A model for Assessment Centres for the W&RSETA as AQP for related QCTO national occupational qualifications
Project 2014/08A

A model for assessment centres for the W&RSEFA as AQP for QCTO national occupational qualifications

October 2015

Prepared by:

Lead researcher: Deonita Damons, Ph.D
Research team: Jason le Grange, Ph.D
Steven Louw
Prof Roger B Mason

Wholesale and Retail Leadership Chair
Cape Peninsula University of Technology
Cape Town

“Collaboration opens the window to a world of opportunities”
Table of contents

List of figures .................................................................................................................. vii
List of abbreviations ....................................................................................................... viii
Executive summary ......................................................................................................... ix

CHAPTER 1 - INTRODUCTION ....................................................................................... 1
1.1 BACKGROUND ......................................................................................................... 1
1.2 CONTEXT AND LIMITATIONS OF THE RESEARCH ............................................. 2

CHAPTER 2 - LITERATURE SURVEY ........................................................................... 4
2.1 INTRODUCTION AND OVERVIEW ......................................................................... 4
2.2 ASSESSMENT OF OUTCOMES BASED ASSESSMENT ....................................... 4
2.3 CURRENT LEGISLATION/CRITERIA GUIDELINES ............................................... 6
   2.3.1 QCTO Assessment Quality Partner (AQP) Criteria and Guidelines ............... 6
   2.3.2 QCTO Policy on Accreditation of Assessment Centres ................................. 7
2.4 IDENTIFIED W&RSETA OCCUPATIONAL QUALIFICATIONS ......................... 8
2.5 ANALYSIS OF OTHER QUALIFICATIONS REGISTERED WITH QCTO ............ 12
   2.5.1 Currently registered ......................................................................................... 12
   2.5.2 Public Comment ............................................................................................. 13
2.6 NATIONAL COMPARABILITY .............................................................................. 15
   2.6.1 National education provider .......................................................................... 15
2.7 INTERNATIONAL COMPARABILITY .................................................................... 16
   2.7.1 City and Guilds: United Kingdom and International Assessment Centres ..... 16
   2.7.2 Singapore and Bangladesh ............................................................................ 18
2.8 CONCLUSION ........................................................................................................ 21

CHAPTER 3 - RESEARCH METHODOLOGY ................................................................. 22
3.1 DESIGN OF RESEARCH INSTRUMENTS & COLLECTION OF DATA .. 22
3.2 DATA ....................................................................................................................... 24
   3.2.1 Target audience and summary of data collection numbers .......................... 24
   3.2.2 Analysis ......................................................................................................... 24
List of figures

Figure 1: Focus group choice of Models................................................................. ix
Figure 2: Responses to Model A by focus groups............................................... 27
Figure 3: Advantages of Model A identified by focus groups............................. 28
Figure 4: Disadvantages of Model A identified by focus groups......................... 29
Figure 5: Cost factors of Model A identified by focus groups........................... 32
Figure 6: Resource requirements identified for Model A by focus groups............ 33
Figure 7: Responses to Model B by focus groups............................................... 35
Figure 8: Advantages of Model B identified by focus groups............................ 36
Figure 9: Disadvantages of Model B identified by focus groups......................... 37
Figure 10: Cost factors of Model B identified by focus groups.......................... 40
Figure 11: Resource requirements identified for Model B by focus groups....... 41
Figure 12: Focus group findings............................................................................. 42
List of abbreviations

AQP - Assessment Quality Partner
ATO – Approved Training Organisation
CPUT - Cape Peninsula University of Technology
DQP – Development Quality Partner
ETQA – Education and Training Quality Assurance
FEIA – Final External Integrated Assessment
NQF – National Qualifications Framework
NVQ – National Vocational Qualifications
OQF - Occupational Qualifications Framework
QCTO - Quality Council for Trades and Occupations
RTO – Registered Training Organisation
SETA - Sector Education and Training Authority
SAQA - South African Qualifications Authority
TVET (FET) - Technical Vocational Education and Training (Further Education and Training) (College)
W&RSETA - Wholesale and Retail Sector Education and Training Authority
Executive summary

The new qualifications and part qualifications to be introduced by the Quality Council for Trades and Occupations will see the management and quality assurance process change from the current model. In the new model, an Assessment Quality Partner will be appointed per qualification, and it will be responsible for: developing assessment instruments, accrediting assessment centres at which the national examinations will be held, ensuring the assessments are assessed and notifying learners of their assessment results.

The Wholesale and Retail Sector Education and Training Authority will act as the Assessment Quality Partner for the qualification “Occupational Certificate: Retail Manager: Retail Store Manager” that has been registered by the Quality Council for Trades and Occupations on the Occupational Qualifications Framework, and is in the process of looking at models for implementation.

This research considers which model would be the most appropriate to the abovementioned Wholesale and Retail qualification as well as six other identified qualifications that have been, or are in the process of being, submitted for registration but are not yet registered on the National Qualifications Framework. Therefore, the research considers how an appropriate model can be flexible to meet the current and future needs of the sector in terms of assessment related to occupational qualifications.

On analysis of the seven identified occupational qualifications that the research is based on, it was noted that there were practical requirements in the majority of the assessment specifications of these qualifications and that there were also identified timelines that ranged from half a day to a full day for the assessments. Thus, in order to implement assessment in terms of these specifications there would be a requirement to have access to a “practical” venue in addition to one where the written assessment would take place. Some assessment specifications were of concern, for example where the assessment needed to take place on a petrol or service station forecourt, and other specifications required learners to access software to be used in the assessment prior to the assessment taking place. Therefore, the models considered in this research had to take these specific and unusual requirements into consideration, even though they are not in line with assessment specifications prescribed by the Quality Council for Trades and Occupations.
Two models were identified by the research:

**Model A** considers the private solution, in which privately owned businesses could register for, and submit to, some accreditation process in order to become assessment centres. These businesses would have a profit motive for this purpose. Businesses that have national footprints would be required, in addition to smaller service providers in rural areas and/or smaller towns, in order to ensure that this model would allow access to all learners.

**Model B** considers using Technical Vocational Education and Training (FET) Colleges throughout the country as a base for national assessment. As this network of sites is much less than that of the private provider network, this model would require learners to come to the venues, even if these were not within the close proximity of the learners. The research indicated a concern by industry that this model would require learners to be away from the workplace for relatively long periods of time. Therefore, industry suggested that where possible assessments could take place at their site, the workplace. Thus, in this amended model, the assessment centre would effectively run some of the assessments on employee sites. This model could, then, consider a combination of TVET/FET Colleges and various workplace sites as assessment venues, provided that all resources required for assessment could be made available to the candidates.

Focus groups held around the country considered the two models and the consensus found that Model B was best suited to industry as well as other stakeholders within the sector.

*Figure 1: Focus group choice of Models*
CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

The National Qualifications Framework (NQF) Act brought into being the Quality Council for Trades and Occupations (QCTO), under the auspices of the South African Qualifications Authority (SAQA). In terms of the Act, SAQA would be responsible for the development, implementation and quality control of learning interventions registered on the QCTO sub-framework of the NQF, the Occupational Qualifications Framework (OQF). The Wholesale and Retail Sector Education and Training Authority (W&RSETA) has developed, and will continue to develop, qualifications for Trades and Occupations in the Wholesale and Retail (and related) sectors, for registration on this sub-framework, and for delivery in order to benefit individuals, organisations, communities and the country and region as a whole.

QCTO policy and procedure requires independent, fair and objective assessment of learning interventions through an Assessment Quality Partner (AQP). As with the Development Quality Partner (DQP), the AQP operates in terms of a Service Level Agreement with the QCTO. The AQP is to be overseen by the relevant SETA; in the case of W&RSETA, the SETA intends acting as the AQP for the seven qualifications within the scope of this research, and this may extend to future relevant qualifications as well. In order to fully engage and comply with its mandate and appropriate QCTO policies and procedures, the W&RSETA has engaged the Cape Peninsula University of Technology (CPUT) to research and develop a suitable W&RSETA management system, and procedures, to oversee its role as AQP for relevant QCTO qualifications.

The overall purpose of this research is to develop a model for the accreditation and management of assessment centres in line with the requirements (including policies and procedures) of the QCTO for occupational qualifications submitted for registration by W&RSETA. This research project forms part of a larger
The framework for occupational qualifications in South Africa has changed from unit standard based learning to occupational profiles. These qualifications do not have pre-defined minimum or maximum credit requirements, but rather focus on the needs of the occupational profile, as per industry requirements and needs.

In the new framework, assessment takes place at each stage of the learning cycle: after theoretical (formative), practical (formative), workplace based experiential learning (logbook as well as formative) and also a summative assessment which is a controlled, standardised, national assessment, which all learners complete in order to be awarded the occupational qualification.

The new framework includes an Assessment Quality Partner (AQP), which administer the summative assessment component of the assessment cycle, in a controlled external summative assessment, administered nationally for all learners who qualify to meet the requirements of external summative assessment. The AQP therefore has to consider the development of assessment instruments, as well as the logistics and planning of a national summative assessment, in a controlled environment.

This research considers models that the AQP, which role is currently intended to be fulfilled by the W&RSETA, could use in order to facilitate and manage the summative assessment process.

1.2 CONTEXT AND LIMITATIONS OF THE RESEARCH

As per the research project specification, the predetermined aims of the research have been developed by the research sponsors. Therefore the aims of the research are pre-agreed and require the researcher to interrogate data and conduct research which considers how an organisation, the W&RSETA in this regard, would develop a model for the accreditation, operation and management, of assessment centers in line with the requirements (including policies and procedures) of the QCTO for the
identified W&RSETA occupational qualifications. The aims of the research were expected to be achieved through:

- The identification of models for the establishment of Assessment Centres for the summative assessment of all wholesale and retail related QCTO occupational qualifications from NQF levels 1 to 6. The models must include information on the possible use of TVET Colleges and Higher Education and Training Institutions as assessment centres for the W&RSETA;

- A model, including systems and procedures that is developed for the accreditation of assessment centres, that is appropriately benchmarked against successful practices, including international benchmarking;

- A management and maintenance framework that is developed for the assessment centres;

- A costing model that is developed for the establishment and operation of assessment centres.
CHAPTER 2

LITERATURE SURVEY

2.1 Introduction and overview

The research project was initiated in order for the Wholesale and Retail SETA to have an opportunity to consider the best model for the implementation of the Quality Council for Trades and Occupations system of occupational certificates and part qualifications.

This literature review considers policy from the regulatory body, the QCTO, assessment specification documentation (curriculum documentation) developed for seven identified occupational profiles and best practice models benchmarked internationally. For purposes of clarity, the scope of the project has been defined above, as well as the initial limitations noted in terms of the current QCTO policy. This is then followed by an analysis of the identified W&RSETA occupational qualifications that form the scope of the research, which is then benchmarked against current registered or to-be-registered occupational certificates and part qualifications listed by the QCTO at the time of this research. Finally, the international comparability considers amongst other things models used in Singapore, Bangladesh and the City and Guilds model used currently in the United Kingdom and elsewhere around the world.

2.2 Assessment of outcomes based assessment

Assessment has been changing over recent decades, and even more rapidly in vocational learning. As Willis notes “Learning and assessment do not exist in a vacuum” (1993, p. 384), yet there is a divide between the assessment and purpose of assessment and the needs of the learning to be practical and valid.

It is indeed the purpose of validity, which ensures that industry accepts learning as having met its objectives. “The needs are more complex in relation to
employment, where validity requires links to the diverse needs of employers" (Black, 2000, p. 411). It is these needs that should be satisfied in order for the assessment to be considered valid. If assessment does not meet the needs of the employer, then it will be rejected and there will be a loss of faith in the current model of learning.

However, assessment models have been problematic and mired in controversy, from the rote-based learning and assessment models, to outcomes-based assessment and its hybrid criterion-referenced assessment. As Black notes, “[t]he consistency of standards over time has been an enduring point of interest and controversy” (2000:417).

As South Africa embarks on a new model in terms of the QCTO concept of Occupational Certificate and Part Qualification, each with its own Assessment Specification, there is a need to ensure that the model that is used for assessment is seen as fit for purpose. This is so that industry can buy into the new model, “[a]ssessment should, therefore, clearly be integrated into the work of the classroom with clear links to personal and vocational concerns” (Willis, 1993:397).

With the changing face of assessment, there are new opportunities for using technology to assess and to limit the large use of paper in the old portfolio of evidence system. Desai (2006) has evaluated the success that institutions can have by using a paperless portfolio, web-based portfolio and digital recording, all of which would improve the perception of assessment by learners and industry.

Desai (2006:11) notes about the National Vocational Qualification process in the United Kingdom:

More emphasis is being placed on ways of trying to make the NVQ process either truly paper-free or significantly reduces the amount of paperwork. An emerging feature is the use of information technology (IT) to help record assessment evidence in electronic portfolios and to extend training opportunities in the workplace.

Therefore, the model that should be developed for assessment should consider the changing methodologies that are used in assessment, but should still be aligned to national policy and consider the requirements of occupational qualifications and part qualifications.
2.3 CURRENT LEGISLATION/CRITERIA GUIDELINES

2.3.1 QCTO Assessment Quality Partner (AQP) Criteria and Guidelines

As there is no current practice against which to benchmark, this research has had to rely on documentation released by the QCTO. All definitions and explanations refer to documents sourced from their website as being the current versions of these documents. As these could change, in the reference section specifically, the date of the document of approval is noted as well as the date it was accessed for research purposes.

The limitation of this study therefore, in part, accepts that should these policies, guidelines or documents change, that this research would reflect the version that was originally used as part of the scope of this research project.

As part of the literature review it is important to understand the different terms as defined by the QCTO, specifically what an AQP and an Accredited Assessment Centre are. In terms of the definitions below, they have been sourced from the criteria and guidelines in either the definitions section or elsewhere to help create a comprehensive understanding of what their role is (QCTO, 2013a:4-5)

Assessment Quality Partner- A body delegated by the QCTO to manage and coordinate the external integrated summative assessments of specified NQF registered occupational qualifications and part qualifications.

In short, an AQP is an entity appointed by the QCTO and delegated to manage, on behalf of the QCTO, the assessment process in order to achieve the above objective.

Assessment Centre- A centre accredited by the QCTO for the purpose of conducting external integrated summative assessments for specified NQF registered occupational qualifications and part qualifications.

Therefore it is noted that the AQP fulfills the function which determines the-

“Assessment centre accreditation/ de-accreditation and assessment site approval/ de-approval” (QCTO, 2013a, p.11).

In addition, the AQP and its associated assessment system should meet the principles and values of the QCTO namely:
“4.1 be fair, reliable, valid, ethical and transparent;

4.2 be consistent across time, place, role players and respond to a non-sectoral demand-led model;

4.3 use methodologies that are fit-for-purpose and reflect a consistent level of higher cognitive challenge;

4.4 avoid tendencies of exclusivity;

4.5 adhere to the QCTO values which show:
   i. innovation and excellence
   ii. empowerment and recognition
   iii. respect and dignity
   iv. ethics and integrity
   v. ownership and accountability
   vi. authenticity” (QCTO, 2013a:6),

2.3.2 QCTO Policy on Accreditation of Assessment Centres

In terms of understanding the registration criteria that the assessment centre is required to meet:

“The entity must:

a) be a juristic person registered or established in terms of South African law;

b) have a valid tax clearance certificate issued by the South African Revenue Service if applicable;

c) have a suitable and compliant MIS in accordance with QCTO specifications;

d) be safe, secure and accessible to candidates;

e) meet the relevant standards for occupational health and safety;

f) have the required physical resources (e.g. venue; equipment, machinery or protective clothing), specified by the AQP to assess learners’ competence regarding the occupational qualification or part qualification;

g) have appropriately qualified human resources as specified by the AQP; and

h) make provision for any other requirements specified for the relevant trade, occupational qualification or part qualification.” (QCTO, 2013b:8)
Criterion (f) indicates the physical resource requirements for assessment purposes and the scope includes the venue, equipment and associated specialised clothing. Therefore, the occupational qualifications and part qualifications are required to be analysed in terms of these criterion to understand what the assessment centres would require in order to be registered as such, and to thus meet the requirements of both being an assessment centre as well as comply with the QCTO requirements listed in the previous section.

2.4 Identified W&RSETA Occupational Qualifications

The scope of the research and literature review is limited to the seven occupational qualifications that have been developed and identified by the W&RSETA, with that SETA indicated as the assessment quality partner. Therefore, these occupational qualifications are briefly described with an indication of the assessment needs of each¹. This analysis forms the basis of the suggested models, which most appropriately match to the current need. As and when further occupational certificates and part qualifications are developed, this model would need to be adapted accordingly.

¹ These are taken from the External Assessment Specification Document of each of the qualifications.
### Analysis of qualification as per assessment specification requirements

<table>
<thead>
<tr>
<th>Name of qualification</th>
<th>Theoretical component only</th>
<th>Theoretical and practical component</th>
<th>Time duration</th>
<th>Specialised equipment</th>
<th>Specialised venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Certificate: Checkout Operator</td>
<td>No</td>
<td>Assessment requirements for AQP Paper or online based knowledge assessment Practical assessment to validate checkout skills</td>
<td>Half a day</td>
<td>Computerised point of sale scanning till Special requirements- candidates must be shown the point of sale system prior to the assessment.</td>
<td>As a computerised point of sale till could be mobile for training purposes, this in effect does not require a special venue, but rather specialised equipment.</td>
</tr>
<tr>
<td>Name of qualification</td>
<td>Theoretical component only</td>
<td>Theoretical and practical component</td>
<td>Time duration</td>
<td>Specialised equipment</td>
<td>Specialised venue</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------</td>
<td>--------------------------------------</td>
<td>---------------</td>
<td>-----------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Occupational Certificate: Service Station Attendant</td>
<td>No</td>
<td>Paper or online based knowledge assessment Practical assessment to validate the candidates ability to make decisions in relation to a set of typical situations and circumstances which are encountered on a forecourt in a service station environment when interacting with customers and providing forecourt services where the candidate can demonstrate providing customer service that encourages customer loyalty and performing safe forecourt services</td>
<td>Half a day</td>
<td>Candidates must be shown the point of sale system prior to the assessment (Concern: there is no reference in the assessment criteria to a point of sale system) The following is inferred from the assessment specification: petrol pumps, point of sale system, tyre pump, oil and water for refilling.</td>
<td>Yes, the forecourt of a service station.</td>
</tr>
<tr>
<td>Name of qualification</td>
<td>Theoretical component only</td>
<td>Theoretical and practical component</td>
<td>Time duration</td>
<td>Specialised equipment</td>
<td>Specialised venue</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------</td>
<td>------------------------------------</td>
<td>--------------</td>
<td>----------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Occupational Certificate: Retail Buyer</td>
<td>No</td>
<td>Paper or online based knowledge assessment Practical assessment to validate and the demonstrate the use of computers where the candidate will demonstrate sourcing suppliers and products and allocating stock to stores</td>
<td>One day</td>
<td>Computerised stock system</td>
<td>Specialised venue required: As a computerised stock control system could be mobile for training purposes, this in effect does not require a special venue, but rather specialised equipment.</td>
</tr>
<tr>
<td><strong>Occupational Certificate: Dispatching and Receiving Clerk or Officer</strong></td>
<td>Yes, Paper or online case study assessment with output of written response <em>(Concern: The assessment criteria refer to a case study methodology with a specific case study pathway which should be completed sequentially as the duration of the assessment is noted as being one day, not a written response assessment methodology which is more appropriately linked to knowledge questionnaires)</em></td>
<td>No</td>
<td>One day</td>
<td>None</td>
<td>Specialised venue required: As the assessment specification notes that this is only a written response assessment, as per the assessment specification no special venue is needed. In terms of further development, clarity would be required, as it appears that the assessment requires a practical role-play.</td>
</tr>
<tr>
<td>Name of qualification</td>
<td>Theoretical component only</td>
<td>Theoretical and practical component</td>
<td>Time duration</td>
<td>Specialised equipment</td>
<td>Specialised venue</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>----------------------------</td>
<td>-------------------------------------</td>
<td>---------------</td>
<td>-----------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Occupational Certificate: Retail Supervisor</td>
<td>Yes, Paper or online case study assessment with output of written response</td>
<td>No</td>
<td>Half a day</td>
<td>Unable to determine without assessment specifications</td>
<td>Unable to determine without assessment specifications</td>
</tr>
<tr>
<td>National Occupational Qualification: Retail Manager: Retail Store Manager</td>
<td>Yes, Paper or online case study assessment with output of written response</td>
<td>No</td>
<td>One day</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Occupational Certificate: Store Person</td>
<td>No</td>
<td>Paper or online based knowledge assessment; Practical assessment to validate movement of stock</td>
<td>Half a day</td>
<td>Equipment required-stock, packing equipment</td>
<td>Specialised venue required: As no specialised equipment is required, and a stock room can be simulated, no special venue is required.</td>
</tr>
</tbody>
</table>
• One of the occupational certificate and part qualifications does not require any practical requirements and therefore could fit into a conventional exit summative assessment methodology.

• Three of the occupational certificate and part qualifications require a theoretical as well as a practical exit summative assessment, which needs to be completed in a defined period of time ranging from half a day to a full day. The practical component could be, but may not be, practical, movable and not require a specific venue but rather a simulation to be built in a venue through the use of equipment that is movable.

• One of the occupational certificate and part qualifications require a theoretical as well as practical exit summative assessment, which need to be completed in a defined period of time ranging from half a day to a full day. The practical component refers to a specific specialised venue and specialised equipment, and would not be simulated, in effect requiring a venue specific exit summative assessment.

• Two of the occupational certificate and part qualifications have yet to be defined, or are noted as having internal issues as per the language used in the assessment specification documentation.

2.5 Analysis of other qualifications registered with the QCTO

Currently, there are 15 occupational certificate and part qualifications in the QCTO domain, 9 registered including one W&RSETA qualification and 6 that are out for public comment.6

2.5.1 Currently registered

• Electrician- follows formal trade test with knowledge and practical over two days

---

2 National Occupational Qualification: Retail Manager: Retail Store Manager


4 Occupational Certificate: Service Station Attendant

5 Occupational Certificate: Dispatching and Receiving Clerk or Officer and Occupational Certificate: Retail Supervisor

6 This has subsequently changed as new qualifications have gone from public comment to registered status.
• **Compliance Officer**- allows for controlled assessment with the workplace assessment component being used as access to the summative and forms part of the summative assessment decision. The portfolio of evidence that should be supplied includes naturally occurring evidence, workplace logs and supervisor/manager authentication.

• **Electric Line Mechanic**- follows formal trade test with knowledge and practical over two days

• **Insurance Agent/ Underwriter** - allows for controlled assessment with the workplace assessment component being used as access to the summative and forms part of the summative assessment decision. The portfolio of evidence that should be supplied includes naturally occurring evidence, workplace logs and supervisor/manager authentication.

• **Office Administrator**- Written controlled summative assessment with no time limit noted.

• **Melter**- follows formal trade test with knowledge and practical over two days

• **Toolmaker**- follows formal trade test with knowledge and practical over two days

**2.5.2 Public Comment**

• **Heat Pump Installer**- Written and practical assessment to be done over one working day.

• **Instrument Mechanic**- follows formal trade test with knowledge, specifically over three hours, and practical over two days

• **Library Assistant**- Written controlled summative assessment with no time limit noted.

• **Lift Mechanic**- follows formal trade test with knowledge and practical over two days.
- **Solar Water Heater Installer**: Written and practical assessment to be done over one working day.

- **Electroplater**: follows formal trade test with knowledge and practical over two days.

- **Moulder**: follows formal trade test with knowledge and practical over two days.

Bases on the qualification assessment specifications, the following four categories are noted in terms of the types of assessments required, and in turn, the assessment centre requirements.

For illustration purposes, the W&RSETA occupational qualifications are not included in the analysis below. Only other qualifications are noted:

A - 2 occupational certificates and part qualifications follow an assessment requirement which does not require specialised assessment centres as they are pure theory and only require a conventional assessment centre;

B - 2 occupational certificates and part qualifications follow an assessment requirement that requires theory and practice, similar to a trade test model, but not noted as such. These occupational certificates and part qualifications require an assessment centre with specialised equipment as well as a venue that accommodates the type of assessment;

C - 8 occupational certificates and part qualifications follow an assessment requirement that is noted as being a formal trade test. As there are pre-agreed standards for trade tests, these occupational certificates and part qualifications must meet the requirements of trade tests as set out in the National Artisan Moderation Body criteria and guidelines for trade tests. Furthermore, the trade tests require specialised equipment and venues in order to be used for assessment;

D - 2 occupational certificates and part qualifications follow an assessment requirement which does not require the use of a specialised assessment venue or equipment, as the practical component is presented for summative assessment but is collected during the workplace component of training in the form of a portfolio of evidence, which is submitted on the day of the summative assessment, and which is
assessed in conjunction with the theoretical summative assessment. This model is the most cost-effective as it does not require further practical demonstration.

2.6 National comparability

2.6.1 National education provider

The national education provider ran a school of insurance, as a school within the larger organisation. The assessment manager from the education provider was interviewed. Due to the sensitivity of the provider’s intellectual property the provider has chosen to remain anonymous and the interview only considered the procedure that the assessment manager implemented within the organisation, using a pre-designed concept (le Grange, 2014).

The education provider was profit seeking, had a national footprint and held summative assessments (examinations) four times a year.

Learners had to pay for all assessment costs (the price of summative assessment was not included in the course fees), and therefore learners would need to qualify for the assessment and then pay the prescribed fee in order to effectively register for the summative. In addition to this, learners who had been found not yet competent (or had failed other examinations) could also register for re-assessment.

This registration became the basis of the planning for the next summative session. The numbers of learners would be noted in the various centres and as there was a national footprint in most cases, the learners could write the summative in their town or city or could easily travel to the nearest town where an assessment centre was located.

The various centres would be notified of the upcoming assessment time and date details as well as the logistical arrangements for invigilators and any special documentation or needs.

The summative assessment papers were dispatched (couriered) one week prior to the summative directly to the centre and be locked up until the time of the summative. The invigilator would manage the summative according to the learners registered and only learners noted on the attendance register (which was pre-populated) would be allowed to write the summative.
All assessments were collected and then couriered back to the main centre where they were assessed by the assessors and moderated by the moderator. Assessment results were provided to learners electronically.

Due to the national footprint, this was a cost-effective process for managing the assessments and a small profit could be realised from the assessments (le Grange, 2014).

2.7 INTERNATIONAL COMPARABILITY

2.7.1 City and Guilds: United Kingdom and International Assessment Centres

City and Guilds are a private institution in the United Kingdom offering vocational qualifications. The model that is used combines both theoretical and practical assessment in the form of exit summative assessments, which could assess both theoretical and practical components. The City and Guilds Assessment model is linked to the qualifications that are offered as part of the services of multiple sector skills councils in the United Kingdom. The model that City and Guilds has developed is closely aligned to the requirements of the QCTO.

City and Guilds have produced various documents that list the process and procedure for accrediting centres or venues, conducting and providing the administrative and data support for assessments, using a national, or in their case international, exit summative assessment. These documents include:

Providing City and Guilds Qualifications: a guide to centre and qualification approval (City and Guilds, 2008)
Guide to the assessment of practical skills in International Vocational Qualifications (City and Guilds, 2003)
Guidance for Centres: Our Quality Assurance Requirements (City and Guilds, 2011)

Amongst the resources the organisation notes that it requires as external resources are a quality systems consultant, external verifier and a setting and marking examiner (City and Guilds, 2008:11-13) and an internal quality assurer (City and Guilds, 2011:27) for the initial phases of accreditation and assessment. In addition to these roles, the monitoring post-registration is conducted by a consultant to ensure that the assessment centre meets requirements (City and Guilds, 2011:23).
Basic process for registration as a City and Guilds centre

- Applicants register their interest to become an assessment centre with the regional City and Guilds Office
- The Quality Systems consultant then visits the centre to validate that there are sufficient systems and to ensure assistance in completing the application documentation
- Applicants formally apply to become Assessment Centres, based on having applicable resources including human resources such as assessors and moderators, physical venue/s for the assessment and computer based software where required
- The identified roles of human resources required at an assessment centre include: a quality assurance coordinator, internal verifier, assessor and invigilator
- There is an opportunity to have an advisory visit (2008, p.5), in which the assessment centre pays to undergo capacity building although these visits are noted as an additional service and are therefore charged to the assessment centre.
- The regional office will schedule a visit with the external verifier
- An external verifier then undertakes the site visit confirming and validating the information
- The external verifier writes a report indicating findings and making a recommendation for:
  - Registration
  - Not recommended: further developments required against action plan
- Once satisfied the assessment centre is required to inform the regional office and possibly undergo a remedial visit

(City and Guilds, 2008:6-14)

City and Guilds do differentiate the approval of an examinations-only centre and the one differentiator is:

- A site visit does not always have to take place but spot checks prior to or during examinations could be done.

In addition, where there is a practical component like a workplace based assessment or practical assessment which is part of a summative, then it is up to the
assessment centre to manage this and to ensure the credibility of the assessment (City and Guilds, 2008:15).

Currently the assessment centres receive two free external verifier visits a year and should more be required then a charge is levied (City and Guilds, 2008:48).

What should also be noted is that the City and Guilds model follows an assessment on demand model, which means, that assessments can be ordered and delivered within a specific time period. There are no restrictions for national set dates that are predefined and published, allowing for continuous assessment throughout the year.

This model is comparable to the requirements noted in the QCTO Policy on Accreditation of Assessment Centres.

The AQP could fulfill similar functions, noting the costs associated with the process linked to this model. It would seem that there would need to be charges levied for the management of the quality assurance activity.

The concern about this model is that there is a reliance on centres wishing to register and that this is a voluntary process, and one linked to various requirements for continued compliance. Therefore, it will be driven by the willingness of organisations to register as assessment centres. There could also be challenges if organisations choose not to register as assessment centres in certain regions, resulting in learners having to travel, at their cost, to undertake an assessment at a centre closest to them, noting that there may be no assessment centre for many hundreds of kilometres. Considering this, although this model is the best from a management and cost perspective, it could become exclusionary.

2.7.2 Singapore and Bangladesh

The use of Singapore in the international comparability is to consider some of their models in terms of accreditation of centres as an example of using public colleges or state schools.

Singapore has been candid about its need to address the assessment of workplace-based learning, commissioning two pieces of research on the matter
Although there is reference to the current type of assessment used in South Africa, which is Provider managed, designed and implemented assessment, the understanding of the authenticity of the workplace learning assessment component is noted as well as the challenges thereof:

“The implementation of the practices described requires strong provider-employer partnership arrangements, which both these frameworks had. Developing partnerships can be challenging and requires time and resources to put in place and maintained” (Bound, 2011a:5).

Included in the findings, (Bound, 2011a:51-53) was the need to ensure that assessment took place in an authentic environment, which was either the real workplace or a simulated environment that closely matched an appropriate workplace. Simulation was noted as being somewhat authentic, but that learners commented that simulations did not always match the workplace context.

The identified W&RSETA occupational qualifications consist of a practical summative assessment requirement in some cases, and these would need to be assessed in an authentic setting. Bound has recommended, for Singapore, that it is important to “identify what is best assessed in the workplace and use the workplace as a site for assessment” (Bound, 2011b:82), although she does not rule out the use of simulated environments as a second option.

In the current framework for accrediting skills development providers of the Workforce Skills Qualifications in Singapore, there are different types of providers that can be translated into a South African context.

The current models consider Accredited Training Organisation (ATO) as:

- Public- Public ATO refers to an institution that offers training to the general public, including corporate clients and/or public walk-ins
- Public and In House- Public and in-house ATO refers to an institution that offers training to the general public and its own employees
- In House- in-house ATO refers to a company that conducts training for its own employees only

(Singapore Workforce Development Agency, nd).
What is helpful about this model is that it acknowledges a public route for assessment and an in-house route for assessment. One should consider that the current TVET (FET) Colleges in South Africa have a national footprint. The public TVET (FET) Colleges could be accredited as assessment centres, in conjunction with possible workplaces or, in the case that this is not possible, an authentic simulated environment. In addition, the tendency to rely on registration of private assessment centres mitigates the risk of not having sufficient centres at which learners can be assessed. In addition to this, the TVET (FET) colleges could fulfill the role of assessment for multiple AQPs and if need be a collaboration model could be used to place the necessary resources into these colleges in order to help provide capacity.

However, should private assessment centres also wish to provide services, they could then opt to identify that they wish to either be public and in-house or in-house, as outlined in the Singapore models, if they are linked to a specific workplace with specific confidentiality associated requirements.

Bangladesh also offers a hybrid assessment centre model in which “it may be government or private” (Bangladesh Technical Education Board, 2012:11). Like the QCTO policy on assessment centres, the Bangladesh model also requires that the assessment centres are able to show capacity to deliver the assessments, be independent legal bodies, be responsive to the demand of the learners as well as use national assessment instruments. Bangladesh uses the nomenclature of Registered Training Organisation (RTO).

Furthermore, an assessment centre can be (Bangladesh Technical Education Board, 2012:14):

- A department within a RTO that is separate from the teaching departments and which ensures that assessment is conducted by independent assessors. The assessors may be external to the RTO and contracted for the purpose of delivering assessment services or they could also be from other parts of the institution.
- A separate organisation that provides assessment services under contract to institutions or workplaces.
- The management centre of an association of assessors that provide assessment services over a particular area or industry.
- An organisation that provides a particular industry with assessment services.
The variety of options available to become an assessment centre offers different potential partnerships that ultimately serve the needs of the learners being assessed. In addition, the independence and autonomy of the assessment is the primary concern to ensure that quality assurance practice is maintained.

In order to become an accredited assessment centre, the applicant registers their interest with the regulatory body. They then are given a self-evaluation to complete in preparation for the submission of information as well as to understand what the requirements are to become accredited assessment centres. Only once this is complete is the application submitted, after which an external assessment is conducted and, should all criteria be met, accreditation awarded (Bangladesh Technical Education Board, 2012:15)

2.8 INITIAL OBSERVATIONS AND QUESTIONS

From the preceding literature review, the following are a list of observations and questions that resulted, and that this research should consider:

- The model that is eventually adopted should consider if it will be reliant on private provision, with its associated risks, or whether it should be managed internally with the assessment centres becoming satellites of the AQP.
- The assessment on-demand model versus assessment on a cyclical predetermined timeline should be considered from a cost perspective to determine affordability.
- Costs for capacity building, accreditation of assessment centre, and running the national assessment need to be considered, as currently W&RSETA does not intend to charge learners for assessment.
- The types of assessment centres should be considered; whether they are public, in-house, or a combination of public and in-house.
- Finally, the use of multiple sites of delivery needs to be considered in terms of the link between the theoretical and practical component of the assessment. In instances, where the practical component cannot be delivered at the theoretical assessment centre, appropriate processes and implications for the practical component would need to be identified and resolved.
CHAPTER 3

RESEARCH METHODOLOGY

3.1 DESIGN OF RESEARCH INSTRUMENTS AND COLLECTION OF DATA

The research instruments were designed considering the target respondents in mind, namely from skills development providers, industry and quality assurance, as well as SETA related personnel. Therefore, the instruments needed to be generic enough to be able to collect data from all of these target groups and a questionnaire was selected as the best research instrument.

As the data was to be collected in a controlled environment, on a specific day within each of three regions, namely Western Cape, Kwa-Zulu Natal and Gauteng, the instruments were not closed questions with a selection of pre-determined fields, but rather open questions in which respondents could provide information specifically contextualised to their situation.

Each model was presented to the respondents using a PowerPoint presentation, in which the outline of the model was explained. Respondents were then asked to complete an evaluation of the model, consider the advantages and disadvantages, consider the costs and resource requirements and then select the model that they thought best for purposes of the W&RSETA.

The questionnaires were then collected and a discussion held with the respondents in a focus group in order to understand their concerns, as well as to note best practice opportunities.

The initial phase of the research included a literature survey to consider current practice used both nationally and internationally. Findings from this research were then considered for selection of the most appropriate models for the target audience, the W&RSETA, as well as the regulatory authority, the QCTO.

Following this, qualitative research was conducted using small focus groups, which included industry experts as well as stakeholders from the education providers
as well as those linked to SETAs and quality assurance bodies. Due to the nature of the research problem and key outcomes indicated, a limited range of expert participants were able to provide the bulk of relevant high-level inputs, rather than a broad-based quantitative survey collecting and analysing relatively low-level inputs.

Participants were invited to workshops to debate and reach consensus on key components of the research. Semi-structured interviews were also used to gather data. Data was then reviewed for themes, categories, patterns and relationships, before being organised via transcripts into tables and other thematic systems.

This qualitative research focuses on current, future and perceived settings; outlining an interest in meaning, perspective and understanding; focusing on process; and combining inductive analysis with grounded theory.

The standard methods of qualitative research were applied, including: observation, interviews, sampling, written material, questionnaires/surveys, and dealing with issues related to validity, ethics and assessment or evaluation of the research conducted.

The population included experts in:

- Wholesale and retail industry
- Learning and assessment
- QCTO practice and requirements
- W&RSETA Trade & Occupational qualifications
- AQP management systems and procedures

A range of inputs was solicited from key experts as indicated above. All participants were voluntary, and were advised both in writing and verbally that their informed consent to participate would be required and that each participant was free to withdraw from participation, in line with the ethical policy and procedure of CPUT. Where appropriate, more than one expert in any particular area was consulted.

As the research was qualitative rather than quantitative, the sources of data include relevant public domain documentation, individual and organisational insights
collected through semi-structured interviews and/or questionnaires, international liaison and literature review.

Confidentiality and anonymity have been offered to all participants and maintained through the use of a coded database. However, due to the nature and purpose of this research, as well as the methodology, most participants did not use this option.

Data was analysed through theme identification and review, as well as by liaison with a research panel that consisted of the research team, a project management team as well as a steering committee.

In order to enhance the credibility of this research every attempt has been made to identify, encourage and support the participation of key stakeholders and experts. Wherever possible organisational support and input have been sought, and where necessary appropriate alternative individuals and/or organisations have been identified and approached.

3.2 DATA

3.2.1 Target audience and respondent numbers

There were a total of 36 respondents noted within the target groups collected over the three sites. 18 respondents were from kwa-Zulu Natal, 10 respondents from Gauteng and 8 respondents from the Western Cape. The respondents were made up of: 44% skills development provider representatives, 44% industry representatives and 11% quality assurance and SETA related personnel.

In terms of data collection, 75% of the respondents completed all fields within the questionnaire, 17% partially completed the questionnaire and 8% did not participate or chose not to complete the questionnaire.

3.2.2 Analysis

The data was analysed using a thematic identifier looking at common trends and language used within the questionnaires. These were grouped according to
categories and data was collected from the questionnaires taking each questionnaire and dissecting it and classifying it according to the categories.

Independent checks were put into place in which data was cross-referenced and audited to ensure that all findings produced were error free.

The findings noted in each model are presented considering what the respondents were given in terms of the summary of the model and then an analysis of the data according to the categories of each model and the findings produced.

3.2.3 Focus Groups

The summary of the focus groups has been collected, considering each of the discussions and key concerns. Notes of the discussions have been collected and are referred within the recommendations in this report. These consider the discussions held with all stakeholders within the assessment process and therefore these are acknowledged as being subjective in nature.
CHAPTER 4

FINDINGS

4.1 MODELS IDENTIFIED

As this is the first part of a multi-phase project, there is a requirement to consider models for the establishment of assessment centres, specific to the regulatory requirements of the quality assuring body, the QCTO, but also to consider the kinds of occupational qualifications linked to the W&RSETA.

As the W&RSETA is going to use this research to consider the most appropriate model, the focus of the research has been on offering models that provide options in understanding the requirements of delivery, which is linked to further phases of the overall research project.

The following research outcomes were further evaluated to consider the deconstruction of the research hypothesis:

The identification of models for the establishment of Assessment Centres for the summative assessment of all wholesale and retail related QCTO qualifications from NQF levels 1 to 6. The models must include information on the possible use of TVET Colleges and Higher Education and Training Institutions as assessment centres for the W&RSETA

- Current infrastructure model: using the current infrastructure of W&RSETA regional offices and associated training space and human resources, which although would be cost saving, may be restrictive in application.

- MODEL A: Partnership model: partnerships would be formed with universities in various regions of the country, as well as TVET (FET) colleges which would host the assessments for the AQP from a logistical or operational perspective (controlled summative only), and the AQP would handle the logistics of the paper based assessment, assessors etc.

- MODEL B: Outsourced model: following a model utilised by outsourcing the assessment centre management to a third party supplier that would effectively manage the assessment centres nationally, in conjunction with private providers that have a national footprint where assessments can take place.
4.2 MODEL A

4.2.1 Overview of the model

Organisations, private examination centres and trade test centres can voluntarily register to be an assessment centre.

The AQP would rely on sufficient private provision to meet all of the needs of its learners across the country. However, if it collaborated with an education provider with a national footprint, as noted in the National Provider’s methodology within the literature review of the paper, it could ensure sufficient provision.

The issues that will be discussed in detail, however, would be the practical component of the assessment. As noted from the assessment specification documentation there is a need for some practical implementation, and for example the Occupational Certificate: Service Station Attendant requires the assessment centre to have a license in order to dispense fuel.

Figure 2: Responses to Model A by focus groups

Research respondents' initial evaluation of the model noted that:
• 29% thought it was the simplest and easiest model to use as it was mostly outsourced by the AQP;
• 12% thought it was costly to the learner and costly to run as an assessment centre if they were doing it for profit; and thought it was business friendly and could create business opportunities;
• 10% thought it could create employment opportunities; and thought there could be a problem with consistency across the various assessment centres;
• 7% thought there could be issues with distribution of assessments to the various centres;
• 5% thought there would be limited opportunities to audit the assessment centres; and thought it was subjective;
• 2% thought it follows the trade test methodology; and that there were limited people with expertise to run an assessment centre; and that it was not QCTO friendly; and that private providers were not able to get a fuel license; and that there would be better integrity in terms of learning and assessment.

In evaluating the model the respondents were asked to consider the advantages and disadvantages of the model, identifying amongst things, the systems and procedures, the management and maintenance framework and the costs.

Figure 3: Advantages of Model A identified by focus groups
- 35% thought resources were already available nationally;
- 27% thought it was accessible;
- 24% thought it was more efficient;
- 5% thought it would create unbiased assessment;
- 3% thought it could make the cost to be market related, as it would be private assessment centres wanting to offer the assessments; and thought it was flexible; and thought there was a once-off set up cost.

**Figure 4: Disadvantages of Model A identified by focus groups**

- 35% thought there would be increased cost for assessment and were concerned whether funding was available from the W&RSETA for this;
- 28% thought the model was open to abuse and would require regular auditing from the AQP;
- 15% thought it would not work for a number of organisations that would require their learners to leave the workplace for assessments;
- 9% thought as it was for profit it would be costly;
- 6% thought it would have to be generic enough to meet the entire population who would be assessed using resources which they were not familiar with; and it was limited to bodies with resources;
- 2% thought it was not small town friendly.
4.2.2 Systems and Procedures

Due to the kind of options available within the model, the initial systems and procedures are a framework rather than a detailed model. The consideration for these could be further defined once the questions and concerns noted within the research have been addressed.

Basic procedure:

1. Assessment instruments are designed using the assessment specification document.
2. The knowledge based assessment instruments are collated into an assessment bank, to ensure that various combinations of assessments can be generated for no additional cost.
3. The practical component of the assessment is evaluated and a specification documented indicating the resource and site requirements to run the practical component.
4. The assessment centres apply to the AQP to become an assessment centre, providing information to show that they are able to offer both the knowledge based and practical assessment (there would be an opportunity for the assessment centre to partner with a workplace in order to conduct the practical component, but this would be done by independent assessors and not the workplace).
5. The assessment centres are evaluated by the AQP to ensure they meet the criteria of provision, are awarded an assessment centre status and are able to run national summative tests.
6. The AQP distributes the assessments to the assessment centres and the assessment centre runs the national summative.
7. The knowledge based assessment and the practical assessment are completed. The practical assessment is recorded for quality assurance purposes.
8. There would be two options linked to this model:
   a. The assessment centres would employ their own assessors and moderators and provide the results back to the AQP.
   b. The assessment centres would employ their own assessors but the AQP would ensure that assessments were moderated to ensure quality assurance. (This would however require more resources)
9. The assessment results are shared with the learners.
10. An evaluation of the assessment cycle is considered by the AQP, noting the efficacy of the assessment, the costs associated with the assessment, the number of learners assessed based on the national footprint etc.

As noted from the evaluation of the model the concern would be the monitoring and evaluation component required of the AQP of the various assessment centres for one to ensure that the system is not open to abuse, and secondly to ensure that the practical component meets requirements and that standards are maintained.

4.2.3 Management and Maintenance Framework

The management and maintenance of this kind of framework indicates a similarity to the current Education and Training Quality Assurance (ETQA) systems and procedures namely:

1) The management of the assessment cycle and accountability for the standards of the assessment;
2) The design and quality assurance of the assessment instrument design;
3) The accreditation of assessment centres;
4) The monitoring and evaluation of assessment centres;
5) The monitoring and evaluation of assessments;
6) The interrogation of assessment results and data;
7) The maintenance of the assessment instruments to ensure currency;
8) The disciplinary process linked to non-compliant assessment centres

4.2.4 Costing

The costing model cannot be considered in a singular model, as there are too many variables associated with the choices the AQP may make in terms of delivery. Rather than creating a cost model, therefore, the costs associated with Model A are noted for consideration noting both the resource requirements as well as other costs. There is also a need to differentiate the costs linked to the assessment centre and the costs associated with the AQP. There are very few costs that the research respondents considered for the AQP related and most of the costs were associated with the assessment centre. Additional input has been provided where other costs are also noted.
Figure 5: Cost factors of Model A identified by focus groups

- 55% thought the costs to set up the assessment centre would be the most; this would include the practical component requirements;
- 18% thought the costs per learner per site would be high based on the national footprint costs and that in some cases there may only be one learner at a site for an assessment event making the assessment costly or unprofitable;
- 11% considered the travel costs of the learners to the assessment centre, as currently some learners are assessed in the workplace and are not required to travel;
- 9% thought the costs of quality assurance would be high;
- 5% thought that costs could be duplicated due to the model;
- 2% were concerned about the courier costs to the various venues.

In addition, the following resources were identified by the research respondents for the assessment centres as well as the AQP:
34% noted the equipment requirements per occupational qualification;
27% noted the personnel requirements both at the AQP as well as at the Assessment Centre;
19% noted the cost of the site and venue;
13% noted the cost of the record keeping and reporting requirements and systems;
5% noted the cost of monitoring and evaluation by the AQP;
2% thought in general that the costs were extensive.

As can be inferred from the above there would be costs for the AQP in terms of the personnel to fulfill the various functions required. However, there would also be significant resources linked to the assessment centre, which could limit the participation and desire to become accredited. These could include resource requirements as noted by the research respondents.

In summary, the AQP would require resources for the design, development and accreditation of assessment centres, monitoring and evaluation, record keeping and data analysis and finally maintenance of the assessment instruments to ensure currency.

The assessment centre would need to cover all costs associated with implementing the assessment, namely the venue, personnel, cost of assessment by an assessor and possibly moderation depending on the model, as well as reporting.
4.3 MODEL B

4.3.1 Overview of the model

In model B, there is a reliance on using both public and private provision for the national summative assessment. The model considers three types of centres:

- Public
- In-house
- Public and in-house

Public assessment centres could be TVET (FET) colleges, in-house could be private assessment centres or workplaces and there could be options to provide either a public and in-house assessment centre, or an exclusively public or exclusively in-house assessment centre.

Using this model, there is not reliance on private assessment centre provision, or for profit making from the assessment process. The TVET (FET) colleges could offer the use of their resources, which already exist, and any participating TVET (FET) college would effectively benefit financially from the use of their resources but as the assessments would not be aimed at making a profit, the cost of assessments could be reduced. There are TVET (FET) colleges with a large national footprint, which would ensure accessibility, and where there are no TVET (FET) colleges, private providers could offer support.

Issues that this model identifies include the practical component of the assessment, as it would require more capacity building and investment of resources by the AQP into the various TVET (FET) colleges as assessment centres. Due to the practical nature of some of the assessments, there could be public private partnerships in which the TVET (FET) college partners with a workplace, and assesses the learners in their workplace, but using assessors from the assessment centre to ensure objectivity, standardisation and the integrity of the assessment. Considering that assessments require items such as point of sale systems, service stations and dispatch areas, such partnerships would be beneficial and desirable.

Should the in-house option be considered by the W&RSETA, then this could integrate assessments held at the workplace. However, the workplace would not be able to assess its own learners but could assess learners from other workplaces. There are various issues noted with this option, as a workplace might not be willing to allow non-staff members on site, and there is a consideration that learners from
other sites may be subjectively assessed. The use of external assessors may mitigate this.

Research respondents' initial evaluation of Model B noted that:

- 60% thought that it was more practical from an implementation perspective;
- 13% thought that industry may prefer private assessment centres whereas government/SETA/AQP may prefer public institutions;
- 10% thought that standards might drop; and that in-house providers should be allowed to apply;
- 6% noted that funding already exists for SETAs and TVET (FET) colleges and this would be the more cost effective model as a result.

In evaluating the model the respondents were asked to consider the pros and cons of the model, identifying amongst things, the systems and procedures, the management and maintenance framework and the costs.
Figure 8: Advantages of Model B identified by focus groups

- 23% thought it was a more flexible model;
- 20% thought it was more acceptable for industry;
- 18% thought there would be more venues available;
- 14% thought that in-house centres would have their own technology and systems which the learners would be familiar with;
- 11% thought that an outside assessment agency could assess in-house learners to ensure objectivity;
- 9% thought it was cost-effective;
- 4% thought that quality assurance would be more streamlined;
- 2% thought that the SETA could still maintain control.
24% were concerned that in-house centres should not assess their own learners;

21% thought it was more costly; and thought it would require more AQP involvement;

14% were concerned that standards would be compromised;

7% were concerned about how assessment design would need to consider different kinds of equipment specific to certain workplaces;

5% were concerned with the currency of assessment instruments after initial implementation;

2% were concerned with TVET (FET) colleges not having the subject matter expertise; and were concerned with the idea of online assessments for the target learner; and were concerned that the TVET (FET) colleges could not accommodate petrol (service station) attendants specifically.

4.3.2 Systems and Procedures

The key difference in this model is the initial resource requirements from the AQP and the significant investment in the infrastructure and capacity building. As per the previous model, the consideration for these would be further defined once the questions and concerns noted within the research have been addressed.

Basic procedure:
1. Assessment instruments are designed using the assessment specification document.

2. The knowledge based assessment instruments are collated into an assessment bank, to ensure that various combinations of assessments can be generated at no additional cost.

3. The practical component of the assessment is evaluated and a revised specification documented, indicating the resource and site requirements needed to run the practical component.

4. Identification takes place of TVET (FET) colleges that would participate and would be willing to undergo capacity building in order to conduct the W&RSETA assessments;

5. Consideration for registration is opened for workplaces as well as private assessment centres;

6. Evaluation of the national footprint takes place to ensure that sufficient assessment centres operate;

7. Infrastructure is audited of TVET (FET) colleges, workplaces and private skills development providers wishing to participate;

8. Gaps and under capacity in the TVET (FET) colleges are identified;

9. Capacity building is conducted for both human and other resources within TVET (FET) colleges;

10. The assessment centres make application to the AQP to become registered as such, providing evidence that they are able to offer both the knowledge based and practical assessment. (There would be an opportunity for the assessment centre to collaborate with a workplace in order to conduct the practical component, but this would be done by independent assessors and not the workplace).

11. The assessment centres are evaluated by the AQP to ensure they meet the criteria of provision, are awarded assessment centre status and are able to run national summative tests. This will include TVET (FET) colleges that have undergone capacity building.

12. The AQP distributes the assessments to the assessment centres and the assessment centre runs the national summative.

13. The knowledge based assessment and the practical assessment are completed. The practical assessment is recorded for quality assurance purposes.

14. Monitoring and evaluation of the assessments would be conducted by the AQP;
15. There would be two options linked to this model for the next stage:
   a. The assessment centres would engage their own assessors and moderators and provide the results back to the AQP. OR
   b. The assessment centres would engage their own assessors but the AQP would ensure that assessments were moderated to ensure quality assurance. (This would however require more resources)

16. The assessment results are shared with the learners;

17. An evaluation of the assessment cycle is considered by the AQP, noting the efficacy of the assessment, the costs associated with the assessment, the number of learners assessed based on the national footprint etc.

4.3.3 Management and Maintenance Framework

The management and maintenance of this kind of framework requires additional criterion to the current ETQA systems and procedures, namely:

1) The management of the assessment cycle and accountability for the standards of the assessment;
2) Capacity building of TVET (FET) colleges;
3) Partnership management of workplace and TVET (FET) colleges;
4) The design and quality assurance of the assessment instrument design;
5) The accreditation of assessment centres;
6) The monitoring and evaluation of assessment centres;
7) The monitoring and evaluation of assessments;
8) The interrogation of assessment results and data;
9) The maintenance of the assessment instruments to ensure currency;
10) The ongoing capacity building of TVET (FET) colleges;
11) The disciplinary process linked to non-compliant assessment centres

4.3.4 Costing

As noted previously, the costing model cannot be considered in a singular model, as there are too many variables associated with the choices the AQP makes in terms of delivery. Rather than create a model, therefore, the costs associated with this model are noted for consideration noting both the resource requirements as well as the costs. There is also a need to differentiate the costs linked to the assessment
centre, the costs associated with the AQP and the costs for capacity building at the TVET (FET) colleges and investment in infrastructure.

Figure 10: Cost factors of Model B identified by focus groups

- 26% thought that the set up costs would be significant;
- 19% thought that there would have to be far more AQP involvement at all stages, from capacity building to monitoring and evaluation; and thought that there would be large costs to set up the TVET (FET) colleges for the practical component of the assessments;
- 10% thought there would be significant costs to keep resources and technology current; and thought there would be more costs if using external assessors;
- 6% thought in-house assessment would be cheaper; and thought the costs would be extensive;
- 3% thought about the cost of allowing 3rd party assessment within the workplace.

In addition, the following resources were identified by the research respondents for the assessment centres as well as the AQP:
Figure 11: Resource requirements identified for Model B by focus groups

- 37% thought that personnel would be the largest resource requirement;
- 23% thought that equipment per occupational qualification would be costly; and that management and record keeping would be a significant resource requirement;
- 14% considered the venues and sites as a resource cost;
- 4% thought monitoring and evaluation would be a resource cost.

As can be inferred from the above there would be costs for the AQP in terms of the personnel to fulfill the various functions noted. However, there would also be significant resources linked to the capacity building and audit of the assessment centres and continued maintenance thereof.

In summary, the AQP would require resources for capacity building, initial audit, the design, development and accreditation of assessment centres, monitoring and evaluation, record keeping and data analysis, maintenance of the assessment instruments to ensure currency and finally maintenance of the assessment centres to ensure consistent delivery of assessments.

The assessment centre would need to cover the costs associated with implementing the assessment, namely the venue, personnel, cost of assessment by an assessor and possibly moderation depending on the model, as well as reporting.
4.4 Focus groups initial findings

In terms of evaluating which model was more appropriate 91% of the respondents chose model B (Figure 12) and thought that it was more suitable for both industry as well as assessment centre provision. Comments included:

- Better from a practical implementation perspective
- More affordable as not replicating existing structures
- Possibly allows for in-house assessment using existing structures
- Transparency, validity, integrity
- Capacity building to ensure better public private integration
- Completely controlled by W&RSETA

Figure 12: Focus group findings

9% considered model A more suitable because:

- Each centre would be set up like a business and therefore more efficient
- TVET (FET) colleges are not sufficiently located in rural areas

Discussions from the focus group also noted the following:

- **Type of assessment centre**-There is a requirement to have an assessment centre model that is not only linked to an examination centre, which could be outsourced, but in most of the cases and examples noted there is a
requirement for written and practical tasks to take place in the same day at the same assessment centre. Considering that practical simulations in some cases require specialised equipment and venues, this limits the type of model to be used.

- **Duration of assessments**- The durations of the assessments are all between a “half day” and a “full day”. The assessment centres therefore will require additional resources like ablutions, access to refreshments (the implication being the cost thereof), and transportation options which would allow learners to access the site easily.

- In addition, there are some concerns that learners would be completing assessments for between 4-8 hours on a single day. This may bring the assessment principle of fairness into question.

- **Cost**- developing the types of assessment specified require in some cases full day case studies. These are going to be costly, and will need to be interrogated when considering what the cost will be to the learner.
5.1 CHALLENGES AND RECOMMENDATIONS

The current challenges include concerns about the design of the External Assessment Specification of the seven identified W&RSETA occupational qualifications, which note practical requirements, controlled time periods for the assessment, and specialised equipment that may not be user-friendly. It is therefore recommended that:

- The QCTO draft templates and policies should be discussed with the QCTO to consider how practical assessments, which form part of the assessment requirements, can be met.
- As the design of the identified W&RSETA occupational qualifications include a practical component, which would require significant resources to assess, consideration should be made for the practical components of assessment specification documents submitted to date.
- This would include a review of the time period noted therein, which in some cases notes one day or half a day.
- Alternatives to be considered could include the assessment of the practical component in the workplace and the submission of naturally occurring evidence in the form of a portfolio to be assessed in conjunction with the national, controlled summative assessment.
- Alternatives would include the registration of mobile assessment centres, however for this to be feasible the Accreditation of Assessment Centre Policy of the QCTO would need to be amended, as each mobile centre would need to be registered as a site of delivery, which could be cumbersome and require resources from the AQP to manage this.

Secondly, if there were to be a national assessment centre model implemented, it would be advantageous to consider the use of shared resources in setting up a model that would benefit all Assessment Quality Partners. Therefore, the following apply:
• Current concerns note the capacity building requirements of setting up assessment centres across a national footprint, when multiple AQP s could be using the same resources and share the costs of capacity building.

• The QCTO has noted that Assessment Centres must meet certain requirements such as tax clearance certificates, with no alternatives noted. As many organisations and TVET (FET) colleges are tax exempt, this would exclude them from participating. These are small considerations, but as they are current policy, they would have an impact on the model.

• In addition, the policy notes that the centres must have sufficient equipment and resources. This means there could not be a partnership between, for example, an institution that could offer the paper based assessment and then a workplace where learners could be assessed through a mobile external assessment centre, registered to be able to go and assess in real time in the workplace.

• This consideration is critical as, for example in the W&RSETA sector, each of the employer point of sale systems is likely to be different and learners would be disadvantaged if they were to use alternative systems which they were not familiar with. This would also increase the cost, as learners would first need to be trained on how to use the assessment centre system before the national assessment, if a generic system is to be utilised.

5.2 CONCLUSION

With the new implementation of assessment centres as documented by the QCTO, there is very little in terms of framework and structure-based documentation. The models and information considered in this research project make assumptions based on the information that is available at the time of the research.

Therefore, this research would need to be ongoing, and further research should be considered beyond the scope of this report. Once further decisions are made, and once assessment specification documents are analysed and possibly amended, the model could be better defined and refined, but noting the practical requirements of some assessment specification documentation there is a need for the kinds of models that have been proposed.
Consideration of costs and resources are also directly linked to the type of model used as, depending on which is more suitable to the W&RSETA, there could be significant investment required up front versus a model in which there is minimal investment by W&RSETA as private provision is responsible for its own capacity to deliver the assessments.

Further discussions around issues raised in this paper should be conducted to help elaborate and formalise a model that best works for the W&RSETA.


le Grange, J. (2014). Personal interview. 1 September.

QCTO, see Quality Council for Trades and Occupations


Singapore Workforce Development Agency. (no date). Becoming a WSQ Approved Training Organisation. Available at: http://www.wda.gov.sg/content/wdawebsite/L225-ForTrainingProviders/L325A-001TP-ATO.html

