, the organogram above does not specifically notate the body, although it is represented under Programme 5: Skill Development.

However, establishing NAMB within DHET and particularly within the existing Chief Directorate of *Indlela*, ensured the capitalisation of the infrastructure of the state and *Indlela* specifically, that was, pre-democracy, the only centre for trade testing, known then as the:

> *"Centralised Organisation for Trade Testing… COTT"* (NAMB Interview, p. 4).

4.4.1 NAMB Data Analysis

In the case of NAMB, which is a newly established state unit operating in an unchartered quality assurance landscape (dependent on policies of the QCTO), documents were difficult to access as these are currently being drafted and reviewed by key stakeholders - the QCTO and the National Skills Authority (NSA) in particular. There also appeared to be an absence of an official website (draft documents could be accessed from SETA websites but remained third-party accounts). Typing the search string 'NAMB' into Google resulted in information about an entity in North America, adding 'South Africa' to the string only yielded a handful of references to NAMB from third-party sites.

Policies, electronic information pamphlets (such as the 7-Steps to becoming a qualified artisan) and the most recently updated draft Trade Test Regulations were provided directly by the participant while the QCTO delegation and curriculum and assessment policies were downloaded from the host, SAQA, website. These documents and the interview transcripts were then analysed according to the predetermined categories set by the Quality Assurance

Analytic Tool. What follows is an explication of the NAMB assessment model and evaluation of this model against the analytic tool.

4.4.2 NAMB Quality Assurance Model

According to DHET (2013b, p. 5), "the core role and responsibility of the NAMB is the coordination of artisan development nationally to achieve a single, common national standard across all economic sectors for artisan development as contemplated in the Skills Development Act."

This has obviously not been the case in the past, as the participant explained;

> *"We've got an electrician, that comes from; EW [referring to the old Energy and Water SETA], Services [SETA], MQA [the Mining Qualifications Authority], you've got the government certificate… which one is an electrician?*
>
> *We know there's varying practices in quality assurance, but are there varying standards in the qualification as well?*
>
> *So industry gets confused"* (NAMB Interview, p. 11).

NAMB must fulfil legislated functions[26] as required by the Skills Development Act (SDA), as amended, that include assessment, moderation and monitoring as well as its QCTO delegated functions (which are consistent with the SDA but include quality assurance functions).

In relation to quality assurance, NAMB is a moderation body delegated the role of Assessment Quality Partner (AQP) by the QCTO:

> *"So, NAMB do not quality assure, they quality assure on behalf of somebody"* (NAMB Interview, p. 3).

In respect of its delegated AQP role, NAMB is specifically required to "implement a national artisan trade testing and certification system across all economic sectors quality assured by the Quality Council for Trades and Occupations" (DHET, n.d., p. 27).

While NAMB have not yet implemented the new centralised trade testing system, the participant indicated that:

[26] NAMB is responsible for the following SDA legislated functions;
- Monitor the performance of accredited artisan trade test centres
- Moderate artisan trade tests
- Develop, maintain and apply a national databank of instruments for assessment a moderation of artisan trade tests
- Develop and maintain a national database of registered artisan trade assessors and moderators
- Record artisan achievements
- Determine appeals against assessment decisions
- Recommend certification of artisans to the Quality Council for Trades and Occupations (DHET, 2013b: 4)

"*as soon as we get the trade test regulations passed, then we can start implementing the system*" (NAMB Interview, p. 7).

According to DHET (2011b, p. 4), the system for artisan development as coordinated by NAMB is a '7-Step Programme' that takes a learner apprentice through the process of becoming a qualified artisan – from career guidance, to tuition and practical and final trade testing and quality assurance as depicted in figure 9 below:



Figure 9: The 7-Steps to Becoming a Qualified Artisan (DHET, 2011b, p. 4)

The 7-Step Programme includes 'Quality assurance and Certification' as a step but "quality assurance will [also] be built into each and every step of the national 7-Step Programme" (DHET, 2011b, p. 10).

The following discussion is based on the data gathered in respect of the Quality Assurance Analytic Tool categories. In this case, the category 'Agreements' is presented first as the NAMB system is largely conceptual and their current institutional arrangements provide some context for the subsequent categories.

Category 4: Agreements

When considering whether NAMB has effective agreements in place, this study evaluated the following indicators;

- Institutional arrangements are in place;
- Responsibility is clear;

- Context.

Context

As stated previously, NAMB is specifically mandated with artisan development and as such, operates solely within a trade context.

Institutional arrangements are in place

NAMB is established and compelled by legislation to moderate all 'listed trades' – occupations listed as trades (currently 125) in government gazette. In addition to its legislated functions, NAMB was formally appointed by the QCTO as the Assessment Quality Partner (AQP) for all trades:

> *"all our functions, in terms of quality assurance is in a service level agreement with the QCTO"* (NAMB Interview, p. 3).

Responsibility is clear

The functions are not full quality assurance functions as the participant explains:

> *"We've got statutory functions, but the statutory functions in terms of quality assurance is very limited, ok, if you have a look at our statutory functions in the Skills Development Act… it's basically, moderation and registering of your assessment practitioners.*
>
> *The rest is more coordination roles"* (NAMB Interview, p. 3).

The functions of the AQP are identical to that of the traditional quality assurance bodies – but include designing, maintaining and conducting, external assessment. Due to this similarly, the NAMB case has been characterised for the purpose of this study, as a quality assurance body and not just a moderation body.

One AQP function similar to that of quality assurance bodies is accreditation of trade test centres – trade test centres were 'accredited' by SETAs in the past as 'assessment only' sites. Now previously SETA-accredited trade test centres will be transferred to the QCTO's centralised control and "deemed accredited" (DHET, n.d., p. 7) by the QCTO - as recommended by NAMB (DHET, n.d, p. 7; NAMB interview, p. 3) – to conduct the "external final summative assessment or what is known as a Trade Test" (DHET, 2011c, p. 9).

Trade Tests that are developed and administered by NAMB are to be conducted by these accredited centres who

> will report to the NAMB as per predetermined requirements to enable the NAMB to monitor their performance. In this sense the NAMB will act as an 'ombudsman' for artisan development and any concern with regards to the quality of artisan development may be reported to the NAMB. (DHET, 2011c, p. 9)

Category 1: Purpose

When considering whether NAMB had a clear purpose, this study evaluated the following indicators:

- Internal or external control;
- Clarity of rationale for quality assurance;
- Definition of quality is available;
- Quality assurance promotes 'sameness.'

Rationale is clear

NAMB, to fulfil its duties, must "develop, implement and manage systems and processes to operationalize the… National Artisan Moderation Forum to standardise all quality assurance functions of artisan development" (DHET, 2013b, p. 5) and thereby "eliminate the prevailing industry and sector based artisan trade testing system and all inconsistencies and imbalances in the prevailing system" (DHET, n.d, p. 2). The purpose is therefore clear – related to artisan development solely.

Definition of quality

By separating provision and assessment of artisans, NAMB provides assurance that institutional learning is of consistent quality. This is done by the quality assurance (in relation to setting, administering and assessing) of the trade test that signals the single exit point for all artisan development.

Quality assurance promotes 'sameness'

The standardised trade test also promotes 'sameness' in that no artisan will be able to 'qualify' without having passed the standardised, external assessment (trade test).

NAMB's main objective is arguably, 'Sameness' in relation to both ensuring that trade competence is consistent across sectors and in ensuring the achievement of a required minimum standard which is important in artisan development because

> *"… a poorly qualified artisan has got three outcomes; he either kills himself, or he kills other people, or he causes a lot of damage on expensive equipment in industry. So we can't play around with quality around artisans* (NAMB Interview, p. 19).

Control

In terms of control, the NAMB, while imposing an external quality assurance in the form of accreditation of trade test centres and moderation, is also itself, operating under external control of both the state (through legislated functions and its positioning as a unit within the national department) and the QCTO in respect of the delegated functions.

Centralising quality control under the QCTO and assessment and moderation of trades under NAMB signals the purposeful move away from SAQA's decentralised model, as the participant outlines:

> *"the more it becomes decentralized, you start to lose control* (NAMB Interview, p. 4).

Category 2: Map of Qualifications

When considering whether NAMB had an adequate map of qualifications, this study evaluated the following indicators;

- Registration on the NQF;
- Standards linked to a career path;
- Standards set through official structures.

For the purposes of this research only the newly developed and registered QCTO qualifications with its prescription of external assessment was considered as the NAMB's 'Map of Qualifications'.

Standards are set through official structures

While it was confirmed that standards were set through the official QCTO process, it was further explained that the setting of standards was not a function of NAMB;

> *"So they [the QCTO] start the qualification development process, now where we start kicking in, is after the curriculum was developed, we then start developing a - in collaboration with the CEP that developed the curriculum - we develop the assessment specifications document" (NAMB Interview*, p. *2).*

Qualifications are registered on the NQF

The search of the NQF for NAMB's map was less simple than in the cases of the SETA ETQA's as there is no filter for 'AQP' and a word search for 'NAMB' brought up only 2 qualifications. Finally, it was decided to request all QCTO registered qualifications, of which there were only 11, and search each document for the phrase 'trade test'. This method identified a total of 7 qualifications registered on the NQF that specified a Trade Test (which implies moderation by NAMB as the moderation body for all trades (SAQA, n.d and attached as Appendix 8).

The table below provides information on the number and range of trade related qualifications registered on the NQF.

NAMB

NQF LEVEL	TOTAL QUALIFICATIONS	RATIO
NQF 4	6	85.7%
NQF 5	1	14.3%
TOTAL	**7**	**100%**

Table 5: NAMB Map of Qualifications

The narrow spread between NQF 4 and 5 is surprising (as trade-related qualifications can start from NQF 1 and, in the case of the engineering and more advanced trades, move all the way up to NQF 7 and 8). However, it must be noted that the data is limited because while the SAQA qualifications have been registered over a period of 13 years, the QCTO have only commenced registration of qualifications in 2013 and the current 11 represent only the first wave of QCTO registrations. The fact that the map was so small and represented only a small number of qualifications actually in development led to the decision not to analyse the NAMB map further.

NLRD performance could also not be confirmed as the new qualifications have not yet been implemented for uptake and learner achievement reporting.

Standards are linked to a career pathway

It could be confirmed that all NAMB related qualifications are linked to a career pathway as all standards moderated by NAMB are linked to occupations listed as trades in government gazette as explained by the participant;

> *"So it's focused on occupations, that's listed in terms of a Gazette that was published in August last year [2012]" (NAMB Interview*, p. *2).*

Category 3: Bureaucracy

When considering whether NAMB had an effective bureaucracy, this study evaluated the following indicators:

- Policies and processes available;
- Resources are adequate and appropriate;
- Quality assurance is aligned to national requirements.

Quality assurance aligned to national requirements

NAMB centralises the moderation of, and provides certain quality assurance functions for, the (still decentralised) external summative assessment (national examination) of trade qualifications – known as the 'Trade Test'. The external summative requires that the "assessment of occupational competence is conducted by registered assessors applying nationally standardised assessment instruments and procedures at accredited assessment centres or registered sites… This assessment is referred to as external summative assessment … and results in QCTO certification" (QCTO, 2011, p. 9).

Policy and process for quality assurance is available

NAMB is currently putting in place systems and processes to implement the national moderation system, as the participant explains:

> *"the type of process that we're moving towards as NAMB, it is a very stringent managed and controlled standardized assessment. But it is decentralized delivery"* (NAMB interview, p. 4).

The credibility of the external summative assessment is critical as it assures the standardisation of competence for artisans and thus provides the required assurances of credibility and trust in certification that the decentralised system has eroded over the years.

Through its direct moderation, NAMB also hopes:

> …to implement a culture of continuous improvement [whereby] all trade assessors must continuously review the assessment process and content of the trade test tasks and inform the NAMB if any problems are identified or recommendation can be made to enhance the quality and reliability of trade testing. (DHET, 2011c, p. 6)

This is a departure from past practice where

> "*there was quite a separation between training delivery, curriculum development and trade testing"* (NAMB interview, p. 14).

This was attributable to the structure of education in the past that located TVET colleges (who delivered the training) under the Department of Education and the Centre for Trade Testing (COTT) under the Department of Labour. The consolidation of the post-school education and training institutions under the Department of Higher Education and Training currently, can only support quality enhancement by enabling communication between these components of the artisan development system, as the participant explains:

> "…*with the move to Higher Education and Training now, [referring to the consolidation of post-school institutions under the new Department of Higher Education and Training], for instance, one of our big delivery agents is the FET colleges. Knowledge component lies there. When we were in the Department of Labour we had very little interaction with the FET colleges"* (NAMB interview, p. 14).

Resources are adequate and appropriate

In the interests of standardisation, NAMB have taken the bold step of excluding assessors and moderators who are not employed at an accredited trade test centre or one applying for accreditation (NAMB interview, p. 10). While this has been a contentious decision, the motivation is clear: previous SAQA structures allowed for a dissipation of accountability, with 'constituent' assessors and moderators signing off competence with little engagement with evidence in some cases due to the lack of accountability structures:

> *"We will not register assessors that's not employed at a centre… we gotta stick to it, because of the fact that these constituent assessors - I was one myself, so I know. Its' nice, you make a couple of bucks, you just sign off and you go - No accountability, no traceability…"* (NAMB Interview, p. 10).

There is evidently an assumption that an employment relationship will lead to higher accountability, possibly because employed individuals are assumed to work in the best interest of their organisations or maybe in the hope of self-regulation initiated by institutions to maintain their accreditation. While the merits are currently untested, the decision is bold and clearly well-intentioned.

4.4.3 Conclusion

In conclusion, the infancy of the NAMB structures resulted in very little officially-approved documentation accessible publically. The documents analysed here were for the most part provided directly by the organisation (and could mostly not be found online). It is also further noted that the NAMB policies were dependent on both state and QCTO approval, and agreement between the two:

> "*At this stage where we are with the trade test regulations, we've been up and down, after the public comment phase, we've advised, we've submitted to the NSA and the QCTO. QCTO returned it, ok, with a couple of issues. We round about in draft number 8 again… after public comment. We've presented to NSA about 3 weeks ago. So, it seems like now we there…"* (NAMB Interview, p. 7).

These layers of external control may create the risk of perpetual consultation with little decisive action. However, after seeing how many national projects are implemented without robust planning and consultation, the delay may well be justified.

The NAMB case provides strong rationale and arrangements for quality assurance of artisan development. However, possibly due to its infancy; the 'Map of Qualifications' and 'Bureaucracy' are lacking. There does however emerge a clear expression of support of the NQF objective: providing for a *single* system that allows for improved access to quality education and recognition of prior learning. This is particularly important to artisan development in the South African context that has historically been highly discriminatory.

4.5 Case Study Findings

Through the analysis of the three quality assurance models, general themes that were not predetermined emerged consistently across the cases. They are presented below.

4.5.1 The Objective of Quality Assurance

This section looks at what quality assurance has been expected to accomplish and then suggests what it should accomplish; to paraphrase Allais (2009, p. 29) “Are the stated objectives of the [quality assurance system] the correct ones?” and taking the line of thought further, “Are the stated objectives the enacted objectives?”

NQF Objectives

SAQA (2001b, p. 11) asserts that:

> the SAQA Act is the basis for a common understanding of quality within the context of both the NQF and… SAQA... The Act provides the opening definition for a statement of the quality mission of the NQF. Specifically, section 2 of the Act states:
>
> The objectives of the NQF are to:
>
> (a) create an integrated national framework for learning achievements;
>
> (b) facilitate access to, and mobility and progression within, education, training and career paths;
>
> (c) enhance the quality of education and training;
>
> (d) accelerate the redress of past unfair discrimination in education, training and employment opportunities; and thereby
>
> (e) contribute to the full personal development of each learner and the social and economic development of the nation at large.

It is clear then that the NQF objectives were meant to be the objectives of quality assurance and that these should constitute the indicators against which quality assurance should be measured.

Instead, what has happened is that quality assurance bodies focussed on their delegated functions (the MerSETA self-evaluation is a detailed evaluation against SAQA’s core criteria) against which their own performance was audited and, while intending to promote the objectives of the NQF was unable to do so effectively without an account of how to promote these objectives and how achievement would be measured. Instead, quality assurance bodies attempted to interpret the requirement as best they could.

It could be argued that all of the cases have been promoting the objectives of the NQF (and I believe they are), but the promotion is either not explicit (in policy) or the causal relationship between their activities and promoting the NQF was indirect. But the question remains: what

would achievement of the NQF objectives look like and how would it be measured? Without a definitive measurement, no judgement of the achievement of these objectives can possibly be made.

4.5.2 Delegated function

The QCTO is required by Section 26H of the SDA to promote the objectives of the NQF, and while not explicitly delegating this responsibility, the QCTO have included this requirement in their Code of Conduct that is signed by all delegated partners.

The requirement to advance the objectives of the NQF has also been specifically indicated in the terms and conditions of the delegation of quality assurance to the SETAs.

However, the functions delegated in both roles (partner delegation[27] and SETA historical qualification delegation), appear to be inconsistent with the NQF objectives or at the least, one cannot easily reconcile the direct causal relationship between the delegated functions and the NQF objectives.

The delegated functions tend to guide and shape the operational activities of the quality assurance bodies and are arguably the indicators of quality that any quality assurance body would judge themselves against. The performance against delegated functions, as in the case of the SETA's, is externally audited by the Auditor-General of South Africa and any significant deficiency would result in a finding or even a qualification (a negative audit finding). This audit continues to provide the state with much needed assurance that the 'assurors' are effective (mainly in relation to the funding set aside for quality assurance).

When evaluating whether quality assurance has been effective, this research would argue that, if measured against the delegated functions, and based on the absence of any significant audit findings, the cases studied here have achieved their stated purpose. However, if judged against the NQF objectives, as intended, the quality assurance bodies have fallen far short of their goal.

This is not an indictment on the quality assurance bodies but rather on the NQF and all its agencies for inadequately defining and quantifying the objectives and measurements of achievement and quality.

4.5.3 Promoting consistency

In all three cases, the requirement for quality assurance to provide standardisation and consistency emerged. The FASSET representative indicated that before quality assurance structures had been established,

> *"different people were doing it differently" (FASSET interview*, p. *13).*

Therefore, quality assurance has introduced much needed consistency.

[27] Detailed above in the Case of NAMB

MerSETA also provided support for standardisation as an outcome of quality assurance, stating clearly in their assessment policy that their quality assurance activities were to ensure that "two or more constituent providers deliver the same 'standard' of consistency when assessing" (MerSETA, n.d.c, p. 15).

In the Trade sector, in addition to centralising assessment, the participant stated that:

> *"funding is standardised, work place approval is standardised, registration criteria for assessors and moderators is standardised. Certification process as from the first of October now, is becoming standardised… so ya, we moving toward a very standardised system"* (NAMB Interview, p. 17).

Ensuring similarity of output is clearly a key objective of quality assurance.

4.5.4 Size matters

Consistently, across the cases, the size of the sector to be serviced and the associated quality assurance capacity was an indicator of success. For NAMB, it was reported that:

> *"it becomes a capacity issue. The more your sector grows, the more centres you have… you need more centres for accessibility… the less manageable it becomes"* (NAMB Interview, p. 4).

Similarly with MerSETA, the capacity to respond to a large sector, regionally, was crucial; as mentioned:

> *"we have a very large sector. And if we don't have this approach, we easily reachable and we have people on the ground to be able to deal with it"* (MerSETA Interview, p. 13).

Finally, for FASSET the fact that they had only accredited 8 Quality assurance partners (QAP's) was important since manageability was dependent on size, as explained:

> "*I think it's difficult to implement that, when you've got very large numbers that you working with...*
>
> *So it's also about making sure that you have a manageable size … so you can have 35 QAP's if I had 5 or 10 specialists at FASSET*" (FASSET Interview, p. 11).

The consistency of this trend was significant enough to warrant the conclusion that consideration should always be given to the intended size of a quality system and measures taken to streamline or accommodate an increase in scope should be planned.

4.5.6 Conclusion

In this chapter I have presented the three cases of quality assurance and each have resulted in different findings; MerSETA implements a decentralised assessment model, using the accreditation and validation model and proved to be well-run and well-resourced, with extensive structures and adequate policies and procedures. FASSET also quality assures decentralised assessment but utilizes a delegation model that allowed for a much smaller workforce but possibly more distance between quality assurance and learning. Finally,

NAMB provided an interesting but incomplete picture as there is no website and little official information was publically available. Their conceptual model appears to be sound and NAMB have begun the long journey of building systems and processes that can certainly be evaluated in the near future, once implemented.

Whether any of the cases have presented activities that have improved the 'quality' of education in their sector, this research cannot say until the notion of quality is defined at a national level.

All of the cases were evaluated against the Quality Assurance Analytic Tool. From the analysis, it was concluded that while the broad evaluative categories provided by the tool were useful, the indicators set were not entirely suitable – the research had tried to provide quantitative indicators that would capture frequency and range of data but ended up not able to capture all the information relevant to making real decisions about quality assurance. While the categories remain useful and were used for this research, the indicators will need to be revised for future use as detailed in the following chapter.

The next chapter will synthesise the analysis and provide insight into the general state of quality assurance of occupational learning in South Africa.

Chapter 5: Conclusions and Recommendations

5.1 Introduction

This chapter presents the conclusions and recommendations derived from the research of three cases of quality assurance.

The chapter first discusses the evaluation of the cases themselves and it is demonstrated that the established cases (that of MerSETA and FASSET) present effective interpretations of the current quality assurance system, but that the 'theoretical', as yet unimplemented case of the NAMB was not sufficiently operational for comprehensive evaluation using the Quality Assurance Analytic Tool and should be tested once the revised Trade Test Regulations are approved and implemented.

The chapter then describes and discusses the Quality Assurance Analytic Tool that was developed to evaluate models of quality assurance. Some conclusions are drawn in respect of the efficacy of the categories and then recommendations are provided for future iterations of the tool. It is concluded that while the tool was useful, it is by no means a fait accompli and should be further developed to provide for evaluation that may successfully judge the effect of quality assurance on quality improvement at the level of tuition.

Finally, the broad justifications and expectations of quality assurance as identified from the literature and the research are elucidated.

5.2 How can Quality Assurance systems be effectively evaluated?

5.2.1 Evaluation of the cases

In respect of the three cases evaluated, it was found that all three provided for an effective system (albeit a more theoretical than implemented system in the case of NAMB) in respect of the quality assurance categories evaluated.

5.2.1.1 MerSETA Evaluation

MerSETA in its quality assurance of decentralised provision and assessment articulated the NQF objectives of increasing access to quality education in order to combat unemployment in their sector. In doing so, they particularly supported the development of artisans as their primary focus and further, specifically aimed at consistency of output. However, in respect of what constituted quality, the analysis could not conclude that any comprehensive articulation of quality existed – this was deemed a consequence of the lack of a national definition.

Bureaucratically the MerSETA was well established with resources and systems in place to ensure that its quality assurance activities were both effective and transparent. This

bureaucracy is built on the delegation by the QCTO and activities are clearly and effectively assigned and implemented.

MerSETA have a particularly impressive range of qualifications, totalling 122 registered qualifications that align with and support their focus on artisan development and are well managed in respect of the NLRD performance indicators.

Quality assurance therefore appeared to do what it was intended to do in the case of MerSETA – provide for the achievement of artisan related qualifications.

5.2.1.2 FASSET Evaluation

FASSET works with a model of both direct quality assurance as well as functions devolved to professional bodies in respect of quality assurance of decentralised learning and assessment. FASSET is able to operate efficiently with a very small quality assurance staff complement due to its devolved model, but resources are (and must be) highly professional and competent.

The apparent rationale for quality assurance (while not explicit) is concluded to be the high market value of the FASSET qualifications for the highly regulated financial services sector where accredited and quality assured achievement are required for license to practice. FASSET qualifications were thus well aligned to the occupations within their sector and many were registered at high levels of the NQF in response to the professional nature of the constituent occupations.

Like MerSETA, FASSET did not explicitly articulate a definition of quality, although it did indicate that quality was determined by the professional bodies to whom it had devolved quality assurance and that the quality standard of the professional bodies was inherently linked to the final assessment. This was interesting as it provided a clear link to the value placed on ‘sameness’ in that the assessment was deemed the most appropriate final indicator of learning achievement in contrast with the varied results (as all learners learn differently) during provision.

Quality assurance therefore was evaluated as effective in respect of supporting the professional sector in the consistent achievement of professional qualifications.

5.2.1.3 NAMB Evaluation

Finally, the case of NAMB was interesting as the only model that worked with centralised curricula and assessments. However, this model was largely theoretical and therefore could not be effectively evaluated by the analytic tool. It would be useful to evaluate this model once the Trade Test Regulations are approved and implemented to test whether the revised centralised curricula improve the quality and consistency of output of learning as quality assured by the standardised Trade Tests.

5.2.2 A Tool for evaluating Quality Assurance

It was clear from a preliminary review of literature that an evaluative framework was needed to enable valid judgments about quality assurance. The Quality Assurance Analytic Tool was developed and used to inform interviews and data analysis of each case. The results of the analysis is presented case by case in the preceding chapter, this section provides an evaluation of the analytic tool itself according to its four categories.

Category 1: Purpose

'Purpose' as a category was meant to elicit for each quality assurance body, the reasons for quality assurance, why quality assurance existed in the form that it did, what it was trying to accomplish and how quality was defined.

A question around the rationale for the quality assurance approach was included in the interview schedule to gather data. Document analysis was also conducted but very little direct evidence exists in respect of why we quality assure (a situation that simply confirms the problem statement).

Most of the cases did not articulate a purpose; however, some did in some way refer to the advancement of the principles of the NQF as obliged. Conducting delegated functions and ensuring consistency within their scope of quality assurance appears a more appropriate articulation of the purpose of the quality assurance bodies.

A national definition for quality was absent from the Quality Council's frameworks, but most likely from the provision of education and training too. The providers who have worked with integrity towards quality, have surely also struggled to understand what is considered good 'quality' and how this can be measured.

This category was useful in respect of providing a broad rationale for implementing quality assurance and specifically for evaluating whether the implemented model measured quality itself *however* the tool was not able to check whether the model resulted in any quality improvements. Future iterations should therefore look for a definition of quality against which to *test* the implemented model in relation to the actual activities of quality assurance in respect of education and training i.e. the category should be expanded to include empirical research at the level of the training provider.

Proposed changes to this category are presented below as 'Additions':

Category	Code
Purpose ***Is the purpose for quality assurance clear?***	P1. **Rationale for Quality Assurance is clear** – is rationale/ purpose for implementing quality assurance is explicit, understood and available?
	P2. **Quality Assurance is aligned to NQF principles** –Is 'sameness' enabled through quality assurance activities?
	P3. **Definition of quality** – Is there an internal definition for quality available against which achievement may be measured?
	Additional: **National definition** - What is the national definition of quality and is the quality assurance internal definition aligned?
	P4. **Internal control** – is purpose of quality assurance internal in the interest of self-improvement?
	P5. **External control** – is the purpose of quality assurance external in the interest of surveillance and accountability?
	Additional (move from Agreements): **Context** – what is the context within which quality assurance model is implemented and what are the expectations of stakeholders in respect of quality assurance?

Category 2: Map of Qualifications

This category focussed on the qualifications, registered on the NQF and quality assured by each quality assurance body under review. The category allowed for a broad analysis and some interesting patterns emerged.

FASSET qualifications ranged the higher levels of the NQF with the highest number of qualifications in Levels 4 and 6. MerSETA's map of qualifications was impressive: 122 full qualifications ranging from NQF 1–5 with most qualifications at NQF 4.

While the qualifications moderated by NAMB were found to be registered on the NQF, they represented a small sample of the scope of the trades: only 7 of the 125 currently listed trades were registered on the NQF – and these were therefore excluded from analysis in this category.

This category was especially interesting as it provided for an objective evaluation of qualification registration and management from the analysis of SAQA and the NLRD structures respectively. The information extracted provided for insight into the range of qualifications that were available to the sector and analysis was able to evaluate the suitability and scope of the qualifications.

While the indicators were sufficient, further analysis should be conducted to analyse the learner uptake against these qualifications (and possibly track employment thereafter) to determine whether they match the trend of qualifications registration and the needs of the labour market.

Proposed changes to this category are presented below as 'Additions':

Category	Code
Map of Qualifications *Are qualifications formally developed and registered?*	Q1. **Qualifications are registered on the NQF** – are qualifications formally registered and managed? If so, how many and at what levels?
	Q2. **Standards are set through official structures** – is the setting of standards comparable within a singular, official model?
	Additional: **Take up of qualifications** – do learners access the qualifications within the scope of the quality assurance body? How does the take up compare across the map of qualifications and in relation to the industry?
	Additional: **Placement of graduates** – do graduates secure employment based on the achievement of the qualifications in the scope of the quality assurance body? Are the skills achieved relevant to the workplace?
	Q3. **Standards are linked to career pathway** – is there alignment between standards and careers?

Category 3: Bureaucracy

In terms of 'Bureaucracy', the key requirements were the existence of formal structures and policies, and adequate resources (both human and financial) available to assure learning and assessment. An inefficient bureaucracy can be counter-productive and create barriers to learner progression if credits required for articulation are not awarded.

It was found that SETAs have policies, structures and adequate resources to conduct their functions – as delegated (this does of course not take into consideration any expectations from other stakeholders such as providers and learners).

The requirement of adequate resources emerged as a recurrent trend and should be carefully planned and managed to ensure consistent service; FASSET indicated that expanding their scope to more than 8 delegated partners would be problematic with its current staff compliment, MerSETA explained that they had a large sector but have enough

resources to provide effective service regardless of where it was required and NAMB warned that the broader the scope the less manageable quality assurance would become.

This category proved to be somewhat subjective as evaluation was primarily based on policies retrieved and narrative from interviews supporting the alignment of process and structure to policy. Whether policies and structures were in fact effective was not as easy to identify and so it is recommended that future iterations of the tool look at evaluating the administration of the quality assurance system in depth – perhaps through onsite demonstrations and specifically through interventions at the level of training provider that may then bring to light certain areas of improvement in relation to the bureaucracy of the quality assurance system.

Proposed changes to this category are presented below as 'Additions':

Category	Code
Bureaucracy ***Are formal structures in place to assure learning and assessment?***	B1. **Policy and process for quality assurance functions are available** – are there formal structures, systems and policies in place to quality assure learning and assessment?
	Additional: **Onsite evaluation of system** – is the quality assurance effective in respect of onsite administration demonstrations and training provider evaluation?
	B2. **Quality assurance is aligned to national requirements** – does the bureaucracy adhere to the prescribed model?
	B3. **In whose interests are judgements made** – how does the *implemented* quality assurance system enable the interests of one group over another?
	B4. **Resources are adequate/ appropriate to implement quality assurance** – are the bureaucracy's resources adequate and appropriate?

Category 4: Agreements

In all three cases, the delegations that are in place appeared to have both positive and negative effects. Positively, the delegations provided for an external arbiter and assurance of good governance (although this may also be used negatively when governance is reduced to tick-box exercises). Negatively, they provided another layer to an already complex quality assurance system. This category was important because it provided data in respect of context and institutional arrangements that are already in place that would otherwise not have been discussed.

Whether the precise delegation arrangements support or detract from the exchange between learning and quality assurance is unclear and will need to be interrogated further at the level of provision.

This category is identified by Young (2001, p. 31) as “politically least visible but practically [the] most important component of a qualifications framework”. All transactions in education and training rely on the arrangements, legislated, delegated or institutional, between institutions of learning and quality assurance and although the category proved very valuable, evaluation was too superficial.

While the category itself should be maintained, it is recommended that specific analysis be conducted at levels of quality council, quality assurance body and provision, to elucidate the actual arrangements and clarity in respect of roles and responsibilities. Whether or not the systems and agents support the arrangements or provide resistance at the level of implementation may then be effectively evaluated.

Finally, the indicator of ‘context’ should be removed and placed in the Purpose category to provide a more comprehensive overall evaluation of the rationale and expectations of quality assurance.

Proposed changes to this category are presented below as ‘Additions’:

Category	Code
Agreements ***Do agreements support exchange between learning and quality assurance?***	A1. **Institutional arrangements in place** – are there delegated or statutory arrangements that underpin learning and there quality assurance thereof?
	Additional: **Institutional arrangement evaluation** – does specific analysis conducted at levels of quality council, quality assurance body and provision elucidate the actual arrangements and clarity in respect of roles and responsibilities? Do the systems and agents support the arrangements or provide resistance at the level of implementation?
	A2.**Responsibility of Quality Assurance Body (QAB) is clear** - do quality assurance bodies understand their unique responsibilities within the cycle of learning and quality assurance and execute activities in line with a clear mandate?
	A3. **Responsibility of quality assured is clear** - do training providers being quality assured understand their unique responsibilities within the cycle of learning and quality assurance and execute activities in line with a clear mandate.
	A4. **Context** – moved to Purpose category

5.2.3 Quality Assurance Analytic Tool Conclusion

While the analytic tool is by no means complete and the indicators used to analyse and categorise data were not always useful (some remained ambiguous even after review) it did provide a broad basis on which to develop a second iteration.

The categories effectively elucidated the key aspects of quality assurance but were not able to measure achievement of each category in great detail. This may be caused by the absence of measurable objectives. The tool was however able to effectively evaluate what was working broadly in respect of the categories investigated and was able to conclude that effective evaluation is largely dependent on the articulation of clear and specific objectives for quality assurance and definitions of quality.

5.3 Justification for Quality Assurance

The literature provided clear justification for quality assurance of occupational learning for the purposes of providing assurance to external stakeholders; the state, industry and professional bodies. This study agrees with authors who argue that as long as education is funded from the national fiscus, it should also be externally monitored (Luckett, 2007; Barnett, 1994; Allais, 2009; Baijnath et al., 2001) to ensure the appropriate management of public funds. Quality assurance is also accountable as an “agent of social transformation” (Baijnath et al., 2001, p. 81) that is expected to support the equitable distribution of ‘quality’ education as social capital that can be traded for career progression and social improvement.

Inherent in accountability is the notion of assuring quality. The efficiency of public expenditure and the credibility of social improvement depend on the quality of education. This is a nebulous construct that has so far confounded providers, quality assurors and, I would argue, the state, for a long time. A shared definition of quality is critical in a quality assurance system as providers need to know what is expected of them in respect of quality learning and assessment on the one hand, and quality assurors need to apply an objective measure of quality when evaluating provision on the other hand. Thus, its absence in the South African context is surprising since quality assurance systems are intended to be built around an agreed notion of quality.

In its original manufacturing context, the specification of the product was absolute and quality could be judged more effectively. However, in education, this is not the case. As difficult as quality is to define, it is more difficult to measure, judge and ultimately, be assured of quality, without a specification of the end-product. The product of education is a productive citizen and therefore there will never be a definitive end-product in the education sector. This research suggests that perhaps the most we can do is to provide an objective measure of quality that could then contribute to improving the evaluation of the *process and implementation* of quality assurance.

After 19 years of the NQF and associated quality assurance structures, quality has remained un-defined and so, while justification exists in relation to the assurance of quality, no real measurement of the effectiveness of quality assurance can in fact be conducted without the express articulation of quality.

This research concludes that quality assurance is justified as the guardian of quality (whatever that may be) in order to satisfy public accountability. However, quality must be defined and shared, so that all role players are aware of the goals and measurements. Then quality may also be adequately tracked and causal relations attributed if benchmarks are objectively set.

5.4 What is expected of Quality Assurance?

In terms of the expectations of quality assurance, this research has concluded from the literature that quality assurance is a constituent component of the qualifications framework and as such should achieve, or support the achievement of, the stated objectives of the framework. Further, the delegation arrangements that are currently in place mandating the quality assurance bodies to conduct quality assurance, all explicitly prescribe the advancement of the objectives of the NQF.

In particular, it seems plausible that quality assurance could contribute directly to the NQF objective 'enhancement of the quality of education and training', but as discussed above, this simply cannot be done without the clearly specified and measurable definition of what those who control the quality assurance system (the Quality Council) accepts as 'quality'. Once this is articulated, the necessary baselines, quality promotion and impact studies can follow.

Analysis of the cases identified that they support the advancement of quality and instructed their providers to advance the objectives of the NQF, but the adherence at level of provision was not researched here. However, from the analysis of the three case studies as well as the literature, I would argue that there is little that quality assurance can do but pay lip service to objectives that are so broad. Most of the objectives cannot be directly contributed to by training providers - to 'create a single integrated national framework' is clearly not a provisioning objective - as much as provisioning must be firmly entrenched in the single integrated framework.

Further consideration leads to the conclusion that even the formal articulation of 'quality' that is clear and more specific than the unwieldy objectives of the NQF would likely not transform *external* quality assurance from compliance to self-improvement. This is because quality assurance in South Africa has mainly been an externally controlled activity that is linked to surveillance (Mhlanga, 2008, p. 62) and not self-improvement. Barnett (1994, p. 172) categorises external control as 'Bureaucratic' and so this research concludes that regardless of the formulation of quality, it is the inherent power relations that lead inevitably to a system of compliance. However, the formulation of clear and measurable objectives for quality assurance would allow for more effective quality assurance (albeit compliance driven), that is

able to measure specific areas and provide evaluations that may be very valuable in terms of consistency or '*sameness*' amongst providers.

So this research concludes that measurement against the NQF objectives seems to be an unfair evaluation because quality assurance will always find it difficult to provide direct causal evidence. However, the alternate proposal that emerges from the analysis is that quality assurance should ensure consistency.

The SAQA model has aimed for consistency through learning outcomes which stipulated a minimum standard. However, maintaining consistency of provision has proven to be difficult in the decentralised system where different learning programmes were developed and each assessed by different summative assessments. The system was literally not designed to provide outputs of consistency, while claiming to allow for similar provision and assessment.

The literature has shown that the outputs of decentralised assessments are often dissimilar due to individual interpretations and are likely to be set at varying complexity levels based on the skills of the individual setting the assessment or guided by the apparent aptitude of the learner. If quality assurance is expected to ensure a national standard, then one national exit assessment, or a very controlled assessment system, can be the only response.

While it is achievable and desirable that quality assurance ensure consistency of output that is dependent on common content and exit requirements, it is not easily achievable. Umalusi (2007a) proposed "commonly developed specifications of content, concepts, and learning outcomes which are tested through a common, externally-set assessment" (Umalusi, 2007a, p. 46) to ensure consistency. Suggesting that consistency would be achieved by the standardisation of curricula that led to centralised summative assessment.

Standardised curriculum will need to be provided *and quality assured for alignment to a minimum, national standard* for decentralised delivery that will support consistency of provisioning and centralised assessment will need to be developed that in turn *aligns to both the minimum standard and the curriculum.* The centralised assessment would need to be administered by appropriately qualified and competent assessors, whose judgements would need to be moderated and externally quality assured to ensure consistency of output. While this may sound similar to the current system, the major departure is that learners would all be given a similar basis of learning and be judged against a standardised assessment instrument.

This research argues for re-centralising curricula that may then allow for similar decentralised provision towards a standardised, centralised assessment (the QCTO model) that would contribute towards the consistency of graduates (who would all have been deemed competent against the same, centralised assessment as opposed to significantly varied de-centralised provider based assessments of the past). This conclusion would of course require an associated change in quality assurance – in particular, a focus on the curriculum and external assessment development as opposed to the current focus on accreditation.

Whether consistency, the NQF objectives, the functional objectives set by delegation or an altogether different goal, it is important that the objectives for quality assurance are set, that they are clear and measurable and that they do not conflict with or diverge significantly from organisational and national goals.

5.5 Final Thoughts

This research sought to understand 'What is working in occupational quality assurance systems, and why?' and intended to do so in two parts: first by understanding the objectives of quality assurance specific to occupational learning in South Africa and developing a Quality Assurance Analytic Tool in relation to be implemented in this research and second by evaluating instrumental cases using the tool.

The research looked at three cases: that of MerSETA (the Manufacturing, Engineering and Related Services Sector Education and Training Authority), an accredited ETQA that implements the SAQA decentralised assessment model; FASSET (the Finance and Accounting Services Sector Education and Training Authority), whose ETQA also implements the decentralised assessment model, but where quality assurance functions are further devolved to professional bodies; and the NAMB (National Artisan Moderation Body), representing the quality assurance model of the QCTO as the statutory assessment partner for all listed trades.

For each of the occupational quality assurance systems explored, the following more specific questions were used to guide the research;

1. What is the justification behind quality assurance in occupational learning?
2. What is expected of quality assurance and is it achieving these goals?
3. How can quality assurance systems be effectively evaluated?

In this study, I have shown that quality assurance in South Africa is a tenuous endeavour, made more so by the lack of clear objectives and national definitions of quality.

The cases reviewed all proved to be effective and well run operations but they could not elicit an evaluation of whether the quality assurance activities in fact enabled 'quality learning'.

In relation to the broad area of research, it was apparent that quality assurance is necessary for accounting to its stakeholders in terms of public expenditure and social transformation, but can only be evaluated effectively based on clearly defined objectives.

The Quality Assurance Analytic Tool was tested and while useful, it was evident that more robust indicators for measurement would need to be developed. While the categories remain

functional, future research should look at developing measurable and objective indicators in order to enable comprehensive evaluation of quality assurance systems.

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NAMB

The documents below were provided by NAMB directly:

DHET 2011c: *Monitoring of accredited trade test centres*.

DHET (n.d.): Trade test regulations

APPENDICES

Appendix 1: Quality Assurance Analytic framework

Version1: Quality Assurance Analytic Tool

MAP OF QUALIFICATIONS

1. What is being quality assured?
2. Where does it fit into the learning pathway required for career trajectory?
3. Points of standard setting
    a. Who develops the standards and how?
    b. Who develops the curriculum and how?
    c. How much variation is likely to exist in implementation of standard due to interpretation/ context?

PURPOSE

1. Purpose
    a. Why is this programme being quality assured?
    b. What is quality assurance supposed to accomplish?
    c. What is the occupational programme supposed to accomplish?
    d. How is ‘quality’ defined in this context?
2. Points of assurance
    a. At what point is the programme quality assured?
    b. What is checked and how is it checked/ quality assured?
    c. What is taken as the evidence of ‘quality’?
    d. Who decides?
3. Internal Logic
    a. Do the activities and sequence of quality assurance support the stated purpose of quality assurance?

b. Does it do what it says it does?

c. Are there any ‘common sense’/ unjustified activities?

BUREAUCRACY

1. Cost indicators
    a. Who pays?
    b. How much does the process cost?
    c. Is the impact worth the expense?
2. Time
    a. How long is the process?
    b. What is the time used for?
    c. Is the impact worth the time?
3. Process
    a. Outline of process
    b. Effectiveness of process
    c. Adequate justification for procedures
    d. Impact of quality assurance
4. Ease of Use
    a. Simple and effective administration vs. bureaucracy
    b. Interpretation of requirements

AGREEMENTS

1. Institutional Arrangements
    a. Are there established institutions trusted to provide learning?
2. Resources
    a. Who is involved?
    b. Is separation of duty required, and for what purpose?

3. Context

    a. What must be in place for this approach to work?

    b. In what condition can this approach not work?

    c. What is the rationale for the approach in this context?

Version 2: Quality Assurance Analytic Tool

Category	Code
Purpose	P1. Rationale for QA is clear
	P2. QA is aligned to NQF principles
	P3. Definition of quality
	P4 Internal control (interests of the academics – self-improvement)
	P5 External control (tax payer/ government - surveillance)
Map of Qualifications	Q1. Qualifications are registered on the NQF
	Q2. Standards are set through official structures
	Q3. Standards are linked to career pathway
Bureaucracy	B1. Policy and process for QA functions is available
	B2. QA is aligned to national requirements
	B3. In whose interests are judge
	B4. Resources are adequate/ appropriate to implement QA
Agreements	A1. Institutional arrangements in place (delegation/ statutory functions)
	A2.Responsibility of QAB is clear
	A3. Responsibility of quality assured is clear
	A4. Context

Appendix 2: Interview Schedule

Background:

- What does your sector look like? Professionals/ artisans etc.?
- What qualifications do your institute deliver/ quality assure?

Process

- What are the quality assurance arrangements for learning?
- How are your standards set? Process and structure
- How are your standards quality assured? Process and structure?
- What makes your process effective?
- What is the impact of quality assurance on the quality of learning and assessment?

Ease of Use

- Is your approach simple and effective or is the administration bureaucratic and cumbersome? Justify
- Is there common interpretation of requirements of quality assurance?

Context

- What must be in place for this approach to work?
- In what condition can this approach not work?
- What is the rationale for the approach in this context?

Appendix 3: Quality Assurance Practitioner Follow up Questionnaire:

You may answer any/all question(s) with a document (policy/ process / guideline) or reference to a publically available document.

Map of Qualifications

How do you know that the standards you set are credible?

What are your prerequisites for the development of a good quality standard/ qualification?

What are your validation points for a good quality standard/ qualification?

Are there clear career pathways linked to the qualifications?

How is achievement of your standard judged?

How do you judge competence? (Is your assessment continuous or summative, practical or written?)

Are assessments standardized or de-centralized institutionally?

What are the criteria to become an assessor?

Quality assurance

What is your quality assurance approach supposed to accomplish?

Please outline your process for certification? (i.e. how are achievements validated and how does validation trigger certification?)

Cost indicators

Who pays for quality assurance?

How much does the process cost?

Appendix 4: Information and Consent letters

NAMB information and consent letters

HOD ACKNOWLEDGEMENT OF INFORMATION SHEET AND PROPOSED RESEARCH PROJECT:

A CRITICAL ANALYSIS OF QUALITY ASSURANCE APPROACHES TO OCCUPATIONAL LEARNING IN SOUTH AFRICA.

University of Witwatersrand Protocol Number: 2013ECE102M

It would be greatly appreciated if you could please acknowledge receipt of the information sheet requesting permission to conduct research in your institution. You will be acknowledging that:

- Involvement is completely voluntary and nominated participants may choose not to participate or to withdraw their consent at any given time without any negative consequences.
- Interviews with nominated participants will be audio-recorded to ensure accuracy of transcription. Consent will be obtained separately and specifically for recording and all data and transcripts will be kept securely and destroyed after 5 years of completion of this project.
- You have read and understand the information sheet and acknowledge its contents.
- While the researcher will do everything in her power to keep institutions and individual identities anonymous and their inputs confidential, through the use of pseudonyms, confidentiality and anonymity cannot be guaranteed due of the nature of the research that aims to contribute to strengthening the emerging national occupational qualification quality assurance approach.
- Participant's individual consent will be obtained before data collection begins.
- The data collection process will not interfere with the day to day running of the institution
- It is envisaged that the research findings will be used for academic purposes including books, journals and or conference proceedings and to inform policy debate.

I, Dr. F. PRINSLOO (*Head of Department full name*) acknowledge the information stated above and grant permission for Nadia Traut to conduct research within INDLELA / NAMB (*institution's name)* in 2013.

Please provide details should you wish to receive an electronic summary of the research findings.

E-mail address: fprinsloo@dhet.gov.za

Signature: _____ Date: 7/1/2014

3 | Page

PARTICIPANT CONSENT FOR INDIVIDUAL INTERVIEWS RELATED TO THE RESEARCH PROJECT:

A CRITICAL ANALYSIS OF QUALITY ASSURANCE APPROACHES TO OCCUPATIONAL LEARNING IN SOUTH AFRICA.

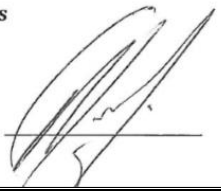
University of Witwatersrand Protocol Number: 2013ECE102M

I, NICOLAAS HENDRIK LOUW *(participant's full name)*

Please tick either the yes or no block below to show that you understand what it will mean to consent and participate:

- I have read and I understand the information sheet. Yes ☒ / No ☐
- My participation is completely voluntary and I understand that I may choose not to participate or to withdraw from the study at any time without any punishment or negative consequences. Yes ☒ / No ☐
- I will also not be advantaged, disadvantaged or paid for participating. Yes ☒ / No ☐
- I do not have to answer any questions I don't feel comfortable answering. Yes ☒ / No ☐
- While confidentiality and anonymity cannot be guaranteed, a pseudonym (fake name) will be used to protect my individual identity in all academic writing including books, journal and conferences Yes ☒ / No ☐

By signing below I give consent to participate in the research project and individual interviews

Signature:  Date: 04/10/2013

PARTICIPANT CONSENT FOR AUDIO-RECORDING AND TRANSCRIBING INDIVIDUAL INTERVIEWS RELATED TO THE RESEARCH PROJECT:

A CRITICAL ANALYSIS OF QUALITY ASSURANCE APPROACHES TO OCCUPATIONAL LEARNING IN SOUTH AFRICA.

University of Witwatersrand Protocol Number: 2013ECE102M

I, NICOLAAS HENDRIK LOUW *(participant's full name)*

Please tick either the yes or no block to show that you understand what it will mean to consent and participate:

- My participation is completely voluntary and I may choose not to participate or to withdraw from the study at any time without any punishment or negative consequences. Yes ☒ / No ☐
- I will also not be advantaged, disadvantaged or paid for participating. Yes ☒ / No ☐
- While confidentiality and anonymity cannot be guaranteed, a pseudonym (fake name) will be used to protect my individual identity in all academic writing including books, journal and conferences Yes ☒ / No ☐
- The audio recordings will be used to make sure the researcher uses exactly what I answered in the interview questions. Yes ☒ / No ☐
- All audio-taped and transcribed responses will be safely kept in a locked cabinet and completely destroyed between 3 – 5 years after completion of the project. Yes ☒ / No ☐

By signing below I give consent for interviews to be audio- taped and transcribed

Signature:  Date: 04/10/2013

FASSET information and consent letters

HOD ACKNOWLEDGEMENT OF INFORMATION SHEET AND PROPOSED RESEARCH PROJECT:

A CRITICAL ANALYSIS OF QUALITY ASSURANCE APPROACHES TO OCCUPATIONAL LEARNING IN SOUTH AFRICA.

University of Witwatersrand Protocol Number: 2013ECE102M

It would be greatly appreciated if you could please acknowledge receipt of the information sheet requesting permission to conduct research in your institution. You will be acknowledging that:

- Involvement is completely voluntary and nominated participants may choose not to participate or to withdraw their consent at any given time without any negative consequences.
- Interviews with nominated participants will be audio-recorded to ensure accuracy of transcription. Consent will be obtained separately and specifically for recording and all data and transcripts will be kept securely and destroyed after 5 years of completion of this project.
- You have read and understand the information sheet and acknowledge its contents.
- While the researcher will do everything in her power to keep institutions and individual identities anonymous and their inputs confidential, through the use of pseudonyms, confidentiality and anonymity cannot be guaranteed due of the nature of the research that aims to contribute to strengthening the emerging national occupational qualification quality assurance approach.
- Participant's individual consent will be obtained before data collection begins.
- The data collection process will not interfere with the day to day running of the institution
- It is envisaged that the research findings will be used for academic purposes including books, journals and or conference proceedings and to inform policy debate.

I, Natércia Faustino _____ (*Head of Department full name*) acknowledge the information stated above and grant permission for Nadia Traut to conduct research within Fasset _____ (*institution's name)* in 2013.

Please provide details should you wish to receive an electronic summary of the research findings.

E-mail address: natercia.faustino@fasset.org.za

Signature: _____ Date: 040913

PARTICIPANT CONSENT FOR INDIVIDUAL INTERVIEWS RELATED TO THE RESEARCH PROJECT:

A CRITICAL ANALYSIS OF QUALITY ASSURANCE APPROACHES TO OCCUPATIONAL LEARNING IN SOUTH AFRICA.

University of Witwatersrand Protocol Number: 2013ECE102M

I, Natércia Faustino (*participant's full name*)

Please tick either the yes or no block below to show that you understand what it will mean to consent and participate:

- I have read and I understand the information sheet. Yes ☑ / No ☐
- My participation is completely voluntary and I understand that I may choose not to participate or to withdraw from the study at any time without any punishment or negative consequences. Yes ☑ / No ☐
- I will also not be advantaged, disadvantaged or paid for participating. Yes ☑ / No ☐
- I do not have to answer any questions I don't feel comfortable answering. Yes ☑ / No ☐
- While confidentiality and anonymity cannot be guaranteed, a pseudonym (fake name) will be used to protect my individual identity in all academic writing including books, journal and conferences Yes ☑ / No ☐

By signing below I give consent to participate in the research project and individual interviews

Signature: _____ Date: 040913

PARTICIPANT CONSENT FOR AUDIO-RECORDING AND TRANSCRIBING INDIVIDUAL INTERVIEWS RELATED TO THE RESEARCH PROJECT:

A CRITICAL ANALYSIS OF QUALITY ASSURANCE APPROACHES TO OCCUPATIONAL LEARNING IN SOUTH AFRICA.

University of Witwatersrand Protocol Number: 2013ECE102M

I, Natércia Faustino *(participant's full name)*

Please tick either the yes or no block to show that you understand what it will mean to consent and participate:

- My participation is completely voluntary and I may choose not to participate or to withdraw from the study at any time without any punishment or negative consequences. Yes ☑ / No ☐
- I will also not be advantaged, disadvantaged or paid for participating. Yes ☑ / No ☐
- While confidentiality and anonymity cannot be guaranteed, a pseudonym (fake name) will be used to protect my individual identity in all academic writing including books, journal and conferences Yes ☑ / No ☐
- The audio recordings will be used to make sure the researcher uses exactly what I answered in the interview questions. Yes ☑ / No ☐
- All audio-taped and transcribed responses will be safely kept in a locked cabinet and completely destroyed between 3 – 5 years after completion of the project. Yes ☑ / No ☐

By signing below I give consent for interviews to be audio- taped and transcribed

Signature: _____ Date: 040713

MerSETA information and consent letters

HOD ACKNOWLEDGEMENT OF INFORMATION SHEET AND PROPOSED RESEARCH PROJECT:

A CRITICAL ANALYSIS OF QUALITY ASSURANCE APPROACHES TO OCCUPATIONAL LEARNING IN SOUTH AFRICA.

University of Witwatersrand Protocol Number: 2013ECE102M

It would be greatly appreciated if you could please acknowledge receipt of the information sheet requesting permission to conduct research in your institution. You will be acknowledging that:

- Involvement is completely voluntary and nominated participants may choose not to participate or to withdraw their consent at any given time without any negative consequences.
- Interviews with nominated participants will be audio-recorded to ensure accuracy of transcription. Consent will be obtained separately and specifically for recording and all data and transcripts will be kept securely and destroyed after 5 years of completion of this project.
- You have read and understand the information sheet and acknowledge its contents.
- While the researcher will do everything in her power to keep institutions and individual identities anonymous and their inputs confidential, through the use of pseudonyms, confidentiality and anonymity cannot be guaranteed due of the nature of the research that aims to contribute to strengthening the emerging national occupational qualification quality assurance approach.
- Participant's individual consent will be obtained before data collection begins.
- The data collection process will not interfere with the day to day running of the institution
- It is envisaged that the research findings will be used for academic purposes including books, journals and or conference proceedings and to inform policy debate.

I, JACOBUS PETRUS C. BASSON (*Head of Department full name*) acknowledge the information stated above and grant permission for Nadia Traut to conduct research within MERSETA (*institution's name)* in 2013.

Please provide details should you wish to receive an electronic summary of the research findings.

E-mail address: cbasson@merseta.org.za.

Signature:  Date: 23/9/13

PARTICIPANT CONSENT FOR INDIVIDUAL INTERVIEWS RELATED TO THE RESEARCH PROJECT:

A CRITICAL ANALYSIS OF QUALITY ASSURANCE APPROACHES TO OCCUPATIONAL LEARNING IN SOUTH AFRICA.

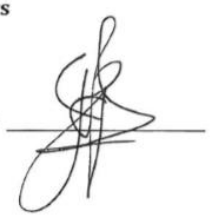
University of Witwatersrand Protocol Number: 2013ECE102M

I, JACOBUS PETRUS CHRISTOFFEL BASSON. *(participant's full name)*

Please tick either the yes or no block below to show that you understand what it will mean to consent and participate:

- I have read and I understand the information sheet. Yes ☒ / No ☐
- My participation is completely voluntary and I understand that I may choose not to participate or to withdraw from the study at any time without any punishment or negative consequences. Yes ☒ / No ☐
- I will also not be advantaged, disadvantaged or paid for participating. Yes ☒ / No ☐
- I do not have to answer any questions I don't feel comfortable answering. Yes ☒ / No ☐
- While confidentiality and anonymity cannot be guaranteed, a pseudonym (fake name) will be used to protect my individual identity in all academic writing including books, journal and conferences Yes ☒ / No ☐

By signing below I give consent to participate in the research project and individual interviews

Signature:  Date: 23/9/13.

PARTICIPANT CONSENT FOR AUDIO-RECORDING AND TRANSCRIBING INDIVIDUAL INTERVIEWS RELATED TO THE RESEARCH PROJECT:

A CRITICAL ANALYSIS OF QUALITY ASSURANCE APPROACHES TO OCCUPATIONAL LEARNING IN SOUTH AFRICA.

University of Witwatersrand Protocol Number: 2013ECE102M

I, JACOBUS PETRUS CHRISTOFFEL BASSON *(participant's full name)*

Please tick either the yes or no block to show that you understand what it will mean to consent and participate:

- My participation is completely voluntary and I may choose not to participate or to withdraw from the study at any time without any punishment or negative consequences. Yes ☒ / No ☐
- I will also not be advantaged, disadvantaged or paid for participating. Yes ☒ / No ☐
- While confidentiality and anonymity cannot be guaranteed, a pseudonym (fake name) will be used to protect my individual identity in all academic writing including books, journal and conferences Yes ☒ / No ☐
- The audio recordings will be used to make sure the researcher uses exactly what I answered in the interview questions. Yes ☒ / No ☐
- All audio-taped and transcribed responses will be safely kept in a locked cabinet and completely destroyed between 3 – 5 years after completion of the project. Yes ☒ / No ☐

By signing below I give consent for interviews to be audio- taped and transcribed

Signature:  Date: 23/9/13

Appendix 5: DHET Skills Accord Presentation

The below is an excerpt from DHET Skills Accord presentation (2011: 1 & 4)



Skills Accord Actual Registrations as at 30 September 2011

SETA	Economic Sectors	Target for 2011-2012	TOTAL Registered year-to-date	VARIANCE TARGET YTD
CHIETA	Chemicals	2,319	236	2,083
FPMSETA	Fibre Processing & Manufacturing	500	56	444
CETA	Construction	2,500	163	2,337
EWSETA	Energy & Water	995	177	818
FOODBEV	Food Processing	96	149	-53
CATHSSETA	Tourism, Arts & Culture, Hospitality, Sports	50	70	-20
LGSETA	Local Government	570	1193	-623
MQA	Mining and Minerals	3,424	705	2,719
MERSETA	Manufacturing & Engineering	5,358	3237	2,121
SASSETA	Safety & Security	1,500	290	1,210
PSETA	Public Sector	300	0	300
AGRISETA	Agriculture	133	79	54
SERVICES	Services Sector	3,000	1025	1,975
TETA	Transport	2,255	249	2,006
W&RSETA	Wholesale & Retail	-	35	-35
INDLELA	Non SETA Candidates	7,000	2414	4,586
	Totals Registered	30,000	10,078	19,922

4

Appendix 6: MerSETA Map of Qualifications

No	No/ NQF level	Qual / Prog ID	Qualification Title / Learning Programme Title	NQF Level	Min Credits	Quality Assuring Body
1	1	23253	National Certificate (GETC): Manufacturing, Engineering and Related Activities	Level 1	124	MERSETA
2	1	65449	National Certificate: Air-conditioning, Refrigeration and Ventilation	Level 2	133	MERSETA
3	2	64709	National Certificate: Automotive Body Repair	Level 2	120	MERSETA
4	3	71950	National Certificate: Automotive Components: Manufacturing and Assembly	Level 2	123	MERSETA
5	4	65809	National Certificate: Automotive Manufacturing and Assembly	Level 2	135	MERSETA
6	5	64810	National Certificate: Automotive Repair and Maintenance	Level 2	125	MERSETA
7	6	64410	National Certificate: Automotive Spray Painting	Level 2	120	MERSETA
8	7	78944	National Certificate: Autotronics	Level 2	127	MERSETA
9	8	57878	National Certificate: CNC Production Machining	Level 2	143	MERSETA
10	9	58860	National Certificate: Electro-Mechanical Winding	Level 2	120	MERSETA
11	10	66769	National Certificate: Electro-Mechanics: Manufacturing and Engineering	Level 2	166	MERSETA
12	11	67569	National Certificate: Electronics Manufacturing and Assembly	Level 2	132	MERSETA

13	12	66774	National Certificate: Engineering Fabrication: Manufacturing and Engineering	Level 2	148	MERSETA
14	13	58268	National Certificate: Lift Installation and Maintenance	Level 2	126	MERSETA
15	14	63476	National Certificate: Mechanical Engineering: Fitting: Fluid Power	Level 2	130	MERSETA
16	15	63473	National Certificate: Mechanical Engineering: Fitting: Manufacturing and Engineering	Level 2	130	MERSETA
17	16	63483	National Certificate: Mechanical Handling: Rigging: Manufacturing and Engineering	Level 2	127	MERSETA
18	17	67629	National Certificate: Mechatronics	Level 2	142	MERSETA
19	18	79686	National Certificate: Metal and Engineering Manufacturing Processes	Level 2	120	MERSETA
20	19	58718	National Certificate: Metals Processing	Level 2	120	MERSETA
21	20	65189	National Certificate: Metals Production: Manufacturing and Engineering	Level 2	120	MERSETA
22	21	49450	National Certificate: Plastics Manufacturing	Level 2	120	MERSETA
23	22	36154	National Certificate: Polymer Composite Fabrication	Level 2	132	MERSETA
24	23	21011	National Certificate: Power and telecommunication cable manufacturing	Level 2	128	MERSETA
25	24	58781	National Certificate: Production Technology	Level 2	125	MERSETA
26	25	48800	National Certificate: Quality Checking and Finishing of	Level	140	MERSETA

			Manufactured Tyres	2		
27	26	24215	National Certificate: Thermoplastic Fabrication	Level 2	121	MERSETA
28	27	48793	National Certificate: Tyre and Tyre Component Manufacturing	Level 2	128	MERSETA
29	28	61809	National Certificate: Tyre Repair and Maintenance	Level 2	120	MERSETA
30	29	58534	National Certificate: Welding Application and Practice: Manufacturing and Engineering	Level 2	158	MERSETA
31	30	77003	National Certificate: Yacht and Boat Building	Level 2	136	MERSETA
32	1	48794	National Certificate in Quality Checking of Tyres and Tyre Components	Level 3	134	MERSETA
33	2	65489	National Certificate: Air-Conditioning, Refrigeration and Ventilation	Level 3	122	MERSETA
34	3	64529	National Certificate: Automotive Body Repair	Level 3	135	MERSETA
35	4	71989	National Certificate: Automotive Components: Manufacturing and Assembly	Level 3	120	MERSETA
36	5	64809	National Certificate: Automotive Repair and Maintenance	Level 3	135	MERSETA
37	6	64409	National Certificate: Automotive Spray Painting	Level 3	120	MERSETA
38	7	78923	National Certificate: Autotronics	Level 3	132	MERSETA
39	8	57877	National Certificate: CNC Production Machining	Level 3	128	MERSETA
40	9	82966	National Certificate: Electrical Engineering: Switchgear	Level	133	MERSETA

			Manufacturing	3		
41	10	58862	National Certificate: Electro-Mechanical Winding	Level 3	130	MERSETA
42	11	66771	National Certificate: Electro-Mechanics: Manufacturing and Engineering	Level 3	141	MERSETA
43	12	66772	National Certificate: Engineering Fabrication: Manufacturing and Engineering	Level 3	138	MERSETA
44	13	58882	National Certificate: Fluid Power	Level 3	135	MERSETA
45	14	58271	National Certificate: Lift Installation and Maintenance	Level 3	136	MERSETA
46	15	83986	National Certificate: Management: Stores and Warehousing	Level 3	120	MERSETA
47	16	23255	National Certificate: Mechanical Engineering: Fitting and Machining	Level 3	174	MERSETA
48	17	63469	National Certificate: Mechanical Engineering: Fitting: Manufacturing and Engineering	Level 3	120	MERSETA
49	18	63329	National Certificate: Mechanical Engineering: Pipe-Fitting: Manufacturing and Engineering	Level 3	121	MERSETA
50	19	63489	National Certificate: Mechanical Handling: Rigging: Manufacturing and Engineering	Level 3	121	MERSETA
51	20	67609	National Certificate: Mechatronics	Level 3	141	MERSETA
52	21	79666	National Certificate: Metal and Engineering Manufacturing Processes	Level 3	121	MERSETA
53	22	58719	National Certificate: Metals	Level	120	MERSETA

			Processing	3		
54	23	65191	National Certificate: Metals Production: Manufacturing and Engineering	Level 3	120	MERSETA
55	24	49449	National Certificate: Plastics Manufacturing	Level 3	126	MERSETA
56	25	36155	National Certificate: Polymer Composite Fabrication	Level 3	130	MERSETA
57	26	79407	National Certificate: Polymer Compound Manufacturing	Level 3	145	MERSETA
58	27	79407	National Certificate: Polymer Compound Manufacturing	Level 3	145	MERSETA
59	28	21012	National Certificate: Power and Telecommunication Cable Manufacturing	Level 3	144	MERSETA
60	29	58785	National Certificate: Production Technology	Level 3	120	MERSETA
61	30	24217	National Certificate: Thermoplastic Fabrication	Level 3	126	MERSETA
62	31	48798	National Certificate: Tyre and Tyre Component Manufacturing	Level 3	134	MERSETA
63	32	48795	National Certificate: Tyre Assembly	Level 3	131	MERSETA
64	33	58535	National Certificate: Welding Application and Practice: Manufacturing and Engineering	Level 3	151	MERSETA
65	34	78863	National Certificate: Yacht and Boat Building	Level 3	136	MERSETA
66	1	65509	Further Education and Training Certificate: Air-conditioning, Refrigeration and Ventilation	Level 4	152	MERSETA
67	2	64549	Further Education and Training Certificate: Automotive Body	Level	135	MERSETA

			Repair	4		
68	3	71949	Further Education and Training Certificate: Automotive Components: Manufacturing and Assembly	Level 4	138	MERSETA
69	4	64849	Further Education and Training Certificate: Automotive Repair and Maintenance	Level 4	159	MERSETA
70	5	64289	Further Education and Training Certificate: Automotive Sales and Support Services	Level 4	147	MERSETA
71	6	64411	Further Education and Training Certificate: Automotive Spray Painting	Level 4	140	MERSETA
72	7	78883	Further Education and Training Certificate: Autotronics	Level 4	134	MERSETA
73	8	57885	Further Education and Training Certificate: CNC Production Machining	Level 4	162	MERSETA
74	9	58861	Further Education and Training Certificate: Electro-Mechanical Winding	Level 4	142	MERSETA
75	10	66770	Further Education and Training Certificate: Electro-Mechanics: Manufacturing and Engineering	Level 4	171	MERSETA
76	11	80307	Further Education and Training Certificate: Electronics: Electronics Manufacturing	Level 4	122	MERSETA
77	12	66773	Further Education and Training Certificate: Engineering Fabrication: Manufacturing and Engineering	Level 4	141	MERSETA
78	13	58880	Further Education and Training Certificate: Fluid Power	Level 4	160	MERSETA

79	14	66489	Further Education and Training Certificate: Foundry Operations	Level 4	128	MERSETA
80	15	83987	Further Education and Training Certificate: Generic Management: Inventory and Inventory Control	Level 4	150	MERSETA
81	16	83989	Further Education and Training Certificate: Generic Management: Manufacturing Control	Level 4	150	MERSETA
82	17	83988	Further Education and Training Certificate: Generic Management: Planning and Scheduling Techniques	Level 4	150	MERSETA
83	18	79286	Further Education and Training Certificate: Generic Management: Process Manufacturing	Level 4	150	MERSETA
84	19	50021	Further Education and Training Certificate: Inspection and Assessment (Non-Metallics)	Level 4	150	MERSETA
85	20	58275	Further Education and Training Certificate: Lift Installation and Maintenance	Level 4	147	MERSETA
86	21	48962	Further Education and Training Certificate: Manufacturing and Assembly Logistics (M&AL)	Level 4	155	MERSETA
87	22	48915	Further Education and Training Certificate: Manufacturing and Assembly Operations Supervision	Level 4	150	MERSETA
88	23	63479	Further Education and Training Certificate: Mechanical Engineering: Fitting: Manufacturing and Engineering	Level 4	120	MERSETA
89	24	63331	Further Education and Training Certificate: Mechanical Engineering: Pipe-Fitting: Manufacturing and Engineering	Level 4	123	MERSETA

90	25	63493	Further Education and Training Certificate: Mechanical Handling: Rigging: Manufacturing and Engineering	Level 4	136	MERSETA
91	26	67649	Further Education and Training Certificate: Mechatronics	Level 4	157	MERSETA
92	27	79687	Further Education and Training Certificate: Metal and Engineering Manufacturing Processes	Level 4	139	MERSETA
93	28	65193	Further Education and Training Certificate: Metals Production: Manufacturing and Engineering	Level 4	140	MERSETA
94	29	65851	Further Education and Training Certificate: Motor Vehicle Systems	Level 4	150	MERSETA
95	30	50040	Further Education and Training Certificate: Optical Manufacturing Processes	Level 4	154	MERSETA
96	31	49451	Further Education and Training Certificate: Plastics Manufacturing	Level 4	163	MERSETA
97	32	58779	Further Education and Training Certificate: Production Technology	Level 4	143	MERSETA
98	33	65850	Further Education and Training Certificate: Vehicle Maintenance and Repair	Level 4	150	MERSETA
99	34	58536	Further Education and Training Certificate: Welding Application and Practice: Manufacturing and Engineering	Level 4	158	MERSETA
100	35	78864	Further Education and Training Certificate: Yacht and Boat Building	Level 4	146	MERSETA
101	36	23259	National Certificate: Industrial Rubber Manufacturing: Mixing OR	Level	121	MERSETA

			Extruding OR Moulding OR Calendaring	4		
102	37	36153	National Certificate: Polymer Composite Fabrication	Level 4	154	MERSETA
103	38	21013	National Certificate: Power and Telecommunication Cable Manufacturing	Level 4	142	MERSETA
104	39	48796	National Certificate: Quality Assurance of Tyre Manufacturing Processes	Level 4	142	MERSETA
105	40	24218	National Certificate: Thermoplastic Fabrication	Level 4	137	MERSETA
106	41	48799	National Certificate: Tyre and Tyre Component Manufacturing	Level 4	137	MERSETA
107	1	71969	National Certificate: Automotive Components: Manufacturing and Assembly	Level 5	125	MERSETA
108	2	64789	National Certificate: Automotive Repair and Maintenance	Level 5	144	MERSETA
109	3	78943	National Certificate: Autotronics	Level 5	130	MERSETA
110	4	58025	National Certificate: CNC Production Machining	Level 5	138	MERSETA
111	5	58883	National Certificate: Fluid Power	Level 5	129	MERSETA
112	6	60270	National Certificate: Generic Management: Generic Manufacturing	Level 5	162	MERSETA
113	7	78824	National Certificate: Generic Management: Motor Industry Management	Level 5	162	MERSETA
114	8	23260	National Certificate: Industrial Rubber Manufacturing: Mixing OR Extruding OR Moulding OR	Level 5	122	MERSETA

			Calendaring			
115	9	60070	National Certificate: Inspection and Assessment (Non-Metallics)	Level 5	138	MERSETA
116	10	49511	National Certificate: Lift Inspection	Level 5	150	MERSETA
117	11	58496	National Certificate: Lifting Machinery Inspection	Level 5	120	MERSETA
118	12	79406	National Certificate: Maintenance Coordination	Level 5	160	MERSETA
119	13	79627	National Certificate: Mechatronics	Level 5	141	MERSETA
120	14	49448	National Certificate: Plastics Manufacturing	Level 5	129	MERSETA
121	15	60072	National Diploma: Inspection and Assessment (Non-Metallics)	Level 5	241	MERSETA
122	16	22774	National Diploma: Rubber Technology	Level 5	240	MERSETA

Appendix 7: FASSET Map of Qualifications

No	No/ NQF level	Qual / Prog ID	Qualification Title / Learning Programme Title	NQF Level	Min Credits	Quality Assuring Body	Unit standard based
1	1	58375	National Certificate: Bookkeeping	NQF Level 03	120	FASSET	YES
2	2	60150	National Certificate: Business Administration	NQF Level 03	120	FASSET	YES
3	3	73710	Certificate: Accounting Technician	NQF Level 03	120	FASSET	NO
4	4	59751	Certificate: Local Government Accounting	NQF Level 03	120	FASSET	NO
5	1	58376	Further Education and Training Certificate: Bookkeeping	NQF Level 04	130	FASSET	YES
6	2	57901	Further Education and Training Certificate: Credit Management	NQF Level 04	164	FASSET	YES
7	3	49021	Further Education and Training Certificate: Debt Recovery	NQF Level 04	140	FASSET	YES
8	4	64691	Further Education and Training Certificate: Management and Administration	NQF Level 04	140	FASSET	YES
9	5	60152	National Certificate: Management and	NQF Level 04	140	FASSET	YES

			Administration				
10	6	48736	National Certificate: Small Business Financial Management	NQF Level 04	120	FASSET	YES
11	7	77143	Further Education and Training Certificate: Accounting Technician	NQF Level 04	120	FASSET	NO
12	8	73712	Further Education and Training Certificate: Local Government Accounting	NQF Level 04	120	FASSET	NO
13	9	20352	National Certificate: Public Sector Accounting	NQF Level 04	120	FASSET	NO
14	1	20397	Certificate: Certified Accounting Technician	Level TBA: Pre-2009 was L5	390	FASSET	NO
15	2	24418	National Certificate: Business Accounting	Level TBA: Pre-2009 was L5	120	FASSET	NO
16	3	36213	National Diploma: Technical Financial Accounting	NQF Level 05	251	FASSET	YES
17	4	80189	Certificate: Accounting	NQF Level 05	120	FASSET	NO
18	5	23618	Certificate: Office Administration	NQF Level 05	120	FASSET	NO

19	6	20353	Diploma in Public Sector Accounting	NQF Level 05	137	FASSET	NO
20	7	23619	Higher Certificate: Office Administration	NQF Level 05	240	FASSET	NO
21	1	24406	National Diploma: Management Accounting	NQF Level 06	240	FASSET	NO
22	2	23653	National Diploma: Financial Markets	NQF Level 06	240	FASSET	YES
23	3	60149	CIS Professional Qualification: Governance and Administration	NQF Level 06	130	FASSET	NO
24	4	60154	CIS Professional Qualification: Management and Administration	NQF Level 06	129	FASSET	NO
25	5	67709	Diploma: Cost and Management Accounting	NQF Level 06	420	FASSET	NO
26	6	67710	Diploma: Financial Accounting	NQF Level 06	420	FASSET	NO
27	7	35958	Diploma: Office Administration	NQF Level 06	360	FASSET	NO
28	8	20366	National Diploma: Financial Accounting	NQF Level 06	280	FASSET	NO
29	9	67708	Diploma: Company Secretaryship	Level TBA: Pre-2009 was L6	420	FASSET	NO

30	1	20392	Post-graduate professional qualification: Professional Accountant in Business	Level TBA: Pre-2009 was L7	480	FASSET	NO
31	2	20400	Professional Qualification: Chartered Management Accountant	Level TBA: Pre-2009 was L7	930	FASSET	NO
32	3	67269	Advanced Certificate: Fraud Examination	NQF Level 07	120	FASSET	NO
33	4	60151	CIS Professional Advanced Qualification: Governance and Administration	NQF Level 07	120	FASSET	NO
34	5	20358	Diploma: Technician: Internal Auditing	NQF Level 07	240	FASSET	NO
35	1	20360	Certificate: Certified Internal Auditing	NQF Level 08	240	FASSET	NO
36	2	63550	Certificate: Chartered Certified Accountant	NQF Level 08	915	FASSET	NO
37	3	20359	Certificate: General Internal Auditing	NQF Level 08	120	FASSET	NO
38	4	20398	Certified Diploma: Accounting and Finance	NQF Level 08	240	FASSET	NO

39	5	60153	CIS Professional Post-Graduate Qualification: Company Secretarial and Governance Practice	NQF Level 08	120	FASSET	NO
40	6	20391	Post-graduate Diploma: Professional Accountant in Practice	NQF Level 08	240	FASSET	NO

Appendix 8: NAMB Map of qualifications

No	No/ NQF level	Qual / Prog ID	Qualification Title / Learning Programme Title	NQF Level	Learning Sub-field	Originator	Min Credits	AQP
1	1	91781	Occupational Certificate: Electrical Line Mechanic: Overhead Lines	NQF Level 04	Electrical Infrastructure Construction	DQP - Eskom Academy of Learning	510	NAMB
2	2	91761	Occupational Certificate: Electrician	NQF Level 04	Electrical Infrastructure Construction	Development Quality Partner - LG SETA	360	Accredited Trade test centre' therefore NAMB inferred
3	3	91783	Occupational Certificate: Electroplater	NQF Level 04	Manufacturing and Assembly	Development Quality Partner - MERSETA	411	Accredited Trade test centre' therefore NAMB inferred
4	4	91877	Occupational Certificate: Melter	NQF Level 04	Manufacturing and Assembly	Development Quality Partner - MERSETA	361	Accredited Trade test centre' therefo

								re NAMB inferred
5	5	91785	Occupational Certificate: Moulder	NQF Level 04	Manufacturing and Assembly	Development Quality Partner - MERSETA	364	Accredited TTC' therefore NAMB inferred
6	6	91782	Occupational Certificate: Plumber	NQF Level 04	Engineering and Related Design	Development Quality Partner – IOPSA	360	Accredited TTC' therefore NAMB inferred
7	1	91796	Occupational Certificate: Toolmaker	NQF Level 05	Engineering and Related Design	Development Quality Partner - TASA/NTIP	432	NAMB