ASSESSMENT IN THE FURTHER EDUCATION AND TRAINING SCHOOL SECTOR: A QUALITY ASSURANCE PERSPECTIVE

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ASSESSMENT IN THE FURTHER EDUCATION AND TRAINING SCHOOL SECTOR: A QUALITY ASSURANCE PERSPECTIVE

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LIST OF ABRREVIATIONS AND ACRONYMS

AFL	Assessment for Learning
CASS	Continuous Assessment
DoE	Department of Education
FAL	First Additional Language
FET	Further Education and Training
FSDoE	Free State Department of Education
GET	General Education and Training
HEQC	Higher Education Quality Committee
HL	Home Language
IQAA	Independent Quality Assurance Agency
NBEF	National Board of Education of Finland
NCS	National Curriculum Statement
NQF	National Qualifications Framework
OBE	Outcomes-based Education
PISA	Programme for International Student Assessment
QA	Quality Assurance
OECD	Organisation for Economic Co-operation
SAQA	South African Qualifications Authority
SD	Standard Deviation
SQA	Scottish Qualifications Authority
TQM	Total Quality Management
TIMMS	Trends in International Mathematics and Science Study
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WNCP	Western and Northern Canadian Protocol for Collaboration in Education

UITTREKSEL

Suid-Afrika se prestasierekord in die internasionale arena, asook verslae van Umalusi, die nasionale gehalteversekeringsliggaam vir voortgesette onderwys en opleiding (VOO), het die afgelope jare die land se sorgwekkend lae onderwysprestasies, veral onder leerlinge in die VOO-skoolstelsel, uitgelig. Die ontleding van leerprestasie teenoor nasionale en internasionale maatstawwe, het gewys dat 'n verbetering in die gehalte van leeruitsette, een van die grootste uitdagings is wat die Suid-Afrikaanse onderwysstelsel in die gesig staar. 'n Hoofprioriteit vir alle rolspelers, is om maniere te vind om leerlinge se prestasies en die gehalte van die onderwys wat hulle ontvang, te verbeter. Ten spyte van verbete pogings deur die departement van onderwys (DoE) om 'n aantal inisiatiewe en programme te ontwikkel wat gemik is op die verbetering van die prestasie van leerlinge, is geen verbeterings aangebring nie. Die aanspreek van hierdie bepaalde probleem is ook een van Umalusi se top-prioriteite.

Bestaande literatuur doen aan die hand dat die versterking van die assesseringspraktyke wat tans toegepas word, tot verbeterde onderwys leer en assessering kan lei, terwyl dit gehalteversekering in skole kan bevorder. Skole regdeur die land toon groot verskille ten opsigte van prestasie en daarom is gepoog om die beperkinge te identifiseer wat die prestasievlak in skole kan beïnvloed. In opvolging hiervan, het die navorser sekere skole uit elk van die volgende kategorieë geïdentifiseer: hoë-prestasie skole, gemiddelde-prestasie skole en lae-prestasie skole - gebaseer op hulle prestasie ten opsigte van die graad 12-resultate in 2009.

Die doel van hierdie studie was om 'n teoretiese begronding van assessering op skoolvlak daar te stel vanuit 'n gehalte versekeringsperspektief, waaruit inligting verkry kon word om te gebruik vir die saamstel van 'n vraelys om onderwysers se bewustheid van die gehalteversekeringsmaatstawwe wat gedurende assesseringspraktyke in skole toegepas moet word, te ondersoek. Bo en behalwe dit, is daar gepoog om vas te stel of onderwysers leerlinge in totaliteit assesseer en om die mate waarin gehalteversekeringsmaatstawwe benut word, te ondersoek. Daar is ook 'n kwalitatiewe studie gedoen om die kwantitatiewe bevindings te rugsteun.

Die bevindings het getoon dat verskeie beperkinge van krag is wat die implementering van gehalteversekering en die mate waartoe dit benut word strem en dat sodanige beperkinge wel 'n invloed uitoefen op leerlinge se prestasies. Dit wys duidelik in die data-analise as onderwysers van die verskillende skoolgroepe vergelyk word ten opsigte van hulle bewustheid en begrip van assessering en gehalteversekering.

Die bevindings van hierdie studie ten opsigte van wat as goeie assesseringspraktyke beskou kan word, is vergelyk met die bevindings van die bestaande literatuur in dié verband. Sowel kwantitatiewe as kwalitatiewe data-stelle is gebruik om bevindings in die literatuur te verduidelik en om die navorser in staat te stel om bepaalde aanbevelings te doen met betrekking tot assesseringspraktyke en die bevordering daarvan.

ABSTRACT

South Africa's performance record in the international arena together with reports of national quality assurance bodies released in recent years have highlighted the alarmingly poor results in the educational accomplishments specifically amongst learners in the further education and training school sector. An analysis of school learning achievements compared to national and international benchmarks has indicated that an improvement in the quality of learning output remains one of the biggest challenges facing the South African educational system. Finding means to improve the performance of learners as well as the quality of the education learners receive is a major priority for all stakeholders. Despite vigorous attempts of the national department (DoE) to develop initiatives and programs aimed at improving learner achievements, minimal progress has been achieved. Umalusi, the quality assurance body for Further Education and Training (FET), intends to address this problem as one of its top priorities.

Existing literature indicate that strengthening the assessment practices currently employed could result in improved teaching, learning and assessment whilst simultaneously enhancing quality assurance in schools. There is a marked variation in performance of schools throughout the country. An attempt was therefore made to identify constraints leading to the different performance levels of schools. Schools for the research were selected from different categories: good, average and low performing schools based on the performance of their 2009 grade 12 results.

The goal this study pursued was to provide a theoretical underpinning of assessment at school level from a quality assurance perspective. Information assimilated from contemporary literature, was utilised to develop a questionnaire with the aim to investigate teachers' awareness of quality assurance measures that should be implemented during assessment practices in schools. Additionally, it aimed to determine whether teachers assess learners in totality and also to investigate the extent of quality assurance measures being employed. A qualitative study was also conducted to strengthen the quantitative findings. Results indicated that various constraints impeding

the implementation and application of quality assurance were present and that these constraints affected the performances of the learner. This was made evident in the data analysis where teachers of the different school groupings were compared in respect of their awareness and understanding of assessment and quality assurance measures.

Findings of what were considered good assessment practices in the study were compared with those in the existing literature review which enabled the researchers to make recommendations pertaining to the improvement of assessment practices and enhancement of quality assurance.

CHAPTER 1

INTRODUCTION AND OVERVIEW

1.1 INTRODUCTION

Pressure has been placed on education institutions and the services they render, as well as their accountability for the quality of those services. In this regard, Shay (2004) referred to the services that learners receive and the responsibility that rests on institutions and teachers to realign their teaching to address the needs of learners and other stakeholders. In light of this statement by Shay (2004), the following paragraphs highlight how good assessment practices can result in excellent performances.

Various international studies have been conducted to evaluate learners' performance in specific subjects in a global context and identifying the best-performing countries. In light of this study's aim to translate quality education, innovative assessment practices that could lead to the improvement of current assessment practices and quality assurance in South Africa, the findings of the 2008 survey of the Programme for International Student Assessment (PISA) were used as reference point.

The PISA survey, conducted in 2008 to determine the knowledge and skills of a group of 400 000 learners aged 15 years in 57 countries, revealed significant improvements in student performance in certain countries since 2000. The survey focused primarily on the learners' ability to comprehend and solve scientific problems, as well their progress in terms of performance in reading and mathematics. This was a follow-up on previous surveys conducted in 2000 and 2003. A comparison of the results of the 2008 survey with the findings in 2000 and 2003 revealed that learners in countries such as Korea, Poland and Mexico had improved in terms of reading performance between 2000 and 2008, with learners in Korea improving by 31 score points – an increase equivalent to almost one school year, mainly by raising the proportion of top performers. Over that same period, learners in Poland improved their reading performance by 29 score points, while learners in Mexico and Greece also showed a significant improvements in mathematics between 2003 and 2008 (OECD, 2010:13-23).

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According to the PISA survey, the top performing country in science in 2008 was Finland, followed by Hong Kong-China, Canada, Chinese Taipei, Estonia, Japan and New Zealand. Australia, the Netherlands, Korea, Germany, the United Kingdom, the Czech Republic, Switzerland, Austria, Belgium, Ireland, Liechtenstein, Slovenia and Macao-China also scored above the average of the Organisation for Economic Co-operation (OECD) average. The findings further revealed that learners from a more advantaged socio-economic background were more likely to show a general interest in science, as revealed in Ireland, France, Belgium and Switzerland. Various factors contributed towards the good performance of learners in these countries, but a low teacher-to-student ratio, a quality assurance system and planning for assessment were identified as the most valuable factors (OECD, 2010:13-23).

Although South Africa was not part of the PISA survey, reports on matriculation (Grade 12) results over the past few years, as well as the findings of other surveys conducted on learner performance in South Africa, show a different picture, as will be discussed in the following paragraphs.

Supplementary information from the Department of Education (DoE, 2009:21) revealed that in 2007 only 72.2% of learners in the Free State Province completed Grade 12 successfully, while in 2008 only 70.5% passed Grade 12. From 2007 to 2009, on average 28.7% – almost one-third – of all learners who enrolled for Grade 12 in the Free State did not pass their final examination. This leads to questions about the quality of education, assessment, teachers and schools. More than one decade after the implementation of Curriculum 2005, despite many changes in the South African educational policy, it is clear that the government (national and provincial) is still struggling to provide quality education to all South Africans (Christie, 2008:2-4).

This is also reflected in the national systemic evaluation report and the Trends in International Mathematics and Science Study (TIMSS) report (Mullis, Martin & Foy, 2008: 4-5) regarding the performance of South African learners.

The TIMSS studies of both 1999 and 2003 found South Africa's performance to be extremely poor, with learners achieving the lowest average scores in Mathematics compared to all other participating countries, including those in Africa. In 1999 the average scale score for South African Grade 8 learners was 275, while in 2003 the learners scored 264 points out of a maximum of 800. This was well below the international average scale score (DoE, 2009:87). The findings of the TIMSS (2007:7) report, as shown in Table 1.1, illustrate the unimpressive performance of the South African learners in 2007 and also South Africa's weak overall performance in comparison with other countries.

Table 1.1: Educational rankings by least performance (TIMSS Report 2007)

5 Least-performing countries (2007)		5 Least improving countries (2007)		
1	SOUTH AFRICA	1	SWEDEN	-9.1%
2	PHILIPINES	2	MALAYSIA	-8.7%
3	CHILE	3	TUNISIA	-6.6%
4	INDONESIA	4	NORWAY	-5.8%
5	IRAN	5	SOUTH AFRICA	-4.0%

South Africa's own systemic evaluation exercises conducted in 2001, 2004 and 2007, which focused on Grade 3 and 6 learners, produced similar results. In 2007, Grade 3 learners scored an average of 35% in numeracy. In 2004 the achievement rates of learners in the Grade 6 evaluation were even poorer than those for Grade 3, with learners obtaining an average of 27% specifically for Mathematics. The majority of Grade 6 learners failed to reach the standard required by the National Curriculum, with only 12% of Grade 6 learners performing at the Achieved or Outstanding level (DoE, 2003:33, DoE, 2009:78).

The statistical information obtained from the systemic evaluation report clearly indicates the need for improved quality of education (including assessment), the need for more

learning resources to aid learners and teachers, and the need for appropriate systems to be put in place to monitor the proper and effective utilisation of resources.

The TIMSS report (Mullis *et al.*, 2008: 4-5), reveals the following situation in South Africa in 2007 that supports previous discussions:

- An average Grade 8 class size of 46 learners;
- More learners in urban schools than in rural schools;
- An average enrolment of 1 028 learners in urban schools and 622 in rural schools, while the shortest school lesson time reported was 15 minutes;
- Vandalism of school property and drug abuse emerged as a serious problem, as reported by the principals of 34% of schools.

The analysis of learning achievement against national and international benchmarks, as discussed in the foregoing paragraphs, indicates that an improvement in the quality of learning output remains one of the greatest challenges facing the South African education system, along with assessment that provides the means to determine the performance of learners and the quality of the education received by learners. In response to these results, the DoE has been vigorous in developing a number of initiatives and programmes aimed at improving learner achievement. Umalusi, the quality assurance body for the further education and training (FET) band, also identified this as a top priority.

In the highly competitive globalised economy of today, quality education is one of the most valuable assets that a society and an individual could strive for. Emerging from decreasing matriculation results this study sought to investigate current assessment practices and quality assurance practices with the aim to suggest possible guidelines to improve the quality of assessment practices in secondary schools in the Motheo district. Newman (2008:1) affirmed the Human Sciences Research Council (HSRC) finding that the quality of education in South Africa is depicted as weak in comparison with other, even poorer countries. Naledi Pandor, then Minister of Education, reported in 2008 that

the performance of South African schools in mathematics and science subjects was dismal in relation to other countries such as Iceland, Finland and Korea. She blamed the weak performance on inadequate infrastructure, inefficient administration, lack of quality assurance, under-qualified teachers, and changes to the curriculum (DoE, 2008:1-2).

Assessment and learning are intertwined and thus have a mutual influence, as well as an influence on the quality of education. Assessment, therefore, is the process that determines whether learning has taken place, as well as the quality of that learning and how learning and teaching can be improved. Thus it seems that when assessment practices and measures are of high quality, learning should improve.

Morris, Ripley and Fincher (in Collins & O'Brien, 2003:29) asserted that assessment can affect decisions about grades, advancement, placement, instructional needs and the curriculum. Information gathered from assessment can also display the social, educational and psychological aspects that can be used to identify an individual's strengths and weaknesses. Various methods (internal and external) can be used during assessment and certain procedures can be followed in gathering and interpreting information about learners, institutions and programmes for purposes of evaluation, appraisal and accreditation. Assessment as an integral part of teaching and learning can therefore be affected by how effectively teachers and schools implement assessment and what procedures are in place to ensure quality assurance.

Quality assurance was introduced into South African schools in the late 1990s during the transformation of the education system. According to the Independent Quality Assurance Agency (IQAA), quality assurance consists of a combination of approaches, processes and instruments that are used to ensure education quality (IQAA, 2008:2). The implementation of quality assurance procedures and policies might be one way of ensuring quality learning. Harman (1998:2) referred to quality assurance as the systematic management of assessment procedures that are adopted to ensure the achievement of specified quality or improved quality. Quality assurance is therefore

seen as an imperative to ensure that the degree of excellence that is specified is achieved. A more controversial definition of quality assurance is that it reflects the sum of activities that ensure the quality of the products and services at the time of production or delivery.

Hattingh (2003:5) confirmed that the implementation of quality assurance ensures that organisations/institutions maintain high standards and that the correct procedures and/or processes are followed through to the end-product. Currently in South Africa, national quality assurance bodies such as Umalusi – since 2001 – and the South African Qualifications Authority (SAQA) – since 1995 – are involved in improving the quality of education.

1.2 STATEMENT OF THE PROBLEM

Throughout the world, stakeholders expect evidence from institutions as an indication of their accountability. Learners are seen as the most important clients of the education system and should therefore receive appropriate support. The establishment of SAQA and quality assurance bodies such as Umalusi and IQAA is aimed at improving the quality of education.

There have been questions about whether the implementation of quality assurance guidelines by these quality assurance bodies, has materialised in assessment practices during the 13 years since the implementation of outcomes-based education (OBE) in 1998, especially in the FET sector.

Schools are held accountable for education and more specifically for the performance of learners. When the 'revised' National Senior Certificate (NSC) was introduced in 2008, the first group of Grade 12 learners in the Motheo district to obtain the NSC showed a poor pass rate of 70.5% (DoE, 2008:3-7).

Spady (in Rademeyer, 2008:1) stated that OBE in South Africa had failed, leading to a drop in the standard of education. Spady further suggested that improved quality assurance would raise the standard of education, thus confirming the need to investigate quality assurance procedures with regard to assessment in South African schools. Despite recent changes leading to an increased focus on a student-centred approach to learning, the question can be asked whether approaches to assessment paralleled this shift in practice or realised the potential of student engagement.

It can be deduced that teachers and learners are faced with unique challenges in respect of assessment, as well as the relevance, flexibility and credibility of the assessment procedures to be implemented. This study attempted to respond to these trends in terms of the procedures suggested by the national bodies involved in quality assurance, such as SAQA, IQAA, DoE and Umalusi.

This study on assessment practices, conducted from a quality assurance perspective, investigated whether aspects suggested by the various quality assurance bodies are in place and being executed. According to Martin and Stella (2007:23-27), quality assurance is the extent to which:

- Excellence is specified and implemented;
- Quality is managed in schools, and the processes used to ensure quality can be considered effective;
- Activities are executed to ensure the quality of the products; and
- Quality of the service is measured and quality control is carried out.

With the above in mind, the research questions posed in this study were as follows:

- Are teachers aware of quality assurance measures in respect of assessment?
- To determine whether teachers assess learners in totality?
- Are quality assurance measures in respect of assessment executed according to the quality assurance guidelines?

1.3 AIM AND OBJECTIVES

In an effort to answer the research questions above, the general research aim investigated assessment practices from a quality assurance perspective in the FET school sector of the Motheo district. This aim gave rise to the following objectives:

- To provide a theoretical underpinning of assessment at school level from a quality assurance perspective by means of a literature study;
- To investigate teachers' awareness of quality assurance measures that should be implemented during assessment practices in schools;
- To determine whether teachers assess learners in totality;
- To investigate the extent to which quality assurance measures are implemented; and
- To make recommendations aimed at improving assessment practices and enhancing quality assurance plans.

The next section focuses on the methods of investigation used during the study.

1.4 METHODS OF INVESTIGATION

To accomplish the objectives above, different research methods were employed. Non-empirical and empirical studies were conducted to gather adequate data to enhance validity and reliability. The non-empirical study was conducted by means of an extensive literature review on assessment and quality assurance, while the empirical study was conducted by means of quantitative and qualitative research methods, as discussed in 1.4.2.

1.4.1 Literature Review

An in-depth and comprehensive literature study on assessment and quality assurance was conducted to determine the main aspects of quality assessment and quality assurance. Fraenkel and Wallen (2006:66) asserted that a literature review contributes

to research in two ways – firstly by identifying and gathering information on relevant issues and themes that can be utilised during the research process, and secondly by providing the researcher with the opportunity to argue viewpoints gained from the literature study and compare these to the results of other similar studies. De Vos, Strydom, Fouchè and Delport (2005:127) confirmed that a literature review also contributes to the conceptualisation of the research problem. Suter (2006:85) supported this view, adding that a literature review provides the researcher with a theoretical framework whereby he/she can collect interrelated concepts that will guide the research and determine what will be measured and which statistical relationships should be sought.

Both primary and secondary literature sources have been included in this study so as to provide credible insight into assessment and quality assurance. De Vos *et al.* (2005:131) supported the viewpoint that a quality literature study involves the scrutiny of all relevant sources of information, including articles in educational journals, dissertations, statistics from credible sources, university policies, and publications by researchers and governmental agencies.

In addition to the theoretical insight obtained from the literature review, the researcher sought to understand the concepts of quality assurance and assessment and the implementation thereof. The researcher further sought to identify the extent to which teachers are aware of the quality assurance measures to be implemented during assessment practices in schools, and to investigate whether teachers design assessment instruments to assess learners in the cognitive, affective and psychomotor domain, as well as the extent to which those quality assurance measures are implemented. Mouton (2001:180) lent credence to this point by affirming that the researcher needs to understand the world from the subjects' point of view, and thereafter seek scientific explanations.

1.4.2 Empirical Study

In order to investigate the implementation of assessment and to search for scientific explanations relating thereto, an empirical study was conducted according to a mixed-method approach and following an explanatory design, where the qualitative data helped to explain the quantitative data. Suter (2006:42-44) alludes us that the employing of a combination of a qualitative and quantitative methods provides the researcher with the opportunity to ensure that the research is valuable, valid and reliable. In order to emulate these trends the sequence in Figure 1.1 was followed (see 4.4.2).
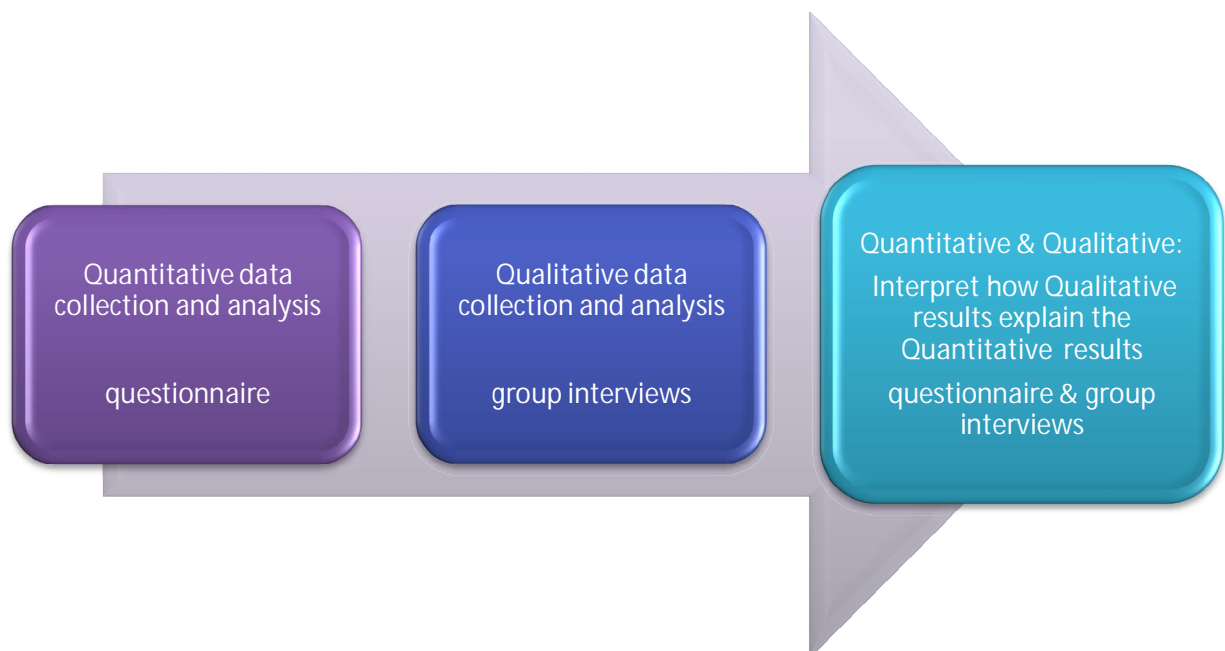
Figure 1.1: Sequential explanatory diagram of mixed-methods approach

Adapted from Ivankova, Creswell & Clark (2008:264)

The advantage of implementing both qualitative and quantitative methods in the study was that the researcher was able to collect multiple forms of data using different strategies, approaches and methods in such a way that the resulting mixture or combination resulted in complementary strengths and non-overlapping weaknesses.

1.4.2.1 Quantitative Method

With reference to Suter (2006:41), a quantitative research method can be employed to identify the extent to which statistical data describes the phenomena. In quantitative research, this is done by means of data collection methods such as measuring instruments and the measurement of procedures. According to Cohen, Manion and Morrison (2007:146-147), reliability and validity in quantitative research refer to the consistency and dependability of all methods used during the research. This implies that similar results should be obtained when these methods are applied to a similar group of respondents. In this case, a pilot study was conducted to identify and then rectify any problems in respect of the questionnaire.

For purpose of this study, quantitative research involved descriptive statistics presented in terms of the mean to summarise, simplify and represent the data in numerical form. Inferential statistics were also pursued by means of an analysis of variance (ANOVA) with the aim to accept or reject the null hypothesis regarding the responses from teachers from the different school groups.

The questionnaire (see 4.5.1) consisted of five sections. Section 1 was designed to provide general information, while section 2 focused on assessment, section 3 focused on quality assurance section 4 focused on the term "moderation", and section 5 was designed to provide information on holistic assessment. The respondents related themselves on a five-point Likert scale ranging from "Not at all", "Sometimes", "Uncertain" and "Usually" to "Almost always" (refer to Appendix C for the detailed questionnaire).

1.4.2.2 Qualitative Method

Babbie and Mouton (2001:49) attested that qualitative researchers always attempt to study human action from the insider's perspective. According to Denzin and Lincoln (2000:8), "Researchers seek answers to questions that stress how social experience is created and given meaning". By opting for this research method, the researcher was able to gain an in-depth and interpreted understanding of how teachers perceive assessment and the extent to which they implement assessment and quality assurance.

Group interviews were chosen as an appropriate instrument to provide the researcher with the opportunity to respond to the information given and to obtain accurate first-hand information. Thus, the instrument allowed for an in-depth understanding of assessment and quality assurance, as well as the opportunity to probe and expand the interviewees' responses (Partington, 2001:1).

Group interviews were held with randomly selected teachers who would not be participating in the quantitative research (adding value to the qualitative data). These interviews were semi-structured so as to provide flexibility for both the researcher and the respondents (De Vos *et al.*, 2005:302). Data was collected, analysed and categorised in terms of the participants' definition of the situation, noting patterns, themes, categories and regularities (Cohen *et al.*, 2007:461) (also see 5.4.2).

1.4.2.3 Pilot Study

Weijun (2008:25) referred to the importance of conducting a pilot study prior to distributing the questionnaires to the respondents, since this strengthens the validity of the research. Cohen *et al.* (2007:343) suggested that when piloting a questionnaire, the researcher should use a group of respondents who are drawn from the possible sample but who will not receive the final, refined version. Any problems relating to the content, wording, layout, length, instructions or coding, which are uncovered in the pilot study, must be amended accordingly.

In this study, pre-testing was conducted amongst five teachers who would not be taking part in the main study. The pilot study therefore provided the researcher with the opportunity to refine the data-collecting instruments and to identify and rectify possible problems (Suter, 2006:412). Cohen *et al.* (2007:340) went so far as to state that the pilot study is crucial to the success of the overall research, as it has various functions – the most important being to improve reliability and validity. According to De Vos *et al.* (2005: 211) and McMillan and Schumacher (2001:307) the pilot study involves the testing of a questionnaire and/or interview on a much smaller scale.

1.4.2.4 Population and Sampling

Zechmeister, Zechmeister and Shaughnessy (2001:123) defined population as a set of all cases of interest. It was not possible, due to financial constraints, to involve the whole population which in this instance was the entire Motheo district. A sample was therefore selected, as a subset of the population to represent the entire population (Zechmeister *et al.* 2001:124). The population consisted of 2 690 FET teachers, as per the 2009 figures provided by the Free State DoE, from which a representative sample of 215 teachers, randomly selected from high-performing, average-performing and low-performing schools, were chosen to participate (see 4.7.2). The researcher distributed the questionnaires personally, and 149 (69%) of the 215 questionnaires handed out were returned.

The same method of random sampling was employed to select schools for the group interviews. Interviews with small groups of teachers (four to eight teachers) were conducted at the selected schools (see 5.4).

1.5 ETHICAL ISSUES

McMillan and Schumacher (2001:17) asserted that it is the researcher's responsibility to adhere to ethical issues. The steps undertaken by the researcher to ensure objectivity, confidentially and honesty are outlined in 4.11.

1.6 VALUE OF THE STUDY

The findings of this study are intended to augment both current and further research data on how to improve assessment practices from a quality assurance perspective, in view of improving learning in South African schools. This is made essential by the weak performance of learners in South African schools in comparison with learners from other countries around the world.

1.7 DEMARCATION OF THE RESEARCH AREA

The schools in the Motheo district are divided into pre-primary, primary and secondary-level schools. For a limited study such as this, the focus was on secondary schools and more specifically teachers from the FET sector. This research took an interpretive approach to the interaction between the researcher, the schools and the teachers (Neuman, 2000:85). The information was obtained through social interaction between the researcher and the respondents, by means of a questionnaire and group interviews, with the aim of understanding and reconstructing knowledge regarding quality assurance and assessment practices.

Moreover, the paradigmatic perspective of interpretivism on which this study is based also determines the demarcation of the research area. For this paradigm, the emphasis is on the importance of 'understanding' and studying people's 'lived experiences' that occur within 'a particular' historical and social context (Snape & Spencer, 2003:7). Thus, this study is confined within the specified contextual parameters.

1.8 DEFINITIONS OF CONCEPTS

1.8.1 Assessment

In South Africa, the DoE (2005:5-7) refers to assessment as "a process of collecting, synthesising and interpreting information to assist teachers parents and other stakeholders in making decisions about the progress of learners".

According to Morris, Ripley and Fincher (in Collins & O'Brien, 2003:29) assessment refers to any process that is used to gather information on learners' knowledge. Assessment can influence decisions concerning student performance, progression, placement and instructional needs, as well as the curriculum. Information gathered from assessment can help teachers to recognise certain strengths and weaknesses in an individual student, which may help teachers to adjust their teaching strategy according to the needs of their learners.

From the above definitions, it is clear that assessment is a process that helps to monitor and record the progress of learners. Assessment is used not only in education, but also in the private sector to assess whether progress is being made and to identify strong points and weaknesses in the business. For purposes of this research, the focus is on the following assessment terms:

1. **Assessment Process**: A process referred to as a general method of doing something, generally involving steps or operations that are usually ordered and/or interdependent. Process can be evaluated as part of assessment, as in the example of evaluating a learner's performance during exercises leading up to the final assessment (Beder, 1999:1-3; Wiggins, 1994:2-5).

2. **Assessment Product**: The concrete and stable result of a performance or task. An assessment is made up of learner performance based on evaluation of the product of a demonstration of learning (Beder, 1999:1-3; Wiggins, 1994:2-5)

3. **Assessment Strategy**: The single most important factor in any educational institution. Refers to the process of judging whether or not educational tests, instructions and methods are effective and then implementing steps to improve effectiveness (Beder, 1999:1-3; Wiggins, 1994:2-5).

4. **Assessment Methods:** SAQA (2001:27) referred to assessment methods as any activities that the assessor implements and uses to assess the learners'

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work. A list of assessment methods for formative (see 2.7.1) and summative (see 2.7.2) purposes is discussed in Chapter 2. Furthermore, Geyser (2004:108) stated that assessment refer to activities assigned to the learners – often referred to as assessment instruments.

The next section offers a glimpse into the second main theme of the research, namely quality assurance (a detailed discussion and literature review can be found in Chapter 3).

1.8.2 Quality Assurance

Quality assurance in schools is common throughout the world and can be defined as the process of evaluating and confirming whether a school has achieved its goals (long and short term), whether individual goals or those set by an independent educational organisation. According to the National Alliance of Independent Schools, "A school holds itself publicly accountable to all who seek assurance that it meets generally accepted standards of educational quality, safety and management". (Westerheijden, Stensaker & Rosa, 2007:225-227).

Quality assurance strives towards developing learners and teachers who can perform a task to the highest possible standards of quality. It makes sense that there should be constant assessment, evaluation and reflection to verify that these standards have been met and to ensure that improvements can be made where necessary (Westerheijden *et al.*, 2007:247-251).

Quality assurance refers to the process of ensuring that the specified degree of excellence is achieved, through the sum of activities that ensure the quality of the products and services at the time of production or delivery. Quality assurance also refers to the way in which organisations ensure that the proper standards are met throughout the process, right up until the end product (Hattingh, 2003:5).

In conclusion, quality in education refers to the following (adapted from Martin & Stella, 2007:23-27 and Pond, 2002:7):

- An educational system that prompts and accepts social change;
- A curriculum and teaching methods that encourage critical analysis of social power relations and the ways in which formal knowledge is produced and transmitted;
- Active participation by learners in the design of their own learning experience; and
- Learning that moves beyond the boundaries of the classroom/school through non-formal and lifelong learning activities.

1.9 LAYOUT OF STUDY

The study has been organised in the following manner:

- Chapter 1 focuses on the introduction and overview of the research.

- Chapter 2 focuses on the theoretical understanding of the concept of assessment and how this links up with the overarching question of this research.

- Chapter 3 scrutinises the concept of quality assurance within the context of this study by means of a literature review.

- Chapter 4 focuses on the empirical research by presenting the research methodology and providing the rationale for the use of a mixed-methods research methodology. Explanations of the sampling techniques and data collection methods are provided, along with details of the validity and reliability of the study. Finally, an explanation of the analysis and interpretation of the data is given.

- Chapter 5 focuses on the research findings and the analysis and interpretation of the results.

- Chapter 6, the final chapter, summarises the research in the form of findings and conclusions, as well as recommendations on how assessment and quality assurance can be improved in the FET sector.

1.10 CONCLUSION

This introductory chapter highlighted the need to investigate assessment practices in schools from a quality assurance perspective. With reference to international and national reports, the performance of learners was compared, revealing that South Africa will face a major problem if quality in the education system is not addressed. These reports also point out possible factors that could be inadequate for the development of good assessment practices and quality assurance, and mention possible assessment plans that should be considered to improve learning.

A statement and clarification of the problem, and the aims and objectives that will direct the study, was given in this chapter. The research design (detailed discussion in Chapter 4) was discussed in brief, as was the layout of the study.

In order to obtain valid and reliable data, an explanatory mixed-methods approach (as discussed in 4.4.2) was followed by means of a questionnaire (quantitative research) and group interviews (qualitative research).

To give insight into this study, the two main themes of the research were also briefly discussed, namely assessment (detailed discussion in Chapter 2) and quality assurance (detailed discussion in Chapter 3). As mentioned, the next chapter will focus strongly on the first part of the title of this study, namely assessment.

CHAPTER 2

ASSESSMENT IN THE FURTHER EDUCATION AND TRAINING SCHOOL SECTOR

2.1 INTRODUCTION

In this chapter, the emphasis is on assessment and the applicable assessment policies in the Further Education and Training (FET) sector, as suggested by the policy documents of the Department of Education (DoE), South African Qualifications Authority (SAQA), Independent Quality Assurance Agency (IQAA) and Umalusi.

The important principles of reliability, validity, fairness and practicability as imperatives for high-quality assessment are addressed, along with ways in which the conceptualisation of these fundamental principles of high-quality assessment can support teachers in adapting their assessment practices to the current curriculum framework. This chapter also provides a more decisive definition of the term assessment and integrated assessment.

The implementation of outcomes-based education (OBE) and the national curriculum statement (NCS) requires that teachers implement some new approaches to planning, teaching and assessment. Teachers feel that they are ill-prepared for this so-called paradigm shift, however, and are also concerned about how to conduct assessment in terms of reporting on learning while facing challenges of overcrowded schools and limited resources (Dreyer, 2008:2-3). This chapter furthermore aims to address the mentioned concerns of the teachers with the purpose in mind to improve the quality of education within the FET sector.

2.2 DRIVING FORCE BEHIND ASSESSMENT IN SOUTH AFRICA

The assessment of students' learning achievements has become a popular discussion point worldwide, due to the global view on assessment and the impact thereof on student performance. Dreyer (2008:2-3) emphasised that assessment is an important part of education and can often lead to the identification of problems, resulting in

changes to the education system. This has been a worldwide trend over the past 30 years, in countries like Australia, England, the United States, New Zealand and South Africa.

Umalusi, the statutory body in South Africa that prescribes requirements for accreditation in the FET phase, conducted an investigation in 2005 to determine the standard and quality of the senior certificate examination of 2004 (Umalusi, 2005:78). Ensuing from that investigation, the following needs were identified:

- The need to improve the procedures in place to ensure the quality of assessment; and
- The need to improve the design and development of question papers.

By means of this study, an attempt was made to identify the needs experienced by teachers and to make recommendations on how assessment and quality assurance in the FET school sector can be addressed and/or improved. SAQA (2001:8) stressed the need for transformation in the South African education system to ensure acceptance on international and national level. The DoE (2003:1) made an attempt to address the aforementioned by introducing the National Curriculum Statement (NCS) directed by the following principles:

- Transformation and progression;
- Outcomes-based education ;
- Human rights; and
- Credibility, quality and efficiency.

In order to address these directives during the process of curriculum reform, it was imperative to make changes to assessment practices. In 2006, therefore, schools were provided with the necessary guidelines and policies on assessment (DoE, 2005; SAQA, 2005; Umalusi, 2006) in order to address these mentioned directives. The researcher's

concern was whether the provision of documents warranted the implementation thereof (see 1.2).

- Are these principles, polices and protocols as suggested being implemented in schools?
- Are teachers aware of the quality assurance measures regarding assessment?
- Are teachers assessing students in totality?
- Are the quality assurance measures regarding assessment being executed correctly?

The aforementioned questions forms the main focal point of this study, which will be embedded within the theoretical framework of assessment and quality assurance in the South African context from an interpretive paradigm, to interpret what assessment and quality assurance entail within the Motheo district.

2.3 DEFINTION OF ASSESSMENT

In South Africa, with the implementation of OBE and the NCS, it can be assumed that the implementation of the assessment process could have been influenced by a variety of factors, for example inadequately trained teachers and educators, different views and interpretations of assessment policies, and insufficient quality control. In order to achieve the aim of this research, an in-depth study on the importance of assessment and the implementation thereof was necessary.

According to Morris, Ripley and Fincher (in Collins & O'Brien, 2003:29) assessment refers to any process that is used to gather information regarding students' knowledge, performance and progress. In obtaining this information, informed decisions can be made regarding student performance, progression, placement and instructional needs, as well as the curriculum. The nature of the information gathered from assessment should enable teachers to recognise the strengths and weaknesses of individual students in order to ensure their progress, to adjust the teaching and learning environment accordingly, and to address the needs of the students.

Kellaghan and Greaney (2001:19) expanded on this definition by stating that assessment, with specific reference to education, is any method or action that is intended to gather information about the knowledge, attitude or skills of a student or group of students.

In a quest to identify why some schools perform better than others, Smith (2008:1) chose to study the education system of Finland, since it is one of the top-performing countries when it comes to schooling. Finland's education system characterises assessment as a process that should include the diverse cognitive and affective factors that direct student learning at any time during the schooling process. These factors go beyond directing the learning process and performance in the different subjects at school; they also reflect the students' ability to apply their learning to the tasks at hand (FNBE, 2006:9-11). Brenham (1996), cited in Dysthe (2008), confirmed that these expectations for the future will enable students to adapt to change in terms of processing information and learning new skills. In other words, a clear distinction is made between the cognitive competence (problem solving and critical thinking) and affective disposition (internal motivation, independence and flexibility) that students should acquire. He postulated that a new learning culture should emerge and that assessment should be adapted accordingly. In order to address what is envisaged for learning within the South African context, the DoE (2005:5-7) refers to assessment as "a process of collecting, synthesising and interpreting information to assist teachers, parents and other stakeholders in making decisions about the progress of learners".

In line with the DoE definition of assessment, SAQA (2001:1) concurs with McMillan (2011:61-67) who defined assessment as "a structured process of gathering information about an individual's performance in relation to registered national unit standards and qualifications".

It is advised that during the assessment process, teachers should focus on the application of a variety of approaches, strategies, methods, tools and techniques to ensure that the majority of learning styles are accommodated in the teaching and

learning context (SAQA, 2001:9-10). In coherence with SAQA (2001:9-10) the DoE (2005:5) stated that assessment should consist of formal and informal assessment, and internal and external assessment. Feedback should also be seen as a tool that can be used during the assessment process to contribute to the improvement of the student's learning experience.

According to the DoE (2005:9-20), assessment should meet the following requirements:

- Support creativity and be explorative;
- Be informative;
- Be appropriate; and
- Provide expanded opportunities for students.

The DoE (2005:9-20) stressed the importance of including the abovementioned aspects in the assessment process, since this can have the following results:

- Teachers can create the opportunity to make accurate placements.
- A contribution can be made to the progress of students.
- Constructive feedback can be provided to stakeholders (parents, principals and tertiary institutions) regarding students' performance and achievements (DoE, 2005:18-24).

The utilisation and implementation of DoE and SAQA documents attempts to ensure that all teachers are provided with information on how to implement these guidelines, principles and policies of assessment. According to the assessment bodies, if teachers in South Africa are conversant with what quality assessment entails, they will apply the fundamental principles of reliability, validity and fairness.

Haynes and McDowell (2008:17-20) propose another feature to quality assessment, namely assessment for learning (AFL), which is regarded as the most powerful tool for raising standards if designed to encourage motivation and build students' confidence.

They expressed the strong opinion that educational endeavours must shift focus from what is to be taught to who is learning. Assessment and the quality thereof is an important element to ensure the quality of education and is also a reliable means of identifying predicaments in schools and amongst students. Feedback should therefore form an integral part of teaching, learning and assessment.

Assessment in some instances can be used either as a reward and/or as punishment in order to guide students to behave in an academically responsible way. The way in which assessment is conducted and feedback is provided can also play a crucial role in student motivation. Assessment should therefore be designed to encourage intrinsic rather than extrinsic motivation and to build students' confidence to give them a sense of ownership and control (Dysthe, 2008:216-217).

Biggs (1999:28) shared the view that assessment can contribute towards the support, development and motivation of students and that it can result in effective learning. In the effort to make students willing to learn and succeed, teachers can ask themselves the following questions:

- How much have the students learned at this point in time?
- How can we use assessment to help students learn more effectively?
- How do the students feel about what they have learned?

From the above definitions and views, assessment can be defined as the identification, collection and interpretation of information on a student's performance during his or her education. The next section focuses on the dimensions of assessment.

2.4 DIMENSIONS OF ASSESSMENT

Assessment, according to Gravett and Geyser (2004:87), should not be seen as an add-on, but rather as an integral part of the learning process. In order to gain a more comprehensive understanding of assessment, the following paragraphs will reveal the significance of assessment; provide a framework of questions to be asked by teachers when planning for assessment and the role of the assessor during the teaching and learning process so as to ensure high-quality assessment;

2.4.1 The Assessor

According to Killen (2010:396-398), a teacher seeking to portray the role of assessor must possess the following characteristics (also see 2.8):

- Acknowledge assessment as an essential feature of the teaching and learning process and know how to integrate it into the process.
- Have an understanding of the purpose, methods and effects of assessment and be able to provide feedback to students.
- Be able to design and manage both formative and summative assessment in ways that are appropriate to the level and purpose of learning and which meet the requirements of accrediting bodies.
- Keep detailed and diagnostic records of assessment.
- Understand how to interpret and use assessment results to feed into the process of improving learning programmes.

The abovementioned characteristics should be used as guidelines to direct the assessment process. It can be deduced that an assessor shapes the learning pathway and determines the pace of learning of the students. Within the South African context, assessment criteria guide the assessor on how assessment should be conducted, while assessment standards on the other hand determine the intensity and level of the learning that must take place as indicated in the NCS. Dreyer (2008:2) adds that in South Africa, assessment places a heavy burden on the teacher as the assessor due to

issues such as overcrowded classrooms, limited resources, and lack of a learning culture in schools. Haynes and McDowell (2008:17-20) asserted, however, that the aforementioned issues will always be an impediment and that all efforts will continue to have a relatively marginal impact until the "language itself, namely learning", can be addressed.

Christie (2008:184-187) and Dreyer (2008:2-3) alluded that educators reacted differently to the introduction of the new education systems in terms of changing their methods and techniques, or making minor adjustments to their teaching and learning. Some educators have a positive attitude towards change, but are still unable to manage change effectively, and they strive towards the mastering of the system and the successful implementation thereof. To empower teachers as assessors, they need to be knowledgeable on how to employ effective assessment approaches (see 2.7).

2.4.2 Implementing Assessment

According to Lubisi (1999:18), students are often assessed without clarity and relevance instead of with precision and significance. He emphasised that it is imperative that this aspect be taken into account when planning for assessment. Geyser (2004:95-99) concur that in order to address the increasing number of students pursuing higher education qualifications, and to maintain accountability, teachers need to plan comprehensively for assessment in order to ensure the clarity, validity, and relevance of assessment procedures.

The DoE (2003:31) agreed with this viewpoint, stating that before teachers can assess students, the purpose of the assessment must be clear and unambiguous, since well-planned assessment will contribute to fair and appropriate assessment practices.

Dreyer (2008:3) suggested that clear guidelines as to why assessment takes place will enable students to take control of their own learning and also provide valid information

regarding their progress and achievements. Assessment can provide the necessary information on:
- The effectiveness of instruction; and
- If necessary, ways to modify and/or improve approaches towards assessment.

From the above, it seems that assessment has a dual function in terms of providing teachers with information on whether or not their approaches were successful, as well providing learners with information regarding their progress and performance. For assessment to be effective and to promote learning, planning is necessary to identify the most appropriate methods of assessment (see 2.7).

2.4.3 Assessment as a Product

Lubisi (1999:19) and Geyser (2004:92-99) agreed that the curriculum is the impetus that determines what should be assessed, and suggested that in order to determine the outcome of the assessment process, the following questions can serve as guidelines:

- Do I want to assess the student's ability?
- Do I want to assess the student's knowledge?
- Do I want to assess the student's values?
- Do I want to assess the student's skills?

Answers to these questions can serve as the baseline to determine a learner's competence in terms of skills, attitudes and values. Consequently, appropriate assessment instruments should be employed to promote the development of skills. It can be assumed that if students are able to demonstrate various competencies and are skilled to become lifelong students, they should be able to complete their education successfully even beyond schooling. Dreyer (2008:32) stated that most countries hold the same view on what is regarded as imperatives when it comes to developing effective assessment instruments.

McAfee and Leong (2002) in Dreyer (2008:32) referred to effective assessment in the FET band in secondary schools, which must be designed in such a way that assessment contributes to the development of a variety of attributes, including:

- Problem-solving skills;
- Critical thinking and analysis; and
- Knowledge, attitudes, skills and interests.

Quality assessment can therefore contribute to the development of such skills so as to empower students emerging from an education system to function more effectively in the "real world" (see information related to cognitive domain, 3.2.1.2).

2.4.4 Assessment as a Process

Lubisi (1999:19) argued that using a variety of assessment instruments enables the assessor to assess certain knowledge, skills and values thoroughly. The methods of assessment utilised must allow all students to demonstrate their understanding and to fabricate adequate information to support credible and justifiable statements. In doing so, stakeholders can use the results in suitable ways.

Dreyer (2008:35) added that assessment should be continuous and that it should focus on all the domains (see 3.2.1.2) and be sensitive towards the uniqueness of each student. Students will then be able to demonstrate their applied competence and ability in an authentic situation, as well as their understanding of what they are doing, while enabling them to reflect on what they have done. The DoE (2003:33) stated that assessment should be valid and reliable, and therefore the importance of implementing various assessment opportunities (see 2.7) is emphasised. The focus is thus on the implementation of continuous assessment (CASS, see 2.7.3), which is classroom and school based and which can provide students with expanded opportunities to demonstrate performance.

What students accomplish depends mostly on their individual abilities, but when teachers ask themselves the three questions (why, what and how) mentioned above, it may help to improve the quality of assessment. It is important that teachers realise that the method of assessment should be in line with the intended outcomes of a lesson (see 2.8 – aligning teaching, learning and assessment). Various methods of assessment are available to teachers, but it is critical that teachers understand the importance of implementing the most appropriate method in order to achieve the desired outcomes.

2.5 PRINCIPLES OF ASSESSMENT

According to Western and Northern Canadian Protocol (WNCP, 2006:8), assessment is a complex procedure that requires a teacher's specialised judgement. This implies that teachers are responsible for making decisions on:

- How to assess;
- What to assess; and
- When to assess.

Furthermore, WNCP (2006:9) indicated that it is important to keep the four basic principles of assessment in mind when preparing for the classroom, namely reliability, validity, fairness and practicability.

SAQA (2001:16) expressed strong support of these underlying principles, indicating that assessment is an integral part of teaching and learning and vital to the acknowledgment of students' achievements. Quality assessment practices are therefore crucial in granting credible certifications. SAQA (2001:16) confirmed that "quality assessment is assured through assessment procedures and practices being governed by the principles: fairness, validity, reliability and practicability".

2.5.1 Fairness

McMillan (2011:80-86) defined fairness as a process where all students are given an equal opportunity to demonstrate achievement during assessment. In contrast, an unfair assessment occurs when certain students have an advantage over others due to factors like ethnicity, gender, age, disability, social class and race.

Killen (2010:360-364) explained that fairness is based on the two principles, namely equality and equity.

- Equality, especially in assessment, means that all learners must be assessed in a standardised way. This can be achieved when teachers employ the same assessment methods and activities for all students, thus contributing to consistent results.

- Equity, on the other hand, is achieved when assessment is based on the needs of the students. This implies that various learning styles must be accommodated in a multicultural classroom.

SAQA (2001:16) clearly stated that "an assessment activity or opportunity should not in any way hinder or advantage a student". During the assessment process it is crucial to ensure that:

- All students receive equal opportunities, resources and instruction;
- No students are judged or assessed according to ethnicity, gender, age, disability, social class, values, life experiences or race; and
- Communication during the assessment process is clear, transparent, and accessible to all students.

According to Dreyer (2008:14) fair assessment entails a test, activity or examination that is reliable. No learner should be obliged to do anything unreasonable, or to do anything

under unreasonable conditions. It is apparent that fairness is achieved when assessment creates equal opportunities without barriers, regardless of the learners' abilities, and promotes opportunities for all students to succeed.

2.5.2 Validity

SAQA (2001:17) defined validity during the assessment process as the measuring of what is to be measured in terms of knowledge, understanding subject content, proficiency, information, behaviours, etc. Therefore assessment procedures, methods and instruments are obliged to assess that which has been identified for assessment.

WNCP (2006:11) added that validity in classroom assessment is determined by a teacher's professional judgement, since the same test or measuring instrument may be valid for one exercise but invalid for another.

According to WNCP (2006:10-11), validity is also based on the accurate analysis of assessment data and the use thereof. Thus the question that can be asked is: How well does assessment measure what it is intended to measure?

To ensure validity, it is imperative to take into account both the intended and unintended outcomes. Teachers should therefore take cognisance of their important role as assessors to ensure that the assessment process is valid (McMillan, 2011:68). SAQA (2001:17) referred to the need for the implementation of clear and appropriate methods, instruments and techniques to ensure valid data during assessment.

Validity also refers to the accurate methods of assessment applied to obtain data that is consistent. Dreyer (2008:14) confirmed that valid assessment can be achieved if:

- A wide variety of methods (see 2.7) are employed; and
- Assessment procedures are aligned with the teaching and learning outcomes and the activities that support the content conveyed during instruction (see 2.8).

Haynes and McDowell (2008:17-28) referred to validation as the process that establishes the kind of inferences that are warranted on the basis of assessment outcomes and those that are not. This urges us to seek solutions in order to ensure quality assessment.

2.5.3 Reliability

Reliability as an assessment principle is related to validity and reflects the consistency, stability and dependability of results gathered from assessment. Reliable results are therefore those that "demonstrate similar performance at different times or under different conditions" (McMillan, 2011:73-75).

According to Killen (2010:351-354), the execution of reliability during assessment can be affected by the number of items involved, such as tests and examinations, as well as the level of difficulty, the environment, the interpretation of students' responses, and the formulation of the memoranda.

SAQA (2001:18) expressed strong support for the view of McMillan (2011:73-75), confirming that reliability in assessment is about consistency. Unreliable and inconsistent results have little or no value and meaning and do not provide a good foundation for further assessment.

SAQA (2001:17) went on to argue that to ensure reliability and consistency, teachers as assessors must be qualified, competent experts in their subjects and be able to provide clear, consistent and unambiguous instructions. Only then will these teachers as assessors produce reliable assessment items that are mostly free of errors and inconsistencies, thus delivering consistent and reliable results.

WNCP (2006:9) suggested that in order to ensure reliability, teachers must use a variety of assessment tasks (see 2.7 and tables 2.1 and 2.2). They must allow students to demonstrate their competency in a manner that suits their individual strengths and must

also work in partnership with other teachers to review and discuss the students' performance.

2.5.4 Practicability

The fourth principle according to SAQA (2001:19) also confirmed by McMillan (2011:91-93), namely practicability, refers to the execution of assessment methods, instruments and tasks that include:

- Available financial resources; and
- Facilities, equipment, and the time factor.

Unfortunately, it is not always possible to implement this particular principle at present in South Africa, for the following reasons:

- Not all teachers in South Africa can ensure fair, reliable, valid and practicable assessment due to challenging circumstances and limited resources.
- Many schools are without sanitation and an electricity supply, and in severe cases learning takes place under a tree instead of in a classroom.

According to DoE (2009:7) there are 1 838 schools in the Free State Province, 809 (44%) of which are without telephones, 440 (24%) without electricity and 935 (51%) without computers. Moreover, only 11% of all educators in the Free State Province are sufficiently qualified.

For an assessment to be practicable, it requires elaborate arrangements for equipment and facilities, which can be costly. Assessment practices that do not meet these requirements will therefore fail the system. McMillan (2011:91) affirmed that high-quality assessment should be practicable and efficient.

The mentioned can therefore imply that lack of resources and not well qualified teachers can have an effect on the quality of assessment that is implemented.

From the literature review, the conclusion can be drawn that a delicate balance must be maintained between the four principles of assessment so as to ensure the success of the assessment process and contribute towards the validity, reliability, fairness and practicability thereof. Moderation as a form of consistency can improve the quality of assessment, provided that the moderation system is well planned (Umalusi, 2006:2). A more detailed discussion of moderation is contained in Chapter 3 (see 3.2.2.2).

2.6 AIMS OF ASSESSMENT

Black and Wiliam (1998:50) and Jones and Tanner (2006:3-4) agreed that the aims of assessment should be stated clearly and be grouped into three broad categories, namely managerial, communicative and pedagogical aims.

Managerial aims can be realised through the presence and practicability of government policies in schools and include the following:

- Schools and teachers being held accountable for students' progression; and
- The presence of a reward system for teachers who deliver excellent service and results.

Communicative aims can be realised through the presence of communicational structures within the education system and include the following:

- Information to all stakeholders regarding the students' progression, advancement and performance;
- Information on assessment standards, criteria and performance within schools; and
- Information on the purpose of examination.

Pedagogical aims can be realised through the presence of educational procedures and include the following:

- Evaluating teacher and student performance;
- Providing feedback;
- Supporting the teaching and learning process;
- Identifying problems to ensure that effective future planning can take place; and
- Providing motivation and encouragement.

Jones and Tanner (2006:3-4) went on to state that since the 1980s, the emphasis has been mainly on the managerial and communicative aims, in particular the need to summarise the extent to which learners, teachers and schools have met particular standards. They add by stating that it is essential not to exclude the pedagogical aims, since these contribute towards the improvement of the teaching and learning process while having a positive influence on students and teachers and ensuring that the classroom functions as a unit.

From what has been discussed, it appears that the various authors are all in agreement that assessment should be seen as an integral part of the learning and teaching situation; that assessment has a specific purposes to be considered when developing assessment tasks and learning experiences; and that assessment practices and processes must be fair, reliable, valid and practicable (see 2.5). Underpinning these principles is the view that assessment at every level should be based on clearly articulated criteria. In implementing the principle of alignment, Biggs (2003:26-28) referred to the following components: what we teach; the teaching methods that we use; and the assessment procedures that we follow. In the following paragraphs, different approaches to assessment are discussed as ways to support the teacher in achieving the intended aims.

2.7 ASSESSMENT APPROACHES

Gravette and Geyser (2004) and McMillan (2011:61-62) agreed with the SAQA (2005:7) proposal that assessment is the process of gathering evidence on an individual's performance, which will in turn provide information on the level of competence against assessment criteria. To gather such evidence, various assessment methods can be taken by the assessor in determining specific competencies. Assessment should be planned in cohesion with the purpose of the curriculum to be assessed. In achieving the assessment aims, it is imperative that appropriate assessment methods are used so as to develop activities that form a coherent, integrated process as proposed by SAQA (2005:7). Integrated assessment provides the means to present evidence of an individual's applied competence in terms of that individual's knowledge, which should reflect practical, reflexive and fundamental competencies. Integrated assessment therefore materialises in the classroom during the teaching and learning situation when (SAQA, 2005:7):

- Assessing a number of outcomes together;
- Assessing a number of assessment criteria together;
- Assessing a number of unit standards together;
- Using a combination of assessment methods and instruments for an outcome/outcomes;
- Collecting naturally occurring evidence (such as in the workplace setting); and
- Acquiring evidence from other sources such as supervisors' reports, testimonials and portfolios of work previously done.

The DoE (2003:3) expressed strong support of this view and referred to integrated assessment as the implementation of different methods of assessment for the purpose of continuous assessment. The different assessment methods are not mutually exclusive and should be applied in an integrated manner in the overarching assessment process that will include formative (see 2.7.1), summative assessment (see 2.7.2) and continuous assessment (see 2.7.3 - CASS) (DoE, 2003:3).

In the following paragraphs, formative assessment, summative assessment and continuous assessment (CASS) are discussed.

2.7.1 Formative Assessment

Cowie and Bell (1999:101-107) defined formative assessment as the "bidirectional process between the teacher and the student to enhance, recognize and respond to learning". Black and Wiliam (1998:7-11) consider assessment 'formative' when the feedback from learning activities is actually used to adapt the teaching to meet the learners' needs. Nicol and Macfarlane-Dick (2006:200-205) described formative assessment when providing feedback as a means to support students in taking control of their own learning. Reddy (2004:34) referred to formative assessment as taking place during the learning activity or instruction, or after self-, peer and group assessment, if self-reflection is considered by the student.

Reddy (2004:34) portrayed formative assessment as a means to identify the weaknesses and strengths of the learner and to redirect the learner's thoughts. They also agreed that it can provide another opportunity for assessment before awarding a final mark or judgement. Formative assessment also creates the opportunity for feedback – often in an informal way – and usually consists of qualitative comments and advice on how to improve performance.

According to Du Toit, Du Toit and Reddy (2008:37-38) the value of formative assessment is that it provides the opportunity for learners to identify gaps in their knowledge, understanding or skills and then guides them towards closing those gaps.

The principles underlining successful formative assessment, as proposed by the aforementioned authors, are as follows:

- It should take place on a continuous basis during any teaching and learning situation;

- A learner-centred environment should be structured where both teacher and learners are actively involved;

- The implementation of successful formative assessment should be informed according to the needs and expectations of the learners, which in turn will contribute to the improvement of learning;

- Formative assessment can ensure effective learning through the accurate and consistent interpretation of student learning;

- Clear and detailed learning expectations must be formulated; and

- Accurate and comprehensive feedback must be given to students.

Formative assessment attempts to monitor and support the learning process and should therefore be regarded as an essential professional skill for all teachers (Maree & Louw, 2010:230-231). The implementation of formative assessment demands that teachers acquire the necessary knowledge and skills to plan for assessment, to observe learning, to analyse and interpret learners' evidence of work, and to provide feedback to learners. Numerous authors and curriculum documents, as well as the National Assessment Policy (DoE, 2007:8), emphasise the importance of formative assessment. These documents advocate for continuous assessment (CASS, see 2.7.3), which "encourages the integration of assessment into the teaching from which formative assessment is an integral part". The importance of formative assessment was recently stressed with the launch of the Foundations for Learning Campaign in South Africa. In support of the above, Naledi Pandor (SAPA, 2008), South African Minister of Basic Education, announced the following directives to encourage the implementation of formative assessment:

- Reduction in the number of projects for learners;

- Eradication of portfolio files of learner assessments;

- The weighting of continuous assessment and end-of-year examinations in grades 6-11 to change from 75% continuous assessment and 25% end-of-year exam to 40% continuous assessment and 60% end-of-year exam; and

- Clear targets for improving learner achievement in the Annual National Assessments (ANA) by 2014 by means of setting a target for improving numeracy and literacy attainment levels in grades 6 to 11 from the current average of between 27% and 38% to at least 60% by 2014.

Stiggins (2008:2) campaigned for a balance between formative and summative assessment and between "large-scale" and classroom assessment which in some aspects concur with the afore directives.

Black and Wiliam (1998:1) advocated for formative **assessment,** or "assessment for learning". Based on an extensive review of literature, a conclusion was reached that enhanced formative assessment is a common feature of various interventions resulting in improved learner performance. Formative assessment is characterised by an interactive learning environment where teachers gather evidence of their learners' progress through a range of activities, questions, observations and discussions. This evidence is then used to adapt teaching strategies to meet the needs of learners and enhance learning.

2.7.1.1 Applications of Formative Assessment

Formative assessment can have various applications for summative purposes in the classroom, and *vice versa*. The following are appropriate examples of how formative assessment can be applied in the FET classroom in order to assess learners during the course of instruction:

- Short essays, letters and comprehension tests: Learners are required to respond by writing and organising information in an understandable way. These instruments are easy to apply and allow the learners to express their individuality. Although there are limitations to these methods, i.e. the focus is on verbal skills, and the methods can take time to assess, they remain effective methods of assessment which can contribute to the improvement of learner's CASS grades.

-   Tests and examinations: Usually seen as traditional methods of assessment involving short questions, paragraph-type questions and written responses. If set in a fair and appropriate manner, all students have an equal opportunity to excel. The evidence provided is a reflection of the learners' own work and competence, and if questions are asked in view of gathering evidence of higher cognitive skills (see cognitive domain, table 3.1), learners have the opportunity to demonstrate their competence in solving problems and applying critical skills. The disadvantages of such methods are that there is little or no feedback from learners, and no critical and creative problem-solving is involved. Moreover, a poorly developed test or examination is of no use. Tests and examinations are the most common means of assessing students and can be very effective if properly designed and developed (Gravett & Geyser, 2004:199-204). For students to improve their grades constructive and effective feedback is necessary before a final summative assessment mark is awarded.

-   Any activity designed to make students' understanding visible (Gravett & Geyser, 2004:199): Normal daily classroom activities such as observations, practical work and/or projects where learners work individually or in groups to achieve intended outcomes also contributes to the learners CASS grades.

When using the above applications teachers should recognise the importance of constructive feedback as Spady alerts (du Toit & du Toit 2008:5) in order to provide expanded opportunities to improve the task at hand.

2.7.2 Summative Assessment

Summative assessment is characterised as the assessment of learning that contributes to the final mark awarded. Summative assessment usually takes place at the end of a session/year and contributes towards the final assessment. Summative assessment is applied to measure the extent of learning that has taken place and to judge whether a

student demonstrates all outcomes fully or only partially. (McMillan, 2011:161-162, Geyser, 2004:93; WNCP, 2006:65).

The National Protocol on Assessment for Schools (Grades R-12) was implemented in January 2006 by the DoE and stipulates that there are a certain number of formal assessment tasks that must be recorded during the academic year, as seen in Table 2.1.

Table 2.1: Number of Formal Recorded Assessment Tasks for Grade 10 – 11

SUBJECTS	TERM 1	TERM 2	TERM 3	TERM 4	TOTAL
Language 1: Home Language	5	5*	5	4*	19
Language 2: Choice of HL or	5	5*	5	4*	19
FAL	4	4*	4	3*	15
Life Orientation	1	1	1	2	5
Mathematics or Maths Literacy	2	2*	2	2*	8
Subject Choice 1**	2	2*	2	1*	7
Subject Choice 2**	2	2*	2	1*	7
Subject Choice 3	2	2*	2	1*	7

* One of these tasks must be an examination

Source: DoE, National Protocol on Assessment (Grades R-12): 21 October 2005

According to the DoE (2005:15), "If one or two of the subjects chosen for subject choices 1, 2 or 3 include a Language, the number of tasks indicated for Languages 1 and 2 at Home Language (HL) and First Additional Language (FAL) are still applicable. Students who opt for a Second Additional Language are required to complete the same number of tasks as FAL candidates".

Table 2.2 illustrates the number of assessment tasks that are required for Grade 12, according to the DoE (2005:16). All subjects in Grade 12 consist of an internal assessment component and contribute 25% towards the final assessment mark. Thus, the external component includes the other 75% of the final assessment mark. It is also stated that if teachers would like to increase the number of assessment tasks, this must be with the approval of the school principal and/or head of department.

Table 2.2: Number of Formal Recorded Assessment Tasks for Grade 12

SUBJECTS	TERM 1	TERM 2	TERM 3	TERM 4	TOTAL
Language 1: Home Language	6	6*	5*		17
Language 2: Choice of HL or	6	6*	5*		17
FAL	5	5*	4*		14
Life Orientation	1	2	2		5
Mathematics or Maths Literacy	3	2*	2*		7
Subject Choice 1**	2	2*	2*		7
Subject Choice 2**	2	2*	2*		7
Subject Choice 3	2	2*	2*		7

* One of these tasks must be an examination
Source: DoE, National Protocol on Assessment (Grades R-12): 21 October 2005

The same principle regarding the Language of Grade 10 – 11 applies to Grade 12. During the final term (term 4) it is clear that there are no requirements to be met regarding assessment tasks, due to the fact that the Grade 12 learners are completing their final examinations during this term.

In order to meet the requirements of the DoE (2005:15), the following should apply to all formal assessment tasks for learners in Grade 10, 11 and 12:

- Validity, reliability, fairness and practicability;

- Creativity;

- Appropriateness;

- Assessment of a variety of skills; and

- Addressing of all learning outcomes of the subject (see 2.8)

The DoE (2005:23) also stated that formal report cards must be sent to the students' guardians once per term in order to provide an overall picture of the students' achievements in the different subjects. Table 2.3 illustrate the codes and percentages for Grade 7 – 12:

Table 2.3: Codes and percentages for recording and reporting in Grades 7 – 12

RATING CODE	DESCRIPTION OF COMPETENCE	PERCENTAGE
1	Outstanding achievement	80 – 100
2	Meritorious achievement	70 – 79
3	Substantial achievement	60 – 69
4	Adequate achievement	50 – 59
5	Moderate achievement	40 – 49
6	Elementary achievement	30 – 39
7	Not achieved	0 – 29

Source: DoE, National Protocol on Assessment (Grades R-12): 21 October 2005

2.7.2.1 Applications of Summative Assessment

Assessments for summative purposes are normally used to gather proof of a student's achievement and progression for evaluation or judgement purposes. Gravett and Geyser (2004:200-204) referred to the following as ways to apply summative assessment as it is intended to provide a summation of learners' achievements (for example, with an end-of-year examination):

- Traditional tests and exams (discussed in 2.8.1.1) in the context of summative assessment this will contribute towards the learner's final mark/grading;

- Essays (discussed in 2.8.1.1) in summative assessment this would be used during the learner's final mark/grading;

- Book reviews and reports: During this instrument of assessment, learners are required to interact and make use of information gathered from books and/or articles. The advantages of using this instrument are that learners must be able to recall facts/information accurately, and the instrument is easy to develop and allows for broad sampling of content. The constraints of this instrument are that it is difficult to evaluate and focuses on factual knowledge rather than critical and problem-solving skills (Gravett & Geyser, 2004:200).

- Problem-solving activities: This is an instrument whereby learners are required to respond to a certain situation or problem by using problem-solving skills such as analysis, evaluation and critical thinking. This instrument gives the teacher the opportunity to measure cognitive outcomes, and allows the learners to demonstrate their own ideas and skills, usually related to the "real world". The disadvantage of this instrument is that in order for it to be effective, it has to be contextualised (Killen, 2010:245-246).

- Case studies: Jones and Tanner (2006:46) referred to case studies as an instrument where learners are required to respond to certain situations or problems. This instrument focuses on the learner's ability to translate knowledge into action, but it is time-consuming and needs rating scales and rubrics for effective implementation.

- Practical work: This instrument focuses on the process and not the product, and learners learn by doing the work themselves. Practical work is often difficult to

assess, and learners may be inhibited by the teacher observing their performance (Gravett & Geyser, 2004:202-203).

- Projects: This normally refers to the instrument where learners work individually or in a group to complete a project against certain outcomes. Projects give learners the opportunity to relate to the real world and allow for individuality, communication and critical thinking. This instrument is time consuming, and it is difficult to set criteria. Communication problems may occur, but it remains a highly effective method of assessment (Gravett & Geyser, 2004:203)

- Portfolios: Refers to the collection of work that is organised and presented as evidence of learning. There are two types of portfolios:

    1. Teacher portfolios: The DoE (2005:17-18) stipulated that during school-based assessment, every teacher must compile a portfolio consisting of the following:

        ▪ All assessment tasks;
        ▪ Learning programme/learning areas/subject record sheets, etc.;
        ▪ Learning outcomes and assessment standards for every task/activity; and
        ▪ A portfolio for every learning area/subject for which the teacher is responsible.

The teacher's portfolio must be available at all times and can be in the form of a file, folder or box.

    2. Learner portfolios: These provide teachers with the opportunity to evaluate each student's level of learning and to provide the foundation for growth, progression and placement.

The DoE (2005:17-18) stated that during school-based assessment, all learners must compile a portfolio, which is an important collection of information used in the progression and promotion of a learner. However in the Action Plan to 2014, it was announced that requirement that teachers maintain individual learner portfolios was dropped given that records can be kept in a more consolidated fashion by teachers.

All mentioned instruments discussed above provides evidence of final assessment at the end of a period, term or year and contributes to the final mark or learner achievements.

2.7.3 Continuous Assessment (CASS)

Geyser (2004:101) refers to CASS as the "regular manner" that assessment takes place and integrates teaching, learning and assessment. CASS in this manner refers to cyclic process that includes various assessment methods and instruments that displays a holistic picture of the learners' competence. A major feature of CASS is the feedback from each assessment that informs the teacher how to adapt his/her teaching strategy in order to provide quality and effective assessments to learners. CASS is a classroom strategy implemented by teachers to determine the knowledge, understanding and skills of students. Teachers employ CASS in a variety of ways over a period of time that allow them to observe multiple tasks and to collect information on what learners know, understand, and can do (Geyser, 2004:101). Continuous assessment therefore consists of curriculum-based tasks previously taught in class and occurs frequently during the school year as part of regular teacher-learner interaction. Learners also receive feedback from teachers based on their performance that allows them to focus on topics they have not yet mastered. Teachers identify which learners require review and remediation and which learners are ready to move on to the next level of work. Thus, the results of CASS help to ensure that all learners make progress throughout the school year, thereby improving their academic achievement.

The advantages of CASS (Geyser, 2004:101; Du Toit & Vandeyar, 2004:139) are as follows:

- It is a powerful diagnostic tool that enables learners to understand the areas in which they are having difficulty and to concentrate their efforts in those areas.

- Frequent interaction between learners and teachers means that teachers get to know the strengths and weaknesses of their learners.

- Teachers assess the curriculum as implemented in the classroom and are able to evaluate the effectiveness of their teaching strategies relative to the curriculum, thus allowing them to change those strategies as dictated by the needs of their students.

- Learners are able to monitor their achievement of grade-level goals and to visualise their progress towards those goals while it is still possible to do so.

In conclusion, CASS is an assessment strategy that involves the use of a variety of assessment instruments used to assess various components of learning, not only the thinking processes but also behaviours, personality traits and manual dexterity. CASS also takes place over a period of time and such an approach is more holistic, representing the learner in his/her entirety. Drawing from the previous discussion it can be concluded that assessment, which is regarded as an integral part of teaching and learning, should be implemented by means of: a variety of assessment methods (summative, formative and CASS), through the utilisation of various assessment instruments (see 2.7.1 & 2.7.2), to determine student competencies on various levels and to assess a number of outcomes and assessment criteria, together. How the assessment is conducted will influence the quality of the outcomes which will be discussed in 2.8

2.8 ALIGNING TEACHING, LEARNING AND ASSESSMENT

Alignment in this context is the matching of two educational components, thus strengthening the goals and purpose of both. Biggs (1999:26-28) stated that in order to meet the objectives of education, alignment or a high degree of consistency between teaching, learning and assessment is essential. Alignment is crucial in curriculum delivery and in assisting students to achieve the indented outcomes; also teachers should plan for assessment and not see it as a separate activity. The context of assessment should match learning outcomes and a broad range of assessment methods and instruments should be implemented. This is what Biggs (1999:26-28) refer to as 'constructive alignment' in order to describe the process of taking strategic and integrated approaches to curriculum design, teaching and assessment tasks for alignment. This theory of Biggs (1999:26-28) is based on the following:

- The learning process is built on a framework of curriculum design in which learning outcomes, assessment, evaluation and the various teaching methods implemented are all interdependent and, by integrating these components, effective assessment and student learning can be attained.

- Teachers must develop a reflective approach to teaching, learning and assessment and must learn from their mistakes.

- Meaning is not imposed or transmitted by direct teaching; it is created by the learners' own learning activities.

Biggs (1999:28-29) asserted that adopting an integrated approach to teaching, learning and assessment should bring about clarity and consistency in what is taught, what is assessed, and what is supposed to be learned. Therefore it can be said that the advantage of alignment is that it encourages clarity in the design of the curriculum, as well as transparency in the links between learning and assessment which enhances the

quality assurance process. It however can be noted that the absence of alignment results in surface learning and affects the quality of learning.

Drawing in what Biggs (1999) regards as a quality learning experience the question arises whether current teaching and assessment practices are in accordance with these trends and if not what the areas for improvement are?

2.9 CONCLUSION

This chapter provided a theoretical overview of some facets of assessment in education and more specifically in the FET sector of schooling. Various aspects were recognised as the impetus of assessment within the South African context that guides the implementation process. The proposals of the national bodies were compared with the views of other authorities on this topic in an effort to define assessment; to recognise the different dimensions of assessment; to identify the principles and aims of assessment; and to view assessment as an integrated process.

Until now, assessment in South Africa has been directed by the implementation of OBE and NCS and by government bodies such as the DoE, IQAA, SAQA and Umalusi. Based on these policies, principles and guidelines, certain suggestions were made as to how learners in the FET sector should be assessed so as to ensure the high quality of such assessment.

Assessment can also provide information on the performance of learners and how the teacher can assist through appropriate planning and facilitation, as well as communication to stakeholders such as parents, other teachers and tertiary institutions. Such communication can provide a comprehensive picture of the holistic development of the learner and can contribute to the making of informed decisions about the learners' future.

The process of assessment consists of various dimensions, namely the assessor, the implementation of assessment, the product of assessment, and assessment as a process. Teachers and schools must realise that these dimensions are interrelated and they must therefore incorporate the dimensions when planning for assessment.

The assessment process is guided by the key questions of why, what and how to assess. Asking these questions provides the teacher with the necessary information on assessment, and making this a daily practice in the classroom should be encouraged. The result is bound to be an improvement in the performance of all learners, and for this to materialise in the classroom, teachers must take the follow steps:

- Effective planning for classroom assessment;
- Helping students to engage in goal setting and to indentify strengths and areas needing improvement; and
- Effective use of the various assessment methods available.

Regardless of the educational situation, the quality of assessment will always be influenced by the principles of fairness, validity, reliability and practicability. When these principles are implemented correctly, they provide the framework/criteria for high-quality assessment in the classroom. When designing any assessment activity, task or assignment, these principles must not be ignored. High-quality assessment also depends on the managerial, communicative and pedagogical aims of assessment (see 2.6).

Finally, integrated assessment indicates the importance of the use of different approaches to assessment. Formative assessment (see 2.7.1) is characterised as assessment *for learning*, while summative assessment (see 2.7.2) is the assessment *of learning*. Continuous assessment (CASS, see 2.7.3) was also discussed, while the final focus of this chapter was on aligning teaching, learning and assessment (see 2.8).

The purpose of this chapter was to help the reader understand the importance of assessment, which is to monitor learning and understanding. The next chapter focuses strongly on the second part of the dissertation's title: quality assurance. The discussion includes various definitions of quality assurance, information on international trends, and examples from higher education institutions.

CHAPTER 3

QUALITY ASSURANCE

3.1 INTRODUCTION

A general agreement consists amongst stakeholders that quality assurance is crucial for the maintenance and improvement of assessment (Coates, 2005:29-35). This is a tendency not only in education where it is often applied as a benchmark, but all over the world. McDonald and Van Der Horst (2007:2-8) and Strydom and Strydom (2008:101-102) agreed that there is a need in South Africa to improve the quality of life of people, as well as the quality of what they are learning; how they are learning; and why they are learning. Since the implementation of the South African Qualifications Authority (SAQA) in 1995 and the establishment of Umalusi in 2001, various quality assurance documents have been put in place with one aim in mind: To ensure quality. However, there are questions as to whether this aim has materialised in assessment practices over the past 13 years, and more specifically from 2006 to 2008 during the implementation of the National Curriculum Statement (NCS) in the Further Education and Training (FET) sector.

This chapter elucidates the conceptualising of quality and quality assurance policies in the FET sector as suggested by the various government bodies (SAQA and Umalusi) and the implementation thereof. Underpinning the aforesaid, quality assurance is also defined in terms of international trends and examples from higher education (HE) institutions.

The transition to democracy in South Africa can be characterised by a number of challenges due to the obvious inequality in education in the previous era (Rademeyer, 2008:1). A major priority for the post-apartheid government is therefore to provide quality education to all. Providing high-quality education coincides with the aim of SAQA and Umalusi to strive towards the development of quality assurance procedures and the implementation of policies. The intention is to apply a quality assurance policy to ensure exceptional teaching, supported by professional staff, outstanding service delivery, high-

quality administration and top-class facilities. Quality and the improvement of teaching and learning at any institution are considered priorities in addition to ensure accountability; quality assurance will ensure that the clients of the system will receive such quality (Gawe & Heyns, 2004:159-183).

However, the concept of quality is sometimes confusing in the sense that any definition is not bound to time, place and person, and depends on the current South African context. In this chapter, an attempt is made to clarify the concepts of quality and quality assurance and to conduct an extensive literature review of the suggestions of various quality assurance bodies.

3.2 UNDERSTANDING QUALITY AND QUALITY ASSURANCE

Envisaged from the decreasing matriculation results (see Chapter 1) there is a particular focus on how to improve the quality in schools. For this reason a quality assurance plan was put in place. The aim is to translate what is regarded as quality education so that quality approaches can be implemented in order to identify good assessment practices (see 3.4). Within this framework quality and quality assurance will be investigated.

3.2.1 Quality

Pond (2000:186) emphasised quality as a major priority that should also be listed at the top of most governments' agendas. Therefore improving quality is seen in all probability as the most daunting task facing any institution. The author also referred to quality as a controversial concept that is not easy to measure because of major discrepancies that exist in how people regard quality and the fact that no two experts are in agreement on what distinguishes a good school, college or university. Cheng and Tam (1997:23) asserted that quality can be measured in terms of the characteristics that distinguish an ordinary school from an outstanding school, is the quality education that the school provides.

According to Hattingh (2003:4), quality is a relative and absolute concept and an ongoing process defined as the achievement of specified degrees of excellence. It is also a multidimensional concept that cannot easily be assessed by only one indicator.

Sallis (1996:14) added that quality is measured against specifications or criteria and therefore involves the making of judgements about a learner's work and meeting the required standards. Assessment, which is seen as an integral part of the teaching and learning situation, should therefore allow teachers to use their professional judgement to approve and report learners' performance (Sallis, 1996:15). Quality is a crucial part of the teaching and learning process in determining quality education. Gawe and Heyns (2004:162-164) confirmed this viewpoint, adding that "quality is a dynamic concept which originated in the business and industry sector where products and goods must comply with specific regulations and requirements in order to ensure high-quality products".

For purposes of this study, quality encompasses the following:

- The degree to which excellence is achieved in terms of meeting the requirements of the NSC, SAQA and Umalusi;
- The involvement and management of the stakeholders;
- The activities that are in place to ensure quality assurance (see questionnaire); and
- The process that ensures quality (time management and administration procedures).

Gathered from the afore mentioned and as stipulated in Gawe and Heyns (2004:163), quality is "specified, measureable against specifications, to determine progress which leads to decision making".

3.2.1.1 Role Players that Influence Quality

A number of authors have asserted that various role players can influence the quality of education, namely:

- Government: *Government can influence the school system by implementing new policies and regulations without appropriate research. The unfair distribution of financial support and other resources also influences the quality of education in South Africa* (Christie, 2008:171-172).

- Teachers: *Unqualified and under-qualified teachers play an important role, as they are the central components that contribute towards the quality of education in the classroom* (Dreyer, 2008:2).

- Learners: *The high learner-teacher ratio in South African schools is also one of the main factors influencing the quality of education* (Taylor, Muller & Vinjevold, 2003:56).

- Communities: *The cultural and financial situation of the surrounding communities also plays a part in the quality of education, as learners in these communities will rather focus on generating an income for their families, which is a sad reality in South Africa* (Christie, 2008:169-170).

- Stakeholders*: Stakeholders are an important part of any school system, as major companies and businesses provide financial benefits to schools, which can be used to improve the quality of school resources, which in turn will improve the quality of education* (Taylor *et al.*, 2003:56).

From the above, it can be concluded that "quality" is determined by attributes such as the quality of teachers, the socio-economic status of the community, and the way in

which government distributes and prioritises funds to ensure quality. Quality should therefore be validated as discussed in 2.5.2.

Despite the fact that a major paradigm shift took place in South African schools, moving from a traditional towards transformational approach, examinations are still regarded as the major assessment instrument to determine whether a learner can move from one level to the next. Examinations in most cases merely focus on the cognitive abilities of the learner and not on personal qualities and character.

This allows for an investigation into whether the instruments of assessment and assessing of the various domains affect the quality of assessment, because holistic development implies that educators need to consider and assess all the aspects of learner development in the learning process. These aspects concerning the development of learners are interrelated and must be incorporated in the composition of outcomes as mentioned in the Maintaining Standards Report (Umalusi, 2008:70)

3.2.1.2 Addressing the Various Domains

One way to determine quality as stipulated in SAQA (2001:9-10) confirmed by Gawe and Heyns (2004:163) is to take quality control in terms of an examination as the product, against the degree of excellence specified.

Du Toit and Du Toit (2004:20) referred to Johnston (1996:23-31) that alludes that the development of learners during the learning process should include the tripartite theory of the mind (feelings, thoughts and behaviour), which covers cognition (the processing self), conation (the performing self) and affectation (the developing self). This in terms of the NCS includes the cognitive development, skills and attitudes.

1. *Cognition* refers to those processes where information is gathered and the manner in which it is memorised as well as the how the information is communicated.

2. *Conation* on the other hand is characterised as the action-behaviour centre. This process refers to the learner's natural talent to perform (skill), rate of response (pace), and the desire to work in a group or on his/her own.

3. *Affectatio*n describes the self-esteem and self-efficacy of a learner and also describes the learner's values and how the learner perceives his/her capacity to learn. This section of the tripartite also affects the learner's motivation (see 2.6) to learn (Johnston 1996:31-32).

To develop the learner in totality the emphasis must be on the "interrelationship, interconnectedness" aspects of the mind. It is therefore important to address outcomes on all three domains.

Cognition can be seen as the knowledge, thoughts and processes associated with the acquisition, organisation, retention and use of knowledge. Cognitive development entails the development of a person's mental capacity to engage thinking, reasoning, interpretation, understanding, knowledge acquisition, remembering, organising, analysis and problem solving (Lindeque, 1998:66-74). These active verbs relate to critical outcomes – cross-field outcomes – that describe the qualities that the NQF identifies for development within the education and training sector.

To ensure that quality is maintained, these aspects should be addressed during the teaching and learning process. According to Umalusi (2008), FET examination papers in 2008 were valid and reliable. This, however, begs for the question of how the quality assurance process can be implemented if the results (product) display a different picture? This study therefore aims to determine whether teachers are knowledgeable regarding the different levels of Bloom's taxonomy (see tables 3.1, 3.2 and 3.3) in the different domains.

The question arises as to whether learners are less competent in their abilities of thinking and problem-solving primarily because of a lack of rich experience and

knowledge, or the inability to retrieve and store information, and/or lack of general problem-solving and reasoning skills? The above suggestion that the learners' level of expertise should be determined is supported by the six levels of "knowing" within the cognitive domain, which should be taken into consideration in the composition of outcomes (Hamacheck, 1999:352; Van der Horst & McDonald, 1997: 37-38). The six levels progress from the simple level to the more complex level, i.e. from knowledge through understanding, application, analysis and synthesis to evaluation (see table 3.1). The application of different levels of Bloom's taxonomy will reflect quality in terms of a clear distinction between higher and lower cognitive levels, which will result in the differentiation between higher and lower grades (Umalusi, 2008:32).

Table 3.1: Cognitive domain objectives

Level	Description	Action Verbs
Knowledge	Ability to recall information and facts	Identify, describe, relate, list, select
Comprehension	Understanding and using information	Explain, solve, predict, summarise
Application	Ability to use rules, ideas and principles in specific situations	Modify, apply, change, illustrate, relate, use
Analysis	Dividing information into smaller parts	Compare, classify, determine
Synthesis	Working with and arranging smaller parts of information	Compile, combine, revise, create, construct
Evaluation	Judging the quality of information against criteria	Criticise, judge, defend, verify, evaluate, confirm

Source: Adapted from Gunter, Estes and Schwab (1995:28-32); McMillan (1997:40)

The cognitive domain consists of six levels, each of which represents an increasingly complex type of cognition. A cognitive objective specifies that learners will do something intellectual with the knowledge provided to them and also relates to the processing of information by the learner. Cognitive objectives are not the only objectives that should be focused upon. Cognitive objectives describe the knowledge that a learner should possess (Gunter *et al.*, 1995:28-32; McMillan, 2011:42-44), while affective objectives, in turn, describe attitudes, feelings and dispositions that learners should develop. Table 2.2 indicates the objectives for the affective domain.

McMillan (2011:287) referred to the outcomes in the affective domain as the outcomes that concern the feelings and attitudes that the learners should develop during instruction. McMillan (2011:288-294) elaborated on this, adding that values are also about attitudes, appreciation and worth that the learners attach to the knowledge, skills, processes, etc. Spady (1994:54) in Du Toit and Du Toit (2008;22) confirmed that the aspects mentioned above are related to the affective domain and that these aspects have a "direct bearing on learners' successful performance. Spady also adds that that these aspects are outcomes in their own right and referred to them as follows: "They simply are a critical ingredient that makes successful outcome demonstrations possible."

Writing outcomes for the affective domain is not simplistic. The development of this domain however is as important as developing outcomes for the cognitive domain. According to Gunter *et al.* (1995:28-32) it is much more difficult to write affective outcomes, particularly on the higher levels. It is one thing to compose outcomes specifying what learners should know (cognitive domain), but it might be hazardous to specify what learners should feel or value (see table 3.2).

Table 3.2: Affective Domain Objectives

Level	Description
Receiving	Ability to listen, encounter and take in information
Responding	Means of reacting, replying and responding to certain situations
Valuing	Ability to accept and reject, and desire for information
Organization	Prioritising and comparing information
Characterization	Arranging, demonstrating and personalising information

Source: Adapted from Gunter *et al.* (1995:28-32) and du Toit (2010:157)

Despite the fact that the development of learners on the psychomotor *domain* is very seldom assessed during an examination other forms of evidence should be provided that learners are assessed in this domain (see 2.7.2.1, practical work and projects). Learners according to Hamacheck (1990:354) usually do not experience problems in this domain which is a clear-cut and uncontroversial domain. To determine the learner's readiness the following levels in which a learner can be assessed was established.

Table 3.3: Psychomotor domain objectives

Level	Description
Readiness	Willingness and preparation
Observation	Focusing on interests
Perception	Ability and senses
Response	Practising, replicating and imitating
Adaptation	Mastering, developing and changing skills

Source: Adapted from Gunter *et al.* (1995:28-32) and du Toit (2010:156).

A report issued by Umalusi (2005:78) indentified deficiencies in terms of the requirements for assessing learners on the three mentioned domains namely cognitive, affective and psychomotor domain. The report revealed that secondary teachers involved in the FET phase were not designing and developing examination papers catering to the holistic development of learners. This can be seen as one of the imperatives that should be included to ensure quality when activities are designed (see alignment). Bellis (2001:119) and Hattingh (2003:1) stressed that the South African school system is under pressure to provide stakeholders with evidence that they are producing the quality products (high-quality teachers and learners). In providing quality, the improvement of the quality of education should come from within an organisation. In addressing quality, the responsibility lies within the Department of Education (DoE) and the schools. Quality therefore becomes the responsibility of all stakeholders involved in the education system. Teachers must therefore receive the necessary training, support, and information to be able to address the imperatives that define quality so as to ensure the holistic development of learners.

3.2.2 Quality Assurance

The key purpose of quality assurance is to ensure educational improvement and effective performance. Gawe and Heyns (2004:173) states that "quality processes must be built in from the outset in order for these processes to become the providers of a quality management system". They allude that in doing so quality becomes evident in the inputs, the process and outputs of teaching and learning (see Fig. 3.6). Quality previously defined as a process should therefore adhere to: certain principles that should be implemented that are relevant and responsive to the national development needs in terms of flexibility; allow for multiple pathways to the same learning ends; provide access to ease entry to appropriate levels of education and training for all prospective learners in a manner which facilitates progression; provide the opportunity for learners, on successful completion of accredited prerequisites; move between components of the delivery system; give credibility that will allow international and national value of acceptance; and enable progression to ensure that the framework of

qualifications permits individuals to move through the levels of national qualifications via different and appropriate combinations of components of the delivery system (SAQA, 2000:6).

Quality Assurance therefore is an all-embracing term referring to an ongoing, continuous process of evaluating the quality of an educational system. According to Dinham (2008: 4), quality assurance is a professional field of knowledge not only in higher education but also in international organisations such as UNESCO and the World Bank.

Rowley (1995:26-27) refers to total quality management (TQM) as a critical part of quality assurance and that it should be a priority within schools. Collard and Sivyer (1990), cited in Rowley (1995:26), expressed the opinion that in order to ensure TQM, there should be commitment from all stakeholders within a school, coupled with financial planning and the desire for continuous improvement. Thus it can be concluded that quality management, assessment strategies and self-evaluation are means whereby quality assurance can be enhanced in schools. Figure 3.1 illustrates the three aspects that play a crucial part in effective quality assurance in schools.

Figure 3.1: Aspects of quality assurance in schools

Source: Adapted from Birzea, Cecchini, Harrison, Krek & Spajic-Vrkas (2005:33-40)

Harman (1998:346) defined quality assurance as the systematic management and assessment procedures that are used to monitor performance and ensure achievement of quality outputs or improved quality and quality assurance. He further affirmed that quality assurance should aim to provide stakeholders with evidence regarding the quality of the management and the outcomes that were achieved.

According to Bellis (2001:119), quality assurance must not be seen as an outcome, but rather as an instrument to identify gaps within an institution. He added that quality assurance should be stressed as one of the main objectives in any educational institution and must be managed in order to ensure school effectiveness.

In recent years, Umalusi (2008:1-10) aimed to identify a movement towards the implementation of quality assurance procedures and policies. The advent of this movement originated due to the identification of various factors within a dysfunctional system that lacked the necessary quality. Harman (1998:347), Hattingh (2003:1) and McDonald and Van Der Horst (2007:4) raised the following concerns to be addressed:

- Government's concerns regarding the quality of education;
- Increased investment in education and training that fails to produce;
- The need for international competitiveness and standards (globalisation); and
- The need to provide for the professional market.

The above concerns necessitate the need to monitor the quality of performance in schools, universities and colleges to ensure that learners leaving the system are capable of acting professionally in and beyond their schooling. It seems that in order to enhance quality, a systematic and detailed strategic plan should be implemented.

Hattingh (2003:5) reiterated that quality assurance is determined by the degree of performance as specified for schools and other educational institutions. Quality should therefore capture the sum of activities that assure the quality of products and services at

the specific time of production or delivery. Quality assurance is thus determined by the following elements:

- Standards required by, for instance, the National Qualifications Framework (NQF);
- Feedback provided;
- Continuous assessment (see 2.7.3); and
- Ways of correcting or improving the quality of the product.

The quality assurance process is therefore typified by the manner in which organisations attempt to reach the acquired standards for a specific institution. Standards are determined by various quality assurance bodies and their unique functions. The establishment of the NQF arose from the need for an integrated approach to education and training that recognises all education and training in a single national framework. The NQF therefore strives to:

- Create an integrated national framework;
- Support career paths that include the recognition of prior learning (RPL) and different combinations of education and training as the basis for progression through recognised levels and across educational bands;
- Enhance the quality of education and training;
- Redress pervious discrimination in education, training and employment opportunities; and
- Contribute to the full personal development of each learner, as well as social and economic development.

It appears that the NQF works on the premise that quality assurance should take place both internally and externally. Quality assurance should not be seen as an objective in itself, but should rather be aimed at identifying and addressing shortcomings in quality so as to ensure a continuous sequence of planning, achievement, assessment and upgrading (Bellis, 2001:15-44; Hattingh, 2003:2-5; SAQA, 2000:3-6). Quality assurance

in education is characterised by the frequent implementation of procedures that will ensure that all instruction in the teaching and learning context meets the standards and addresses the needs of all individuals, as suggested by SAQA (2000:3).

Understanding the process of quality assurance between learning institution and workplace necessitates an investigation into how these quality principles operate for education and training, as indicated in figure 3.2.
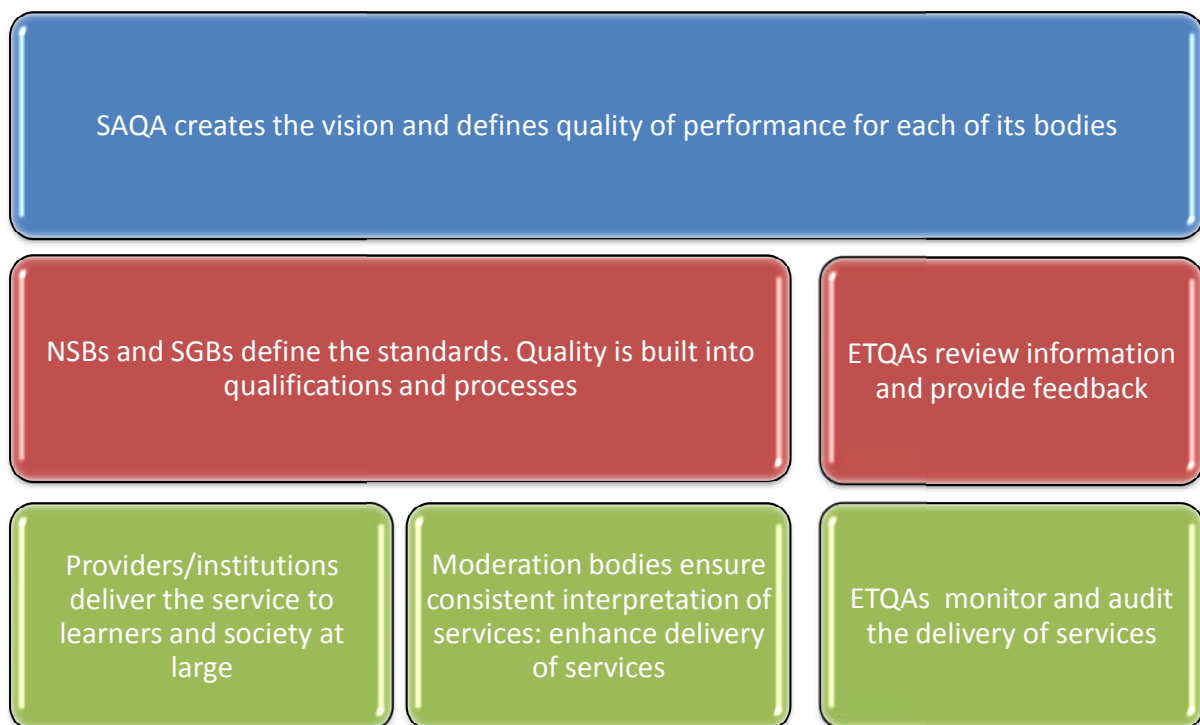
Figure 3.2: NQF Quality Spiral

Source: Adapted from Maree and Fraser (2010:279)

From the suggested diagram, it can be concluded that:

- Quality is the main focus point for education and training;
- Quality is a continuous process;
- Quality should be agreed upon by the stakeholders involved;
- Monitoring may influence how quality is defined; and

- Quality should be an attempt to improve rather than control.

From the above mentioned it can be assumed that the overarching aim of quality assurance is seen nationally and internationally as a trend of measurement and accountability. Arriving at the point of quality assurance, it differs in the national and international arena.

On the international arena Iceland and Finland, for example, do not have separate national agencies for evaluation of education, but rather separate divisions of evaluation and supervision in their ministries of education. A question unanswered at this stage is whether this contributes to the fact that Finland was identified as the highest performing country in terms of science in 2006 during the science scale of the Programme for International Student Assessment (PISA) and Iceland's education system considered as one of the best in the world (Hämäläinen, Haakstad, Kagasniemi, Lindeberg & Sjölund, 2001:18-20)? Gathered from the literature the Iceland's Division of Evaluation and Supervision is responsible for the evaluation (see 3.2.3) of all school levels from pre-school to higher education. The fact that the Icelandic education system has proven to be most successful it should form the basis of recommendations to enhance the education system in South Africa.

In contrast, South Africa has separate agencies for quality assurance (such as the statutory body Umalusi and the Higher Education Quality Committee (HEQC). Umalusi is responsible for ensuring quality in the general education and training (GET) and FET sectors, while the HEQC is responsible for quality assurance in higher education. Both bodies focus on the specific needs of the South African community and the incorporation of best international practices in the development of documents and policies for quality assurance (Strydom & Strydom, 2008:101-110).

The following section discusses quality assurance in practice in terms of the process involved.

3.2.2.1 Effective School Management and Planning

It can be concluded from the literature that the most difficult level at which to effect educational change is at the level of the teaching and learning process. Effective management and planning within the teaching and learning context therefore plays a crucial role in determining the quality of teaching and learning. As confirmed previously Gawe & Heyns (2004:11) states that "if the classroom practice is not addressed it will remain a paper exercise".

To ensure that the classroom practise is addressed Sallis (1996:119) suggested that the effective management and planning of teaching and learning should take place at the following three levels in order to ensure quality:

- *Immediate level*: Management and planning at this level is done by the teachers and involves the interpretation of the daily progress of learners.

- *Short-term level*: Management and planning at this level is a form of quality control and is done by senior management in order to evaluate, correct and prevent learner under-achievement.

- *Long-term level*: Management and planning at this level is done by the government or government institutions (SAQA and Umalusi) and involves the overall evaluation of the school system, as well as the development and implementation of policies, regulations and guidelines.

It can be deduced that when planning takes place through the different levels various stakeholders are involved to support discussions on the performance of the learners, and the levels of implementation of quality can also be identified. The inclusion of the three levels therefore allows for progression as well as to determine any gaps within the quality assurance process.

3.2.2.2 Quality Assurance Strategy

Umalusi (2006) envisaged a strategy of putting in place certain action plans that could improve and/or guide quality assurance within the current context. Umalusi, as the recognised quality assurance body dealing with issues in the GET and FET bands, strives towards quality assurance in assessment. Since the establishment of Umalusi in 2001, various policies, directives, guidelines and requirements have been developed with the focus on quality assurance. Umalusi is responsible for promoting and assuring quality in South Africa, through the provision of reliable, responsive and reputable services in a supportive and reflective manner. The components addressed below form part of a quality assurance system regarding assessment in South African schools (Blom, 2008:301-305 & Umalusi, 2006:2):

- The moderation of examination question papers;
- The internal moderation of assessment;
- The monitoring of how examinations are conducted; and
- The moderation of how marking is done.

In the sections that follow a detailed discussion on the stated components of a quality system with specific reference to the FET sector will be discussed.

3.2.2.2.1 Moderation of Examination Question Papers

Umalusi (2006:5) and Blom (2008:302) defines moderation as" "a process of ensuring that the assessment instruments are fair, valid, practical and reliable, and that they are in line with the national standards".

Moderation is seen as the vehicle to determine and improve the quality of the examination process. Umalusi (2006:6) proposed that in order to meet the terms of quality assurance, moderation should take place internally (in the schools or by an assessment body) and also externally, which in this case refers to Umalusi as the recognised quality assurance body for the GET and FET sectors. Umalusi's proposal

that internal moderation should come from within schools, while external moderation involves the visitation of schools by a qualified authority or any other form of moderation done by a person or institution not related to that specific school is also supported by the Scottish Qualifications Authority (SQA, 2003:12).

In maintaining high standards, the following criteria are proposed that should be met during the moderation of examination papers (Umalusi, 2006:17-25).

Table 3.4: Criteria for moderation

Criteria	Description
Content	Does the paper cover various skills and overall content and does it include various types of questions?
Cognitive Skills	Are learners assessed in a holistic way?
Internal Moderation	Is there evidence of internal moderation?
Language and Bias	Does the paper make use of appropriate language and terminology?
Predictability	Is the paper fair, valid and reliable?
Adherence to Policy	Is the paper relevant to policies, guidelines and classroom practice?
Memo	Is the memo compiled in a detailed and accurate way?
Technical Criteria	Is the layout of the paper effective?
Overall Impression	Is the paper of a high standard?

Source: Adapted from Umalusi (2006:17-25)

The table above provides a framework for teachers and moderators in ensuring that examination papers are compiled in a correct and effective manner. The successful implementation of the above framework should lead to the improvement of quality assurance in respect of assessment.

3.2.2.2.2 Internal Moderation of Assessment

Umalusi (2006:31) defined internal assessment as "the assessment of the learner's performance carried out on an on-going basis at the learning site by the educator, using various assessment techniques that may comprise of assessment of oral and practical work, classroom-based work, class tests, controlled tests, assignments, projects and examinations".

Blom (2008:301) states that quality assurance will only have an effect on education and training if it is integral to teaching and learning. Blom (2008:301-302) also stressed that moderation of assessment is an important tool to ensure quality standards for the inputs, the processes and outputs, are maintained. Moderation is generally associated with the output (or the summative results of teaching and learning), thus the importance that the outputs are only as good as the inputs and processes. Moderation should not take place only at the end of the process, but be integrated into the quality cycle.

Taking the above mentioned view on moderation into consideration, Umalusi (2006:31) stated that internal assessment or CASS in the FET sector must comply with the following regulations in order for successful design, implementation and review:

Section A

This section applies to all subjects and must be composed of:
  (a) 50% tests (focuses on the cognitive domain (see Table 3.1) where learners are required to recall information and facts);
  (b) An independent project which is an original written piece of work by the learner (involves both the cognitive and affective domains (see tables 3.1 and 3.2) where learners need to respond to, organise, value and characterise information);
  (c) The independent project in b) above must include evidence of the process of developing the project – planning, brainstorming right up to the final draft;

(d) Furthermore, the project should allow the learner to apply the skills of collecting, analysing and synthesising information (emphasises the importance of incorporating Bloom's taxonomy into all assessment practises in order to develop multiple skills in learners, such as the ability to evaluate, criticise, judge, predict, compare and classify information).

Task specifications, marking-rubrics and model answers should form part of the portfolio. (Teachers are required to ensure that they compile rubrics and provide feedback and include this in the portfolio, as this also helps learners to understand what is expected of them.)

Section B

This section applies to language and must include:

Records of at least four tasks complete with task specifications, marks and marking-rubrics.

Section C

This section applies to subjects with a practical component and must include at least four tasks. (In section C, attention is given to the psychomotor domain (see table 3.3) where learners are required to observe and respond and adapt to the situation in the classroom.)

These regulations as suggested by Umalusi (2006:31-38) are another step towards the improvement of quality assurance regarding assessment. Another aspect concerning internal moderation is the level at which it should take place. Umalusi (2006:31-36) illustrated the following:
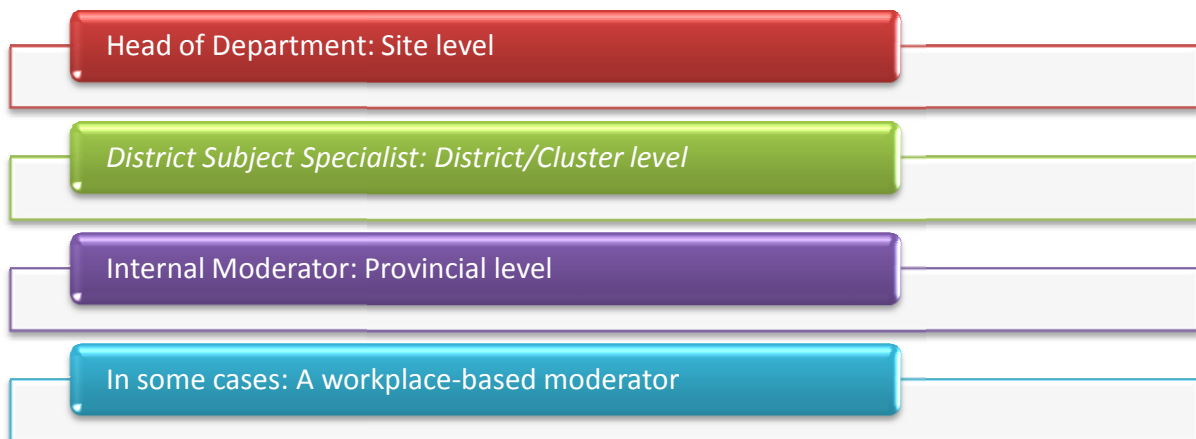
Figure 3.3: Levels of Internal moderation

Source: Umalusi (2006:31-38)

The above-mentioned policies, guidelines and requirements were implemented by Umalusi in 2006 with the aim of improving the assessment process in South African schools. Taking into consideration how marks have decreased over the past few years, questions can be asked about the quality of the quality assurance process in place. It is clear that moderation takes place at different levels, both internally, at the educational institution and externally through education and training quality assurance bodies. Internal moderation ensures that learners who are assessed are assessed in a consistent, accurate and well designed manner (SAQA, 2001:59). An internal moderation system is therefore an integral part of the review of the system and of the quality management system of an education institution.

In order to determine whether aspects of internal moderation was implemented at schools in the FET sector an empirical research was conducted to identify possible variables that could have an effect on the quality of the quality assurance process (see Appendix C). The questions sought to find answers to the following:

- Are senior management and departmental heads aware of these quality assurance measurements and whether the policies are being effectively implemented?
- Do schools and teachers comply with these rigorous moderation measures?

- Is there enough time for moderation?

It was envisaged that answers to the questions could be an attempt to indicate areas of improvement regarding the quality assurance of assessment and whether these demands are realistic for the South African school system.

Denmark, having been identified as a high-quality education system on the other hand makes extensive use of external examiners in comparison with most other countries to ensure high quality assessment. External examiners are appointed to determine the quality of the majority of examinations and other assessments. It is also the responsibility of the external examiners to ensure that examinations and assessments are conducted according to the relevant regulations and the ministerial order on the programme in question.

External examiners should also ensure that the learners are treated fairly and equally as well as provide the various institutions with feedback on quality issues in order to identify problematic areas (Hämäläinen *et al.*, 2001:18-20). From what has been discussed it seems that external moderation could be suggested to improve the quality of the moderation process and quality assessment.

3.2.2.2.3 Monitoring the Examination process

Umalusi (2006:41-49) stressed the importance of how examinations are conducted and suggested that examinations be conducted in such a way that all learners receive equal opportunities to demonstrate their achievement. High priority has also been given to the establishment of a safety and security body that should be managed in a professional way by professional staff.

The manner in which examinations are conducted must be based on the principles of democracy to ensure a fair and equal opportunity for all learners to meet the

requirements that are stipulated by the national quality assurance body (Umalusi, (2006:41-49) as indicated in table 3.5.

Table 3.5: Aspect of assessment that must be monitored

Aspect	Description
Implementation of internal assessment	Ensuring that internal moderation takes place in accordance with policies; ensuring equal opportunities for all learners.
The design phase	Registration of candidates; appointment of moderators and examiners; setting, translation and distribution of exam papers.
Conduct of examination	General examination management: seating arrangements; marking; security; moderation, etc.
Resulting process	Processing, adjustment and publication of marks.

Source: Adapted from Umalusi (2006:41-49)

3.2.2.2.4 Moderation of Marking

De Klerk (2010:271-272) refer to moderation in terms of quality assurance as an important tool to ensure the maintenance of quality standards for inputs, processes and outputs. They suggest that moderation should take place on a continuous basis and form part of the "cyclical nature of quality". They bring it to our attention that despite the fact that moderation focuses on the output it is important that moderation should be an ongoing process to ensure quality. The moderation of marking is one of the processes utilised by Umalusi to ensure that marking is conducted in accordance with agreed-upon practices and standards so as to ensure the validity, fairness, reliability and practicability of the assessment process. Demonstrating the assessment principles will ensure that national standards are uniformly applied. Umalusi (2006:53-62) proposed that the moderation of marking should take place through three approaches, illustrated in Figure 3.4:
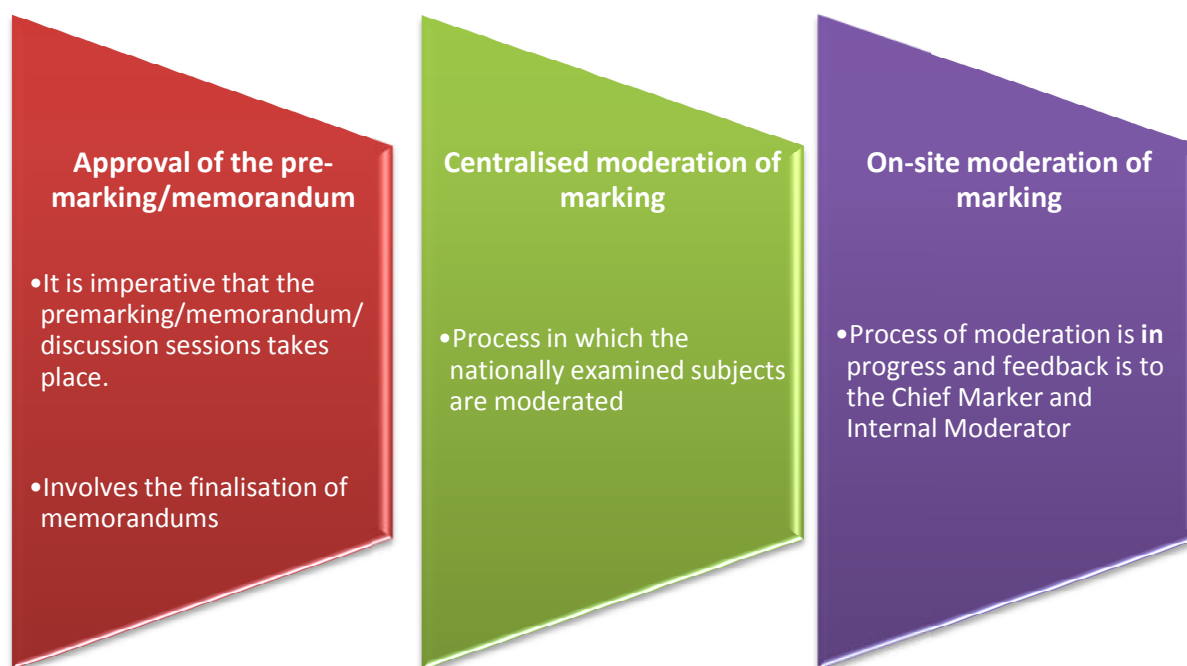
Figure 3.4: Moderation of marking

Source: Adapted from Umalusi (2006:53-62)

This proposed approaches from Umalusi (2006:53-62), should be implemented by schools in order for them to ensure that the "marking" process is managed effectively.

3.2.3 Self-evaluation by Schools

In improving the quality of assessment in schools, Hopkins (1987:21) suggested that self-evaluation should be regarded as a normal process for secondary school education and higher education. Already in 1987, Hopkins (1987:23) stated that self-evaluation is a means to determine what a particular school has accomplished academically during the year. He alludes that self-evaluation, when implemented correctly, can contribute towards the improvement of educational results.

Sallis (1996:133) concurred with this view, stating that self-evaluation in education is of crucial importance, especially when striving towards the improvement of quality. Sallis (1996:133) identified four phases of self-evaluation, as shown in table 3.6:

Table 3.6: Self-evaluation phases

Phase	Description
Planning	Identifying possible problem areas and planning, designing and monitoring the system.
Implementing	Collecting data, thus allowing the opportunity for modification.
Process	Analysing the data collected in the previous phase and making decisions.
Recycling	Adjusting education until problems are rectified.

Source: Adapted from Sallis (1996:133-142), Scheerens (2000:95) and Thackwray (1997:18-23)

Sallis (1996:133-142), Scheerens (2000:95) and Thackwray (1997:47) contended that self-evaluation can contribute to the reaching of an organisation's educational goals. From the above, it seems that self-evaluation plays an important role in the TQM (see 3.3.3) of schools. It can however be a point of discussion that whether self-evaluation occurs in South African schools or more specifically in the FET sector in the Motheo district? Are teachers, principals and senior management aware of the benefits of a self-evaluation system? Is the education system structured in such a way that time is available for self-evaluation?

The process of planning, implementation, process and recycling is identified as the crucial aspects to enhance the quality of an educational system. How, by who and when these aspects are applied can therefore determine the quality of an educational system. In the previous paragraphs it came to the for that self-evaluation plays an important role in the total quality management of schools bearing the main aim in mind – to ensure a high quality product by means of appropriate assessment that can result in good quality assurance.

In 3.3 various aspects that could contribute to the development of good assessment practises and result in quality education will be highlighted.

3.3 DEVELOPMENT OF GOOD ASSESSMENT PRACTICES

In concurrence with Gawe and Heyns (see 3.2.2) that refer to the dynamic nature of quality assurance, Scheerens (2000:45) suggested the implementation of a cyclic model that can result in a good assessment practice. This model based upon the input, process and output is displayed in figure 3.5 below.

Input   **Process**
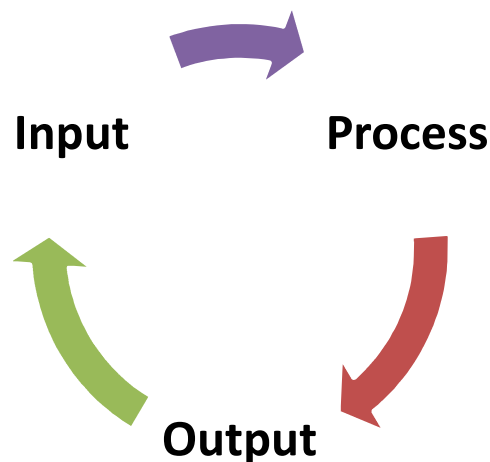
Output

Figure 3.5: Input, process and output model

The cyclic model portrays the following:

-   *Input* which *refers* to the teacher's and learner's experiences and the support provided by any other stakeholders in the educational situation.

-   *Process* that includes all activities, instruction and leadership which take place in the school as well as the teaching and learning situation.

-   *Output* on the other hand that refers to the process where student achievement is analysed and interpreted in order to modifying the teaching experience if necessary (see 3.4).

This model as supported by Bogue (1998:9-14) integrates the three variables that can have an influence on the quality of the assessment practice. The advantage of this

model is that it can be modified and/or improved at any stage to ensure effective and high quality education that enhances the quality assurance (see 3.2.2) which can ensure that progression takes place.

Coates (2005:35) recognised quality in terms of learner engagement that can ensure quality assurance. He added by stating that learner involvement is often under conceptualised in the sense that learner's perceptions as the main clients in education are not always recognised. From this premise quality is explained in 3.3.2 that refers to the stakeholder's involvement.

3.3.1 Stakeholders' Involvement

Although the learner is identified as the most important stakeholder in the educational system the views, opinions and roles of other stakeholders such as: teachers, the community and the government should not be ignored (see 3.2.1).

With reference to the classroom teacher as a stakeholder, Dinham (2008:1) stresses the important role that the classroom teacher plays in terms of learner achievement. In order to ensure quality a close relationship should exist between the quality of the teacher and the quality of teaching. Freedman, Lipson & Hargreaves (2008:13) state that teaching as a profession can be seen as an easy job, with long holidays and obtaining an easy qualification. Dinham (2008:2-3) responded to this acquisition and stated in order to improve teacher quality and restore the pride and respect of the profession the following aspects can contribute to restoring quality in education:

- Reforming teacher training;

- Equity in salaries for teachers;

- Smaller class sizes;

- In-service training to ensure life-long learning; and

- A performance-reward system.

Dinham (2008:3) elaborated that although the mentioned aspects may contribute to improving the quality of teachers, it will not necessarily improve the quality of the teaching process. Quality according to Scheerens (2000:101) involves the various stakeholders that influence the teaching process which affects the quality of educational management and leadership of any educational institution. The managerial role of these leaders are to ensure the effective implementation of the financial aspects of education, efficient time management and creating and ensuring a safe learning environment in the institution and equal opportunity for all stakeholders to perform. The role of the community should also not be under estimated as one of the main stakeholders that contribute to the school budget and effects quality education. It is therefore important that the quality management involves all the stakeholders (see 3.2.1.1).

3.3.2 Total Quality Management (TQM)

According to Bogue (1998:12) TQM is a controversial issue in education that is seen by some academics as being relevant while others simply ignore the need for it. Rowley (1995: 26-27) asserted that to prevent any barriers to TQM an educational institution needs:

- Dedication from top management;
- Quality assurance, which will have a financial impact on education;
- An understanding of quality and the needs of stakeholders; and
- Continuous upgrading and development (technology and innovation).

Sallis (1996:35-37) agreed that such needs should be addressed, but indicated that in order to address these needs, hard work is required as well as the eradication of certain elements that can have a negative influence on TQM should take place. In this regard Sallis cited elements such as: a fear for failure; implementation of new and different ideas; implementation of strategic plans; long-term goals; and in some instances the lack of involvement of senior management. The presence of these elements can lead to assessment practices that cannot provide quality education (see 3.2.2).

3.3.3 Maintaining Relevance

In terms of maintaining relevance the SAQA document (2001) refers to addressing the needs of the stakeholders and including the rapid change of technology. The document furthermore emphasised that any quality assurance system should adapt to its surroundings in order to ensure that education is still relevant. The education system should also remain relevant to the changing needs of the stakeholders. E-learning ,for example can be seen as a relative new concept in education in South Africa which brought new challenges to quality assurance. To address the demands of the new millennial and stakeholders, Pond (2000:185-186), Pryor and Lubisi (2002:673-678) illustrate the importance for educational institutions to keep improving and adapting education, assessment and the quality assurance thereof.

Pond (2000:185) referred to the above recommendations as the influence of a universal (due to globalisation) model of ensuring quality in every aspect of education.   The last two decades have been characterized by an industrial society which has been subjected to a technology, economic and social nature has brought forward change that cannot be ignored and that should be incorporated in all educational institutions to ensure that education stays relevant and credible.

With reference to some of the aspects discussed the following is proposed to characterise a good assessment practise.

3.4 GOOD ASSESSMENT PRACTICES (GAP)

According to the literature there are various factors that characterise good assessment practices which influence the quality of assessment and learner performance (see chapter 1). It may be deducted from Chapter 2 and Chapter 3 that good assessment practices are identified in terms of the following characteristics:

- **Being multidimensional**

A multidimensional assessment practise refers to various indicators (NCS, SAQA and Umalusi) that are employed as well defined criteria to judge the quality of the practise and the dynamic nature thereof (see 3.2).

- **Involvement of stakeholders**

In 3.2.1.1 it is referred to the various stakeholders and their role to ensure quality assessment.

- **Attributes**

In 3.2.1 quality is defined in terms of the quality of its teachers, the socio economic status and resources that are available.

- **Instruments utilised during assessment**

In order to enhance the quality of the teaching, learning and assessment process learners should be assessed on all three domains (see 3.2.1.2) and in order to ensure this a variety of assessment instruments (see 2.7) should be utilised.

- **Validity, reliability, practicability and fairness**

To have national and international value, assessment practices are based upon: **v**alidity (see 2.5.2) when assessing what it intended to assess, which is usually specified in terms of the learning objectives which are to be assessed. In turn, reliability (see 2.5.3) refers to the situation where a particular assessment assessed by assessors, acting independently, using the same criteria and marking schemes would

come to exactly the same conclusion or judgement regarding a given piece of work. Fairness, (see 2.5.1) refers to when all students are allowed an equal opportunity to demonstrate achievement during assessment. The literature clearly states that fair, reliable and valid assessment practices can be achieved through:

- The setting of clear criteria and performance standards for the assessment of the student's work (see 2.5.1);
- Assessment tasks that are designed to ensure no inherent biases that may disadvantage groups (see 2.5.2);
- The anonymity of student's work that must be maintained in the assessment process (see 2.5.3);
- Clear and articulated policies that are available to all students (see 2.5.4)

- **Assessment that influences student motivation and learning**

An assessment practice that bears the following in mind can influence student learning positively if:

- The assessment supports student learning and test their achievement by providing clear opportunities to demonstrate their learning and skills development (see 2.5);
- Students are provided with descriptions of their progress against the stated outcomes (see 2.6);
- A balance exists between assessment being developmental (see 2.7.1) and/ or judgmental (see 2.7.2).

- **Quality assurance measures**

The implementation of good quality assurance measures (which are cyclic in nature see 3.2.2) can ensure effective performance if the following measures are applied:

- Effective school management and planning (see 3.2.2.1) that function on various levels to ensure progression and determine the gaps in the process.

- Employment of strategies such as moderation (see 3.2.2.2.1) and the stipulation of specific criteria (see table 3.4)

Internal assessment stresses the concept that the output is only as good as the input; this course of action (see 3.2.2.2.2) should be integrated into the cyclic processes.

Monitoring of the examination process to ensure equal opportunity and to meet the requirements stipulated in the policy documents (see 3.2.2.2.3).

Self evaluation (see 3.2.3) should be part of any normal process to improve quality in education and adhere to guiding principles as suggested in die policy documents.

Employment of agencies that are: Effective; one national agency with separate divisions instead of various quality assurance bodies; appointing external examiners to provide institutions with feedback on quality issues. External examiners should determine the quality of the majority of examinations and not only the final examination.

It was one of the aims of the study to investigate teachers' awareness of quality assurance measures that should be implemented during assessment practices in schools. It, however, goes beyond awareness and the output depends on the effort and challenges that will be implemented to improve the quality of education.

3.5 CONCLUSION

This chapter provided a theoretical overview of some facets of quality assurance in the FET sector, with a strong focus on quality and quality assurance, as well as the policies and principles of the quality assurance bodies in South Africa. Reference was also made to international trends regarding quality assurance on how to ensure and improve the quality in education.

From the literature it is evident that the pursuit of quality in education is of high priority for most countries in the world. It can also be said that South Africa is faced with unique challenges regarding the quality of education due to its history and the pressure to be accepted in the international arena.

Various concerns on how to address quality education was identified one of which was assessing learners in all three domains (see tables 3.1, 3.2 and 3.3). The literature clearly indicated the importance of the development of higher-order cognitive skills through the implementation of Bloom's Taxonomy of Educational Objectives to develop learners in totality.

Quality assurance was defined as cyclic process to evaluate the quality of an education system, as well as the systematic management and assessment procedures used to monitor performance and to ensure the achievement of quality outputs or the improvement of quality. It is also evident that for quality assurance to be effective, there are certain aspects that need to be addressed, namely:

1. Effective school management and planning (see 3.2.2.1)
2. An effective assessment strategy (3.2.2.2)
3. Self-evaluation by schools (3.2.3)

Certain imperatives were identified that are not negotiable if national standards are to be met as indicated by the quality assurance body for the GET and FET sectors in South Africa. Some of these are:

1. Moderation of examination question papers (see 3.2.2.2.1)
2. Internal moderation of assessment (see 3.2.2.2.2)
3. Monitoring the conduct of examinations (see 3.2.2.2.3)
4. Moderation of marking (see 3.2.2.2.4)

This chapter also contained a literature review in respect of quality assurance in terms of the development of a good assessment practices. It is clear that quality assurance revolves around the following:

1. Stakeholders involvement (see 3.3.1)
2. Total Quality Management (3.3.2)

3. Maintaining relevance (3.3.3)

The aforementioned procedures are seen as guidelines for quality assurance, because every educational institution has its own unique requirements and challenges. Schools can therefore use or adapt the guidelines and implement them according to their own unique situation in order to ensure high-quality education.

The next chapter conceptualises how the research was conducted and investigates the presence of quality assurance procedures regarding assessment as currently implemented in schools (FET sector) in the Motheo District.

CHAPTER 4

EMPIRICAL RESEARCH DESIGN

4.1 INTRODUCTION

In the previous chapters, interrelated concepts of assessment and quality assurance were identified to address the phenomena that exist between the dependent variables (assessment and quality assurance) and the independent variables (secondary schools in the Motheo district) relevant to the qualitative research section of the study. In this chapter, a detailed plan to investigate whether teachers are using and implementing the information suggested by the national quality assurance bodies, namely the South African Qualifications Authority (SAQA), the Department of Education (DoE) and Umalusi, and whether adequate quality assurance procedures regarding assessment are in place in secondary schools in the Motheo district of the Free State Province. It was necessary for the researcher to get acquainted with the educational research design and methodology that was employed in order to address the general purpose of this study. The research design gives a detailed portrayal of the approaches that were employed during this research and their suitability to the overall aim of the study. It furthermore emphasises the utilisation of the mixed-method approach employed in an attempt to address the main research questions (McMillan & Schumacher, 2001:30-31).

Cohen *et al.* (2007:78) stated that there is no "blueprint" for a specific research design, but it is crucial that researchers are knowledgeable about the execution of the research in terms of the practicability and whether the topic is worthwhile researching. De Vos *et al.* (2004:90) elaborated on this, adding that the research strategies employed, as well as the data collection methods and techniques for data analysis, should be specific.

The main aim of the research design is to provide the reader with a framework that specifies how the study will be conducted in order to address the research questions, data collection, and the analysis, interpretation and reporting thereof (Cohen *et al.* 2007:79).

4.1.1 Aims and Objectives of the Study

As indicated, the overall aim of this study was to investigate teachers' awareness of quality assurance measures that should be implemented during assessment practices in schools, and whether teachers are assessing learners in totality in the further education and training (FET) band in the Motheo district. To achieve this aim, the following objectives were pursued in the empirical investigation:

- To investigate teachers' awareness of quality assurance measures to be implemented during assessment practices in schools;
- To determine whether teachers assess learners in totality; and
- To investigate the extent to which quality assurance measures are implemented.

4.2   PARADIGMATIC PERSPECTIVE

Ponterotto (2005:127) defined a paradigmatic perspective as a "set of interrelated assumptions about the social world which provides a philosophical and conceptual framework for the organised study of that world." Research is about understanding phenomena and the way in which the researcher views the phenomena. The researcher should therefore:

- as suggested by Cohen *et al.* (2007), identify and understand the phenomena through the external objective view or the view created by individuals;
- determine whether knowledge can be viewed as objective (positivist stance) or interpretive (anti-positivist stance).

This study followed an interpretivist paradigm, viewed by Finlayson (2004:130) as starting with the insight that "to understand actions and practices of teachers and institutions (in this case schools) that will enable the researcher to grasp the relevant meanings, beliefs and preferences of the people (teachers) involved."

In the context of this study, the researcher sought to explore the phenomena assessment and quality assurance from an external point of view by means of an pragmatic stance. This stance directed the study to employ both qualitative and quantitative research methods. As much as this study is based on the interpretivist paradigm, some aspects of both post-positivist and positivist paradigms were given attention through group interviews and questionnaires that were utilised in the study.

4.3   RESEARCH METHODOLOGY

Research methodology refers to the theory of obtaining knowledge, considering the best ways, methods or procedures by which data should be gathered to provide the evidence basis for the construction of knowledge, and the description and analysis of research methods rather than the actual, practical use of those methods (Morse, 2004:16).

Subsequently, this study followed a mixed-method approach in which both a questionnaire and group interviews were utilised as data collection instruments (Lockyer, 2004:43). The choice of this paradigm depends on the stated objective of exploring teachers' "lived experiences" of how assessment and quality assurance materialise in the classroom (Snape & Spencer, 2003:7). In attesting to how the research objective informs the choice of the paradigm and methods, Casebeer and Verhoef (1997:4) stated that: "*Instead of either ignoring or defending a particular research paradigm, it is possible and more instructive to see qualitative or quantitative methods as part of a continuum of research techniques, all of which are appropriate depending on the research objective.*"

Lockyer (2004:43) asserted that a fundamental rationale for employing mixed-method research is that simply using either qualitative or quantitative research is insufficient, for when used on their own they will not be able to address all dimensions of the research question. Therefore, in order to guard against this limitation, a process of triangulation was carried out. Foss and Ellefsen (2002:243) and Lockyer (2004:43) elaborated on the term "triangulation", which refers to the use of more than one research approach to

investigate a particular question, and which "has a potential to provide multifaceted view as it denotes the combination of different research strategies." Additionally, Lewis and Ritchie (2003:275) indicated that triangulation assumes that the use of different sources of information helps both to confirm and to improve the clarity, or precision, of a research finding. Thus, one type of data (usually quantitative) is used to corroborate another type of data (typically qualitative) (Brannen, 2004:314).

It was therefore the proposition of this study that the quantitative data collected by means of a questionnaire would be supported by qualitative data gathered by group interviews. Group interviews were aimed at exploring in-depth descriptions of how teachers implement assessment and quality assurance in the FET phase. The questionnaire, on the other hand, contributed towards gathering statistical information on issues relating to the sources of assessment and quality assurance.

4.4   RESEARCH DESIGN

This section discusses the aforementioned aspects in the search for answers to the research questions. Knowledge on assessment and quality assurance was obtained through the interaction between the researcher and the respondents (Neumann, 2000:85). Maree (2008:262) affirmed that employing both qualitative and quantitative methods of research improves validity and reliability. The sections below discuss the non-empirical literature review and mixed-method approach to empirical research.

4.4.1 Literature Review

De Vos *et al.* (2004:337) defined a literature review as a critical appraisal of other researchers' work with the following aims, as specific to the purposes of this study:

- <u>Comparing statements made by others</u>: *A review on assessment and quality assurance.*

- <u>Identifying universal issues</u>: *Regarding assessment on national and international level.*

- <u>Identifying differences and contradictions</u>: *The implementation of assessment and quality assurance in schools.*

- <u>Identifying criticisms by others</u>: *Analysing different views on the research themes.*

- <u>Providing context for the research</u>: *A global perspective on quality assurance and assessment*

- <u>Justifying the research</u>: *Analysing the performance of schools in South Africa.*

Suter (2006:84-86) confirmed the view of De Vos *et al.* (2004) and added that a literature review is basically the search for material that is relevant to the study and the analysis and synthesis of the written work of others. It is also critical for researchers to allow sufficient time to include all the activities that are important during a literature review. A planning schedule is suggested for the following purposes:

- To gather information from primary and secondary sources;
- To organise the literature review; and
- To appraise and write up the literature review.

This materialised in chapters 2 and 3 with the focus on assessment and quality assurance respectively. The literature review in these two chapters was conducted to clarify the concept of assessment, to determine the driving force behind assessment within the South African context, to define assessment concepts, and to determine the dimensions of assessment, the principles and aims of assessment, and integrated assessment. This provided the researcher with fundamental knowledge on assessment from which quality assurance ensued, as well as information on how the empirical research should be conducted.

4.4.2 Mixed-Method Approach

The empirical research, of a pragmatic nature, was conducted by means of a mixed-method approach. Suter (2006:42-44) stated that employing a combination of qualitative and quantitative methods provides the researcher with the opportunity to ensure that the research is valuable, valid and reliable. In order to counter the trends mentioned above, Figure 4.1 illustrates the order in which the research questions (see 1.3 and 4.5) were answered:
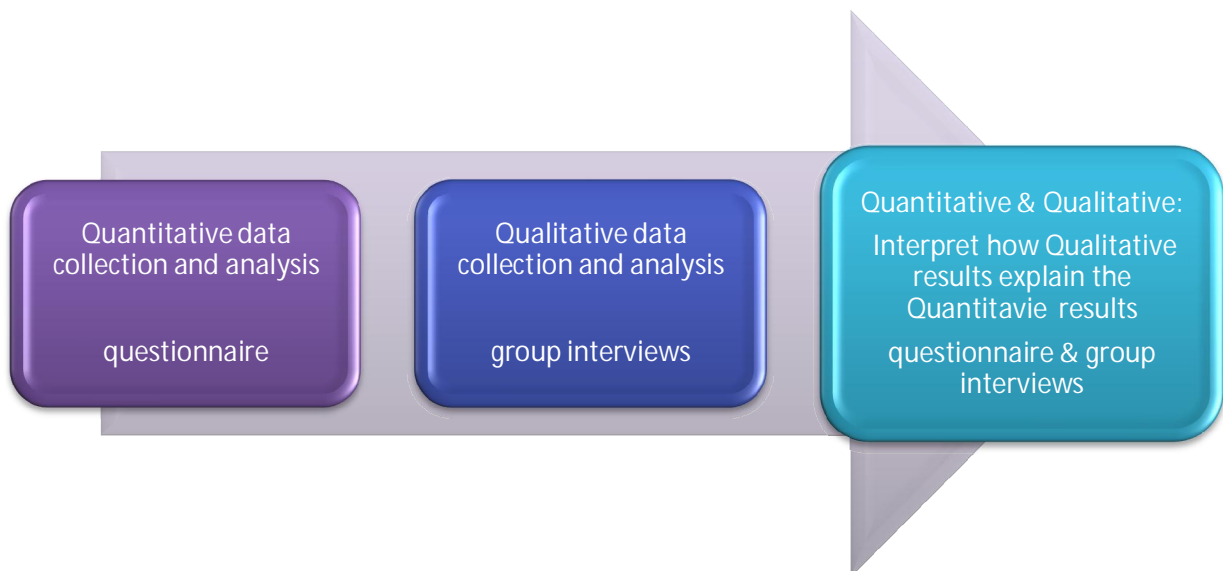
Figure 4.1: Mixed-method design

Source: Adapted from Ivankova, Creswell & Clark (2008:264)

The advantage of bringing together qualitative and quantitative approaches in one study was that the researcher was able to collect multiple forms of data using different strategies, approaches and methods in such a way that the resulting mixture or combination resulted in complementary strengths and non-overlapping weaknesses. It was therefore the proposition of this study that the quantitative data collected by means of questionnaires would be supported by the qualitative data gathered by means of group interviews.

4.4.2.1 Quantitative Research

Charles and Metler (2002) in Ivankova, Creswell and Clark (2008:255) captured the essence of quantitative research as being when the "investigator relies on numerical data to test relationships between variables". Although quantitative research can be very intimidating, it gives the researcher the opportunity to seek explanations, break data into smaller parts and to test hypothesises, make predictions, confirms relationships, compare results and generalise findings (De Vos *et al.* 2004:223).

During the quantitative research process, the researcher formulated specific and narrowed research questions and utilised a questionnaire to collect data from the different schools so as to compare the findings (Suter, 2006:41-43).

For this study, a quantitative research method was chosen on the basis that it strives towards reducing errors and to enhance objectivity. The main quantitative instrument used in this study was the questionnaire (see 4.5.1), which consists of five sections, namely: Section 1: Gathering general and demographical information; Section 2: Assessment; Section 3: Quality assurance; Section 4: Moderation; and Section 5: Whether teachers assess learners in a holistic manner.

The quantitative data (see quantitative data analysis, 4.10.1) was analysed using the SSPS software package, and the key concepts of numerical analysis in this study focused on the various items in the questionnaire (Cohen *et al.*, 2007:501-507). The Cronbach alpha coefficient was calculated to determine the internal consistency of the various questionnaire sections, while it was also used as a reliability coefficient to calculate the extent to which items, such as those found in the questionnaire, correlate positively with one another. As mentioned, both quantitative and qualitative research methods (mixed-method approach) were employed to ensure that the researcher eliminated the chance of errors.

4.4.2.2 Qualitative Research

Qualitative research refers to complex, interconnected terms, concepts and assumptions in respect of a variety of empirical materials such as case studies, interviews, artefacts, observations and visual texts (McMillan & Schumacher, 2001:14-17). Cohen *et al.* (2007:19-24) explained that qualitative research usually focuses on the socially constructed nature of reality and the intimate relationship between the researcher and what is being studied. This differs from quantitative research (see 4.4.2.1), which emphasises the measurement and analysis of the relationship between variables. De Vos *et al.* (2004:339) agreed that qualitative research (see 4.4.2.2) gives the researcher the opportunity to analyse themes, ideas, patterns and beliefs as experienced by the participants and that it is a flexible method of investigation that describes the world in a understandable language

Table 4.1: Key qualities of qualitative research

Qualitative Research	
Methods of data collection	Group interviews that produced data in the form of words (spoken language).
Advantage	Due to the social relationship between researcher and participant, allows innovations and alterations.
Procedure	Research procedures are particular and replication is rare. Data analysis proceeds by extracting themes or generalisations from evidence and organising data into a present, coherent and consistent picture (see 4.10.2 & 5.4).
Overview	An investigation into the meaning of assessment and quality assurance.

Source: Adapted from McMillan and Schumacher (2001:457), Neuman (1994:317) and Suter (2006:42-44)

In employing the qualitative research method, group interviews were utilised as a means to collect data. Group interviews were conducted with groups of four to eight teachers in FET schools classified as either high-performing or average-performing schools, based on the 2009 Grade 12 results. Interviews were only held with teachers at two schools, since the other schools refused to grant permission for their teachers to be

interviewed. The interviews provided the researcher with the opportunity to gain an in-depth understanding of the teachers' perceptions of assessment and the quality assurance thereof. In order to ensure that the data gained from the group interviews was valid and reliable, the interviews were planned to ensure positive social interaction between the researcher and the interviewees (Schostak, 2006: 59-60).

4.5   DATA COLLECTION STRATEGIES

During the collection of data, the following strategy was employed in terms of the mixed-method approach and the fieldwork was conducted in two phases, as explained below:

Phase 1 involved the completion of the questionnaire (see Appendix C) by teachers who were part of the sample in the FET school sector in the Motheo district.

During **Phase 2**, group interviews (see 4.5.2 and 4.10.2) were held with teachers from the FET school sector in the Motheo district. The interviews involved certain topics to validate the data collected from the questionnaires, for example the teachers' knowledge of the different policy documents; the types of assessment implemented, whether they were in possession of the mentioned policy documents. This provided the researcher with insight into the perceptions and opinions of the teachers regarding the mentioned topics.

4.5.1 Questionnaires

McMillan and Schumacher (2001:40) described the utilisation of questionnaires as a very common method of data collection used during educational research. De Vos *et al.* (2001:172) agreed, confirming that questionnaires are relatively economical and ensure anonymity. Although questionnaires are the most common method of data collection, McMillan and Schumacher (2001:258-259) identified the following aspects that should be part of the construction of a questionnaire:

- Questions should be clear and relevant and must avoid ambiguity (see Appendix C);
- Questionnaires must be easy to complete and time efficient (see Appendix C);
- General questions, such as biographical information, should appear at the beginning of the questionnaire, with more sensitive questions towards the end (see Appendix C);
- Questionnaires should avoid biased and negative terms and/or questions (see Appendix C).

The validity and reliability of the study and the empirical issues of the questionnaire was enhanced through pilot-testing (see 4.8). This provided the researcher with the opportunity to locate and rectify errors immediately and at little cost (De Vos *et al.*, 2001:177). The researcher also made use of a questionnaire due to it being economical, relatively easy to score and analyse, as well as anonymous, while it provides sufficient time for completion by respondents. However, it is important to realise that using a questionnaire can also contribute towards biased or ambiguous items and can only be given to respondents who are able to read and write.

Based on the literature review, the questionnaire was developed to determine teachers' awareness of assessment and quality assurance. The questionnaire was clustered in different sections for data analysis, namely:

- **Section 1:**

  - **Section 1.1:** Demographical information (see Appendix C and 5.3.1).
  - **Section 1.2:** Teachers' general understanding of assessment (see Appendix C and 5.3.2).
  - **Section 1.3:** General information on quality assurance (see Appendix C and 5.3.3).

- **Section 2:** The first research theme, namely assessment. This section was divided into the following subsections: *availability and readability of the assessment protocol; awareness of the assessment protocol; implementation of the assessment protocol; implementation of various assessment instruments; the assessment process and implementation of an assessment strategy; the feedback and review process* (see Appendix C and 5.3.4).

- **Section 3:** The second theme, namely quality assurance. This section was also divided into subsections: *curriculum implementation; equal opportunities for all learners; feedback process; assessment process; teaching and learning; teacher co-operation and communication; continuous assessment* (see Appendix C and 5.3.5).

- **Section 4:** Moderation, divided into the following subsections: *employing high-quality assessment; incorporating the various domains; policy adherence* (see Appendix C and 5.3.6).

- **Section 5:** Holistic assessment, divided into the *cognitive, affective and psychomotor domain* (see Appendix C and 5.3.7).

A questionnaire was chosen for this research, because it is cost-effective, allows data to be collected from a large number of respondents (149 teachers in this case), and gives the researcher the opportunity to explain, predict, validate and test the data gathered. The various questions in each section were grouped into subsections to allow for effective data analysis (see table 4.4). The aim of the questionnaire was to secure demographic data and information concerning assessment and quality assurance. The use of the questionnaire helped facilitate free expression by the respondents without being influenced by the researcher's presence and his possible bias.

4.5.2 Group Interviews

The use of interviews provides the opportunity to gain insight into the world, views beliefs, values, opinions and behaviours of the interviewees, making them a valuable source of data when executed correctly (Nieuwenhuis, 2007:87). Fraenkel and Wallen (2006:455) confirmed that interviews are an accurate way of determining how the respondents feel about certain issues, with good interviewing behaviour being essential. It is expected of the interviewer to:

- Respect the various cultures and individuals in question;
- Be a good listener;
- Have a planned interviewing strategy and avoid leading questions;
- Make sure the interviews represents the population (in this case FET teachers from the Motheo district);
- Hold the interviews in a non-threatening environment (in this case, the teachers' classrooms);
- Be sure to obtain written consent from the respondents;
- Record and transcribe responses; and
- Be able to observe non-verbal communication (body language).

For purposes of this research, semi-structured group interviews were conducted by means of a predetermined set of questions. During each interview, sufficient time was allowed for the respondents to think about the questions and also enquire about and clarify some of the answers (Nieuwenhuis, 2007:87). Information was obtained regarding the teachers' knowledge of the different policy documents, the implementation of active verb types during assessment, and whether they were in possession of these policy documents (see 2.4). Semi-structured group interviews were conducted with small groups (2 groups) of four teachers so as to gain insight into the interviewees' general perspectives and opinions on the mentioned aspects. The interviewees were chosen from a school with a good performance record and from a school with an average performance record, based on the 2009 Grade 12 results. The validity and

reliability of the interview was enhanced by a pilot test (see 4.8), as well as by taping and transcribing the data (see 5.4).

4.6 RELIABILITY AND VALIDITY

During this research process, the questionnaire and group interviews were the main research instruments used for data collection. Certain steps were taken to ensure that the data collected was valid and reliable. Ivankova *et al.* (2008:262) confirmed that employing both qualitative and quantitative methods of research improves validity and reliability.

4.6.1 Reliability

Maree and Pietersen (2008:197) stated that reliability can be ensured if there is consistency in the measurement or instrument used, thus giving the same result on a consistent basis. In line with this view, De Vos *et al.* (2004:169) and McMillan and Schumacher (2001:244) indicated that reliability in any research occurs when similar results are obtained from different forms of the same instrument of data collection. The reliability of the questionnaire utilised in this research was ensured by means of a test-retest approach. This was done by piloting the questionnaire and rectifying possible errors before the distribution of the questionnaire to the respondents (De Vos *et al.*, 2004:409).

According to Lewis and Ritchie (2003:275), a number of authors have argued that triangulation has some role to play in the reliability of findings, including Patton (2002): *"It is in data analysis that the strategy of triangulation really pays off, not only in providing diverse ways of looking at the same phenomenon but in adding to credibility by strengthening confidence in whatever conclusions are drawn."*

To lend further credence on this viewpoint, Lockyer (2004:42) concurred that arriving at the same conclusions from two different approaches enhances the reliability of the study, and this leads to greater confidence in the findings. The Cronbach alpha

coefficient was also determined in order to determine the reliability of the various sections of the questionnaire (see 5.2).

The reliability of the group interviews was ensured through pilot-testing certain questions on two teachers who would not be part of the final interview stage. These teachers were asked to answer sample questions from the interview to ensure that the questions are clear and understandable. After completion of the piloting of the questionnaire, the researcher discussed the clarity of the instructions with the teachers, taking their suggestions into account. All the interviews were recorded on audiotape, and the tapes have been stored in safekeeping as a quality assurance measure, should it become necessary to submit them to verify the accuracy of the transcripts.

4.6.2 Validity

Maree and Pietersen (2007:147) stated that a measurement instrument can be considered valid if it measures what it is supposed to measure. De Vos *et al.* (2004:166) and Fraenkel and Wallen (2006:151) added another dimension, namely the degree to which researchers measure what they planned to measure. Validity can also be categorised according to content validity, construct validity and face validity (De Vos *et al.*, 2005:166; Pietersen & Maree, 2008: 216-217).

Content validity, which refers to the extent to which the instrument covers the complete content it set out to measure (Pietersen & Maree, 2008:217), was obtained in this study by means of presenting experts in the field with a draft version of the instruments to be used in view of identifying possible strengths and weaknesses before being finalised. **Construct validity** refers to validity that is needed for standardisation and has to do with how well the construct covered by the instrument is measured by different groups or related items (Pietersen & Maree, 2008:217). The data collection instrument used in this study succeeded in measuring the construct in question, namely assessment and quality assurance, because the questionnaire sections focused on a variety of related components in terms of assessment, quality assurance, moderation

and holistic assessment (see Appendix C). **Face validity** was enhanced through the pilot study due to the comments of respondents, indicating that it appeared to measure quality assurance and assessment. In this study, the consistency of the findings was checked through the pilot study and triangulation of the findings. Nieuwenhuis (2007:80) emphasised the value of triangulation to improve the validity and reliability of research or the evaluation of findings.

During this research the pilot-testing of the questionnaire and the interviews contributed towards the validity of the research instruments. Consulting the supervisor and other specialists also provided direction and guidance in constructing and developing the questionnaire (see 4.5.1) and also in designing and planning the group interviews (see 4.5.2). Using the mixed-method approach (see 4.4.2) also contributed towards the validity of the study and towards triangulation (using questionnaires and interviews).

The use of "methodological triangulation" (Denzin & Lincoln, 2000:443, Terre Blanche & Durrheim 1999:431) in this research can be upheld as a claim to validity. The fact that multiple sources of data were collected, revealing common themes (see table 4.3), contributes to the validity of the conclusions drawn from the data. Denzin and Lincoln (2000:443) endorsed this by stating that triangulation is "a process of using multiple perceptions" for "verifying the repeatability of an observation or interpretation". In addition, the instruments developed in this study were informed by the literature review and based on the objectives of the study, therefore meeting the requirement of "construct validity" (Welman & Kruger, 2001:135). Welman and Kruger (2001:135) asserted that "the instrument we use to measure the variable must measure that which it is supposed to measure" if it is to meet the requirement of construct validity. Therefore, care was taken to ensure that the interview questions were developed in such a way as to ensure that the intended constructs rather than irrelevant constructs were measured. This implies that the interview questions were formulated in such a way that the data gleaned from these would give an indication of the participants' ideas, beliefs and practices pertaining to assessment from a quality assurance perspective. The observations, the research questions and their responses were linked to the

literature and theory of education in order to further ensure that the findings would be given added validity.

4.7 TARGET POPULATION AND SAMPLING

4.7.1 Population

De Vos *et al.* (2004:198) defined "population" as setting the boundaries of the study. Furthermore, it can be said that the population is the total group from which individuals are chosen for the research, as it is not realistic to include every single individual (Fraenkel & Wallen, 2006:92-93). Therefore, the population in this study consisted of the teachers from the FET school sector in the Motheo district. These teachers are the main stakeholders in terms of the quality assurance of assessment within such schools. Teachers are responsible for designing and developing their own assessment activities and examination papers in accordance with the National Protocol of Assessment (DoE, 2005:7-23). There are multiple stakeholders (parents, principals, etc.) and other factors that influence the performance of learners, but for purposes of this study the main focus was on the teachers in the classroom and their knowledge of assessment and the quality assurance thereof.

4.7.2 Sampling

A sample is a group of subjects selected as a representative of the population (McMillan & Schumacher, 2001:169). In addition, Fraenkel and Wallen (2006:92) referred to sampling as a process of selecting individuals from the overall population of the study from which information will be obtained. Sampling can be categorised into probability (random) and non-probability (non-random) sampling, as indicated by De Vos *et al.* (2004:203-207). Probability sampling is based on randomisation, while non-probability sampling is done without the use of randomisation.

In this study, probability sampling by means of simple random sampling was used to select the respondents. Ten schools – and the selected respondents from those schools

– were randomly selected from the high-, average- and low-performing schools in the Motheo district. This selection was based on the 2009 Grade 12 results. The sample size was 215 teachers out of a population of 2 690 FET teachers in 2009 which was a representative sample that could be expected to contribute towards the validity and reliability of the research (Ary, Jacobs & Razavieh, 1990:178). The 10 schools selected (two of the original selected 12 schools were not available to participate in the research) were grouped into high-, average- and low-performing schools. Figure 4.2 reflects the number of respondents from each school.
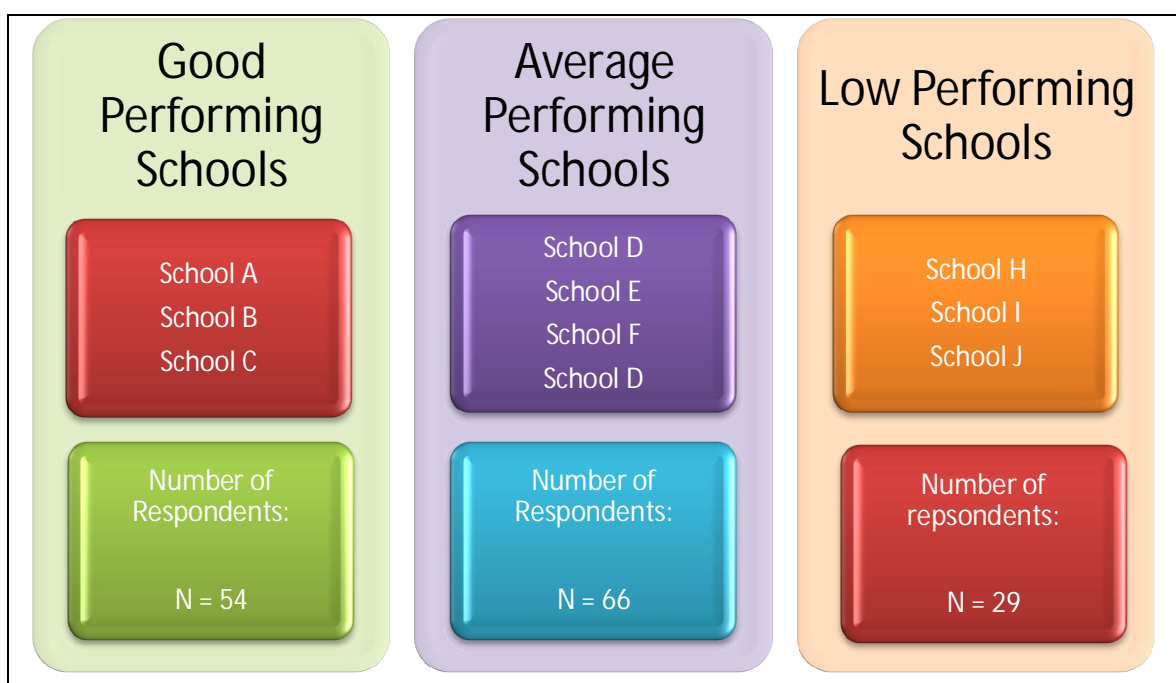
Figure 4.2: School grouping and number of respondents from each school group

In figure 4.2 it is shown that from the various school groups, 149 (69%) of the 215 questionnaires that were handed out were returned.

The same method of random sampling was also employed for the group interviews. For this purpose, interviews were held with small groups of teachers (between four and eight in each group) in the top-performing schools and the average-performing schools,

based on the 2009 Grade 12 results. Permission to hold interviews with low-performing schools were not granted to the researcher.

4.8 PILOT STUDY

A pilot study is seen as a small-scale trial of the proposed procedures that will be followed during the research. The purpose of a pilot study is to detect any possible problems so that these problems can be corrected before the main research is attempted (McMillan & Schumacher, 2001:307). De Vos *et al.* (2004:215) confirmed that the reason for the pilot study is not only to improve the effectiveness of the main research, but also to allow the opportunity for positive criticism and comments by specialists. A pilot study can also provide the researcher with information about possible responses and answers, the time aspect, and the effort needed to administer the questionnaires and complete the interviews that will enable the researcher to meet the requirements of the study (De Vos *et al.*, 2004:215).

During this study, the researcher pilot-tested the questionnaire and the questions for the group interviews (see Appendix B). The piloting of the questionnaire was done by randomly selecting one school in the Motheo district, with the principal being asked to select and permit five teachers to complete the questionnaire in their own time. After completion of the questionnaire, the researcher and respondents discussed the clarity of the instructions and possible suggestions to improve the questionnaire. The piloting of the questions for the group interview was done by asking two teachers (subject to availability) who had not completed the questionnaire to answer sample questions from the interview. None of the participants in the pilot study were included in the final research.

4.9 RIGOUR OF THE RESEARCH

Rigour refers to the adequacy and appropriateness of the method and the solidity of the research design to address the questions proposed (Morse, 2004:501). Several

measures were taken into consideration in order to ensure the rigour and trustworthiness of this study (Babbie & Mouton, 2001:275). Drawing from the study of Thulo (2008:22), the researcher used, *inter alia*, the following:

- *Triangulation of data:* Links between information obtained from the teachers by means of group interviews and a questionnaire, and from the literature, were investigated.

- *Verified interview items and questionnaire:* The researcher used interview items and questionnaires that had been assessed by his supervisor to ensure that what had to be measured was indeed measured adequately.

- *Auditing:* A systematic record of all documents, notes, tapes and transcriptions was safely stored to make it possible for other researchers to investigate the trustworthiness of the data.

The danger of selective or misleading reporting of the research findings was avoided.

4.10 DATA ANALYSIS

4.10.1 Quantitative Data Analysis

Mouton (2001:108) noted that analysis involves "breaking up" the data into manageable themes, patterns, trends and relationships (see Chapter 5).

Descriptive statistics were used to organise and summarise the data meaningfully in order to promote an understanding of the data in a meaningful way (Maree & Pietersen, 2007:185). The data is presented in graphical and numerical form – the latter by summarising the variable by means of a frequency distribution – to determine the respondents' awareness of certain constructs in the questionnaire or their opinion on something for which scales were used. This was done by determining the mean of a Likert scale with five responses, requiring each respondent to indicate the frequency

with which assessment practices, for example, are employed at their school. The respondents were asked to relate their experiences according to a five-point Likert scale, which was analysed by calculating the arithmetic mean of the different items. The value that was obtained was not necessarily an integer that was in concurrence with the scale values of one to five. To interpret these results, the following meaning was allocated to the intervals in this study:

- Between 1.00 and 1.50 – Never
- Between 1.51 and 2.50 – Seldom
- Between 2.51 and 3.50 – Sometimes
- Between 3.51 and 4.50 – Often
- Between 4.51 and 5.00 – Almost always

An overall arithmetic average was also calculated for all items per group for each section.

As the researcher sought to go beyond summarising and describing data, inferential statistics were also utilised to interpret differences between the responses from teachers in the different school groups (good, average and low performing regarding the cognitive, affective and psychomotor domains).

Analysis of variance (ANOVA) (see table 5.26) was conducted, which, according to McMillan and Schumacher (2006:32), allowed the researcher to determine the significant differences between all groups and to make more accurate probability statements. If significant results were revealed between the different groups of variables by means of the ANOVA the hypothesis was accepted or rejected on the 5% significance scale that indicates the likelihood of a change that can occur. The latter will provide the evidence that the hypotheses would be rejected or accepted. The following hypothesises were formulated for the three domains:

Cognitive Domain:

H_0 There is no difference in how teachers of the various schools assess the learners on the cognitive domain.

H_1 There is a difference in how teachers of the various schools assess the learners on the cognitive domain.

Affective Domain:

H_0 There is no difference in how teachers of the various schools assess the learners on the affective domain.

H_1 There is a difference in how teachers of the various schools assess the learners on the affective domain.

Psychomotor Domain:

H_0 There is no difference in how teachers of the various schools assess the learners on the psychomotor domain.

H_1 There is a difference in how teachers of the various schools assess the learners on the psychomotor domain.

In order to determine the internal consistency of the questionnaire, Cronbach's alpha coefficient was used, which is based on inter-item correlations. If the items are strongly related, the internal consistency will be high and the alpha coefficient will be close to one. The following guidelines were suggested by Maree and Pietersen (2007:216) as a means to interpret values (see table 5.1):

- 0.90 – High reliability
- 0.80 – Moderate reliability
- 0.70 – Low reliability

Table 4.2 provides a summary of the execution of the quantitative method.

Table 4.2: Summary of the quantitative method

	Research instruments	Data collection	Data analysis
Quantitative method	*Questionnaire*	- Closed-ended questions - Likert scale	- Descriptive statistics: frequencies, averages and percentages - Inferential statistics: Cronbach alpha coefficient and ANOVA - Data presentation in tabular form and figures.

Table 4.3 indicate how the questions of the questionnaire were grouped in order for the researcher to effective analyse the data obtained from the various questions in the questionnaire:

Table 4.3: Grouping of questions for data analysis

Section	Subsection	Questions
1: General Information	- Teacher information (demographical/biological - 1.1) - General information on assessment (1.2) - General information on quality assurance (1.3)	1 – 4 1 – 7 1 – 9
2: Assessment	- Availability and readability of the assessment protocol - Awareness of the assessment protocol - Implementation of the assessment protocol - Implementing various assessment instruments - Assessment process and implementation of an assessment - strategy - Feedback and review process	1, 10 3, 5, 7, 8, 9 2, 4, 6, 11, 16 13, 14, 18, 19, 20, 21, 31 12, 15, 17, 23, 24, 26, 28, 30 22, 25, 27, 29
3: Quality Assurance	- Curriculum implementation - Equal opportunities for all learners - Feedback process - Assessment process - Teaching and learning - Teacher co-operation and communication - Continuous assessment	1, 2 3, 4, 5, 6, 7, 8, 9, 10, 11 13, 18, 23 12, 14, 15, 22, 24 16, 17 19, 20, 25 21
4: Moderation	- Employing high-quality assessment - Incorporating the various domains - Policy adherence	1, 2, 4, 8, 9, 11 3, 5, 6, 7, 10 12, 13, 14, 15, 16
5: Holistic Assessment	- Cognitive domain - Affective domain - Psychomotor domain	3, 6, 9, 12, 15 2, 5, 8, 11, 14 1, 4, 7, 10, 13

4.10.2 Qualitative Data Analysis

Data obtained from the group interviews was recorded, organised, transcribed and summarised to identify general and unique themes (see 5.4). The first step was to transcribe the data in order to identify and organise the main themes and issues. The main themes were identified as follows:

- Section 1: General quality of assessment in schools
    - Section 1.1: General quality of assessment (see 5.4.3.1);
    - Section 1.2: Holistic assessment (see 5.4.3.2);
    - Section 1.3: Effective assessment methods(see 5.4.3.3);
    - Section 1.4: Influences on the quality of assessment (see 5.4.3.4);

- Section 2: Quality assurance
    - Section 2.1: Moderation mechanisms (see 5.4.4.1);
    - Section 2.2: Advantages of quality assurance (see 5.4.4.2);

Each transcription was then analysed to generate categories, themes and patterns. During this step, data was coded to identify keywords. The third step during this process involved the composition of a matrix, which gave the researcher the opportunity to determine differences, similarities and patterns. Finally the data was categorised into themes and subthemes (see table 5.27, 5.28, 5.29 & 5.30) and a report was compiled on the group interview data in order to give meaning to the data (see 5.4). Table 4.4 provides a brief summary of the qualitative data analysis;

Table 4.4: Summary of the qualitative method

	Research instruments	Data collection	Data analysis
Qualitative method	*Group interviews*	- Predetermined open-ended questions - Tape-recording	- Transcribing - Identifying themes - Ascribing codes - Interpreting and reporting the data obtained (see 5.4)

4.11 RESEARCH ETHICS

Fraenkel and Wallen (2006:54) referred to ethics as "conforming to the standards of conduct of a given profession or group". The concept of research ethics is crucial to the credibility of any research, and every researcher must strive to protect respondents from harm, ensure confidentiality of the research data, and avoid deception (Johnson & Christensen, 2004:94-96). De Vos *et al.* (2004:75) agreed, stating that ethics is a set of widely accepted moral principles followed to ensure that any study and/or research is conducted in a professional manner. Cohen *et al.* (2007:52-75) identified steps that should be taken in order to ensure that the research is conducted in a professional manner, including: getting informed consent, avoiding deception, and considering privacy issues. In order to ensure that this study was conducted according to ethical standards, the researcher was granted permission from the Free State Department of Education to conduct the fieldwork. The principals of the schools visited also gave permission for the research to be conducted in their schools (Appendix A). The researcher ensured that all respondents were aware of the goal and objectives of the research, which also helped to ensure that no respondent was deceived. To ensure the confidentiality and anonymity of respondents during the group interviews, the participating schools and teachers were given the following designations: School A (Participants A, B, C & D), School B (Participants E, F, G & H) respectively. In the

quantitative analysis, reference was only made to the groups of schools involved in the research. All personal and identifiable information, as well as the data provided by the participants, has been – and will continue to be – protected at all times.

4.12 CONCLUSION

This chapter provided an overview of the research design used in this study. The rationale for selecting the mixed-method approach was provided along with a discussion on the literature review and the quantitative and qualitative methods employed. For this study, the researcher also chose to make use of a questionnaire as explained in 4.5.1, as well as group interviews as explained in 4.5.2, in order to supplement the above-mentioned research methods. For this study to be valuable and effective, the researcher also ensured that the study met the terms of reliability (see 4.6.1) and validity (see 4.6.2). In order to ensure that the research represented the population of the study, the researcher also focussed on the population (see 4.7.1) and sampling (4.7.2). A pilot study was crucial in ensuring the validity and reliability of the research, as discussed in 4.8. A discussion on data analysis and ethical considerations formed the final part of this chapter, while the analysis, interpretation and presentation of the data form part of the next chapter.

To ensure validity, a large sample size was randomly selected from the population in order to reflect/represent the population. After the collection of data, the researcher relied on numerical data to present the possible relationship between the different independent and dependent variables. The Cronbach alpha coefficient was calculated to determine the internal consistency of the various questionnaire sections and was also used as a reliability coefficient to calculate the extent to which items, such as those found in the questionnaire, correlate positively with one another.

As mentioned, both quantitative and qualitative research methods (mixed-method approach) were employed to ensure that the researcher could eliminate the chance of errors.

CHAPTER 5

RESEARCH FINDINGS, ANALYSIS AND INTERPRETATION OF RESULTS

5.1 INTRODUCTION

The foregoing chapters comprised a literature review on assessment and quality assurance and the methodology employed to address the research questions. This chapter reports on the key findings, analysis and interpretation of the empirical study. The overarching aim of this empirical research was to investigate assessment practices in the Motheo further education and training (FET) school sector from a quality assurance perspective. To achieve this aim, the following objectives were pursued in the empirical investigation:

- To investigate teachers' awareness of quality assurance measures that should be implemented during assessment practices in schools;
- To determine whether teachers assess learners in totality – in other words, whether learners are assessed on the cognitive, affective and psychomotor domains; and
- To investigate the extent to which that quality assurance measures are implemented.

The research was conducted in two phases: Phase one to establish the findings from the quantitative research method and phase two to support the findings from the first phase by means of a qualitative research method. The literature on assessment and quality assurance implemented in the FET phase was discussed in chapters two and three and was the primary source of information used to construct the questionnaire (see Appendix C) and the interview questions (Appendix B). The latter were designed to establish the extent of FET teachers' general knowledge on assessment and quality assurance, as well as the implementation thereof. The quantitative data has been presented by means of descriptive and inferential statistics and graphs, and all

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important information relating to the qualitative data is described in as much detail as possible (see 5.4).

The data gathered during the quantitative research process is structured according to the different sections (see Fig. 4.2) for the different school groups, namely good-performing schools (GPS), average-performing schools (APS) and low-performing schools (LPS) in the Motheo district, based on 2009 Grade 12 results. The different sections (see Appendix C) addressed are:

- Section 1:

  General information in respect of educator/teacher information (Section 1.1)

  General information on assessment (Section 1.2)

  General information on quality assurance (Section 1.3)

- Section 2:

  Assessment

- Section 3:

  Quality assurance

- Section 4:

  Moderation

- Section 5:

  Holistic assessment

To ensure that the data obtained is trustworthy the reliability of the questionnaire was determined.

5.2 RELIABILITY OF THE QUESTIONNAIRE

The Cronbach alpha coefficient was calculated to determine the internal consistency of the various questionnaire sections, as well as the reliability of the questionnaire. The Cronbach alpha coefficient measures the consistency among individual items in a scale (Simon, 2008). Sekaran (2000) pointed out that if the internal consistency increases, reliability is enhanced and the Cronbach alpha reliability coefficient tends to move closer

to 1, which will imply perfect reliability. The following guidelines for the interpretation of Cronbach's alpha reliability coefficient are suggested: a value of 0.7 indicates low reliability, a value of 0.8 indicates moderately reliability, and a value of 0.9 indicates highl reliability (Pietersen & Maree, 2007:216). The overall Cronbach's alpha coefficient for the questionnaire was calculated at 0.916 (see Table 5.1), which implies that the data obtained from the questionnaire is of high reliability.   The Cronbach alpha coefficients for the different sections are in concurrence, which indicates that the data is highly reliable. Table 5.1 depicts the Cronbach alpha coefficients that were calculated for the various constructs in the questionnaire.

Table 5.1: Cronbach Alpha coefficients

Section	Cronbach Alpha coefficient
1 – General Information	0.901
2 – Assessment	0.906
3 – Quality Assurance	0.911
4 – Moderation	0.926
5 – Holistic Assessment	0.922
Average	0.916

5.3 ANALYSIS AND INTERPRETATION OF QUANTITATIVE DATA

The deductions presented in this section are based on the findings from the questionnaire. The researcher sought to infer the responses of the teachers in an attempt to explain their understanding of assessment and quality assurance and the implementation thereof.

The analysis of the data was guided by the three key questions listed in Chapter 1 (see 1.2 & 5.1) of this study. In order to address the research questions, the following sections were identified (as discussed below).

5.3.1 Section 1.1: Biographical data

The following responses provided the researcher with the general biographical information of the respondents (see Table 5.2). This section allowed the researcher to explore information relating to the respondents that might have an effect on the performance of the learners or on the respondents' knowledge and implementation of assessment and quality assurance.

Table 5.2: Gender of teachers

Gender	N	%
Female	110	74
Male	37	25
Missing	2	1
Total	149	100.0
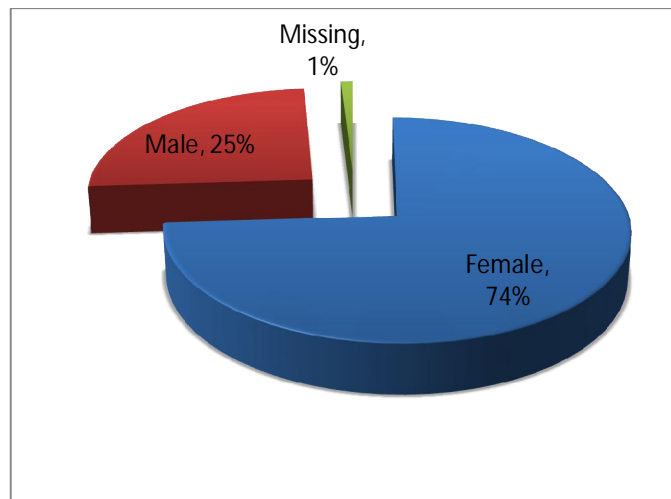
Table 5.2 shows indicates that of the 149 teachers participating in this study, the majority (74%) were female (N=110), with males (N=37) constituting 25% of the population.

Table 5.3 reflects the biographical information regarding the age groups of the teachers.

Table 5.3: Age of teachers

Age	N	%
20 – 24	16	11
25 – 30	20	13
31 – 35	21	14
36 – 40	23	15
41 – 50	32	21
51+	35	24
Missing	2	2
Total	149	100.0
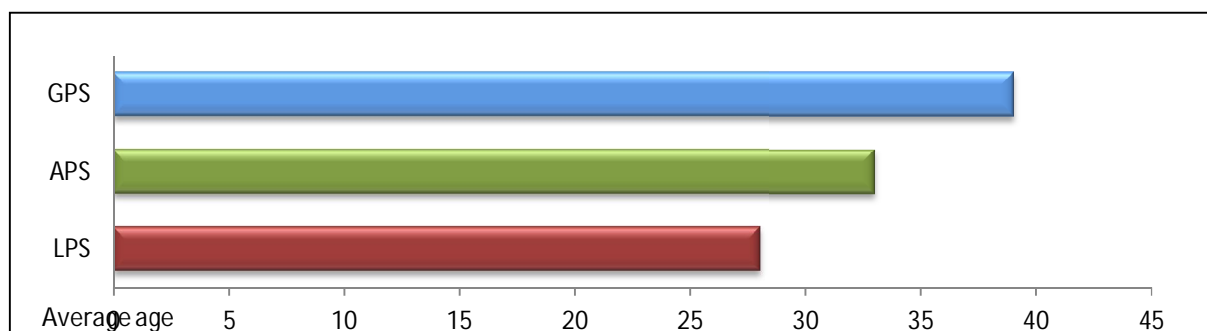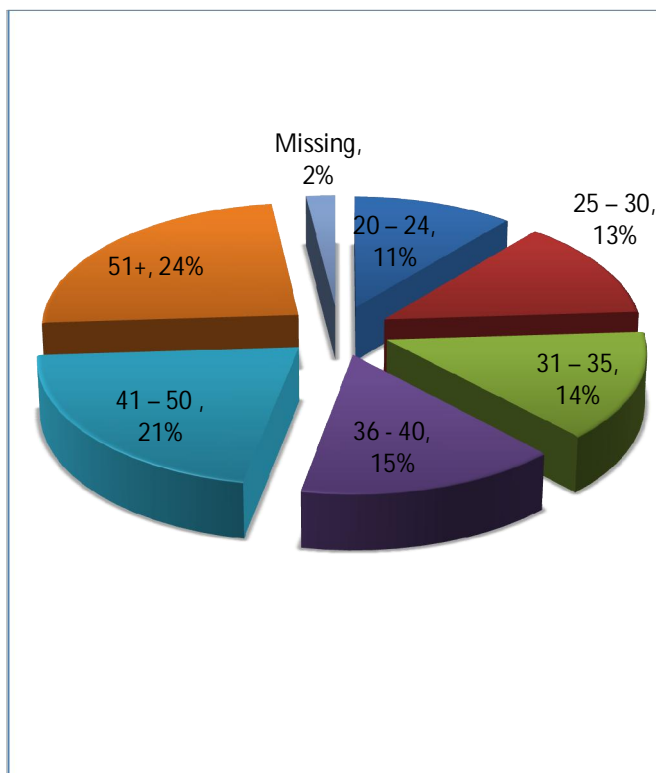
Table 5.3 indicates that the majority of teachers who participated in the research were younger than 40 years (N=80), followed by teachers between the ages of 41 and 50 years (N=32) and those older than 51 years (N=35). It can also be deduced that the majority (N=111) of teachers participating were aged 31 years and older. Clear distinctions in the average age of teachers in the different school groups were noted. The average age of teachers in GPS was 39, while in APS it was 33 years and in LPS

28 years. This can imply that experience in terms of age can have an influence on the performance of learners.

Tables 5.4, 5.5 and 5.6 represent the teaching experience of the teachers in the three school groups (GPS, APS and LPS).

Table 5.4: Teacher experience in the good performing schools (GPS)

Months	N	%
6	1	2
12	1	2
18	2	4
24	4	7
36+	42	78
Missing	4	7
Total	54	100.0
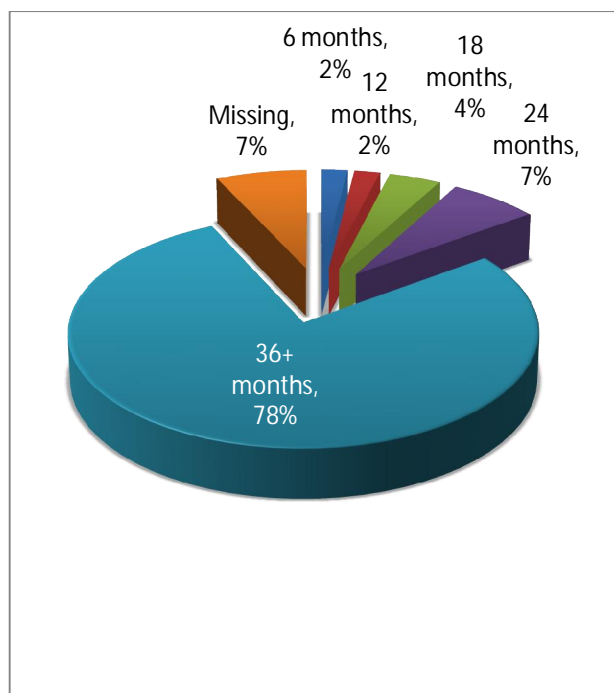
Table 5.4 indicates that the majority (N=42) of GPS participants had 36+ months' teaching experience, while only 4% (N=2) had one year or less teaching experience.

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Table 5.5 reflects the biographical information of APS teachers in relation to their teaching experience.

Table 5.5: Teacher experience in the average performing schools (APS)

Months	N	%
6	7	11
12	2	3
18	3	4
24	2	3
36+	48	73
Missing	4	6
Total	66	100.0
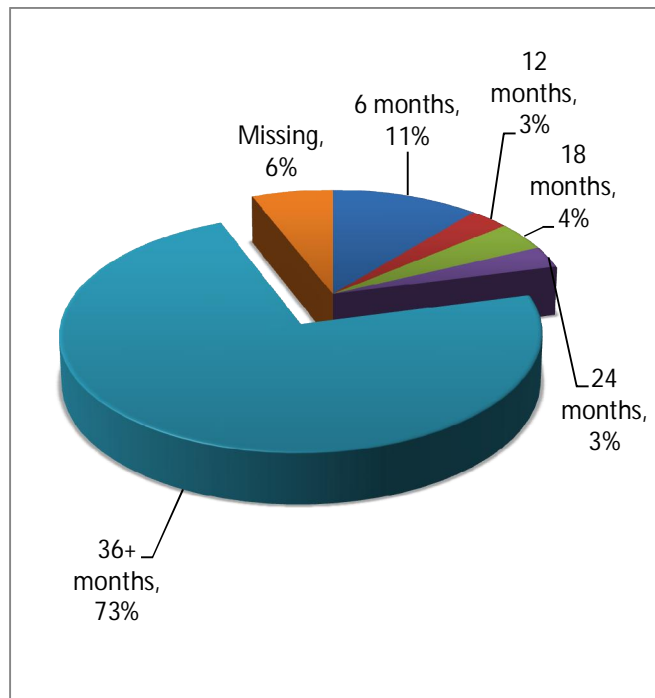
Table 5.5 shows that the majority (N=48) of APS participants had 36+ months' teaching experience. However, if compared to GPS teachers (Table 5.4), there were 10% more APS teachers with one year or less teaching experience.

Table 5.6 depicts the teaching experience of the LPS teachers in the FET sector.

Table 5.6: Teacher experience in the low performing schools (LPS)

Months	N	%
6	1	3
12	0	0
18	3	10
24	5	17
36+	20	70
Missing	0	0
Total	29	100.0
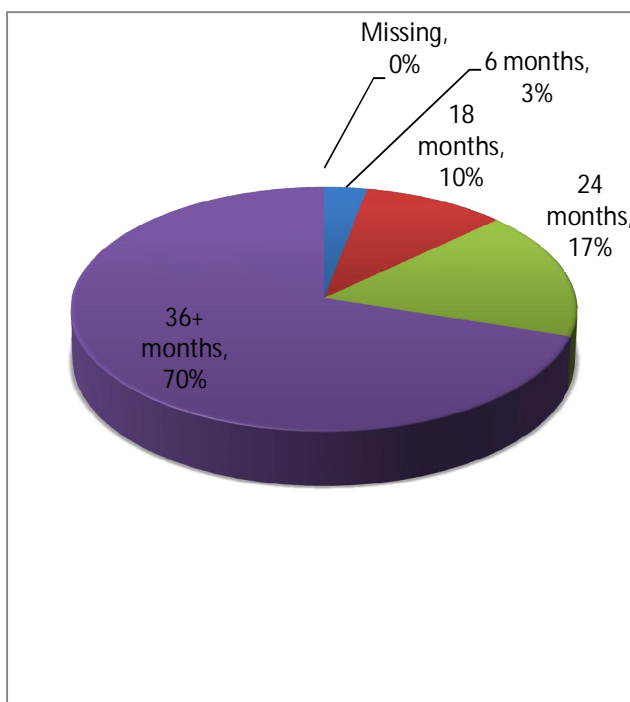
Table 5.6 indicates that 70% (N=20) of LPS participants had 36+ months' teaching experience. In other words, 30% had less than 36 months' experience. In comparison with GPS (Table 5.4) and APS (Table 5.5), it seems that LPS teachers had the least teaching experience in the Motheo FET sector.

The data gathered from Tables 5.4, 5.5 and 5.6 reveal a tendency for LPS teachers to be less experienced. The assumption can be made that this lack of experience amongst LPS teachers can have a negative effect on the performance of the learners, as well as serious implications for the quality of teaching and learning.

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Table 5.7 displays the related positions of the teachers who participated in the research.

Table 5.7: Position of teachers

Position	N	%
Principal	1	0.65
Vice-principal (VP)	3	2
Head of Department (HOD)	20	13
Subject Head	31	21
Teacher level	89	60
Missing	5	3.35
Total	149	100.0
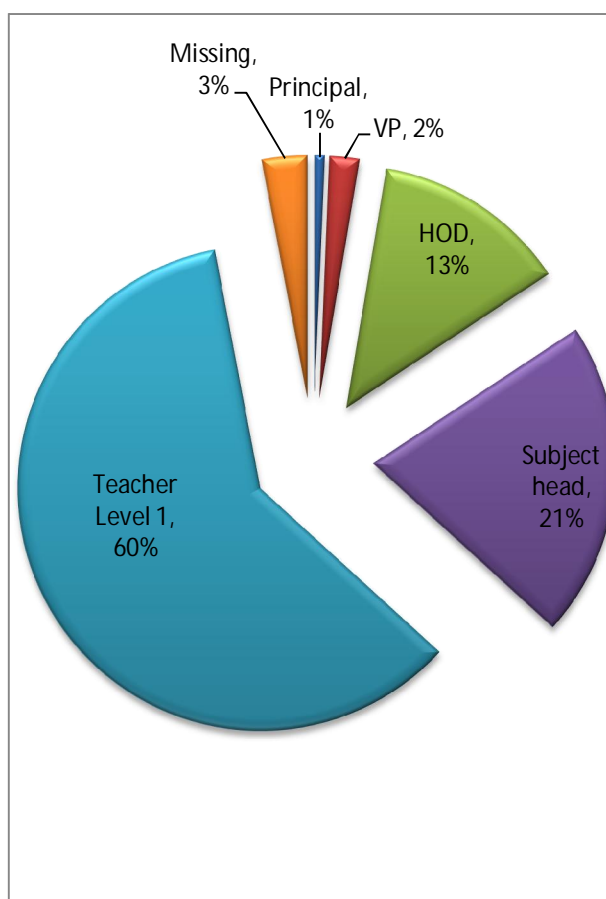
Table 5.7 shows that the majority (N=89) of the participants who took part in the study were level-one teachers and subject heads (N=31) who were responsible on a daily basis for all classroom activities in the FET sector. One principal, three vice-principals and 20 heads of department also participated in the research. An assumption can be made that all level-one teachers who participated were informed about what was expected of them during the assessment process.

The paragraphs below report on the data analysis and interpretation of the responses in the section of the questionnaire relating to general information on assessment.

5.3.2 Section 1.2: General Information on Assessment

This section of the questionnaire focused on gathering information from teachers regarding their general knowledge of assessment and the assessment policy documents. Table 5.8 illustrates teacher awareness of the National Protocol on Assessment.

Table 5.8: Teacher awareness regarding The National Protocol on Assessment

Good Performing Schools (GPS)			Average Performing Schools (APS)			Low Performing Schools (LPS)		
Yes	96%	N = 52	Yes	91%	N = 60	Yes	76%	N = 22
No	0%	N = 0	No	9%	N = 6	No	24%	N = 7
Missing	4%	N = 2	Missing	0%	N = 0	Missing	0%	N = 0
Total	100%	N = 54	Total	100%	N = 66	Total	100%	N = 29
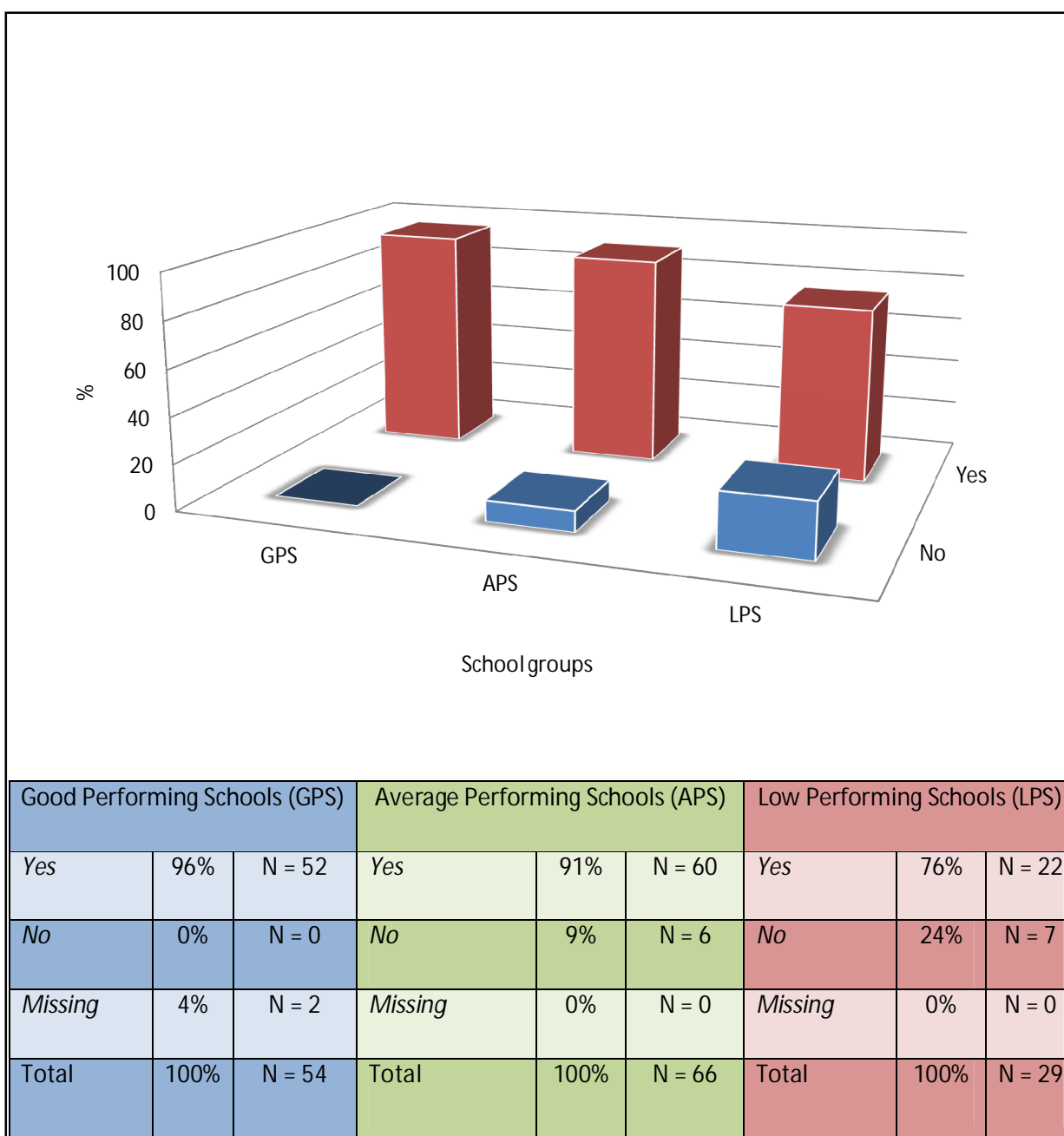
Being aware of the National Protocol on Assessment will provide the necessary information on the implementation of assessment and ensure quality assurance. The information provided in Table 5.8 will contribute towards the first research question, namely teachers' awareness of quality assurance measures regarding assessment (see 1.2). From Table 5.8 it can be deduced that the level of awareness concerning the National Protocol on Assessment differs amongst the three school groups and that the tendency is for there to be a slight decline in the level of awareness from GPS (N=52 or 96%), to APS (N=60 or 91%) and to LPS (N=22 or 76%). It is encouraging to note that the majority (N=134 or 90%) of teachers indicated that they were aware of the National Protocol on Assessment. However, it is recommended that all teachers be aware of the policy documents, because lack of knowledge can have a significant effect on the quality of assessment (see 2.7.2).

Table 5.9 reflects the results regarding the average number of assessment tasks provided by the responding teachers during a school year.

Table 5.9: Average number of assessment tasks during the school year

Good Performing Schools (GPS)	Average Performing Schools (APS)	Low Performing Schools (LPS)
14	10	12
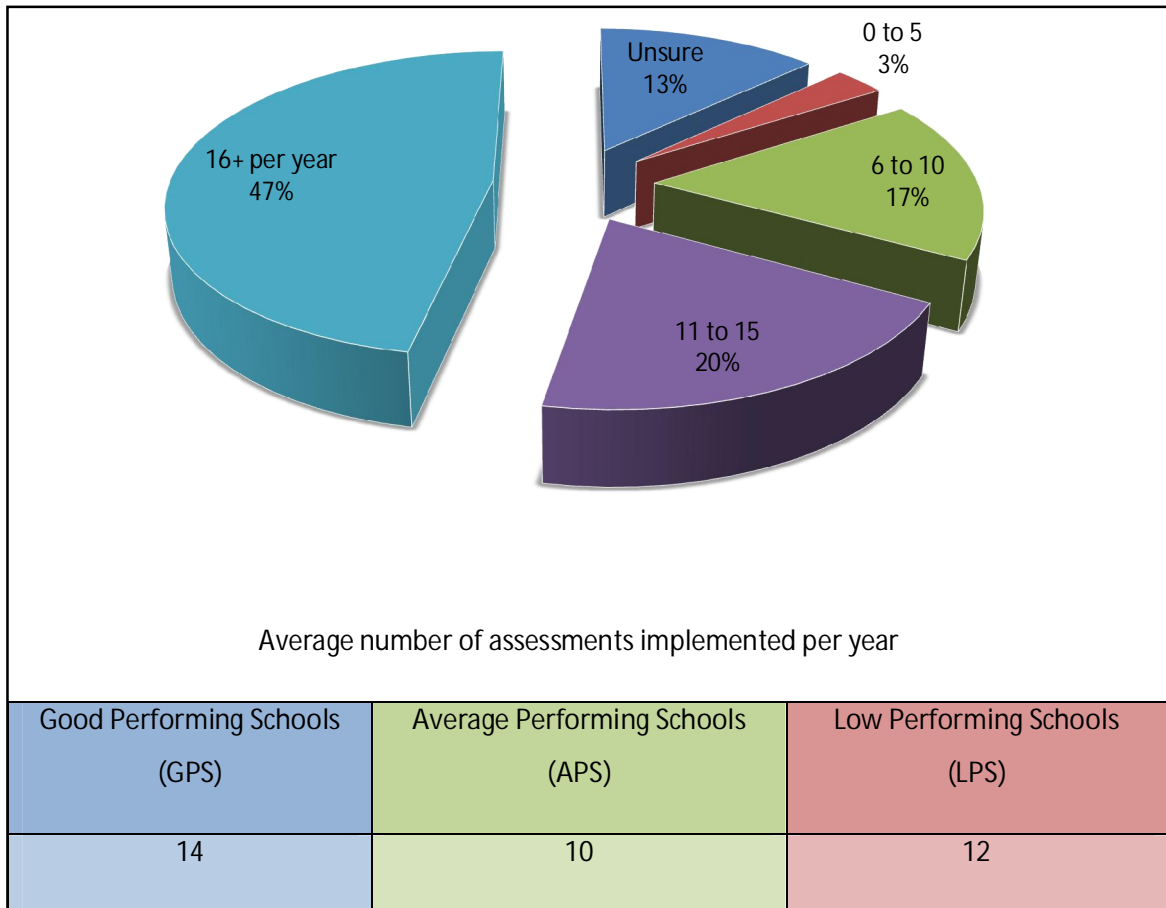
Table 5.9 represents the average number of assessment tasks implemented by respondents annually. The number of assignments varied from 0 – 5 to more than 16 and less than 20. The data revealed that 67% of the respondents were assigning more than 10 but fewer than 20 tasks annually. This finding meets the requirements of the National Protocol on Assessment (DoE, 2005:16), which states that between eight and 15 assessment opportunities/tasks are acceptable. Furthermore, from Table 5.9 it can be deduced that no significant difference was found in the number of assessment tasks assigned in the various school groups (also see Chapter 2, tables 2.1 & 2.2).

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Table 5.10 reflects information regarding teacher awareness concerning the rating scale to be implemented.

Table 5.10: Awareness regarding the rating code and scale for Grade 7 - 12

School Groups	Yes		No		Not Sure		Missing		Total	
	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
GPS	90	49	2	1	4	2	4	2	100	54
APS	88	58	11	7	/	/	1	1	100	66
LPS	62	18	7	2	31	9	/	/	100	29

The National Protocol on Assessment (DoE, 2005:16) also provides a rating scale for schools to be employed in interpreting learner performance (see Table 2.3). Table 5.10 indicates the level of awareness amongst FET teachers in the Motheo district regarding the rating scale to be employed in assessing learner performance. The responses revealed that the majority (N=125 or 84%) of the respondents were aware of the rating scale. Although a relatively high number (N=18 or 62%) of LPS teachers indicated that they were aware of the rating scale, this frequency is relatively lower than the GPS table (N=49 or 90%) and APS table (N=58 or 88%).

The teachers' responses, as reflected in Table 5.11 below, allowed the researcher to determine the possible constraints on assessment and quality assurance in the FET phase.

Table 5.11 also reflects the responses of the teachers from the different schools in respect of whether the school in question is a government or semi-private school, as well as the average number of learners per class.

Table 5.11: General school information

Good Performing Schools (GPS)			Average Performing Schools (APS)			Low Performing Schools (LPS)		
Government school	N=50	93%	Government school	N=62	94%	Government school	N=27	93%
Semi-Private	N=1	2%	Semi-Private	N=0	0%	Semi-Private	N=0	0%
Missing	N=3	5%	Missing	N=4	6%	Missing	N=2	7%
Total	N=54	100%	Total	N=66	100%	Total	N=29	100%
Number of learners per Class			Number of learners per Class			Number of learners per Class		
10-20	/	/	10-20	N=1	1.5%	10-20	/	/
21-30	N=17	31%	21-30	N=20	30%	21-30	N=3	10%
31-40	N=33	61%	31-40	N=38	58%	31-40	N=15	52%
41+	N=1	2%	41+	N=6	9%	41+	N=11	38%
Missing	N=3	6%	Missing	N=1	1.5%	Missing	/	/
Total	N=54	100%	Total	N=66	100%	Total	N=29	100%
Average number of learners		33	Average number of learners		35	Average number of learners		39

Table 5.11 displays that the majority of teachers (93%) in schools that participated in the research indicated that they are teaching in government schools. This table also shows that the majority of schools had on average more than 33 learners per class. The majority (N=33) of GPS teachers and APS teachers (N=38) had a class size varying between 31 and 40 learners, while LPS (N=15) teachers indicated the same class size. In the case of GPS, there were a few (N=17) teachers with classes numbering between 21 and 30 learners and only one instance of more than 41 learners per class. In the case of APS the situation differed, with 30% (N=20) of the teachers having between 21 and 30 learners per class and a few (N=6) having 41 and more learners per class. In the case of LPS, some teachers (N=3) had between 21 and 30 learners per class. The number of teachers in LPS (N=11) that indicated more than 41 learners per class was considerately higher than the number of teachers that indicated the same in GPS (N=1) and APS (N=6). According to the literature, the worldwide benchmark for the number of learners per classroom ranges between 12 and 18 (see 1.1). It can thus be deduced from the data that the high number of learners per class could be a constraint affecting the quality of assessment and/or quality assurance in LPS schools.

Table 5.12 gives an overall picture of possible constraints that could have an effect on the quality of assessment.

Table 5.12: Overall picture of what the different schools regard as major constraints on assessment
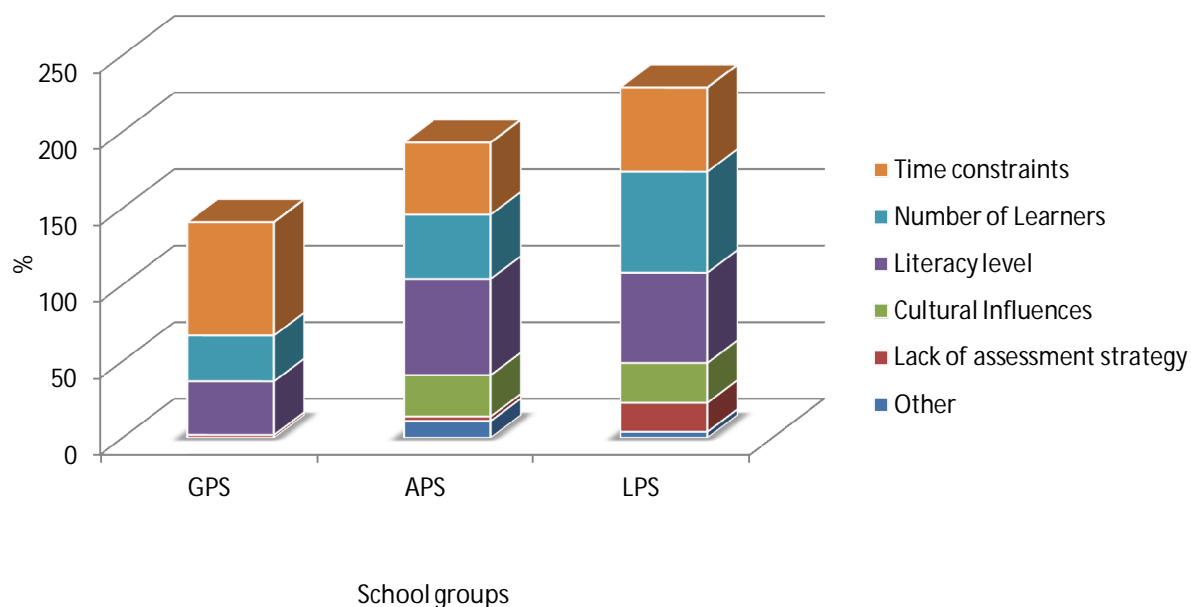
Good Performing Schools (GPS)			Average Performing Schools (APS)			Low Performing Schools (LPS)		
Time constraints	74%	N=40	*Time constraints*	47%	N=31	*Time constraints*	55%	N=16
Number of Learners	30%	N=16	*Number of Learners*	42%	N=28	*Number of Learners*	66%	N=19
Literacy level	35%	N=19	*Literacy level*	63%	N=42	*Literacy level*	59%	N=17
Cultural influences	/	/	*Cultural influences*	27%	N=18	*Cultural influences*	24%	N=7
Lack of assessment strategy	2%	N=1	*Lack of assessment strategy*	3%	N=2	*Lack of assessment strategy*	17%	N=5
Other	/	/	*Other*	11%	N=7	*Other*	3%	N=1
Total	141%	N=76	Total	193%	N=128	Total	224%	N=65

As shown in Table 5.12, the different school groups identified different issues as being the most important constraints to the quality of assessment and/or quality assurance. The majority (N=40 or 74%) of GPS teachers identified time constraints as the major impediment to the implementation of quality assessment, while the majority (N=42 or 63%) of APS teachers identified the literacy level of learners and the majority (N=19 or 66%) of LPS teachers identified the high learner-to-teacher ratio as the most significant constraints affecting the quality of assessment.

A number (N=19 or 35%) of GPS teachers also identified the literacy level of learners as a major constraint to quality assessment. Several (N=31 or 47%) APS teachers stated that they did not have enough time to plan for quality assessment, whilst some (N=17 or 59%) LPS teachers identified the literacy level of learners as a constraint to quality assessment.

GPS teachers also pointed to learner-to-teacher ratio (N=16 or 30%) and lack of implementation of assessment strategies (N=1 or 2%) as lesser constraints to quality assessment. In comparison, APS teachers identified learner-to-teacher ratio (N=28 or 42%), cultural influences (N=18 or 27%), lack of time to plan for quality assessment (N=2 or 3%) and other factors (N=7 or 11%) as constraints to quality assessment. LPS teachers highlighted time constraints (N=16 or 55%), cultural influences (N=7 or 24%), lack of implementation of assessment strategies (N=5 or 17%) and other factors (N=1 or 3%) as lesser constraints to quality assurance.

From Table 5.12 it can be deduced that teachers in all the school groups agree that the number of learners per class, time constraints and the literacy level of learners are the major constraints that effect in the quality of assessment.

5.3.3 Section 1.3: General Information on Quality Assurance

The following responses provided the researcher with general information on what teachers regard as quality assurance. According to Sallis (1996), quality assurance is directed as the measurement against specifications to which teachers should adhere, thus influencing how students are judged and validating quality.

Table 5.13: Teacher awareness regarding quality assurance

Good Performing Schools (GPS)			Average Performing Schools (APS)			Low Performing Schools (LPS)		
Yes	66%	N = 36	*Yes*	67%	N = 44	*Yes*	59%	N = 17
No	11%	N = 6	*No*	8%	N = 5	*No*	10%	N = 3
Not Sure	17%	N = 9	*Not Sure*	24%	N = 16	*Not Sure*	28%	N = 8
Missing	6%	N = 3	*Missing*	1%	N = 1	*Missing*	3%	N = 1
Total	100%	N = 54	Total	100%	N = 66	Total	100%	N = 29
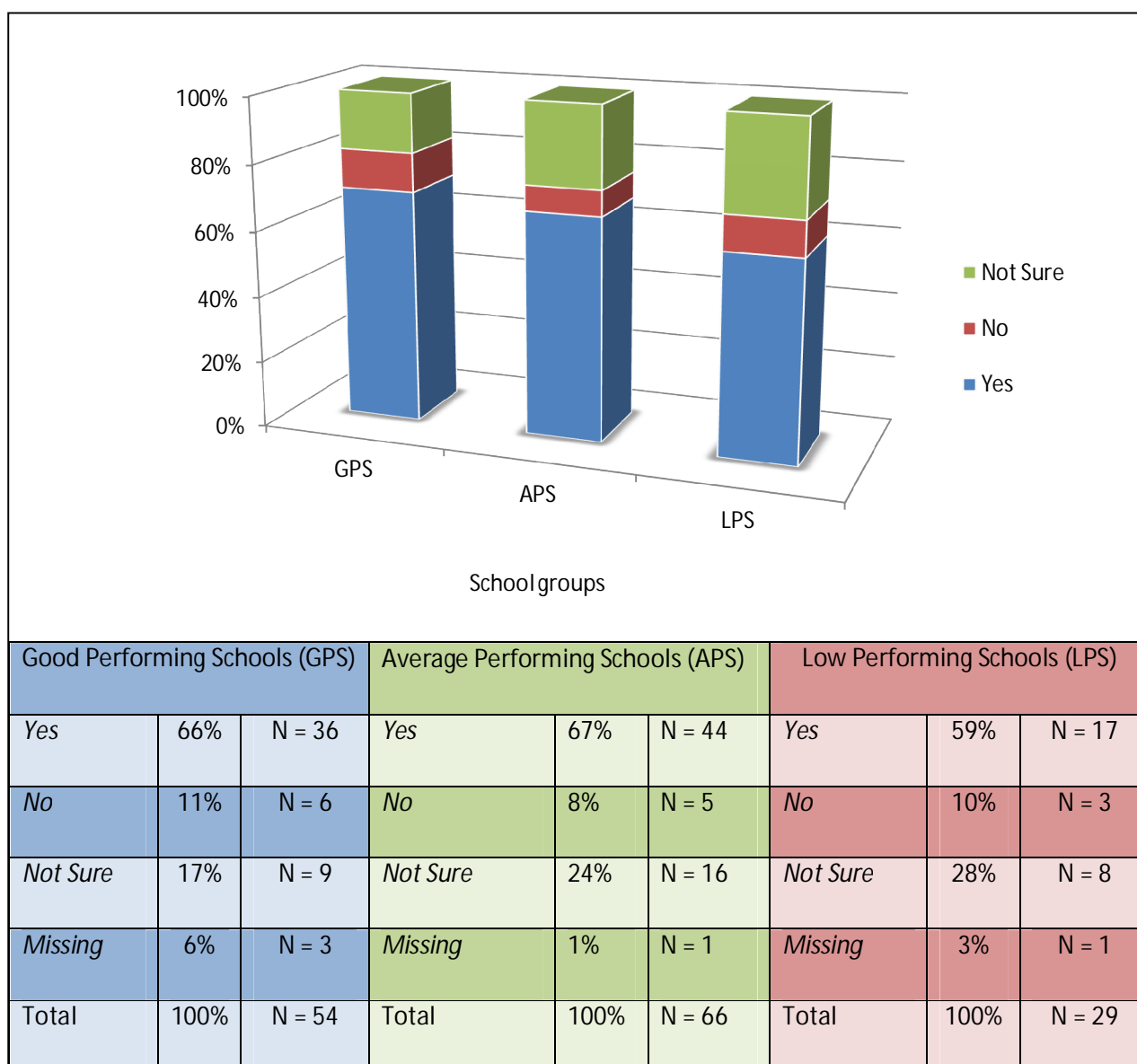
The data revealed that the majority of teachers in all three school groups – i.e. GPS (N=36 or 66%), APS (N=44 or 67%) and LPS (N=17 or 59%) – were aware of quality assurance. Despite this awareness amongst teachers, it is alarming that 28% of GPS, 32% of APS and and 38% of LPS teachers were not aware of quality assurance. The assumption can therefore be made that in order to improve quality assurance, all teachers should be made aware of what quality assurance entails. The lack of awareness links to Table 5.14 in terms of knowledge regarding quality assurance bodies.

Table 5.14 portrays teachers' knowledge regarding the quality assurance bodies and assessment documents and whether they had received in-service training on quality assurance.

Table 5.14: Teacher awareness regarding quality assurance bodies and teachers receiving in-service training

School groups	SAQA		Umalusi		IQAA		Other		In-service training					
									Yes		No		Missing	
	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
GPS	100	54	89	48	24	13	2	1	85	46	11	6	4	2
APS	91	60	47	31	56	37	/	/	85	56	15	10	/	/
LPS	86	25	38	11	48	14	/	/	59	17	38	11	3	1

The South African Qualifications Authority (SAQA), Independent Quality Assurance Agency (IQAA) and Umalusi are the three main quality assurance bodies that impacts schools in the South African educational system (see 2.2). Table 5.14 displays the teachers' awareness of these various quality assurance bodies. The research revealed that all (N=54 or 100%) GPS teachers were aware of SAQA, while 89% (N=48) were aware of Umalusi, 24% (N=13) were aware of IQAA and 1% (N=1) were aware of other quality assurance bodies. In the case of APS, 91% (N=60) of teachers were aware of

SAQA, 47% (N=31) of Umalusi and 56% (N=37) of IQAA. In the case of LPS, 86% (N=25) of teachers were aware of SAQA, 38% (N=11) of Umalusi and 48% (N=14) of IQAA, while no teachers were aware of other quality assurance bodies.

The responses in respect of whether the teachers had received in-service training in the implementation of various policy documents on quality assurance in an effort to improve their educational skills and keep up with the latest trends in quality assurance revealed that 85% (N=46) of GPS teachers, 85% (N=56) of APS teachers and 59% (N=17) of LPS teachers had received in-service training in quality assurance.

The findings reflected in Table 5.14 in some instances corroborate the findings presented and elucidated in the previous tables with regard to the reasons why the LPS group is not on par with the GPS and APS groups.

Table 5.15 aims to reveal how teachers became aware of the various quality assurance bodies.

Table 5.15: How teachers became aware of the various quality assurance bodies

Good Performing Schools (GPS)			Average Performing Schools (APS)			Low Performing Schools (LPS)		
Principal	13%	N=7	*Principal*	23%	N=15	*Principal*	7%	N=2
Other teachers	18%	N=10	*Other teachers*	9%	N=6	*Other teachers*	7%	N=2
DoE	39%	N=21	*DoE*	24%	N=16	*DoE*	38%	N=11
Internet	/	/	*Internet*	4%	N=3	*Internet*	14%	N=4
No idea	8%	N=4	*No idea*	20%	N=13	*No idea*	7%	N=2
Other	4%	N=2	*Other*	6%	N=4	*Other*	7%	N=2
Missing	18%	N=10	Missing	14%	N=9	Missing	20%	N=6
Total	100%	N=54	Total	100%	N=66	Total	100%	N=29
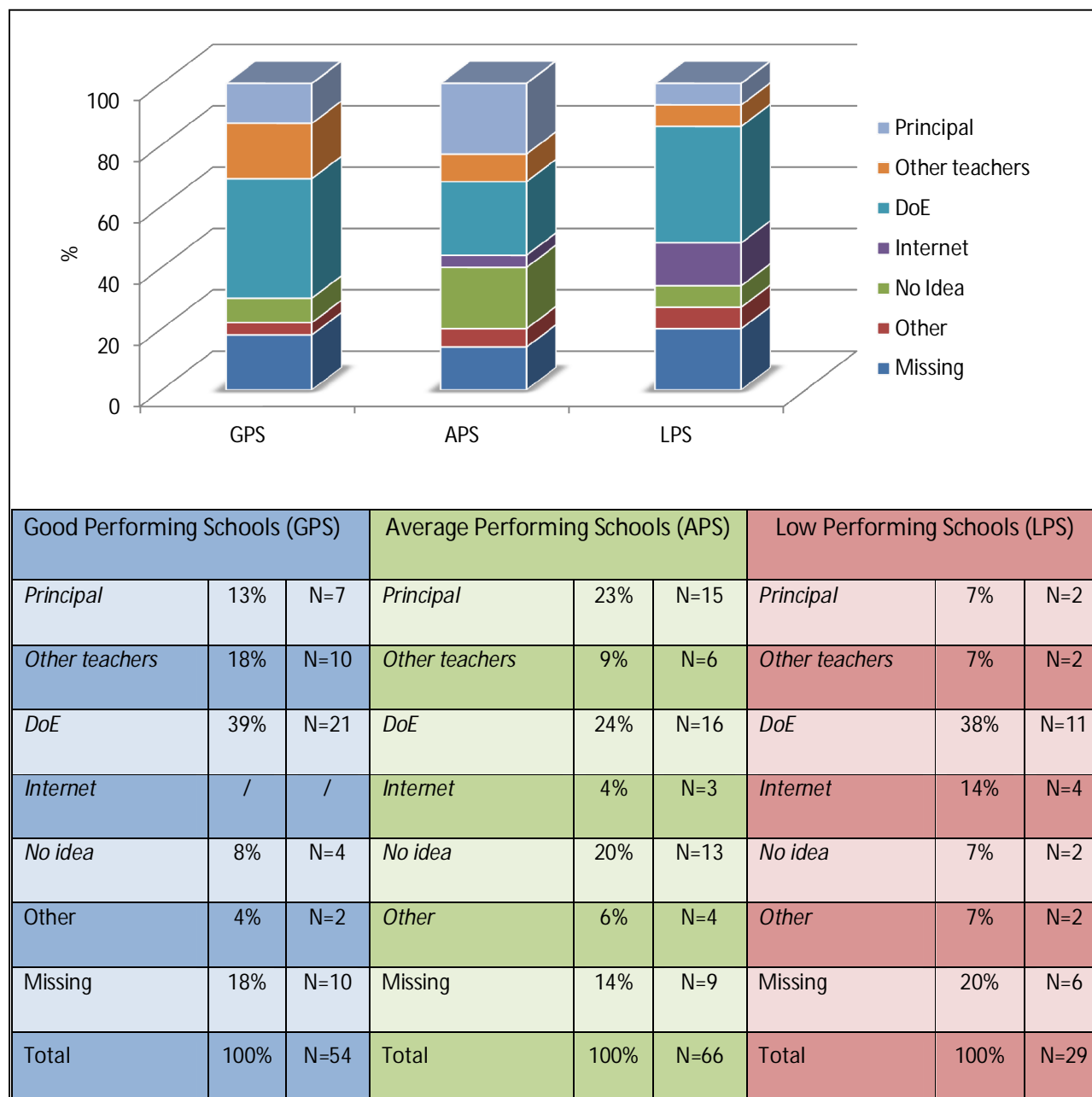
Table 5.15 portrays the means whereby the teachers became aware of the various quality assurance bodies. The data revealed that the Department of Education (DoE)

was the most popular source of information on the different quality assurance bodies, as identified by 39% (N=21) of GPS teachers, 24% (N=16) of APS teachers and 38% (N=11) of LPS teachers.

A number (N=10 or 18%) of GPS teachers had became aware of these bodies by conversing with other teachers, while 23% (N=15) of APS teachers had been informed by their principals and 14% (N=4) of LPS teachers had made use of the internet to access information on the various quality assurance bodies.

Some GPS teachers (N=7 or 13%) had been given the information by their principals and 4% (N=2) had made use of other means to access this information. In comparison, 23% (N=15) of APS teachers had become aware of the quality assurance bodies through their principals, while 9% (N=6) had obtained the information by conversing with other teachers and 6% (N=4) had made us of other sources of information. In the case of LPS teachers, 7% (N=2) had become aware of these bodies through their principals, while 7% (N=2) had obtained the information by conversing with other teachers and 7% (N=2) had obtained the information through other sources.

From the findings, it can be concluded that the teachers participating in the research were to a lesser extent dependent on their principals for the most recent and appropriate information and documentation, which points to a relative absence of the managerial role that the school principal should fulfil (see 2.6).

To ensure that high-quality assessment is implemented, it is expected of teachers to have an effective measurement system in place, which can be done by means of putting a moderation plan in place. Tables 5.16, 5.17 and 5.18 depict the measures implemented by the various schools to ensure high-quality assessment practices.

Table 5.16: Measures that GPS have in place to ensure high quality assessment practices

Measures	N	% of cases
Planning for assessment	50	93
Internal moderation	2	4
Monitoring the conduct of examinations	5	10
Moderation of the evaluation process	/	/
Other	3	6
Total	60	113

According to the data, GPS teachers were prioritising the use of the following assessment measures to ensure high-quality assessment practices: planning for assessment (N=50 or 93%), and also to a lesser extent followed by monitoring the conduct of examinations (N=5 or 10%), internal moderation (N=2 or 4%) and other processes (N=1 or 6%). The literature on the matter concurred with the empirical research (see 3.2.2.3) in that teachers need to understand the importance of self-evaluation (moderation of the evaluation process). Hopkins (1987:23) stated that self-evaluation is a means to determine what the school has accomplished academically

during the year, and that when implemented correctly, it can contribute to the improvement of educational results.

Table 5.17 reflects the data on the measures employed by APS to ensure high-quality assessment practices.

Table 5.17: Measures that APS have in place to ensure high quality assessment practices

Measures	N	% of cases
Planning for assessment	59	90
Internal moderation	/	/
Monitoring the conduct of examinations	6	9
Moderation of the evaluation process	/	/
Other	1	1
Total	66	100

APS teachers acknowledged the importance of employing measures such as planning for assessment (N=59 or 90%), and also to a lesser extent the monitoring of the conduct of examinations (N=6 or 9%) and other processes (N=1 or 1%) in order to ensure high-quality assessment. The data revealed, however, that the APS teachers placed no value on the internal moderation process and the moderation of the evaluation process.

Table 5.18 depicts the measures in place at LPS to ensure high-quality assessment practices.

Table 5.18: Measures that LPS have in place to ensure high quality assessment practices

Measures	N	% of cases
Planning for assessment	20	54
Internal moderation	4	10
Monitoring the conduct of examinations	13	35
Moderation of the evaluation process	/	/
Other	/	/
Total	37	109
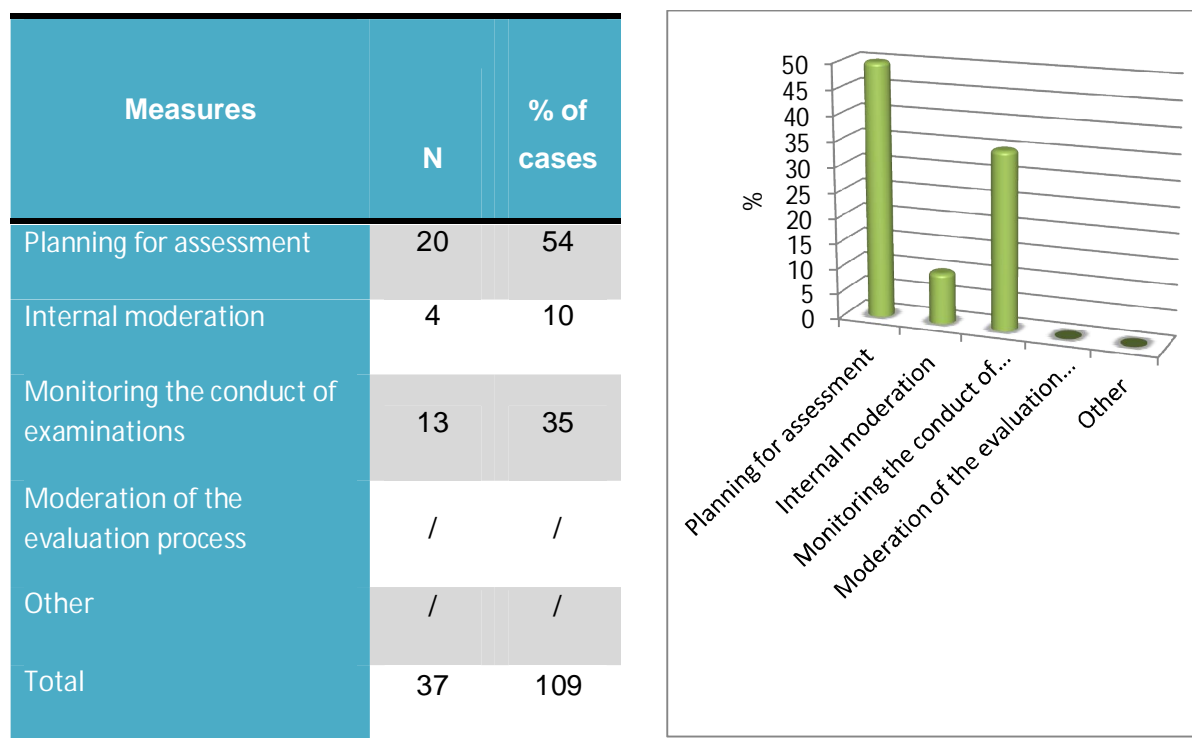
LPS teachers acknowledged the importance of employing measures such as planning for assessment (N=20 or 54%), monitoring the conduct of examinations (N=13 or 35%) and to a lesser extent internal moderation (N=4 or 10%) in order to ensure high-quality assessment. None of the LPS teachers indicated that they value the moderation of the evaluation process as a means to ensure quality assurance.

Planning for assessment was identified as the highest priority in all school groups involved, while a considerable number of constraints to the implementation of quality assurance, as shown in Table 5.18, can be recognised as impediments to ensuring high-quality assessment.

Constraints to the implementation of a quality assurance system were rated as follows by the respondents.

Table 5.19: What teachers see as constraints to quality assurance

Good Performing Schools (GPS)			Average Performing Schools (APS)			Low Performing Schools (LPS)		
No time	44%	N=24	*No time*	33%	N=22	*No time*	35%	N=10
Number of learners	34%	N=15	*Number of learners*	44%	N=29	*Number of learners*	62%	N=18
Student literacy	28%	N=18	*Student literacy*	61%	N=40	*Student literacy*	48%	N=14
Cultural Influences	/	/	*Cultural Influences*	23%	N=15	*Cultural Influences*	24%	N=7
Assessment strategy	6%	N=3	*Assessment strategy*	5%	N=3	*Assessment strategy*	10%	N=3
School management	6%	N=3	*School management*	2%	N=1	*School management*	10%	N=3
Self-evaluation	4%	N=2	*Self-evaluation*	5%	N=3	*Self-evaluation*	17%	N=5
Other	9%	N=5	*Other*	3%	N=2	*Other*	3%	N=1
Total	130%	N=70	Total	174%	N=115	Total	210%	N=61

The main aim with these questions (see Appendix C) was to determine what teachers regarded as constraints to quality assurance. Table 5.19 portrays that GPS teachers (N=24 or 44%) identified time for planning as a constraint to the successful

implementation of quality assurance. In comparison, APS teachers (N=40 or 61%) identified student literacy and LPS teachers (N=18 or 62%) identified number of learners as the main constraints with regard to quality assurance.

A fair number of GPS teachers also indentified the following as additional constraints to the implementation of quality assurance: number of learners (N=15 or 34%), and student literacy (N=18 or 28%). The rest of the listed constraints were identified by only a few as constraints to quality assurance.

In comparison, APS teachers identified the following as additional constraints to the implementation of quality assurance: insufficient time for planning (N=22 or 33%), number of learners (N=29 or 44%), cultural influences (N=15 or 23%). The rest of the listed constraints were identified by only a few as constraints to quality assurance.

Finally, LPS teachers identified the following as additional constraints to quality assurance: student literacy (N=14 or 48%), insufficient time for planning (N=10 or 35%) and cultural influences (N=7 or 24%). The rest of the listed constraints were identified by only a few as constraints to quality assurance.

Despite the fact that teachers in the three school groups had different priorities in terms of constraints, it can be deduced that they all acknowledged that such constraints can jeopardise the implementation of quality assurances in their respective schools.

A framework in which the aspect of the involvement of stakeholders can be considered is what Harman (1998:346) (see 2.4 and 3.2.1) referred to as the process of providing stakeholders with evidence of the quality of the management and the outcomes achieved. The teachers in the different schools involved in the research were asked to identify the stakeholders that they consider to be most important. Table 5.20 reflects the findings in respect of the stakeholders considered by the teachers to be most important in the school environment.

Table 5.20: Important stakeholders in the school environment

Good Performing Schools (GPS)			Average Performing Schools (APS)			Low Performing Schools (LPS)		
School management	96%	N=52	*School management*	97%	N=64	*School management*	90%	N=26
Other teachers	67%	N=36	*Other teachers*	67%	N=44	*Other teachers*	69%	N=20
Learners	56%	N=30	*Learners*	64%	N=42	*Learners*	45%	N=13
Parents	56%	N=30	*Parents*	55%	N=36	*Parents*	62%	N=18
Community	15%	N=8	*Community*	15%	N=10	*Community*	17%	N=5
Businesses	17%	N=9	*Businesses*	5%	N=3	*Businesses*	7%	N=2
Other	2%	N=1	*Other*	2%	N=1	*Other*	/	/
Total	307%	N=166	Total	303%	N=200	Total	290%	N=84

Table 5.20 shows that by far the most of the GPS teachers (N=52 or 96%) identified school management as the most important stakeholder in the school environment, while 97% (N=64) of APS teachers and 90% (N=26) of LPS teachers concurred. This to a certain extent contradicts the data reflected in Table 5.15, namely that the teachers were dependent on their principals for information.

GPS teachers also indentified the following as important stakeholders in the school environment: other teachers (N=39 or 67%), learners (N=30 or 56%), parents (N=30 or 56%). The community (N=8 or 15%), businesses (N=9 or 17%) and other stakeholders (N=1 or 2%) were not rated by most of the respondents as important stakeholders in the school environment.

APS teachers recognised the following as important stakeholders in the school environment: other teachers (N=44 or 67%), learners (N=42 or 64%), parents (N=36 or 55%). The community (N=10 or 15%), businesses (N=3 or 5%) and other stakeholders (N=1 or 2%) were not rated by most of the respondents as important stakeholders in the school environment.

Finally, LPS teachers identified the following as important stakeholders in the school environment: other teachers (N=26 or 69%), learners (N=13 or 45%), parents (N=18 or 62%). The community (N=5 or 17%) and businesses (N=2 or 7%) were not rated by most of the respondents as important stakeholders in the school environment.

According to the literature (see 3.2.2.1 and 3.3.2), stakeholders are an important part of any school system, as major companies and businesses provide financial benefits to schools, which can be used to improve the quality of school resources and in turn improve the quality of education (Taylor *et al*, 2003:56). The data revealed that in the Motheo district, a large number of teachers did not regard businesses as important stakeholders in the school environment.

The next question in the questionnaire aimed to explore ways in which the numerous constraints encountered by teachers in the assessment process can be addressed.

Table 5.21 reflects the solutions proposed by the teachers in the different schools as a means of addressing this problem.

Table 5.21: How to improve quality assurance

Good Performing Schools (GPS)			Average Performing Schools (APS)			Low Performing Schools (LPS)		
Reforming teacher training	33%	N=18	*Reforming teacher training*	29%	N=19	*Reforming teacher training*	45%	N=13
Improved salaries	78%	N=42	*Improved salaries*	58%	N=38	*Improved salaries*	55%	N=16
Performance reward system	48%	N=26	*Performance reward system*	32%	N=21	*Performance reward system*	59%	N=17
Smaller class sizes	48%	N=26	*Smaller class sizes*	71%	N=47	*Smaller class sizes*	79%	N=23
Improved in-service training	30%	N=16	*Improved in-service training*	33%	N=22	*Improved in-service training*	72%	N=21
Technology &Resources	32%	N=17	*Technology &Resources*	56%	N=37	*Technology &Resources*	66%	N=19
Other	4%	N=2	*Other*	8%	N=5	*Other*	7%	N=2
Total	273%	N=147	Total	286%	N=189	Total	383%	N=111

Table 5.21 shows that the majority of GPS teachers (N=42 or 78%) identified improved salaries for teachers as a means to improve quality assurance. In comparison, the majority of APS teachers (N=47 or 71%) and LPS teachers (N=23 or 79%) identified smaller class sizes as the most important means of improving quality assurance.

Furthermore, a fair number of GPS teachers identified the following as means to improve quality assurance: reforming teacher training (N=18 or 33%), a performance reward system for teachers (N=26 or 48%), smaller class sizes (N=26 or 48%), improved in-service training (N=16 or 30%), improved technology/resources (N=17 or 32%).

In comparison, a fair number of APS teachers identified the following as ways to improve quality assurance: reforming teacher training (N=19 or 29%), improved salaries for teachers (N=38 or 58%), a performance reward system for teachers (N=21 or 32%), improved in-service training (N=22 or 33%), improved technology/resources (N=37 or 56%) and other factors (N=5 or 8%).

Finally, a fair number of LPS teachers identified reforming teacher training (N=13 or 45%) as a way to improve quality assurance. Most of the LP teachers identified improved salaries for teachers (N=16 or 57%), a performance reward system for teachers (N=17 or 59%), improved in-service training (N=21 or 72%), improved technology/resources (N=19 or 66%) as important to improve quality assurance. Only two (7%) of the LP teachers referred to other factors that could improve quality assurance.

Most of the teachers in all three school groups agreed that a decrease in the number of learners per class would improve quality assurance, which concurs with previous research findings (also see table 5.11) in this regard.

5.3.4 Section 2: Assessment

The purpose of this section of the questionnaire was to examine whether teachers were aware of the National Protocol on Assessment for schools in the general and further education band that was implemented since January 2006. The data in Table 5.22 pertains to quality assurance in the Motheo FET sector. The questions from the questionnaire were grouped into six sections (see table 4.3). The average mean for each school group was calculated to determine the extent to which the schools concurred or differed. This section of the questionnaire was analysed by means of calculating and interpreting the arithmetic mean of the different items (as explained in 4.10.1).

Table 5.22: Assessment in the Motheo FET school sector

Sections on assessment	GPS	APS	LPS
	Average mean	Average mean	Average mean
1. *Availability & readability of the assessment protocol*	4.8	4.2	4
2. *Awareness of the assessment protocol*	4.8	4.1	3.9
3. *Implementation of the assessment protocol*	3.8	3.5	2.8
4. *Implementing of various assessment instruments*	4.0	3.5	3
5. *The assessment process and implementation of an assessment strategy*	4.5	4.2	3.5
6. *Feedback and review process*	4.5	4	3.4
Overall Average	4.4	3.8	3.4

The rating scale used in this questionnaire was as follows: 1 – Never; 2 – Seldom; 3 – Sometimes;   4 – Often; 5 – Almost always

According to the data reflected in Table 5.22, the majority of GPS teachers answered "Almost always" in response to the question about *Availability and readability of the assessment protocol,* resulting in an overall arithmetic mean of 4.8 for GPS on the different scales for this section. In comparison, the majority of APS and LPS teachers answered "Often" in response to this question, resulting in an overall arithmetic mean of 4.2 and 4 respectively. The section focusing on *Awareness of assessment protocol* revealed the same tendency, with a mean of 4.8 for GPS teachers who answered "Almost always" and an mean of 4.1 for APS teachers and 3.9 for LPS teachers who answered "Often".

It is cause for concern that the section *Implementation of assessment protocol* scored 3.8 (GPS), 3.5 (APS) and 2.8 (LPS) with a response of "Sometimes". The literature (see 2.7.2) reveals that schools were made aware of the assessment protocol in 2006, yet when the research was conducted three years later, in 2009, there was still some indication that teachers in schools in the Motheo district were unsure of the implementation thereof.

A section that also scored relatively low was *Implementation of various assessment instruments.* An overall average mean of 4.0 was assigned to GPS teachers who answered "Often", while APS and LPS teachers respectively scored 3.5 and 3 on average for the answer "Sometimes". The literature (see 2.4.4) on this aspect on assessment clearly states that in order to ensure high-quality assessment, a variety of assessment methods should be employed to accommodate the different learning styles of learners.

In the section *Assessment process and implementation of assessment strategy,* again the tendency was for GPS teachers to "Almost always" (average mean of 4.5) make use of assessment strategies, in comparison to APS teachers who answered "Often" (average score of 4.2) and LPS teachers who answered "Sometimes" (average mean of 3.5). In order to substantiate the data gathered in the previous section, the final section focused on whether teachers in the various school groups were implementing a

Feedback and review process. The data revealed that GPS teachers as well as the APS teachers "Often" (mean score of 4.5 and 4 respectively) employed this process, in comparison to "Sometimes", as LPS teachers (average mean of 3.4).

From the overall mean scores, it is evident that GPS teachers scored an overall mean of 4.4 and the APS teachers scored an mean of 3.8, meaning that they were "Often" made aware of the assessment protocol, whilst LPS teachers scored a mean of 3.4, meaning they were "Sometimes" made aware of the assessment protocol. The data analysis clearly distinguishes between the extent of awareness amongst GPS teachers and APS and LPS teachers, which could be a possible impediment to the overall performance of learners in the APS (to a lesser extent) and LPS groups.

5.3.5 Section 3: Quality Assurance

This section of the questionnaire focused on whether the guidelines provided by SAQA (as the overarching quality assurance body of education and training) in 1995 and Umalusi (as the quality assurance body for the GET and FET phases) in 2001, have been implemented and whether schools are striving towards quality. The questions in the questionnaire were grouped according to the subsections mentioned in Table 4.3.

Table 5.23: Quality assurance in the Motheo FET school sector

Sections on Quality assurance	GPS	APS	LPS
	Average mean	Average mean	Average mean
1. Curriculum implementation	4	4	3
2. Equal opportunities for all learners	3.8	3.5	3.5
3 Feedback process	4.8	4.5	4.3
4. Assessment process	4.5	4.3	4.0
5. Teaching and learning	4.5	4.3	4
6. Teacher co-operation and communication	3.7	3.5	3.0
7. Continuous assessment	4.5	4	3.8
Overall Average	4.3	4	3.7
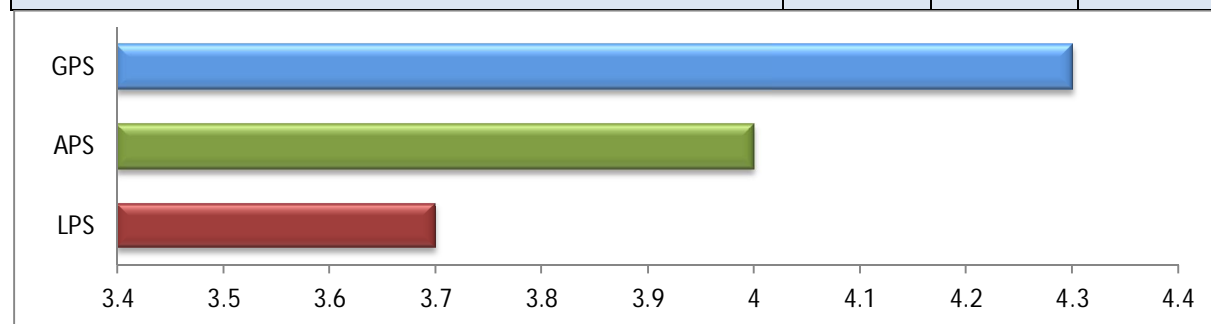
The rating scale used for this questionnaire was as follows: 1 – Never; 2 – Seldom; 3 – Sometimes; 4 – Often; 5 – Almost always

Questions asked in this section were compiled according to the literature (see Chapter 3 and Table 4.3) to provide clarity on whether quality assurance was taking place in the various schools involved in the research.

The first section focused on whether teachers in the three school groups were in line with the correct *Implementation of the curriculum.* Here, GPS and APS teachers scored 4, indicating that they were "Often" in line with the correct implementation, while LPS teachers scored 3, indicating that were "Sometimes" in line.

A section that scored relatively low was *Equal opportunities for all learners,* where GPS teachers scored an overall mean of 3.8, indicating that they "Often" provided equal opportunities to all learners, compared to APS teachers (3.5) and LPS teachers (3.5), who "Sometimes" did so. This data confirms the findings in the literature (see 3.2.2.3), i.e. if fair and equal opportunities are not provided to all students, they will not be able to meet the requirements as stipulated by the national quality assurance bodies (Umalusi, 2006:41-49).

A section that scored relatively high was *Feedback process,* where GPS teachers (4.8) "Almost always" provided feedback, and APS teachers (4.5) and LPS teachers (4.3) "Often" implemented this process in accordance with the various policy documents.

This section substantiated the data gathered in respect of whether the teachers were in line with what is expected by the policy documents regarding the *Assessment process.* All three groups (GPS teachers (4.5); APS teachers (4.3); LPS teachers (4)) confirmed that they were "Often" in line with the requirements. The section on *Continuous assessment* confirmed a distinction between the different school groups, with GPS teachers (4.5) and APS teachers (4) "Often" implementing continuous assessment. Such continuous assessment was being implemented "Sometimes" by LPS teachers (3.8).

The section on *Teaching and learning* was designed to gather data on whether teachers in the various school groups were employing high-quality teaching to ensure quality learning. Teachers in all school groups indicated that they were employing quality teaching "Often", with GPS teachers scoring a mean of 4.5, APS teachers 4.3 and LPS teachers a 4.

Alarmingly, a factor that scored relatively low in all three school groups was *Teacher co-operation and communication.* GPS teachers indicated that they were co-operating and communicating "Often", in contrast to APS teachers (3.5) and LPS teachers (3) who were only doing so "Sometimes".

An assumption can be made that this overall low score contributes to poor learner performance, especially in the LPS group. From the literature it was confirmed that communication and co-operation between teachers is crucial to ensure that assessment is of high quality (see 3.2.1).

This section of the questionnaire focusing on quality assurance revealed that all three school groups (GPS – 4.3; APS – 4; LPS – 3.7) "Often" implemented quality assurance. This is contradictory to the performance of the three school group. The question can be asked whether quality assurance is not seen by some teachers as only a "paper exercise" (see 3.2.2.1).

5.3.6 Section 4: Moderation

This section of the questionnaire investigated the extent to which moderation is implemented in the different schools as a means of contributing towards high-quality assessment (see 3.2.2.2.1).

Table 5.24: Moderation procedures contributing towards quality assessment

	Employing high-quality assessment tasks	Incorporating various domains	Policy adherence
■ LPS	2.9	3.1	3
■ APS	3.6	3.8	3.4
■ GPS	4.1	4	4.4
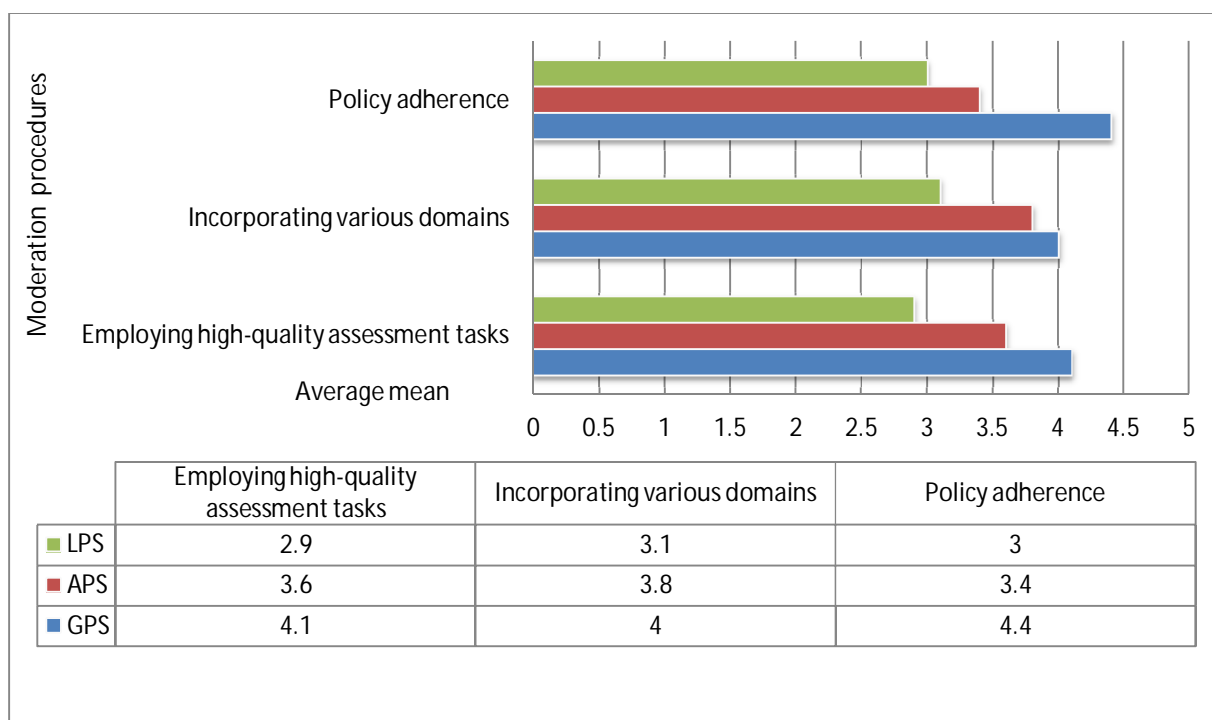
Table 5.24 portrays the moderation procedures that can contribute towards quality assessment. The questions for this section of the questionnaire were grouped into three subsections (see Table 4.3), namely: employing high-quality assessment tasks, incorporating various domains, and policy adherence.

The first section focused upon whether teachers in the three school groups were *employing high-quality assessment tasks.* The data confirmed that GPS teachers (4.1) and APS teachers (3.6) "Often" employed high-quality assessment tasks, but that LPS teachers (2.9) "Sometimes" did so.

The data on whether the different schools were *incorporating the various domains* revealed a clear distinction between GPS teachers (4) and APS teachers (3.8) who "Often" incorporated aspects to address the different domains, and LPS teachers (3.1) who "Sometimes" did so. Finally, to confirm the tendency stated above, data from the section relating to *policy adherenc*e revealed the same tendency in terms of GPS teachers (4.4) "Often" adhering to policy documents and APS teachers (3.4) and LPS teachers (3) "Sometimes" doing so.

The data revealed that LPS teachers scored an overall lowest average of 3, indicating that they only "Sometimes" implemented the aforementioned moderation measures. In comparison, GPS teachers scored an overall mean of 4.2 and APS teachers an overall average of 3.6, indicating that they "Often" implemented such measures. The scores reveal that the better performing schools were applying moderation more readily to ensure quality than the lower performing schools.

5.3.7 Section 5: Holistic Assessment

The final section of the questionnaire focused on whether teachers were assessing learners on the different domains, namely the cognitive, affective and psychomotor domains.

Table 5.25: Assessing the cognitive, affective and psychomotor domain

	LPS	APS	GPS
▇ Cognitive Domain	3	3.5	4.3
▇ Affective Domain	3	3.5	4
▇ Pscychomotor Domain	2.2	3	3.6
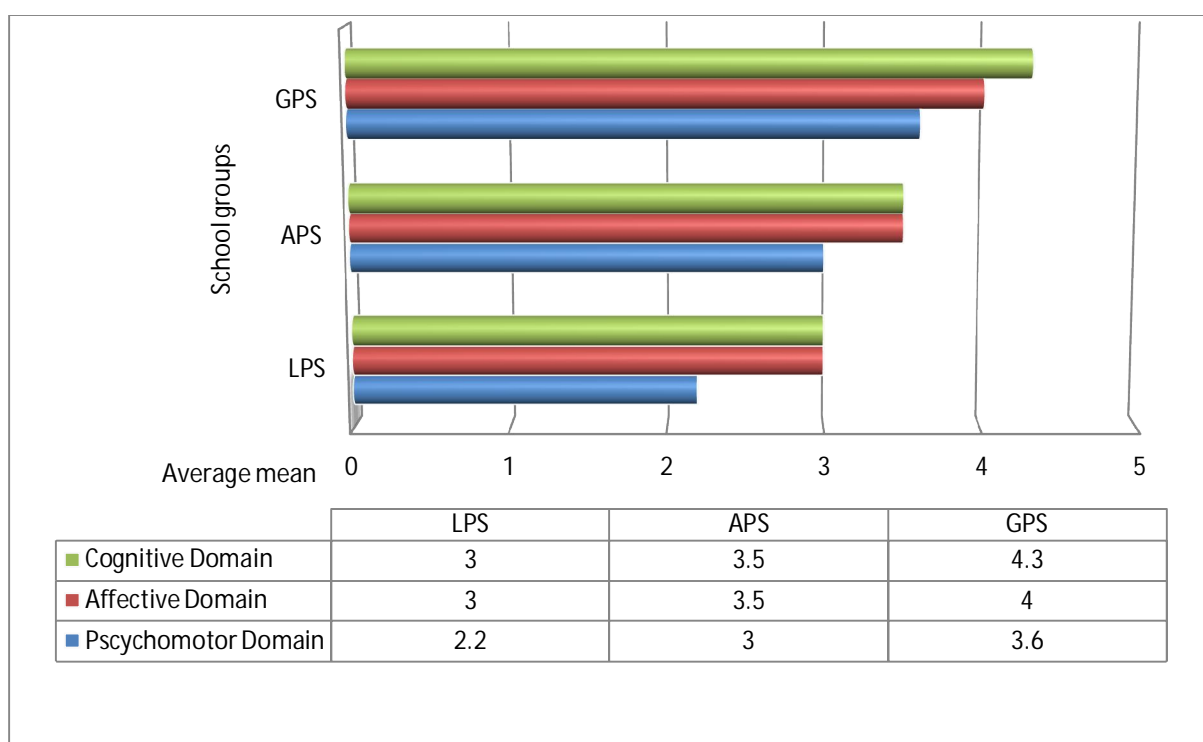
According to the literature (see 3.2.1) – including Bellis (2001:119) and Hattingh (2003:1) – the South African school system is under pressure to provide stakeholders with evidence that schools are producing quality products (high-quality teachers and learners). One way of addressing this problem, according to the literature (see tables 3.1, 3.2 and 3.3), is to assess learners in totality. The number of learners passing the Grade 12 examination has been declining over the years, and Umalusi (2008:32) therefore investigated possible reasons for this decline.

This section of the questionnaire was designed to address the statement made by Umalusi (2005:78), namely "that a deficiency in assessing students in totality has been identified", and to investigate the extent to which schools in the Motheo district are assessing students in totality. The data (see Table 5.25) revealed that the teachers involved in the study were assessing the various domains, although to different degrees (GPS – "Often"; APS – "Sometimes"; LPS – "Sometimes", but psychomotor only "Seldom") emerged that teachers in all three school groups had a tendency to neglect the psychomotor domain. This concurs with the qualitative research findings on holistic assessment, where teachers seemed to realise the importance of holistic assessment, but identified various constraints as being cause for concern. This is also in line with a report issued by Umalusi (2005:78), identifying deficiencies in meeting the requirements for assessing students on the three domains (cognitive, affective and psychomotor). The Umalusi-report further revealed that teachers involved in the FET phase were not designing and developing examination papers catering to the development of learners in totality (also refer to Table 5.25).

An analysis of variance (ANOVA) was performed to compare the independent groups (GPS, APS and LPS) on the average mean for each of the domains, namely the cognitive domain, affective domain and the psychomotor domain (Pietersen & Maree, 2007:229-230).

Table 5.26: ANOVA performed on the GPS, APS and LPS per domain

	Domains	Sum of Squares	df	Mean of Squares	F	Sig (*P*)
Psychomotor Domain	Between Groups	30.718	2	15.359	1.390	0.252
	Within Groups	1568.840	142	11.048		
	TOTAL	1599.559	144			
Affective Domain	Between Groups	43.375	2	21.687	1.848	0.161
	Within Groups	1666.115	142	11.733		
	TOTAL	1709.490	144			
Cognitive Domain	Between Groups	17.472	2	8.736	0.994	0.373
	Within Groups	1247.563	142	8.786		
	TOTAL	1265.034	144			

From the information presented in the table above, the focus is on the F-test to detect the significant differences between the three school groups in terms of how the different domains are addressed. In the case of the ANOVA, the zero hypothesis (H_0) indicates that the mean of the three school groups is the same, while the alternative hypothesis (H_1) indicates that the mean is not the same.

The "*p*-value" in the table indicates the likelihood of a change that can occur on the 5% significance scale that will provide the evidence that the hypotheses will be rejected or accepted.

H_0 There is no difference in how teachers in the different school groups implement aspects to address the cognitive domain during the teaching and learning process.

H_1 There is a difference in how teachers in the different school groups implement aspects to address the cognitive domain during the teaching and learning process.

Ho is accepted on the 5% significance level (Sig.=.373), i.e. that there is no significant difference in how teachers in the different school groups implement aspects to address the cognitive domain.

H0   There is no difference in how teachers in the different school groups implement aspects to address the affective domain during the teaching and learning process.

H_1 There is a difference in how teachers in the different school groups implement aspects to address the affective domain during the teaching and learning process.

Ho is accepted on the 5% significance level (Sig.=.161), i.e. that there is no significant difference in how teachers in the different school groups implement aspects to address the affective domain.

H0   There is no difference in how teachers in the different school groups implement aspects to address the psychomotor domain during the teaching and learning process.

H_1 There is a difference in how teachers in the different school groups implement aspects to address the psychomotor domain during the teaching and learning process.

Ho is accepted on the 5% significance level (Sig.=.252), i.e. that there is no significant difference in how teachers in the different school groups implement the psychomotor domain.

Data gathered from the research revealed that although the psychomotor domain is neglected, no significant difference was found between the three school groups and how teachers assess learners on the three domains.

The next section reports on the analysis and interpretation of the qualitative data.

5.4 ANALYSIS AND INTERPRETATION OF QUALITATIVE DATA

5.4.1 Introduction

The purpose of this section is to analyse, interpret and report the data collected during the qualitative research process. The qualitative research method focused on teachers in the FET school sector and was carried out by means of group interviews (as discussed in 4.5.2). However, only two schools gave the researcher permission to conduct interviews – one high-performing and one average-performing school. The interviews were conducted in view of determining the teachers' knowledge and opinions on the following:

- Section 1: Assessment;

    - Section 1.1: General quality of assessment

    - Section 1.2: Holistic assessment;

    - Section 1.3: Effective assessment methods;

    - Section 1.4: Influences on the quality of assessment;

- Section 2: Quality assurance.

    - Section 2.1: Moderation mechanisms

    - Section 2.2: Advantages of quality assurance;

To ensure that the data obtained was trustworthy, the reliability of the interviews was determined.

5.4.2 Reliability of Interviews

A semi-structured group interview method (see 4.5.2) was used, since this refers to a predetermined set of questions (see Appendix B), seldom spans a long period of time, and gives the respondent time for inquiry and the clarification of answers.

The first group interview was conducted at a high-performing school (based upon the 2009 Grade 12 results). To ensure the anonymity of participants, the teachers involved in the study are referred to as Participants A, B, C or D. The interviews took place in a setting where all participants had the opportunity to react and respond accurately.

The second group interview was conducted at an average-performing school (based upon the 2009 Grade 12 results). Again, to ensure the anonymity of participants, the teachers involved in the study are referred to as Participants E, F, G or H. This provided the researcher with the opportunity to compare the data from the two schools so as to gain insight into the different opinions, understandings and feelings of the teachers.

All the data was transcribed and codes were assigned to the different themes, and a matrix table was used to analyse, present and report the data, as per tables 5.27, 5.28, 5.29 and 5.30 below.

Table 5.27: Themes and codes used for analysing group-interviews

Themes	Codes
General quality of assessment	GQA
Holistic assessment	HA
Effective assessment methods	EAM
Influences on the quality of assessment	IQA
Moderation mechanisms	MOM
Advantages of quality assurance	AQA

Table 5.28: Demographic comparison of group-interviews

Group-interview 1(Good-performing school)		Group-interview 2 (Average-performing school)	
Participant A	Female	Participant E	Female
Participant B	Male	Participant F	Female
Participant C	Female	Participant G	Female
Participant D	Female	Participant H	Female

Table 5.29: Group-interview 1 (GPS)

CODE	PARTICIPANT A	PARTICIPANT B	PARTICIPANT C	PARTICIPANT D
General quality of assessment **GQA**	"I think there is a big difference of quality in regarding assessment in our school than that of other schools. We are currently one of the top performing schools in the free state". So i would definitely say that there is a need for improving the quality of assessment in other schools."	"During our subject meetings there is a big difference between the "top" performing schools and the "lower" performing schools. This clearly indicates that there is a need for improving the quality of assessment."	"Especially in "my" subject Maths there is a big difference between the ways schools assess, which creates a lot of confusion in the schools."	"Time is one aspect that influences the quality of my assessments as I do not always have enough time to do proper planning and delivering marks on time."
Holistic Assessment **HA**	"It is also relatively easy to assess learners on the affective domain. I especially make use of data-projectors to display and play information to students."	"We have guidelines on how to develop exams and test and I must say that i do not always use these guidelines. The main way I make sure that learners are assessed on the cognitive domain is by using tests and exams which is the most effective way of assessing learners in Life Sciences"	"CASS is a very effective tool to ensure holistic assessment during the school year. Test and exams normally only focus on the cognitive and affective."	"We normally make use of group work which is also part of Outcomes based assessment. During group work all three the domains are focussed on."

Effective assessment methods **EAM**	"Formative assessment, like test and exams"	"Formative assessment"	"The traditional way a final examination at the end of each term"	Yes, formative assessment it is quick and effective"
Influences on the quality of assessment **IQA**	"Teachers still have to mark these assignments and our schedule is also overloaded."	"The amount of tasks that learner has to complete during the school year. The difference in the learners CASS mark and their final exam mark."	"There is all kinds of assessment which takes huge amount of time and administration" The huge amount of administration is "killing" teachers."	"The learners overloaded programmes" The syllabus is so full that we actually have less class time."
Moderation mechanisms **MOM**	"Varies from subject to subject but we normally need to hand in the portfolio once a term."	"There is a need to implement quality measurements for assessment. In our school moderation is one aspect that ensures high quality assessment. The circulation of test and exam papers to other teachers for comments and remarks."	No response	"Sometimes the principal also request our portfolio to monitor teacher performances."

Advantages of quality assurance AQA	"It will definitely improve the standard of the exam paper, which in my opinion in recent times is not up to standard"	No response	"Definitely, it will make a difference"	"Quality assurance procedures would help to eliminate problems."

Table 5.30: Group-interview 2 (APS)

CODE	PARTICIPANT E	PARTICIPANT F	PARTICIPANT G	PARTICIPANT H
General quality of assessment GQA	"Well at this stage we only write two exams and we are not really allowed to do more, the others are controlled tests. So, maybe shorter periods and more frequent assessment during the year. We should go back to the old system where four examinations were written"	"Due to the fact that in the primary school children are not prepared properly anymore. They do not write exams at all so I would say that children are not prepared for exams and that is a huge problem. The big problem in this country is the structure of the primary school."	"Can definitely be improved by implementing an assessment strategy with less tasks and assignments."	"The way in which educator are trained plays a very important part in the quality of assessment, I know a lot of teachers that still use traditional ways of assessment. Times have changed and so must methods."

Holistic Assessment **HA**	"It is important to assess learners on all three the domains but were must us (teachers) find the time to do all this? We have meetings, marking work and sport in the afternoons sometimes till 20:00 or 21:00 at night! We or I simply just do not have the time to sit and plan for assessment."	"I do not think that learners are always assessed on all three the domains, normally on one or two but not all of the domains are assessed or developed. This is a worrying aspect especially at school level."	"In these big classes where there are many students it is quite difficult to address the needs of all the individuals."	"It is not just our schedules that are so busy the learners also do not have time to do their homework properly and cannot develop as they learn."
Effective assessment methods **EAM**	"Unfortunately at school level it stays exams. Time is so limited that all these creative, very smart ideas of assessment simple just do not work and in the end everything collapses due to that."	"The amount of learners in class just does not make it possible to implement new methods or ways of assessment."	"This also forms part of the size of the class because for me as a woman it is very difficult to implement effective discipline to over 30 kids in the class."	"The new idea that you have to cater for all needs in one group that's very not realistic at all We cannot provide the special attention these children need because there are too many children in class! It does not work it is unfair to the child."

Influences on the quality of assessment **IQA**	"More time for planning provides the opportunity for better quality assessment"	"Initial teacher training is lacking in this country. If I were made aware or trained how to effectively design papers, how to assess in the correct way or how to manage discipline it would already contribute towards quality assurance."	No response	"Lack of management and in some instances lack of discipline."
Moderation mechanisms **MOM**	"The HOD checks our teacher profiles."	"Moderation happens less now because there is no money for these officials to visit schools anymore."	"Most probably There is a system in place, exam papers have to go to subject heads and departmental heads and so on. I think it is just not managed effectively	"Exam scripts get moderated. Internally and sometimes externally by the Free State Department of Education's departmental officials."
Advantages of quality assurance **AQA**	"Better quality education"	"Quality assurance will have a snowball effect. Education can only benefit, but it must not mean more administration for teachers, but in overall education can only improve."	"Improved assessment strategies for teachers and schools"	"Hopefully to help with disciplinary issues"

5.4.3 Section 1: Assessment

5.4.3.1 Section 1.1: General Quality of Assessment (GQA)

From the analysis of the data (see tables 5.29 & 5.30), it seems that the participants had the same opinions on the general quality of assessment in schools. It is clear that they agreed that the way in which schools conduct assessment differs and that this may have an impact on the quality of assessment.

Participants A, B and C appear to have the same opinions regarding the general quality of assessment. These participants felt that the quality of assessment in their school was up to standard, but they did express the view that schools have different methods of assessment, which may have an impact on the quality thereof. Participant D indicated that time constraints and lack of decent planning influence the general quality of assessment, which corresponds to the quantitative data gathered (see Table 5.12). Participants E and G (from the average-performing school) pointed to a problem regarding the quality of assessment in their school. Participant E felt that the old system of writing four examinations was a better way to improve the general quality of assessment. Participant F stated that the structure of primary schools influences the quality of assessment, as learners are not properly prepared. Participant H identified teacher training as the major influences on the quality of assessment.

From the above discussion, some teachers seemed to point to a problem regarding to the quality of assessment, while others expressed satisfaction with the quality of assessment in their schools. Time constraints, lack of assessment strategies and the manner in which teachers are trained were identified as possible influences on the quality of assessment.

5.4.3.2 Section 1.2: Holistic Assessment (HA)

There were different views regarding holistic assessment (see tables 5.29 & 5.30), but it seems that the participants were working according to guidelines for assessing learners on the different domains. Another aspect that was identified was the fact that different learning fields are assessed differently and a variety of assessment methods is used to ensure holistic assessment.

From the responses, participant B appeared to have guidelines on how to ensure that learners are assessed on the different domains, while participants C and D appeared to use different assessment methods to ensure holistic assessment. The participants seem to focus on the affective when assessing by using media. In group interview 2, participants E, G and H seemed to realise the importance of holistic assessment, but again identified time constraints (E) and the high learner-to-teacher ratio (F,G & H) as possible negative influences on holistic assessment. Participant F did not feel that learners are assessed on all three domains and saw this as a worrying aspect.

With regard to the above discussion, teachers seemed to realise the importance of holistic assessment, but again time constraints were identified as a worrying aspect. This data also confirms what was found during the quantitative data analysis (see Table 5.25), namely that teachers from the Motheo FET sector are assessing the various domains. The extent to which the domains are addressed differs, and from the quantitative data the tendency were that teachers in the various school groups seem to neglect the psychomotor domain. However in the qualitative group interviews participant A revealed that the affective domain was assessed by means of displaying info and playing activities, while participant B revealed that the cognitive domain was assessed my means of tests and exams. In turn, participant D revealed that all the domains are assessed by OBE and group work. Participants E, F, G and H all revealed that they felt all the domains were not assessed equally and also indentified time constraints and the number of learners per class influencing holistic assessment.

5.4.3.3 Section 1.3: Effective Assessment Methods (EAM)

This section focuses on what the teachers felt to be the most effective assessment methods (see tables 5.29 & 5.30).

From the responses, it appears that all the participants were of the opinion that formative (see 2.7.1) and traditional assessments are still the most effective way to assess learners. Unfortunately, it appears that the participants felt that they were being given insufficient time to implement new assessment practices effectively. The same tendency was also indentified by the quantitative data (see Table 5.12) which confirmed time constraints, the number of learners and the literacy level of learners as constraints which not only influence effective assessment methods, but also the quality of assessment.

5.4.3.4 Section 1.4: Influences on the Quality of Assessment (IQA)

This section of the group interview focused on the teachers' opinions on what influences the quality of assessment. The responses varied, as follows:

During the good-performing schools interview, participants A, B and C pointed out that their schedules were overloaded and added that assessment adds even more time and administration to their already overloaded schedules. Participant D was concerned with the overloaded programs of the learners and was also concerned that teachers have less time to teach due to an overcrowded syllabus. A point of concern from a quality assurance perspective is the difference in the learners CASS mark and their final examination mark as pointed out by participant C

During the average-performing schools interview, participant E also saw time constraints as a barrier to quality assessment. Participant F blamed initial teacher training for the lack of quality assessment. He argued that he was not trained on how to assess correctly and also on how to manage discipline. Participant G did not respond to this question where as participant H also shared the view that the lack of discipline

affects the quality of assessment. She furthermore added that the lack of management can also affect the quality of assessment.

The qualitative data again revealed the same tendency as the quantitative data (see Table 5.12) which revealed that the participants also confirmed time constraints, the number of learners and the literacy level of learners as constraints which influences the quality of assessment.

5.4.4   Section 2: Quality Assurance

5.4.4.1 Section 2.1: Moderation Mechanisms (MOM)

From the responses, it seems that the participants in good performing schools (except participant C who did not respond) did have an understanding of moderation and also had some sort of moderation mechanism, which forms part of quality assurance, in place. However, in group interview 2, participants F and G indicated that moderation is not managed effectively at school and departmental level. This is cause for concern, as moderation is an important part of quality assurance and also plays a crucial role in the standard and quality of assessment. The quantitative analysis of the data on moderation (see Table 5.24) revealed differences in how the school groups were implementing the various moderation processes, which was also confirmed during the quantitative analysis.

5.4.4.2 Section 2.2: Advantages of Quality Assurance (AQA)

The final section of the group interviews focused on the teachers' opinions of the advantages of quality assurance, as per the following responses:

All the participants indicated that by employing quality assurance procedures, the quality of assessment would improve. This is a positive aspect, as teachers are realising the advantages of quality assurance. However, it appears that the participants felt that

the act of employing quality assurance should not affect the already overloaded schedules of teachers. Data from the quantitative data analysis (see Table 5.23) revealed that teachers realise the importance of quality assurance; however, there are differences in how the respective school groups interpret and implement quality assurance.

5.5 CONCLUSION

The purpose of this chapter was to explore assessment from a quality assurance perspective concerning teachers in the Motheo FET sector. The data analysis and interpretation indicated that although scores were higher than expected, there is a need to improve assessment and the quality thereof. The findings revealed that the teachers participating in this study were aware of and understood the terms "assessment" and "quality assurance". However it was also evident from the interviews that participants from the GPS were not clear on the concept formative assessment; however, effective implementation thereof is lacking in the Motheo district.

In-depth data analysis and interpretation (triangulation of quantitative data ([see 5.3] and qualitative data [see 5.4]) revealed that the teachers involved in the research were aware of quality assurance measures regarding assessment, but the effective implementation thereof appeared to be lacking. The second objective for this study focused on whether assessment is being conducted in a holistic manner, and the findings revealed that teachers in all three school groups tended to focus on the first two domains, namely the cognitive and affective domains, while neglecting the psychomotor domain. The final objective for the study was to determine whether teachers execute quality assurance measurement according to the guidelines provided by the various quality assurance bodies. Again, it emerged that although the teachers were aware of the quality assurance bodies, the implementation of the guidelines was lacking. The data also revealed a clear distinction between the different school groups in almost all sections of the questionnaire, with GPS teachers scoring the highest, followed by APS and then LPS teachers.

In the last chapter of this dissertation the findings, conclusions and recommendations will be addressed.

CHAPTER 6

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

In this final chapter, a summary of findings regarding the literature and the empirical study titled "Assessment in the further education and training school sector: A quality assurance perspective" is presented. Based on these findings, conclusions were made to determine whether or not the objectives formulated at the onset of the study have been achieved. Finally, this chapter focuses on recommendations aimed at enhancing assessment procedures and quality assurance.

6.2 OBJECTIVES OF THE STUDY

The main aim of this study was to investigate assessment in the further education and training (FET) school sector from a quality assurance perspective. In order to achieve the aim mentioned above, the following objectives (see 1.3) were pursued:

a) To investigate teachers' awareness of quality assurance measures to be implemented during assessment practices in schools;

b) To determine whether teachers assess learners in totality; and

c) To investigate the extent to which quality assurance measures are implemented.

In order to accomplish the aforementioned objectives, a literature review was conducted together with an empirical investigation. The qualitative research process (see 5.4) involved interviews with eight teachers from two different schools, while 149 teachers took part in the quantitative research (see 5.3) by responding to the questionnaire. Relevant information about the data collection strategies employed in this research can be found in Chapter 4 (see 4.5.1 and 4.5.2). What follows are the findings and conclusions concerning the three research objectives mentioned above.

6.3 RESEARCH FINDINGS AND CONCLUSIONS

6.3.1 Research Objective (a):

To investigate teachers' awareness of quality assurance measures to be implemented during assessment practices in schools.

6.3.1.1 Research Findings and Conclusions

From the literature review (see Chapter 3), quality assurance can be defined as an all-embracing term referring to an ongoing, continuous process of evaluating (assessing, monitoring, guaranteeing, maintaining, and improving) the quality of an educational system. Various quality assurance bodies – most notably the South African Qualifications Authority (SAQA), established in 1995, and Umalusi, established in 2001 – have been established with one aim in mind: To ensure quality. Furthermore, from the literature it is also evident that quality assurance is directed at measurement against specifications to which teachers should adhere and which therefore influence how students are judged and which can validate quality (Sallis, 1996). The literature also revealed that the successful implementation of quality assurance will enhance the quality of education and training and redress previous discrimination in education, training and employment opportunities, while finally contributing to the full personal development of each individual learner, as well as social and economic development as a whole.

In comparison with the literature, results from the quantitative research (see Table 5.13) revealed that most of the teachers in the Motheo district were aware of the term "quality assurance". Of the 149 teachers who participated in the research, 47 (32%) were either unsure or had no awareness of quality assurance. It can be deduced that almost one-third of teachers participating in this research were not aware of the required quality assurance measures, which can be an indication of why quality assurance has not been fully implemented in the Motheo district within the past four years.

As confirmed by the data reflected in Table 5.14, it is clear that of teachers involved in the research most were aware of SAQA and to a lesser extent Umalusi and the IQAA. Data from Table 5.14 furthermore revealed that there is a distinction regarding receiving regular in-service training; most of the teachers in the good-performing schools (GPS) and average-performing schools (APS) confirmed that they do receive regular in-service training while; it was clear that the teachers in the low-performing schools (LPS) were lacking in-service training.

Furthermore, as shown in Table 5.15, it emerged that Department of Education's (DoE) communication and documents, the principal's role (confirmed by the literature - managerial and communicative aims, 2.6), other teachers (communicative aim, see 2.6) and the internet were the most popular sources of information on quality assurance for teachers in the Motheo FET sector. According to the data reflected in Table 5.20, the teachers in the Motheo FET school sector who participated in the research identified school management as the most important stakeholder in the school environment. Results from the qualitative research (see 5.4.4.2) and tables 5.29 and 5.30 confirmed that some teachers understood the term "quality assurance" and some realised the need for and advantages of quality assurance measures, but were not equipped to implement such.

The National Protocol on Assessment for Schools (Grades R-12) was implemented by the DoE in January 2006. Table 5.8 illustrates the level of awareness of this protocol amongst teachers in the Motheo FET sector. The quantitative data revealed that 90% (N=134) of the respondents were aware of this protocol. Data gathered through qualitative research revealed that the respondents were of the opinion that the quality of assessment in their schools was up to standard (see 5.4.3.1), but the fact that different schools have different approaches to assessment may have an impact on the quality of assessment. From Table 5.19, it is clear that most the GPS teachers identified lack of time for planning as a major constraint to quality assurance, while most of the APS teachers identified learner literacy and most of the LPS teachers identified the number of learners per class as the main constraints to quality assurance. This confirms the

data obtained in Table 5.12 i.e. that GPS teachers identified time constraints as the major impediment to the implementation of quality assessment, while APS teachers identified the literacy level of the learners and LPS teachers identified the high learner-to-teacher ratio as having the most profound effect on the quality of assessment. According to the data shown in Table 5.21, teachers identified improved salaries and smaller class sizes (GPS teachers to a lesser extent) as means to improve quality assurance. According to the data reflected in Tables 5.16, 5.17 and 5.18, the GPS teachers prioritised the employing of assessment measures to ensure high-quality assessment as follows: planning for assessment as the highest priority, followed by the conducting of examinations, then internal moderation and other processes. Even though the APS teachers indicated that they were implementing these measures, it became evident that they did not value the internal moderation process and the moderation of the evaluation process, while the LPS teachers appeared not to value the moderation of the evaluation process as a means to ensure quality assurance.

The research findings highlighted aspects that can have an effect on the implementation of the quality assessment process. In conclusion, the first objective of this study focused on whether the teachers participating in the research were aware of the quality assurance measures to be implemented during assessment practices in schools. The findings from the qualitative research (see 5.4) and the literature findings (see 3.2.2) correlate with the quantitative findings (see tables 5.19, 5.21 and 5.23). The findings indicate that although teachers in the Motheo district are aware of these quality assurance measures, there are still concerns about the implementation thereof and the way in which the assessment process is conducted.

The data further revealed differences between the school groups. Firstly, the LPS teachers were not on the same level as the GPS and APS teachers in terms employing assessment measures to ensure high-quality assessment.

6.3.2 Research Objective (b):

To determine whether teachers assess learners in totality.

6.3.2.1 Research Findings and Conclusions

According to Umalusi (2005:78), "South African secondary teachers are not designing and developing examination papers in order to ensure that students are assessed holistically". The literature also revealed that assessment in the classroom will never be an exact science. What learners accomplish depends to a great extent on their individual abilities, but by asking themselves the questions of why, what and how (see 2.4.4), they may help to improve the quality of assessment. This report issued by Umalusi (2005:78) identified deficiencies in terms of meeting the requirements for assessing students on the three domains (cognitive, affective and psychomotor).

In order to address the literature findings, section 5 of the questionnaire (see 5.3.7) investigated whether teachers were assessing learners on the different domains, namely the cognitive, affective and psychomotor domains. The teachers' responses to the questions pertaining to these different domains indicate that the intensity with which the domains are addressed differs, and it seems that the tendency here is for all schools to seemingly neglect the psychomotor domain (see tables 5.25 & 5.26). This corroborates the qualitative research findings on holistic assessment (see 5.4.3.2), with teachers seemingly acknowledging the importance of holistic assessment. However, time constraints were identified as a cause for concern and an impediment.

From the literature (see 3.2.1.2) it was revealed that the development of learners during the learning process should include the tripartite theory of the mind (feelings, thoughts and behaviour), which covers cognition (the processing self), conation (the performing self) and affectation (the developing self). This in terms of the NCS includes the cognitive development, skills and attitudes. From the data once again, the LPS teachers were found to be lagging behind the GPS and APS teachers when it came to assessing learners in totality.

The literature (see 2.4 & 2.5) also refers to assessment as a complex procedure that requires a teacher's specialised judgement. It was also found that assessment is an integral part of the learning process; provide a framework of questions to be asked by teachers when planning for assessment and the role of the assessor during the teaching and learning process so as to ensure high-quality assessment and in turn ensures that learners are assessed in totality. This implies that teachers are responsible for making decisions on the following:

- How to assess;
- What to assess; and
- When to assess.

In addition, SAQA (2001:16) states that these underlying principles indicate that assessment is an integral part of teaching and learning and vital to the acknowledgment of learners' achievements. Quality assessment is therefore crucial when it comes to granting credible certifications. SAQA (2001:16) confirmesd that "quality assessment is assured through assessment procedures and practices being governed by the principles: "fairness, validity, reliability and practicability".

Section 2 of the questionnaire (5.3.4) focused on assessment. In order to address the statement above, the questionnaire (Table 5.22) was divided into the following sections:

- Availability and readability of the assessment protocol;
- Awareness of the assessment protocol;
- Implementation of the assessment protocol;
- Implementation of various assessment instruments;
- Assessment process and implementation of an assessment; and
- Feedback and review process.

Data from the quantitative research revealed a tendency throughout the various sections (see Table 5.22) for the LPS teachers to lag behind the GPS and APS

teachers. Data from the qualitative research revealed that the teachers who participated in this research were of the opinion that traditional assessment is still the most effective way to assess learners. Furthermore from the ANOVA performed on the cognitive domain, affective domain and psychomotor domain data revealed that although the psychomotor domain is neglected, there is no significant difference between the three school groups and how teachers assess learners on the three domains.

In conclusion, objective (b) of the study focused on the term "holistic assessment". The findings indicate that there is a correlation between the literature (see 3.2), the qualitative data (see 5.4) and the quantitative data (see tables 5.25 and 5.26). Such findings revealed that although teachers should focus on all the domains (cognitive, affective and psychomotor), it would appear that the psychomotor domain is being neglected. For learners to develop successfully, the focus should be on the holistic development of the learner.

6.3.3 Research Objective (c)

To investigate the extent to which quality assurance measures are implemented

6.3.3.1 Research Findings and Conclusions

The literature (see 3.2.2.2) revealed that since the establishment of Umalusi in 2001, various policies, directives, guidelines and requirements have been developed with the focus on quality assurance. Umalusi is responsible for promoting and assuring quality in the general education and training (GET) and further education and training (FET) sectors in South Africa, through the provision of reliable, responsive and reputable services in a supportive and reflective manner. The following components form part of a quality assurance system regarding assessment for South African schools (Umalusi, 2006:2):

- Moderation of examination question papers;

- Internal moderation of assessment;

- Monitoring of the way in which examinations are conducted; and

- Moderation of how marking is done.

In order to supplement the literature findings, sections 3 and 4 of the questionnaire (see 5.3.5) were designed to gather data on whether quality assurance measures regarding assessment are executed according to the quality assurance guidelines. Table 5.23 depicts the measures in place at the different school groups to ensure high-quality assessment

The data gathered from the quantitative research once again revealed that throughout the various sections (see Table 5.23), there was a tendency for LPS teachers to lag behind the GPS and APS teachers in all sections of quality assurance (see Table 5.23).

Data from the qualitative research revealed that the participants did have an understanding of moderation, which forms part of quality assurance (see 5.4.4.1). However, the respondents indicated that moderation was not being managed effectively on school and departmental level. This is cause for concern, as moderation is an important part of quality assurance and also plays a crucial role in the standard and quality of assessment. During the quantitative analysis of the data pertaining to moderation (see Table 5.24), a difference was found in the way in which the different school groups were implementing the various moderation processes, which was also confirmed during the qualitative analysis (see 5.4.4.1).

Furthermore, the teachers also acknowledged that by employing quality assurance procedures, they would help to improve the quality of assessment. This is a positive aspect in that the teachers recognised the advantages of quality assurance. However, the participants were also of the opinion that the implementation of quality assurance should not be allowed to burden their already overloaded schedules. The quantitative data analysis (see table 5.21) also revealed that the teachers were aware of the

importance of quality assurance, but that there were differences in the way in which the different school groups were interpreting and implementing quality assurance.

Although the quantitative findings (see table 5.23) indicate that teachers who participated in the study did employ quality assurance measures according the guidelines provided by the various bodies, there is room for improvement. This correlates with the findings of the qualitative research (see 5.4), with teachers indicating that although they understood the moderation process (which plays an important part in quality assurance), they felt that it was not being implemented and managed effectively.

Furthermore, this correlates with the findings from the literature review (see 3.1.1), namely that quality assurance is an all-embracing term referring to an ongoing, continuous process of evaluation (assessing, monitoring, guaranteeing, maintaining and improving the quality of an educational system).

In conclusion, the research findings revealed that the teachers participating in this study were aware of and understood the importance of quality assurance measures. Furthermore, it can also be concluded that the objective in this respect was addressed, because it emerged that despite an awareness of quality assurance measures and the importance thereof, there is a need to develop such quality assurance measures in the Motheo FET sector.

6.4 RECOMMENDATIONS

Based on the findings from the empirical investigation, it is proposed that in order to enhance **assessment** as a means of improving the performance of learners, a comprehensive assessment process must be implemented.

- The school management team and heads of department should also receive training regarding the implementation of a successful assessment strategy so that they may be in a position to identify possible weaknesses and strengths (see 3.2.2). Teachers need guidance and intensive training in the development of

suitable teaching, learning and assessment plans with the focus on learning outcomes, assessment standards and assessment activities. These teaching, learning and assessment activities must focus on the achievement of the learning outcomes and the accompanying assessment standards. Engaging the learning outcomes, and more specifically the assessment standards, will enable teachers to judge whether the assessment is in fact assessing what has been taught and learnt. Teachers must be encouraged to evaluate the teaching, learning and assessment process to determine the success thereof. Formative assessment can be used to a greater extent as a means of assessing learning and also to inform subsequent learning activities. An assessment plan used as part of an academic term plan will prove effective in the alignment of teaching, learning and assessment.

- Courses in assessment should be included in curriculums for professional development of teachers as a way of preparing them to successfully implement high-quality assessment. If teachers understand the assessment process and the role it plays in the alignment of teaching, learning and assessment, they will be in a better position to select appropriate tasks as teaching, learning and assessment activities.

- Communication and co-operation amongst teachers is also an important focus area, as teachers need to share their experiences and learn from one another in the effort to improve teaching and assessment. School management should introduce regular and proactive staff meetings to address issues relating to assessment and quality.

The second part of the research focussed on quality assurance and, based on the findings from the empirical investigation, it is proposed that the effort to enhance **quality assurance** as a way to improve performance in schools can only be addressed through the implementation of a comprehensive process covering all aspects of quality assurance, as follows:

- Appropriate seminars, conferences and symposia for teachers should be organised. The Free State DoE should also find ways to improve in-service training for teachers in the Motheo district in order to enhance teaching skills and "lifelong" learning, since the respondents indicated that they lacked regular in-service training regarding quality assurance (see Table 5.14). Schools should also implement an approach directed at the quality assurance of assessment. Many higher education institutions have implemented such quality assurance approaches or methods (see 3.2.2), and since the quality of assessment is crucial to the development of learners and the effectiveness of schools, it is important for quality assurance programmes to be introduced in schools. It is recommended that the management teams of schools be given the opportunity and ability to align their schools' visions and objectives to the national plans and protocols. The research findings reveales that a focus on quality assurance regarding assessment in a school placed a demand on school management and teachers to identify strategic directions regarding the implementation thereof. It would therefore be essential to provide relevant strategic management training in the Motheo FET sector. For this to materialise, school management must ensure that every teacher in the school is actively involved and aware of this "action plan".

- Courses in quality and the execution thereof should be included in the curriculum for the professional development of teachers as a way of preparing them to be able to successfully implement high-quality assessment. The majority of the respondents indicated that the increase in the number of education documents and policies has led to a higher level of bureaucracy within schools, thus increasing the administrative workload and impacting on teaching contact time and opportunities for individual interaction with learners. According to Thompson *et al.* (cited in Louw & Venter, 2006:427) this type of bureaucracy has the potential to block activity and stifle ingenuity. School strategies that are aligned with the national and provincial regulations will have strategic direction and

boundaries that would thus correlate with national (and even international) expectations. This would enable the teachers to use national policies and protocols as a guide to facilitate effective and efficient behavioural responses, rather than perpetuating a bureaucratic paper-producing machine.

- As stakeholder contributes to the quality assurance process, schools should recognise all stakeholders and the manner in which they contribute towards effective school systems (see 3.3.2). The research findings revealed that the respondents were able to identify some stakeholders, but that they did not sufficiently realise the importance of working effectively with businesses and the resulting financial benefits. It is therefore recommended that schools in the Motheo FET sector should deliver and circulate a programme that takes into account the various local businesses in a way that will have a direct impact on the school and positive financial implications (as finances can lead/improve resources and teaching technology)

6.5   LIMITATIONS OF THE RESEARCH

Of the fourteen schools in the Motheo FET Sector originally selected for the research, two schools indicated that they were not available to participate due to demanding teacher programmes and at a later stage another two schools withdrew due to demanding teacher programmes. Furthermore during the qualitative research (group-interviews), only two schools (one good-performing schools & one average performing school) indicated that their teachers were available to participate in these interviews. Finally the researcher realised that these group interviews (a pre-determined set of questions for interviews was utilised, see Appendix B) did not provide the necessary freedom to the teachers and to some extent guided teachers responses. Their responses never the less supported the quantitative findings.

6.6   SUGGESTIONS FOR FURTHER RESEARCH

An investigation into classroom practices and approaches at different schools towards quality assurance and the corresponding means implemented in order to ensure high-quality assessment is necessary (by means of for example, observations and document analysis).

During this research the main focus was placed upon the Further Education and Training phase, thus research into other phases (e.g. senior; intermediate and foundation phases) could also be researched in regard to assessment for a quality assurance perspective.

The final section of this dissertation focuses on the overall conclusions of the study.

6.7 OVERALL CONCLUSIONS OF THE STUDY

This study was undertaken with the aim to achieve the objectives set out in Chapter 1. From the main findings, it can be deduced that these objectives have indeed been researched and attained.

The study revealed that the teachers in the Motheo FET sector who participated in the study were aware of the quality assurance measures that should be implemented during assessment practices in schools; however, the implementation thereof is lacking (see 6.3.1). As mentioned in 6.5, in order to address this issue, there should be a focus on introducing seminars, conferences and symposia for teachers with the aim of improving their knowledge regarding quality assurance.

The research revealed that although the teachers who participated in the study were of opinion that they were assessing learners in totality and were aware of the term "holistic assessment", the main focus was on the development of the cognitive and affective domains, with less attention clearly being paid to the development of the psychomotor domain (see 6.3.2). However there was no significant difference in how teachers in the

different school groups implemented the various domains. A realistic solution would be to offer regular courses on assessment with the aim of improving teachers' knowledge and skills with regard to assessment (see 6.5).

With regard to the extent to which quality assurance measures are utilised, it can be concluded that although the research findings revealed that the teachers were employing quality assure measures according to the guidelines provided by the various bodies, there is still room for improvement. In order to address this issue, quality assurance bodies such as Umalusi and SAQA should collaborate with the Free State DoE to develop courses and documentation to enable teachers to improve their skills and understanding in respect of the effective implementation of quality assurance measures.

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APPENDIX A: Letter to principals

<div align="right">
24 HUDSON AVE
FICHARDTPARK
9301
27 JULY 2009
</div>

THE PRINCIPAL

Dear Sir/Madam

APPLICATION TO DO RESEARCH AT YOUR SCHOOL

I am registered for a M.Ed degree at the University of the Free State. As part of the requirements for my degree I need to conduct a research project in schools regarding assessment and the quality assurance thereof.

The title of my research is: **Assessment in the Further Education and Training school sector: A quality assurance perspective**. The main purpose of the study is to investigate whether assessment practices in the Further Education and Training (FET) school sector adhere to quality assurance measures as suggested by the relevant quality assurance bodies. The aim of this study is thus to investigate whether there is a need to improve the quality of assessment practices in secondary schools (FET- sector) in the Motheo district

Data collection will be in the form of questionnaires that will be completed by teachers in the FET-sector (Grades 10 -12) in your school. The second part of the research will involve semi-structured group interviews with teachers from the FET-sector (Grades 10 – 12) in your school. All responses will be treated confidentially and are solely for the purposes of this research.

I hope you will consider my request favourably.

Kind regards
Mr. S.P Brown

Contact details: Cell: 083 23 55 998
                 Fax: 051-401 9456
                 E-mail: browns.hum@ufs.ac.za

APPENDIX B: SEMI-STRUCTURED GROUP INTERVIEW QUESTIONS

SECTION 1: Assessment

1. Do you think there is a need for improving the quality of assessment in schools?

2. How do you ensure that learners are assessed on the following:

    -   Cognitive domain:

    -   Affective domain

    -   Psychomotor domain:

3. In your view, what is the most effective way to assess students?

4. What do you see as the major influences that affect the quality of assessment at school?

SECTION 2: Quality Assurance

1. What moderation mechanisms are in place at school?

2. In your view, are their advantages of employing quality assurance measurements at school?

APPENDIX C: Questionnaire

The purpose of this questionnaire is to collect information regarding assessment from a quality assurance perspective in the FET-school sector.

By completing this questionnaire insight will be provided into teachers' understandings, views and perceptions of assessment and quality assurance.

All information provided will be treated confidentiality.

This questionnaire consists of four sections:

- ❑ Section 1: General Information
- ❑ Section 2: Assessment
- ❑ Section 3: Quality Assurance
- ❑ Section 4: Moderation
- ❑ Section 5: Holistic Assessment

General information on answering this questionnaire

1. This questionnaire will not take more than 30min to complete.

2. Your response will be very valuable for research purposes. Your identity, and that of your school, will not be revealed. I shall be the only person handling these questionnaires. All information will be kept strictly confidential. In no way is this questionnaire an assessment of you or your school.

3. The research can only benefit from this questionnaire if you are honest when answering the questions. Your friendly cooperation is very much appreciated.

THANK YOU FOR YOUR SUPPORT
SP BROWN
Please feel free to contact me for any assistance or enquiries, any time at 083 23 55 998 or at
browns.hum@ufs.ac.za

It is important that you answer all the questions as honestly as possible.

Please complete all the items/questions by indicating or marking the appropriate option with a <u>circle</u> (O), unless advised differently.

SECTION 1: General Information

1.1 EDUCATOR/TEACHER INFORMATION

1. Gender

Male	Female
1	2

<div align="right">4</div>

2. Age in years

20 – 24	1
25 – 30	2
31 – 35	3
36 – 40	4
41 – 50	5
50 +	6

<div align="right">5</div>

3. Teaching experience in the Further Education and Training sector (FET):

6 months	1
12 months	2
18 months	3
24months	4
36 months+	5

<div align="right">6</div>

4. Position of Educator/Teacher

Principal	Vice-Principal	Head of Department	Subject-Head	Teacher level 1	Other (Specify)
1	2	3	4	5	6

<div align="right">7</div>

1.2 GENERAL INFORMATION ON ASSESSMENT

Please complete all the items/questions by indicating or marking the appropriate option with a <u>circle</u> (O), unless advised differently.

1. **Are you aware of The National Protocol on Assessment for schools in the General and Further Education Band as implemented in January 2006?**

Yes	No
1	2

<div align="right">8</div>

2. **What subjects are you responsible for?**

Languages	Life Orientation	Maths or Maths Literacy	Other Subjects
1	2	3	4

<div align="right">9</div>

3. **How many assessment tasks, tests, assignments and examinations are employed during the school year**?

0 – 5	6 – 10	11 – 15	16 – 20
1	2	3	4

<div align="right">13</div>

4. **Are you aware of the rating code and percentages for Grade 7 – 12?**

Yes	No	Not sure
1	2	3

<div align="right">14</div>

5. **What is the average number of learners in your class?**

10 – 20	21 – 30	31 – 40	41 +
1	2	3	4

<div align="right">15</div>

6. **Type of school**

Government	Semi – Private	Private
1	2	3

<div align="right">16</div>

7. **Indicate with an (O), which of the following you see as the major constraints or limitations to the implementation of high quality assessment in your school?** *More than one option may be circled (O)!*

1. Not enough time for quality assessment	1
2. High learner-teacher ratios	2
3. Literacy level of learners	3
4. Cultural and financial situation of the school and the surrounding communities	4
5. Lack of an assessment strategy in the school	5
6. Other (specify):	

17 - 22

1.3 GENERAL INFORMATION ON QUALITY ASSURANCE

Please complete all the items/questions by indicating or marking the appropriate option with a <u>circle</u> (O), unless advised differently.

1. **Do you understand the term quality assurance?**

Yes	No	Not sure
1	2	3

23

2. **Are you aware of the various quality assurance bodies such as the following?** *More than one option may be circled (O)!*

	Yes	No	Not sure
1. South African Qualifications Authority (SAQA)	1	2	3
2. UMALUSI	1	2	3
3. Independent Quality Assurance Agency (IQAA)	1	2	3
4. Other (specify)			

24 - 27

3. How did you become aware of these quality assurance bodies?

Principal	Other teachers	Department of education	Internet	No idea	Other (specify)
1	2	3	4	5	

28

4. Do you receive regular in-service training to sharpen your educational skills and to bring you up to date with recent trends?

Yes	No	Not at all
1	2	3

29

5. What measurements are in place in your school to ensure that all assessment practices are of high quality? *More than one option may be circled (O)!*

	Yes	No	Not sure
1. Planning for assessment	1	2	3
2. Internal moderation	1	2	3
3. Monitoring the conduct of examinations	1	2	3
4. Moderation of the evaluation process	1	2	3
5. Other (specify)			

30 -34

7. Indicate with an (O), which of the following you see as the major constraints or limitations to the implementation of a quality assurance system in your school? *More than one option may be circled (O)!*

1. Not enough time for proper planning	1
2. High learner-teacher ratios	2
3. Literacy level of learners	3
4. Cultural and financial situation of the school and the surrounding communities	4
5. Lack of an assessment strategy in the school	5
6. Ineffective school management & planning	6
7. Lack of self-evaluation by the school	7

8. Other (specify):	

8. Indicate with an (O), which of the following stakeholders, in your opinion; has an important influence on school situation? *More than one option may be circled (O)!*

1. School management (principal, vice-principal, subject heads, governing bodies etc.)	1
2. Other teachers	2
3. Learners	3
4. Parents	4
5. The community	5
6. Businesses	6
7. Other (specify):	

43 -49

9. Indicate with an (O), which of the following, in your opinion, will contribute towards the improvement of the overall quality of the school situation? *More than one option may be circled (O)!*

1. Reforming teacher training	1
2. Improved salaries for teachers	2
3. Performance reward system for teachers	3
4. Smaller class sizes	4
5. Regular & improved in-service training for teachers	5
7. Improved school technology & resources	6
8. Other (specify):	

50 - 56

SECTION 2: Assessment

The purpose of this section of the questionnaire is to examine whether teachers are aware of The National Protocol on Assessment for schools in the General and Further Education Band that was implemented in January 2006. Choose one of the five possible answers: Choose one of the five possible answers: **Never, seldom, sometimes, often** or **almost always**. If your answer is not at all, <u>circle</u> (O) 1; never, <u>circle</u> (O) 2; seldom, <u>circle</u> (O) 3; sometimes, <u>circle</u> (O) 4; often, <u>circle</u> (O) 5. almost always. Remember no answer is right or wrong.

1: Never	2:Seldom	3:Sometimes	4: Often	5: Almost always

1	Is the The National Protocol on Assessment for schools in the General and Further Education Band document made available to all educators in the school?	1	2	3	4	5
2	Do you take time to plan for assessment?	1	2	3	4	5
3	Did you become aware of the document on assessment by means of attending a workshop?	1	2	3	4	5
4	When you implement assessment is there a clear alignment between the stated outcomes, learning experience and the assessment task?	1	2	3	4	5
5	Did you become aware of the document on assessment by means of attending a seminar?	1	2	3	4	5
6	Do you facilitate the assessment tasks in terms of the learning outcomes and the criteria against which the students will be assessed?	1	2	3	4	5
7	Did you become aware of the document on assessment during a staff meeting?	1	2	3	4	5
8	Did you become aware of the content by reading the documents on assessment?	1	2	3	4	5
9	Did you have access to the document by means of the internet?	1	2	3	4	5
10	Was this document on assessment easy to understand (grasp)?	1	2	3	4	5
11	Does the document provide clear guidelines for the	1	2	3	4	5

	implementation thereof?					
12	Do your assessment requirements clearly indicates progression within a specific subject?	1	2	3	4	5
13	I use tests as an instrument of assessment in the classroom?	1	2	3	4	5
14	I use an examination as an instrument of assessment in the classroom?	1	2	3	4	5
15	Assessment provides clear opportunities for learners to demonstrate learning and skill development?	1	2	3	4	5
16	I implement assessment processes which are clear?	1	2	3	4	5
17	Assessment provides clear opportunities for learners to develop various skills?	1	2	3	4	5
18	I use portfolios as an instrument of assessment in the classroom?	1	2	3	4	5
19	I use assignments as an instrument of assessment in the classroom?	1	2	3	4	5
20	I use practical work as an instrument of assessment in the classroom?	1	2	3	4	5
21	I use classroom observations as a method of assessment in the classroom?	1	2	3	4	5
22	Feedback provides learners with clear details on how to improve?	1	2	3	4	5
23	Assessment procedures that are implemented correspond with the teaching and learning outcomes?	1	2	3	4	5
24	Assessment procedures that are implemented corresponds the content used during instruction?	1	2	3	4	5
25	Feedback provides learners with clear details on how to prepare for future assessment tasks?	1	2	3	4	5
26	Does your assessment process indicate the learners progress stated against the learning outcomes?	1	2	3	4	5
27	A review process is in place in your school?	1	2	3	4	5
28	Your assessment strategy takes learner workloads	1	2	3	4	5

	into consideration?					
29	Regular feedback is provided to learners regarding assessment?	1	2	3	4	5
30	Clear criteria and performance standards for the assessment of learners work are made available to students before assessment takes place?	1	2	3	4	5
31	I use learner self-assessment as a method of assessment in the classroom?	1	2	3	4	5

57 - 87

SECTION 3: Quality Assurance

The purpose of this section of the questionnaire is to examine whether the implementation of the South African Qualifications Act in 1995, Umalusi in 2001 and other quality assurance bodies are in place with the aim of ensuring quality. Choose one of the five possible answers: **Never, seldom, sometimes, often** or **almost always**. If your answer is not at all, circle (O) 1; never, circle (O) 2; seldom, circle (O) 3; sometimes, circle (O) 4; often, circle (O) 5. almost always. Remember no answer is right or wrong.

1: Never	2:Seldom	3:Sometimes	4: Often	5: Almost always

1	I implement assessment methods which inform and improve the curriculum?	1	2	3	4	5
2	I implement assessment methods which inform and improve assessment practices?	1	2	3	4	5
3	During assessment practices all learners are given an equal opportunity to demonstrate achievement?	1	2	3	4	5
4	During assessment practices learners are not judged or assessed according to ethnicity?	1	2	3	4	5
5	During assessment practices learners are not judged or assessed according to gender?	1	2	3	4	5
6	During assessment practices learners are not judged or assessed according to age?	1	2	3	4	5
7	During assessment practices learners are not judged or assessed according to disability?	1	2	3	4	5
8	During assessment practices learners are not judged or assessed according to social class?	1	2	3	4	5
9	During assessment practices learners are not judged or assessed according to values?	1	2	3	4	5
10	During assessment practices learners are not judged or assessed according to life experiences?	1	2	3	4	5
11	During assessment practices learners are not judged or assessed according to race?	1	2	3	4	5
12	I Implement assessment processes which are	1	2	3	4	5

	transparent?					
13	Feedback provides learners with clear details on how to improve?	1	2	3	4	5
14	I implement assessment processes which are clear unambiguous?	1	2	3	4	5
15	I implement assessment processes which are accessible to all students?	1	2	3	4	5
16	The assessment procedures that are implemented correspond with the teaching and learning outcomes?	1	2	3	4	5
17	The assessment procedures that are implemented corresponds the content used during instruction?	1	2	3	4	5
18	Feedback provides learners with clear details on how to prepare for future assessment tasks?	1	2	3	4	5
19	I work in partnership with other teachers to review and discuss student's performances?	1	2	3	4	5
20	I do all the marking/grading myself?	1	2	3	4	5
21	Do you assess learners on a continuous basis?	1	2	3	4	5
22	Does the school implement an effective assessment strategy?	1	2	3	4	5
23	Regular feedback is provided to learners regarding assessment?	1	2	3	4	5
24	Clear criteria and performance standards for the assessment of learners work are made available to students before assessment takes place?	1	2	3	4	5
25	I communicate with teachers on a daily basis interpret the progress made by learners?	1	2	3	4	5

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SECTION 4: Moderation

The purpose of this section of the questionnaire is to examine the extent that the steps of moderation implemented, contributes towards high quality assessment. Choose one of the five possible answers: **Never, seldom, sometimes, often** or **almost always**. If your answer is not at all, circle (O) 1; never, circle (O) 2; seldom, circle (O) 3; sometimes, circle (O) 4; often, circle (O) 5. almost always. Remember no answer is right or wrong.

1: Never	2:Seldom	3:Sometimes	4: Often	5: Almost always

1	Assessment activities address the various skills needed?	1	2	3	4	5
2	Assessment activities cover all content?	1	2	3	4	5
3	Assessment activities address a variety of question types?	1	2	3	4	5
4	Does the assessment cover the intended outcomes for the learning field?	1	2	3	4	5
5	Questions asked during assessment covers aspects on the cognitive domain?	1	2	3	4	5
6	Questions asked during assessment covers aspects on the affective domain?	1	2	3	4	5
7	Questions asked during assessment covers aspects on the psychomotor domain?	1	2	3	4	5
8	Can you provide evidence of internal moderation?	1	2	3	4	5
9	Is the level of language used appropriate for the FET-sector?	1	2	3	4	5
10	Is a variety of action verbs used to assess the different levels of Blooms taxonomy?	1	2	3	4	5
11	Is the time provided for the assessment tasks	1	2	3	4	5

	appropriate?					
12	Assessment activities adhere to the relevant policies, guidelines and classroom practises?	1	2	3	4	5
13	The memo is compiled in a detailed and accurate way?	1	2	3	4	5
14	It is clearly stated what weight the individual assessments will carry?	1	2	3	4	5
15	Assessment schedules are provided in advanced?	1	2	3	4	5
16	Effective administration procedures are in place to manage assessment results?	1	2	3	4	5

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SECTION 5: Holistic Assessment

The purpose of this section of the questionnaire is to examine whether teachers assess students on the cognitive, affective and psychomotor domain. Choose one of the five possible answers: **Never, seldom, sometimes, often** or **almost always**. If your answer is not at all, <u>circle</u> (O) 1; never, <u>circle</u> (O) 2; seldom, <u>circle</u> (O) 3; sometimes, <u>circle</u> (O) 4; often, <u>circle</u> (O) 5. almost always. Remember no answer is right or wrong.

1: Never	2:Seldom	3:Sometimes	4: Often	5: Almost always

1	During assessment I use questions where students are required to demonstrate certain skills with precision?	1	2	3	4	5
2	During assessment do you make use of questions where learners are required to communicate with others?	1	2	3	4	5
3	During assessment I use questions where students are required to recall knowledge?	1	2	3	4	5
4	During assessment I use questions where students are required to manipulate certain situations?	1	2	3	4	5
5	During assessment I use questions where students are required to prioritise?	1	2	3	4	5
6	During assessment I use questions where students are required to apply previous knowledge in a new situation?	1	2	3	4	5
7	Do you create an atmosphere in the classroom where learners can seek newly constructed information?	1	2	3	4	5
8	During assessment I use questions where students are required to act in a spontaneous manner?	1	2	3	4	5
9	During assessment do you provide opportunities for learners to express their feelings about a certain	1	2	3	4	5

	topic?					
10	During assessment do you ask questions where learners are required to distinguish between different aspects?	1	2	3	4	5
11	During assessment do you provide opportunities where learners can creatively apply new mastered skills?	1	2	3	4	5
12	Do you expose learners to situations to make them aware of real life situations?	1	2	3	4	5
13	Do you ask questions where learners are required to synthesise the content that has been researched or analysed?	1	2	3	4	5
14	Do you provide constructive feedback in terms of progression when a new skill is developed?	1	2	3	4	5
15	Do you make use of questions where learners are required to differentiate between situations?	1	2	3	4	5

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FS460C

APPLICATION FORM TO REGISTER RESEARCH PROJECTS IN THE FREE STATE DEPARTMENT OF EDUCATION

- ❖ Please complete all the sections of this form that are applicable to you. If any section is not applicable please indicate this by writing N/A.
- ❖ If there are too few lines in any of the sections please attach the additional information as an addendum.
- ❖ Attach all the required documentation so that your application can be processed.

Send the application to:

Director: Quality Assurance
Room 401
Syfrets Building
Free State Department of Education
Private Bag X20565
Bloemfontein
9300.

Tel: 4048750/4048662
Fax: 447 7318

1   **Title** (eg Mr, Ms, Dr, Prof):

M	R		

2   **Initials and surname**:

S	P		B	R	O	W	N						

3   **Telephone**:   Home:

0	5	1	-	4	3	6	5	6	5	7	

Cell:

0	8	3	-	2	3	5	5	9	9	8	

Work:

0	5	1	-	4	0	1	9	6	6	0	

Fax:

0	5	1	-	4	0	1	9	4	5	6	

E-Mail

Browns.hum@ufs.ac.za

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4   **Home Address**:

7	W	I	L	L	I	A	M		T	R	O	L	L	I	P
S	T	R		H	E	U	W	E	L	S	I	G			
												B	F	N	

5   **Postal Address**:

7	W	I	L	L	I	A	M		T	R	O	L	L	I	P
S	T	R		H	E	U	W	E	L	S	I	G			
												B	F	N	

6.1   **Name of tertiary institution/research institute**
         UNIVERSITY OF THE FREE STATE (UFS)

6.2   **Occupation:** STUDENT (Full-time)

6.3   **Place of employment:** N/A

7   **Name of course**:

         M.Ed. (Curriculum Studies - DKT 700)

8   **Name of supervisor/promoter:** Dr. ER du Toit (University of the Free State)

         Please attach **a letter from your supervisor** confirming that you have
         registered for the course you are following.

9   **Title of research project**:

Assessment in the Further Education and Training school sector: A quality assurance perspective

10   **Concise explanation of the research topic:**

The purpose of the research is to investigate whether assessment practices in the Further Education and Training (FET) school sector adhere to quality assurance measures as suggested by the relevant quality assurance bodies. The aim of this study is thus to investigate whether there is a need to improve the quality of assessment practices in secondary schools (FET- sector) in the Motheo district. In order to achieve the objectives of this study various research methods will be implemented. The relevant information of the research will be collected by means of a literature study, qualitative and quantitative research methods. The combination of these research methods will contribute to the improvement of the reliability and validity of the study.

11   **Application value that the research may have for the Free State Education Department:**

This research will identify whether teachers use and implement information suggested by the national quality assurance bodies (SAQA, DoE, IQAA & Umalusi) and whether adequate quality assurance procedures regarding assessment are in place in secondary schools in the Motheo district of the Free Sate. The results of this study could contribute

towards quality assurance procedures of assessment in the Further Education and Training band throughout schools in the study area.

12.1   The full particulars of the group with whom the research is to be undertaken:
Teachers/Educators in the FET- school sector (Grades 10 -12)

12.2   List of schools/Directorates in the Department/Officials:11

A stratified random sampling method was used were schools were divided into sub-groups

Bloemfontein South High School
Brebner Secondary School
C&N Oranje Secondary School
Dr. Blok Secondary School
Eunice Secondary School
Fichardtpark Secondary School
Grey College Secondary School
HTS Louis Botha Secondary School
Jim Fouche Secondary School
Lereko Secondary School
Navalsig Secondary School
Petunia Secondary School
Sand du Plessis Secondary School
Sentraal High School

12.3   Grades: FET – sector: Grades 10 – 12

12.4   Age and gender groups:

Any/All

12.5   Language groups:

Afrikaans & English

12.6   Numbers to be involved in the research project:

+/- 225 Teachers/Educators in the Motheo district

13   Full particulars of how information will be obtained eg questionnaires, interviews, standardized tests.   **Please include copies of questionnaires, questions that will be asked during interviews, tests that will be completed or any other relevant documents regarding the acquisition of information**.

<u>**Questionnaires:**</u>

A random sampling method will be used for the selection of teachers in the schools who will receive questionnaires. The sample size will be 15% of the population (+/- 1500 FET-teachers in Bloemfontein in 2008 according to the Free State Department of Education) which is a representative sample (225 teachers) that will contribute towards the validity

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and reliability of this research. A pilot study will be conducted to remedy possible issues that might influence the validity of the research negatively.

Interviews:

During this study, group interviews with teachers from the FET-school sector will be carried out to collect data and to sample the respondents' opinions. These interviews will be semi-structured as this will provide flexibility to both the researcher and the respondents'.

14   The **starting and completion dates**of the research project: (Please bear in mind that research is usually not allowed to be conducted in the schools during the fourth term.)

03 August 2009 – 31 August 2009

15   Will the research be conducted **during or after school hours**?

During school hours and/or after school hours

16   If it is necessary to use school hours for the research project, **how much time** will be needed?

Max. 60 minutes****30min each

17   **How much time will be spent on the research project** by individual educators and/or learners?

Educators: max. 60 minutes

18   **Have you included**:

18.1   A letter from **your supervisor** confirming your registration for the course you are following?   Yes

18.2   A draft of the letter that will be sent **to the principals** requesting permission to conduct research In their schools?   Yes

18.3   A draft of the letter that will be sent **to parents** requesting permission for their children to participate in the research project?..(If applicable)   N/A

18.4   Copies of **questionnaires** that you wish to distribute?   Yes

18.5   A list of **questions** that will be asked during the interviews?   Yes

I confirm that all the information given on this form is correct.

…………………………   ………………….
SIGNATURE   **DATE**

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Appendix D: Research Application Form   p. 214-217