



2007

Report on the Quality Assurance of the Vocational Education and Training Assessment

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#### FOREWORD BY THE CHAIRPERSON OF UMALUSI

Since 2003, Umalusi has been quality assuring the NATED Report 190/191 instructional offerings. Initially, only a selected number of instructional offerings at the N3 level of certain of the six examinations that are conducted annually were quality assured. Later, a selection of N2 instructional offerings and quality assurance activities for all six examinations were added. Umalusi takes pride in the great strides that have been made in the quality assurance of the examinations in this sector over the past few years.

Umalusi judges the quality and standard of examinations by determining: the level of adherence to policy in implementing examination related processes; the cognitive challenge of examination question papers; the appropriateness and weighting of content in question papers in relation to the syllabus; the quality of presentation of examination question papers; the efficiency and effectiveness of systems, processes and procedures for monitoring of the conducting of examinations; the quality of marking as well as the quality and standard of internal quality assurance processes within the assessment body. This is accomplished through the following quality assurance processes: moderation of question papers; monitoring of continuous assessment; monitoring of the writing of the examinations; moderation of marking; and standardization of results.

The Vocational Education and Training examinations does not attract the same level of public attention as the Senior Certificate. These examinations are classified as not being "high stakes" and therefore the achievements go unnoticed. However, all this is about to change. The introduction of the National Certificate (Vocational) coupled with the emphasis on skills training is once again shifting Vocational Education and Training into the educational spotlight. The implementation of the National Certificate (Vocational) at NQF level 2 in 2007 has been a challenge. A particular challenge is the quality assurance of the practical component of this qualification. It is ironic that the erstwhile technical colleges offered mainly theoretical training and therefore the implementation of the National Certificate (Vocational) was hampered due to infrastructure and human resource limitations.

Through its quality assurance processes, Umalusi will continue to ensure that the quality, integrity and credibility of the Vocational Education and Training examinations are maintained and continue in its endeavour towards a world-class assessment system.

Prof J D Volmink 19 December 2007





## **Chapter One**

## Introduction

In terms of the General and Further Education and Training Quality Assurance Act (No 58 of 2001) Umalusi (Council for Quality Assurance in General and Further Education and Training), is responsible for quality assurance of general and further education and training in South Africa. The Council executes this function through:

- Monitoring and reporting on the adequacy and suitability of qualifications and standards;
- Quality assurance of all exit point assessments;
- Certification of learner achievements;
- Quality promotion amongst providers; and
- Accreditation of private providers.

Umalusi reports on the standard of the Vocational Education and Training (VET) examinations to the Minister of Education on an annual basis. In this regard, Umalusi reports on each of the quality assurance of assessment processes and procedures, which together allow Umalusi to make an evaluative judgement on the credibility of the VET examinations. These processes ensure that all aspects of the examination are monitored against prescribed criteria, thus ensuring that standards are maintained.

This report is in respect of the quality assurance of the VET assessment in 2007

- Six NATED Report 190/191 examinations were conducted during March, April, June, August and November. The Natural Sciences examinations were conducted during April, August and November and the Business and General Studies examinations were conducted during March (supplementary N3/NSC examination), June and November. The responsibility of Umalusi is restricted to the quality assurance of N1 N3 as well as NIC and NSC Report 190/191 qualifications.
- The National Certificate Vocational (NCV) level 2 examinations were conducted during November 2007.
- The internal assessment (portfolios of evidence and portfolios of assessment) of a sample of the NCV subjects that are currently moderated by Umalusi were moderated during October 2007.
- The integrative summative assessment tasks were evaluated and the conduct thereof monitored/moderated during October 2007.

Examinations in this sector are written at different types of centres, namely public FET colleges, private FET colleges, correctional-services centres and schools. The marking of scripts takes place externally in the case of N2, N3, NSC and NCV and internally in the case of N1 and NIC.



Umalusi judges the quality and standard of the VET examinations by determining: the level of adherence to policy in implementing examination related processes; the cognitive challenge of examination question papers; the appropriateness and weighting of content in question papers in relation to the syllabus; the quality of presentation of examination question papers; the efficiency and effectiveness of systems, processes and procedures for the monitoring of the conducting of the VET assessment; the quality of marking as well as the quality and standard of internal quality assurance processes.

Chapter 1 of this report outlines the purpose and scope of the report. Chapter 2 briefly describes the quality assurance processes used by Umalusi to ensure that the VET examinations meet the required standards. The third chapter reports on the quality assurance of the Natural Sciences and the Business and General Studies examinations. Chapter 4 reports on the quality assurance of the NCV level 2 examinations.

## 2. Purpose of the report

The purpose of this report is to report to the Minister of Education on Umalusi's quality assurance of the 2007 VET examinations with respect to the following:

- The salient findings from the external moderators' reports, which are synthesized, analyzed and used to make judgements on the standard of the VET examinations;
- The quality and standard of marking the VET examinations;
- The efficiency and effectiveness of processes for the conduct of the VET examinations;
- The moderation of marks during the standardization process;
- The recommendations for the improvement of assessment processes.

## 3. Scope of the report

This report covers all the 2007 VET examinations and reports on the quality assurance of assessment processes used by Umalusi to ensure that the VET examination is of the required standard, namely:

- moderation of question papers and integrative summative assessment tasks;
- moderation of internal assessment (for the NCV);
- moderation of marking;
- monitoring the conduct of the VET examination; as well as the
- moderation of examination marks.

Each of the two chapters on the assessment (Chapter 3 and Chapter 4) captures the salient findings with respect to each of the processes, highlights certain strengths/areas of improvement as well as problem areas and offers recommendations for improvement.



## **Chapter Two**

# 2

## **Quality Assurance Processes**

The quality assurance processes used by Umalusi are described in the section that follows.

## 1. Moderation of question papers

External moderation of question papers is one of Umalusi's key quality assurance processes. Question papers are moderated to ensure that they are of an appropriate standard, cover the appropriate content as prescribed in the syllabus, are representative of relevant conceptual domains and are relatively fair, valid and reliable.

Umalusi appoints external moderators who are qualified subject experts and experienced in the field of assessment to moderate the question papers. The moderation process focuses on ensuring that the question papers submitted for external moderation comply with the prescribed criteria set by Umalusi.

The criteria used by the external moderators to moderate the question papers cover the following aspects:

- Content coverage
- Cognitive challenge
- Internal moderation
- Language and bias
- Predictability
- Adherence to policy
- Marking memorandum
- Technical criteria
- Overall impression of the paper.

After completion of moderation, the external moderators submit reports to Umalusi and the national Department of Education. The use of prescribed report formats for both Umalusi and the national Department of Education ensures that the external moderators give a detailed account of the quality of the question papers and identify areas that are in need of improvement. Umalusi uses the moderators' reports to determine the standard of the question papers, highlight issues that were observed by the moderators and report on the quality of the VET question papers to the Minister of Education.



## 2. Moderation of internal assessment

Umalusi has the responsibility to quality assure all exit examinations within the General and Further Education and Training Band. Final promotion marks consist of two components: an external written component and an internal component. Umalusi's quality assurance processes are used to quality assure both components of the examinations.

Internal assessment means any assessment conducted by the provider, the outcomes of which count towards the achievement of a qualification.

Internal assessment is set, marked and graded at site level. This makes it absolutely necessary for Umalusi to put in place measures to standardize internal assessment to ensure uniform standards in this component of the examination. In order to standardize internal assessment, Umalusi sets down directives. These directives include: defining the composition of internal assessment; the respective responsibilities of key role players; presentation of internal assessment; as well as moderation procedures.

Moderation of internal assessment occurs at site, college, provincial and national levels. Umalusi moderates a sample of the internal assessment portfolios to verify that the internal assessment was conducted in terms of the Directives for Internal Assessment.

## 3. Monitoring of the VET examinations

Monitoring of the examinations is one of the most important quality assurance processes used to ensure the credibility of the VET examinations.

Umalusi judges the standard of the examinations by determining the examination and marking centres' level of adherence to policy in terms of establishing systems and implementing the required processes and procedures for examinations. Monitoring of the conducting of the examinations entails monitoring the different types of examination centres, as well as the different phases. The following phases of the 2007 VET examinations were monitored:

- The design phase, which focuses on the state of readiness of the assessment body, as well as the examination and marking centres to administer the examination.
- Conducting of examinations, which includes the writing and marking process.
- The capturing, processing and release of results, which includes the capturing of marks, standardization and release of results.

Umalusi, the provincial departments of education and the national Department of Education



monitor the design and conducting of examinations.

The purpose of monitoring is to assess the level of compliance with the national policy relating to the Further Education and Training programmes offered at colleges.

It is Umalusi's responsibility to ensure that monitoring is done effectively and efficiently. For this purpose, carefully selected and trained monitors are used to monitor the different phases and types of centres.

It is important to note that, in this sector, the national Department of Education is responsible for all aspects pertaining to the setting, editing, printing, packaging and distribution of all externally written question papers. Examination papers are sent to and stored at examination centres. The national Department of Education is also responsible for the appointment of examiners, marking centre managers, markers and chief markers (marking moderators). The involvement of the provincial departments of education with regard to the VET examinations is at this stage mainly in terms of the conducting of examinations. This influences Umalusi's scope and approach to monitoring of VET examinations.

## 4. Moderation of integrative summative assessment tasks

For the National Certificate (Vocational) the external summative assessment, in the case of the vocational subjects, comprises a theoretical question paper and a practical integrated summative assessment task (ISAT). It is critical that the tasks, as well as the administering thereof are moderated.

The main objectives of moderation of the ISATs are to:

- Ascertain the appropriateness and standard of the practical assessment tasks.
- Confirm that a candidate has demonstrated the required skills and competence as well as the necessary underpinning knowledge.
- Ensure that evidence of successful performance is collected and documented effectively.
- Assure quality by verifying that practical assessment submits to the principles of being fair, valid, reliable, and practicable.
- Ensure that assessment across different organizations is consistent and that standards are maintained.
- Ensure the proper procedures are followed.



## 5. Moderation of marking

The moderation of marking is of critical importance as it largely determines the standard and quality of marking and ensures that marking happens according to established practices and standards. Umalusi moderates marking to improve the quality and standard of marking and to promote confidence in the VET examinations. Umalusi focuses on the moderation of marking of selected N1 - N3 and NCV subjects.

The purpose of moderation of marking is to determine the standard and quality of marking and to make a judgement on the reliability and practicability of the systems, processes and procedures at the marking centres.

Umalusi moderators moderate marking to ensure that:

- memorandum discussions take place as prescribed;
- markers are effectively prepared for the marking process;
- all possible alternative correct answers are included in the memorandum and the memorandum is accepted and finalised;
- the memorandum is correctly interpreted and consensus is reached on memorandum interpretation;
- an acceptable and appropriate standard of marking and internal moderation of marked scripts is maintained across the marking centres and throughout the marking process.

The external moderators are expected to report comprehensively regarding their findings on the above so that Umalusi can take the necessary steps to ensure the quality and validity of this particular aspect of the examination process. In addition, the moderators also report on the systems, processes and procedures at the marking centres.

To fulfil the external moderation of marking function, Umalusi appoints external moderators who are highly experienced in moderation of assessment. These moderators carefully evaluate the systems, procedures and practices at marking centres by means of instruments developed by Umalusi.

## 6. Standardization of results

The General and Further Education and Training Act indicates that Umalusi may adjust raw marks during the standardization process and that the assessment bodies may recommend to the Council during the standardization process that raw marks be adjusted.



The standardization is based on the principle that when the standard of examinations from one examination to another or one year to the next are equivalent, and they are taken by a sufficiently large body of candidates, then statistical mark distribution should correspond. Standardization therefore serves to neutralise differences in the standards between examinations over time.

The following are possible sources of variability in the distribution of examination results:

- Standard of the examination question papers and internal assessment
- Standard of marking
- Changes in the composition of the group of candidates for a particular subject
- Disruptions of examinations
- Special efforts by assessment bodies and examination centres to improve performance.

The Kolmogorov-Smirnov goodness of fit procedure is used in conjunction with historical averages for the standardization of the VET (N1 – N3, NIC, NSC) results. The historical averages are reviewed after the completion of each examination and adjusted where necessary. For subjects with an enrolment of less than 25 candidates no historical averages are determined and the raw marks are accepted, except in cases where there are compelling reasons to effect an adjustment.

The current mark distributions and the corresponding average distribution over the last six examinations of all the N1 - N3, NIC and NSC subjects are compared and considered in the standardization decisions. The examination raw scores are compared per percentage interval with the norm and where raw scores fall outside the confidence band they are adjusted up to the band, while scores falling within the band are not adjusted.

A different approach had to be designed for standardizing the NCV results. As this is a new qualification, there are no historical averages against which to standardize the current mark distribution. The approach relied primarily on pairs analyses of subjects within a particular programme as well as the qualitative information provided by the chief markers and external moderator reports.

#### Principles of standardization

The following are some of the principles that were employed in the standardization of the examination results:

No adjustment in excess of 10% would be applied either upwards or downwards, except in exceptional cases.



No adjustment will be made if the recommended adjustment does not make a significant difference in the percentage passes and distinctions. Where the trend differs distinctly from the historical average, attention is drawn to the need for a new historical average.



## **Chapter Three**

3

## **Quality Assurance of the NATED examinations**

### 1. Introduction

Umalusi has been involved in the quality assurance of the NATED examinations since 2003. Over this time Umalusi has increased its quality assurance activities and currently quality assures aspects of each of the six NATED examinations conducted every year.

## 2. Purpose

The purpose of this chapter is to report on the quality assurance activities, findings and recommendations of Umalusi's moderators and monitors for the different NATED examinations conducted in 2007. The report covers the April, August and November Natural Sciences examinations and the February, June and November Business and General Studies examinations.

## 3. Scope

## 3.1 Moderation of question papers

A total of 6 Natural Sciences and 12 Business and General Studies subjects were moderated. The details regarding subjects and examinations are as indicated in the following tables:

Table 1: Moderation of question papers – Natural Sciences

NAT	NATURAL SCIENCES								
No	SUBJECT	APRIL	AUGUST	NOVEMBER					
1	Industrial Electronics N2	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$					
2	Industrial Electronics N3		$\sqrt{}$						
3	Mathematics N2		$\sqrt{}$						
4	Mathematics N3		$\sqrt{}$						
5	Mechanotechnology N3	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$					
6	Engineering Drawing N3	√	$\sqrt{}$	√					



Table 2: Moderation of question papers - Business and General Studies

GEN	NERAL STUDIES			
No	SUBJECT	FEBRUARY	JUNE	NOVEMBER
1	Applied Accounting N2		V	
2	Applied Accounting N3		V	
3	Business English First Language N3			V
4	Business English Second Language N3	V		V
5	Business English Second Language N2		1	
6	Computer Practice and Typing Technique N2		1	
7	Computer Practice N3		V	
8	Public Administration N3		V	V
9	Sake Afrikaans Eerste Taal N3			V
10	Sake Afrikaans Tweede Taal N3			V
11	Office Practice N3			V
12	Small Business Management and Entrepreneurship			V

## 3.2 Monitoring of examinations

Umalusi deployed 18 monitors to visit a pre-selected sample of examination and marking centres in all nine provinces.

#### 3.2.1 Monitoring of the design phase

The monitors were deployed for one day before the onset of the April and November examinations to monitor the state of readiness of the provincial departments of education, as well as selected marking centres for the conducting of the examinations. The table below indicates the centres included in Umalusi's monitoring of the design phase before the November examinations.

Table 3: Centres monitored during design phase

PROVINCE	COLLEGE	CAMPUS
Eastern Cape	Port Elizabeth	Russel Road
Free State	Maluti	Bethlehem
Gauteng	Tshwane South	Centurion
KwaZulu-Natal	Northdale	Pietermaritzburg
Limpopo	Capricorn	Seshego
Mpumalanga	Nkangala	C N Mahlangu
North West	Vuselela	Potchefstroom
Western Cape	College of Cape Town	Pinelands
Northern Cape	Urban	City

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#### 3.2.2 Monitoring of the writing phase

Umalusi deployed monitors to visit examination centres during the April, June, August and November examinations. The monitoring/verification of the writing phase made provision for the inclusion of examination centres at public FET colleges, private FET colleges, schools and correctional-services centres. The table below provides a summary of the different examinations included in Umalusi's monitoring of the writing phase and indicates the number and types of centres per province.

Table 4: Monitoring of the writing phase

PROVINCE	TYP:	TYPE OF EXAMINATION CENTRE														
		Public FET Colleges			Correctional Services			Private FET Colleges			Schools					
Examination	April	June	August	November	April	June	August	November	April	June	August	November	April	June	August	November
Eastern Cape		1	1	2	1		1		1	1		2				
Free State	1		1	2												
Gauteng		1	1	4	1								1	1	1	
KwaZulu-Natal	1	1	1	4					1							
Limpopo	1								1	1	1	1				1
Mpumalanga	1			1				1								
North West	1		1	1				1								
Northern Cape		1														
Western Cape	1			3						1		3				
TOTAL	6	4	5	17	2	0	1	2	3	3	1	6	1	1	1	1
Grand Total		3	32	1		1	5	1		1	3			,	4	



#### 3.2.3 Monitoring of marking

A sample of marking centres was selected for monitoring of marking. Marking was monitored at selected marking centres in KwaZulu-Natal, Eastern Cape and Mpumalanga. The marking phase was monitored during the August and November examinations at the marking centres as indicated in the table below.

Table 5: Marking centres monitored

EXAMINATION	PROVINCE	MARKING CENTRE
August 2007	Eastern Cape	St Marks (Buffalo City College)
	Mpumalanga	Witbank (Nkangala College)
November 2007	Eastern Cape	St Marks (Buffalo City College)
	KwaZulu-Natal	Centec (Thekwini College)

## 3.3 Moderation of marking

Eleven of Umalusi's NATED moderators were deployed to marking centres across the country to attend memorandum discussions and moderate the marking of a sample of 15 subjects during one or more of the 2007 NATED examinations.

Addendum 1 gives a detailed account of the subjects moderated and the centres at which the memorandum discussions were attended and marking was moderated for each of the NATED examinations.

#### 3.4 Standardization of results

The N1 - N3 subject results of the April, June, August and November examinations were standardized in accordance with the Kolmogorov-Smirnov goodness of fit procedure in conjunction with historical averages.

## 4. Findings

This section of the report will outline the significant findings from the external moderators' and monitors' reports in respect of the 2007 NATED examinations.



## 4.1 Moderation of question papers

#### 4.1.1 Content Coverage

Most of the NATED question papers covered the content and skills of the subject as prescribed by the syllabus, although the weighting was not always as prescribed by the syllabus.

The August and November Mathematics N2 question papers were rejected due to the fact that the total marks allocated were not in line with the level of difficulty and the overall duration of the question papers; as a result the candidates could complete the examination well before the allocated time.

#### 4.1.2 Cognitive skills

The majority of the question papers adhered to the prescribed distribution in terms of cognitive level. It was reported that Mechanotechnology N3 and Engineering Drawing N3 question papers reflected a fair balance in terms of the cognitive challenge of the questions and these papers were approved on first moderation.

The cognitive demand in some of the question papers was in keeping with the recommendations in the syllabus. Small Business Management and Entrepreneurship N3 were two such subjects.

#### 4.1.3 Internal moderation

Umalusi requires that question papers sent to it for external moderation must be accompanied by the internal moderator reports. This is still a major concern as question papers are sent to external moderators without the internal moderators' reports. This was registered as a concern in the 2005 and 2006 reports on quality assurance of the VET examination but, unfortunately, the practice continues.

Most of the external moderators reported that no evidence of internal moderation, no internal moderators' signatures and reports and no history of the question papers were included. However, positive comments on the internal moderation were received, e.g.

- although no proof of moderation was submitted, the nature of the question paper indicates that thorough internal moderation did take place;
- for the first time, the Mechanotechnology N3 August question paper was submitted to the external moderator with the internal moderator's report.



#### 4.1.4 Language and bias

The language used was clear, fair and pitched at an appropriate level for most of the question papers. Instructions and questions were in general clear and unambiguous. Most moderators reported that candidates would have no difficulty in accessing the paper as terminologies were appropriate for English second language candidates.

#### 4.1.5 Adherence to policy

The external moderators reported that, in general, question papers were set in terms of current policy/guideline documents. Certain question papers required resubmission because they did not cover certain modules of the syllabus. It was found that most of the question papers moderated were not accompanied by an analysis grid.

#### 4.1.6 Marking memorandum

The memoranda were of an appropriate standard and would facilitate marking.

#### 4.1.7 Technical criteria

The question papers were sent to the external moderators as draft papers, hence there were many question papers not adhering to this criteria. The layout in terms of instructions, mark allocation, numbering, sketch and diagram sheets of most question papers were not of an acceptable standard.

## **Areas of improvement**

- The majority of the question papers moderated were approved on first moderation.
- Some question papers were accompanied by the full history of the question paper.
- There is an improvement in the quality of the marking memorandum for most of the subjects.

## Areas of concern

- Cognitive challenge of question papers
  - The level of cognitive challenge of the N2 question papers and some N3 question papers remains a challenge.
- Adherence to policy
  - The late submission of some question papers to external moderators is of serious concern.



#### • Quality of internal moderation

The standard and quality of internal moderation was generally low. In some cases there was no evidence of internal moderation. This impacts negatively on the quality and standard of the question papers submitted for external moderation and on the external moderation process.

## 4.2 Monitoring of examinations

#### 4.2.1 Monitoring of the design phase

The following are the findings of the monitoring of the design phase in terms of the April and November 2007 examinations:

- In general, the examination centres visited were well prepared for the 2007 examinations.
   Question papers were received in advance. Examinations papers, stationery and other
   examination materials were stored in strongrooms in most of the examination centres.
   Examination permits reached the colleges a week before commencement of the
   examinations. In most of the examination centers proof was obtained of the appointment
   of chief invigilators and invigilators.
- The monitoring plans differ from province to province. In some provinces, for example in North West, Western Cape and Eastern Cape, the monitoring plans were done for the year, while other provinces had three year monitoring plans.
- The major emphasis was on monitoring public colleges. Schools and private colleges were excluded from the monitoring plans of most provincial departments of education.
- The marking centres were well prepared for the examinations.

## Areas of concern

• The exclusion of schools, private colleges and correctional services in the monitoring plans of some provincial departments of education is a concern, as many incidences of non-compliance with policy occur at these centres.

#### 4.2.2 Monitoring of the examination centres

In general, the necessary systems and processes to ensure that examinations are conducted in a credible manner were found to be in place. Deviations from policy were mostly of a less serious nature, however, some degree of non-compliance with policy was observed at the following institutions:

Tswelopele Commercial College in Limpopo:
 The college had no written invigilation time table. However, it was reported that caution
 was taken not to allow the lecturer to invigilate his/her subject.
 The seating arrangements were not conducive for the writing of the examination: in some



- cases candidates sat facing each other.
- Pretoria Gardens High school in Gauteng:
   The display of examination permits and identity documents during the writing of the examination was disregarded.
- Living Waters Independent school in Limpopo: Numerous aspects of non-conformance reported.

### Areas of concern

- Appointment and training of chief invigilators. There seems to be no clear criteria for the appointment of chief invigilators; the general practice is to appoint a senior staff member to fulfill this task and in most cases this is not done in writing. The delegation of this responsibility in the absence of the chief invigilator is often not done in writing.
- Lack of contingency plans for unforeseen circumstances e.g. power failure, emergencies.
- The seating arrangements at the site visited in Limpopo were not conducive to the writing of the examination: in some cases candidates sat facing each other.
- The display of examination permits and identity documents during the writing of the examinations is disregarded at some centres.
- Inaccurate numbers of question papers e.g. number as indicated on envelope contradictory to actual number included.

#### 4.2.3 Monitoring of marking centres

In the marking centers visited by the monitors, the centres were in general well prepared for the examinations.

Most of the markers came prepared to the memorandum discussions. Additional training and attention was provided to new markers before and during the marking session. The marking centre managers and chief markers need to be commended on their efforts to ensure quality marking.

## Areas of concern

- Unavailability of examination assistants to check the addition and transfer of marks from the scripts to the mark sheets.
- There was no evidence of provincial monitoring at the centres that were visited.
- The Marking Centre Manager at the marking centre visited in the Eastern Cape served as a Centre Manager, Internal Moderator as well as Chief Marker.



## 4.3 Moderation of marking

#### 4.3.1 Management of marking centres

The marking centres were well managed and the following observations were made:

- There were good security measures in place, for example access control, the use of identity and visitor cards, burglar alarms and security gates.
- There were effective measures in place to control the flow of scripts from the time that they were received until the time they were returned to the Department of Education.
- Communication facilities were not always readily available over the weekends, e.g. fax machines.

#### 4.3.2 Memorandum discussions

- Memoranda were not always adjusted in accordance with the changes effected to the question papers.
- Markers were sometimes not prepared when they attended the memorandum discussions.
- Not all markers attended the memorandum discussions e.g. not all markers attended the second memorandum discussion of Computer Practice N3 (June 2007 examination) at Roodepoort Campus.
- Logistical and administrative responsibilities, as well detailed discussions of the memoranda, were included in the training and the memorandum meetings.
- There was a lack of measures to ensure that changes to the memoranda are communicated to all the marking centres to ensure that the same memoranda are used across the different marking centres.

#### 4.3.3 Standard of marking and moderation

• The standard of marking of the majority of markers was good, as could be detected from remarks made by the moderators as well as from small differences in the marks allocated by the markers, internal moderators and external moderators. Most of the mistakes that occurred were calculation errors and marking of accuracy errors in Computer Practice. Deviations in the marks allocated by the markers, internal moderators and external moderators did occur however. Differences of between 5 and 11 percent in the mark allocated by the marker versus that allocated by the moderator were observed in 4 of the 20 scripts (20% of the scripts) moderated by the external moderator of Mathematics N3 (April 2007 examination); up to 9% in the marks moderated by the external moderator of Computer Practice N3 (June 2007 examination) and in 5 of 18 scripts (28% of the scripts) moderated by the external moderator of Business English N3 2nd Language Paper 1 (November 2007 examination). This was not the case with the moderation of the Industrial Electronics N3 (April 2007, August 2007) and Mathematics N3 (August 2007,



November 2007) subjects, where the allocation of marks by the examiner, internal moderator and external moderator were very similar, with no or very small variations.

- The majority of markers were experienced markers. There were, however, cases where many new markers were appointed e.g. at Roodepoort for Computer Practice N3 with the June 2007 examination: eight of the sixteen markers were new with no experience in the marking of computer subjects or external marking.
- Where a particular subject is marked at more than one centre, communication between marking centres to ensure consistency remains a challenge.
- Almost all markers followed the marking procedures as stipulated in examination instruction 14 of 2004.
- The internal moderation was of a good standard. Great care was taken to moderate ten percent of the marked scripts of all markers and to ensure that a wide spectrum of performance was included in the moderation sample. Where there were substantial differences in the marks allocated by the marker and internal moderator, the marker had to remark the whole batch of scripts.
- Some markers were appointed to mark NATED as well as NCV scripts and therefore
  exceeded the maximum number of scripts they were allowed to mark. This practice could
  compromise the standard of marking.

#### 4.3.4 Performance of learners

The markers and moderators identified the following aspects that are an indication of shortcomings in the teaching and learning:

- Lack of insight and understanding of learners they rely too heavily on textbooks and are not exposed to the industrial and practical component of the subjects
- Inadequate preparation of learners for the examination
- Poor pass rate and below standard quality of work.

## **Strengths**

#### Management of marking centres

Marking centres were well organised. Great care was taken to put the necessary systems in place to secure and manage the flow of scripts.

• Memoranda and memorandum discussions

There was good participation by the markers in the memorandum discussions.

#### • Standard of marking

Effective training of markers before the onset of the marking and additional attention given to new markers ensured that a high standard of marking was maintained.



#### • Internal moderation

A good standard of internal moderation was maintained.

#### Areas of concern

#### • Quality of memoranda

The quality of memoranda was not always to standard. Changes to the question papers were not always reflected in the memoranda e.g. Mathematics N2 (April 2007 examination), Business English N3 2nd Language Paper 1 and Mathematics N3 (November 2007 examination).

#### • Preparation for memorandum discussions

Markers were often not prepared when they attended the memorandum discussions, which limited their contribution to the memorandum discussions.

#### • Communication between marking centres

Lack of communication between marking centres lead to inconsistency in marking across marking centres.

#### 4.4 Standardization

The following challenges were experienced with the standardization of examination results:

#### April 2007 examination:

- Certain subjects with substantial enrolments were listed in the booklet for subjects with small enrolments.
- No graphs and norms were presented for 27 subjects in the above-mentioned category.
- Low numbers for N1 enrolments and extremely high enrolments for N2, which impacts
  on the validity of the comparison of April 2007 results with the previous examinations'
  results for the subject.
- Outdated statistics e.g. data for the 2000 2002 examinations presented for some of the subjects.

#### June 2007 examination:

- Higher levels of absenteeism from examinations than in the past.
- Disruption of examinations in KwaZulu-Natal this province was excluded from the standardization process.

#### November 2007 examination:

Large increase or decrease in enrolments in comparison to previous examinations, which
impacts on the validity of the comparison of the November 2007 examination results for
the subject.



• Uncertainty as to the exact extent of the impact of the industrial action on the performance of the learners.

Table 6 below provides data on the standardization of results.

Table 6: Standardization of results

DESCRIPTION	EXAMINATION					
	April	June	August	November		
Number of subjects where no decisions	10	N/A	1	1		
were taken at standardization meeting due						
to insufficient data (e.g. no graphs or						
norms provided despite the fact that there						
were more than 25 enrolments, outdated						
examination statistics)						
Number of subjects that could not be	3	3	6	22		
standardized because less than 80% of the						
results were available						
Number of subjects where there was a lack	2	9	1	13		
of information on enrolments / candidates						
that wrote the subject failed / did not sit						
for examination						
Number of subjects where Umalusi	16	4	No info	44		
requested a revision of the proposed						
decision of the Department of Education						
Number of subjects where raw marks were	78 + 7	27	69 + 4	94		
accepted						
Number of subjects for which marks were	28 + 6	11	48	66		
adjusted						
Number of subjects standardized	106 + 13	38	117 + 4	160		

#### 5. Recommendations

Based on the findings from the external moderator reports, the following is recommended:

#### 5.1 Moderation of question papers

- The internal moderation of question papers must be done rigorously. All question papers must be accompanied by a full history of the question paper and a comprehensive internal moderator's report.
- Development of a grid or assessment framework to show the cognitive levels of the question paper is recommended.
- The assessment body must submit the question papers to the external moderators as per the due dates each year.



## 5.2 Monitoring of examinations

#### 5.2.1 Monitoring of examination centres

• Guidelines must be provided for the appointment and training of chief invigilators.

#### 5.2.2 Monitoring of marking centres

- Checking of addition and transfer of marks can be improved by appointing examination assistants.
- The provincial departments need to be more involved in the monitoring of the marking phase.

### 5.3 Moderation of marking

#### 5.3.1 Memoranda and memorandum discussions

- The chief markers from all the marking centres for a specific subject should attend a centralised memorandum discussion to ensure that the same memorandum is used across the marking centres. Alternatively, the communication between the different marking centres must be formalized and documented.
- It must be ensured that memoranda sent to marking centres are the final approved versions and are devoid of inaccuracies.
- All markers should be prepared when they attend memorandum discussions.

#### 5.3.2 Marking

• It must be ensured that the chief markers and markers have enough marking experience and that only one or two new markers are appointed per marking session.

#### 5.3.3 Teaching and learning

- Centres with poor performance must be identified, reasons for poor performance established and the necessary support provided.
- The marking reports must be made available to providers of the NATED programmes in order to contribute to improvement in teaching and learning.



#### 6. Conclusion

The 2007 NATED examinations were administered in a professional manner and in general high standards were maintained. The June 2007 General and Business Studies examination posed more problems than is normally the case. This could be attributed to the disruption as a result of the public servants' strike.

Although there was an improvement in the standard of question papers, the cognitive challenge and internal moderation of some of the question papers remains a challenge. Examinations were in general conducted in a professional manner and compliance with examination policy and procedures was high. The moderation of marking reports clearly indicated that in terms of external marking there were effective systems, processes and procedures in place at the marking centres; memoranda were discussed in detail to ensure that all possible answers were provided for and that marking and moderation were in general up to standard. The challenge is to ensure consistency in marking where subjects are marked at more than one marking centre. No serious incidences that could jeopardize the credibility of the examinations were reported by any of the monitors or moderators. Examination and marking centres are keen to comply with rules and regulations and deserve acknowledgement and support from the Department of Education.



Addendum 1: NATED subjects in respect of which marking was moderated as well as the different examinations and the centres at which moderation took place.

SUBJECT			MARKING CENTRE		
	March	April	June	August	November
Business English N3 1st Language Paper 1					Bloemfontein
Business English N3 2 <sup>nd</sup> Language Paper 1	Off-site				Springs **
Business English N3 1st Language Paper 2					Centec ** Roodepoort
Business English N3 2 <sup>nd</sup> Language Paper 2	Off-site				
Computer Practice N3			Roodepoort		Phalaborwa Roodepoort
Engineering Drawing N3					Newcastle Technology
Industrial Electronics N2		Off-site			
Industrial Electronics N3				Atteridgeville	Springfield ** Atteridgeville
Mathematics N2		Hillside View			
Mathematics N3				Mamelodi	Polokwane ** Johannesburg
Mechanotechnology N3					Hillside View
Public Administration N3					City (College of Cape Town) ** Msunduzi
Sakeafrikaans N3 1 <sup>st</sup> Language Paper 1					Kempton ** Kempton
Sakeafrikaans N3 1 <sup>st</sup> Language Paper 2					Mpondozankomo
Small Business Management and Entrepreneurship N3					Springs ** Russel Road

\*\* Memorandum discussion attended

As can be seen from the table, the moderation of marking included attendance of memorandum discussions as well as on-site and off-site moderation of marking.



## **Chapter Four**

# 4

### **National Certificate Vocational Assessment**

## 1. Introduction

The National Certificate (Vocational) was introduced for the first time in 2007 and, as could be expected, a number of implementation and assessment challenges were identified.

The assessment structure for the National Certificate (Vocational) qualification is a combination of internal continuous assessment (ICASS) and external summative assessment (ESASS). The external summative assessment comprises, in the case of the vocational subjects, a theoretical question paper and a practical integrated summative assessment task (ISAT).

Umalusi's quality assurance of the internal assessment component of the VET qualifications received limited attention until 2006. During 2006 the vocational sector of Umalusi, in preparation for the introduction of the National Certificate (Vocational), introduced plans for the shift from focusing mainly on the quality assurance of written external examinations to the quality assurance of both internal and external assessment. The shift was vital for the qualification because of the substantial contribution of the internal assessment towards the final mark, namely 50% in the case of the vocational subjects and 25% in the case of the fundamentals. Due to the fact that the internal assessment of this qualification is seen as equally important to external assessment, it was essential to put measures in place to ensure that internal assessment results would be reliable.

In preparation for Umalusi's quality assurance of the internal assessment of the National Certificate Vocational (NCV), the focus for 2006 and 2007 was on ensuring that the necessary systems for quality assuring internal assessment were put in place. Umalusi deemed it necessary to monitor the progress made with these systems as internal assessment is set, marked and graded at site level. Furthermore, ensuring the reliability of internal assessment in a system with vast differences in available resources remains a major challenge.

During October 2007 Umalusi moderated the internal assessment (portfolios of evidence and portfolios of assessment) of a sample of the NCV subjects that are currently moderated by Umalusi. Umalusi also evaluated and monitored/moderated the conduct of the ISATs.

This chapter of the report will outline the scope, approach and findings of Umalusi's quality assurance activities for the NCV. Furthermore, it will highlight the strengths as well as areas of



concern as observed and make certain recommendations.

## 2. Purpose

The purpose of this chapter of the report is to report on Umalusi's quality assurance activities of the 2007 NCV assessment. The findings and recommendations are based on: the reports received from Umalusi moderators and monitors; observations made by staff members after site visits; and data obtained from surveys conducted by Umalusi. This chapter will provide information on the scope of the quality assurance exercise, the approach followed and the findings, then highlight areas of concern as well as strengths, and finally make recommendations for the improvement of the quality and standard of future NCV assessment.

## 3. Approach and scope

### 3.1 Moderation of question papers

Umalusi moderated either one or both question papers for the November 2007 examinations in respect of 38 of the 54 NCV subjects that were offered at NCV Level 2. The subjects moderated included all the fundamentals and at least two of the compulsory vocational subjects of each of the 11 programmes.

The table below provides a list of the subjects that were moderated.

Table 7: NCV subjects moderated in 2007

	SUBJECT				
1	Advertising and Promotions				
2	Afrikaans 1st Additional Language				
3	Animal Production				
4	Applied Accounting				
5	Automotive Repair and Maintenance				
6	Business Practice				
7	Construction Material				
8	Construction Plant and Equipment				
9	Economic Environment				
10	Electrical Control and Digital Electronics				
11	Electrical Principles and Practice				
12	Engineering Fabrication				
13	Engineering Fundamentals				
14	Engineering Systems				
15	Engineering Technology				
16	English 1st Additional Language				
17	Entrepreneurship				
18	Financial Management				



19	Fitting and Turning
20	Food Preparation
21	Hospitality Generics
22	Introduction to Information Systems
23	Introduction to Systems Development
24	Isixhosa 1st Additional Language
25	Life Orientation
26	Management Practice
27	Marketing
28	Mathematical Literacy
29	Mathematics
30	New Venture Creation
31	Office Data Processing
32	Office Practice
33	Operations Management
34	Physical Science
35	Plant Production
36	Science of Tourism
37	Soil Science
38	Sustainable Tourism

## 3.2 Monitoring and moderation of internal assessment

#### 3.2.1 State of readiness project

Umalusi included three selected NCV programmes in the project, namely Office Administration; Engineering and Related Design; and Electrical Infrastructure and Construction. Self-evaluation instruments were developed and these were sent to all the colleges where the above-mentioned programmes are offered. In addition, Umalusi staff members monitored the readiness for internal assessment at 14 campuses across the nine provinces during September 2007.

The sites were selected to include rural as well as urban and privileged as well as previously disadvantaged sites of delivery.

#### 3.2.2 Moderation of internal assessment

Moderation of portfolios was restricted to a sample of the NCV subjects that are currently moderated by Umalusi. The subjects as well as the provinces where the portfolios were moderated are indicated in the table below



Table 8: Moderation of ICASS visits - October 2007

SUBJECT	PROVINCE								
	EC	FS	GAU	KZN	LIM	MPU	NW	NC	WC
Afrikaans 1st Additional								•	
Language									
Automotive Maintenance	•								•
and Repair									
Construction Plant and	•								•
Equipment Economic Environment									
	•					•			
Electronic Control and				•					•
Digital Electronics Engineering Fabrication					_				_
					•		•		•
Engineering Fundamentals				•					
Engineering Systems	•								
Engineering Technology			•		•				
English 1st Additional			•						
Language									
Entrepreneurship				•					
Financial Management			•						
Fitting and Turning				•					
Food Preparation		•	•						
Introduction to Systems								•	•
Development									
Life Orientation		•						•	
Marketing	•			•					
Mathematical Literacy						•	•		
Mathematics				•		•			
Office Practice									•
Physical Science			•						•
Soil Science		•			•				
Sustainable Tourism			•						
TOTALS	5	3	6	6	3	3	2	3	7

Umalusi deployed 25 moderators to moderate the portfolios of 24 NCV subjects between 6 - 8 October and 13 – 15 October 2007.

A sample of portfolios of assessment (educators' portfolios) and portfolios of evidence (learners' portfolios) from different colleges that offer the selected instructional offerings were included in the moderation process.

Information was obtained through a pre-moderation session, during which staff were interviewed, followed by the moderation of the portfolios of evidence and portfolios of assessment.



#### 3.2.3 Moderation of Integrative Summative Assessment

Fifteen ISATs were evaluated by Umalusi's external moderators.

Umalusi deployed 18 external moderators to monitor/moderate the conduct of 14 ISATs across the nine provinces.

Table 9: Moderation of conduct of ISAT

No	SUBJECT	PROVINCE	COLLEGE	CAMPUS
1	Civil Engineering and	Western Cape	Northlink	Bellville
	Building Construction	Eastern Cape	Buffalo City	John Knox
				Bokwe
2	Electrical Infrastructure	KwaZulu-Natal	Coastal	As-Salaam
	Construction	Western Cape	College of Cape	Crawford
			Town	
3	Engineering and	Gauteng	Sedibeng	Lekoa
	Related Design	Limpopo	Waterberg	Lebowakgomo
		KwaZulu-Natal	Umgungundlovu	Plessislaer
		Eastern Cape	Buffalo City	East London
4	Finance Economics and	Mpumalanga	Nkangala	Middelburg
	Accounting	Eastern Cape	Buffalo City	East London
5	Hospitality	Free State	Motheo	Bloemfontein
		Gauteng	Sedibeng	Vanderbijlpark
6	Information	Western Cape	Northlink	Goodwood
	Technology and			
	Computer Science			
7	Management	KwaZulu-Natal	Coastal	Durban
		Gauteng	South West	Molapo
8	Marketing	KwaZulu-Natal	Elangeni	Pinetown
9	Office Administration	Western Cape	Northlink	Parow
		Western Cape	Boland	Paarl
10	Primary Agriculture	Limpopo	Vhembe	Mashamba
		OPTIONAL SUB	JECTS	
11	Automotive Repair and	Eastern Cape	Port Elizabeth	Russel Road
	Maintenance	Western Cape	College of Cape	Athlone
			Town	
12	Engineering Fabrication	Western Cape	Northlink	Bellville
		North West	Orbit	Rustenburg
13	Entrepreneurship	KwaZulu-Natal	Elangeni	Pinetown
14	Fitting and Turning	KwaZulu-Natal	Coastal	Swinton Road

It was the first time that ISATs were conducted and the first time that Umalusi was involved in the moderation of practical tasks of this nature. Off-site moderation was used to moderate the ISATs. Umalusi's moderators evaluated the ISATs and submitted reports to Umalusi and the Department of Education.

In monitoring /moderation of the conduct of the ISAT on-site moderation was used. This



exercise focused on the process as well as the ISAT product. Moderators had to observe the process of learners completing the task or moderate the completed product.

#### 3.2.4 Moderation of marking

#### a. Memorandum discussions/pre-marking

Sixteen moderators were deployed to the national Department of Education as well as to different NCV marking centres whilst the memorandum discussions and pre-marking were in progress. The centralised memorandum discussions of the NCV subjects that were marked at more than one marking centre took place at the CD:EMAPE, whilst those for the NCV subjects that were marked at only one marking centre took place at an established marking centre in each of the nine provinces.

#### b. Moderation of marking

Twenty of Umalusi's moderators were deployed to all the NCV marking centres across the country to moderate the marking of a sample of twenty subjects.

Table 10 gives a detailed account of the subjects moderated and the centres at which the memorandums discussions were attended and marking were moderated.

Table 10: Moderation of marking

SUBJECT	MEMORANDUM	MODERATION OF
	DISCUSSION	MARKING
Advertising and Promotions		Tygerberg
Afrikaans 1st Additional Language	CD:EMAPE	City (Northern Cape)
Animal Production		C N Mahlangu
Applied Accounting	Centurion	Centurion
Construction Material		C N Mahlangu
Electrical Principles and Practice	CD:EMAPE	Centurion
_		Durban
Engineering Fabrication Paper 2	CD:EMAPE	Bethlehem
Engineering Fundamentals	CD:EMAPE	Durban
English 1st Additional Language	CD:EMAPE	Centurion
		Seshego
Hospitality Generics	Centurion	Centurion
IsiXhosa 1st Additional Language	East London	East London
Introduction to Information	Durban	Durban
Systems		
Life Orientation	CD:EMAPE	East London
		Tygerberg
Mathematical Literacy	CD:EMAPE	Potchefstroom
		C N Mahlangu
Mathematics	CD:EMAPE	Centurion
		Durban
New Venture Creation	Centurion	Centurion
Office Data Processing	CD:EMAPE	Potchefstroom
Operations Management	Centurion	Centurion
Science of Tourism		Tygerberg
Physical Science Paper 2	Centurion	Centurion

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## 3.3 Standardization

The pre-standardization and standardization meetings of the NCV results took place on 17 and 18 December 2007. The challenge was that because this is a new qualification there were no norms or other data that could be used as a point of departure. The approach followed by Umalusi's statisticians relied primarily on pairs analyses of subjects within a particular programme as well as the qualitative information provided by the chief markers and external moderator reports.

## 4. Findings

## 4.1 Moderation of question papers

#### 4.1.1 Content Coverage

Most of the NCV question papers covered the content and skills of the subject as prescribed by Subject Guidelines, although the weighting was not always as prescribed by the syllabus. The following are examples of where the content was not covered:

- Mathematical Literacy Paper1 Geometric and numeric patterns not included
- Food Preparation all the learning outcomes were not covered; in some cases there was more than one question on a learning outcome.
- Physical Science Paper 2 on the topic Chemical Change, the learning outcome "Identify, describe and apply principles of heat" was not examined.
- Construction Material the topic "Material tools and equipment" was not included in the question paper.

The following subjects were rejected for not covering all content and skills as prescribed in the Subject Guidelines: Office Data Processing, Afrikaans 1st Additional Language, Introduction to Systems Development.

#### 4.1.2 Cognitive Skills

The cognitive level of the majority of the question papers was pitched at the correct level. There were some question papers where the weighting was not as indicated in the Subject and



#### Assessment Guidelines, for example:

- Management Practice knowledge 73% (30% required), application 17% (50% required) and analysis 10% (20% required).
- Electrical Control and Digital Electronics knowledge 33% (50% required), application 65% (40% required) and analysis 2% (10% required).

#### 4.1.3 Internal moderation

There was an improvement in that the question papers handed to the external moderators. Question papers were in most cases accompanied by the history of the question papers. It was, however, not always easy to determine which were the most recent versions as not all question papers were signed by the internal moderators. However, positive comments on the internal moderation were received, in that the nature of the question paper indicate that thorough internal moderation did take place for the following subjects:

- Afrikaans 1st Additional Language
- Applied Accounting
- Marketing
- Construction Material
- Engineering Systems

#### 4.1.4 Language and bias

The language used was clear, fair and pitched at an appropriate level for most of the question papers. Instructions and questions were, in general, clear and unambiguous. Most moderators reported that candidates would have no difficulty with the paper as the language was appropriate for English second language candidates at level 2.

#### 4.1.5 Adherence to policy

The external moderators reported that, in general, question papers were set in terms of current policy/guidelines documents. It was found that most of the question papers moderated were not accompanied by an analysis grid.

#### 4.1.6 Marking memorandum

The memoranda were reported as being of the required standard and to correspond with the questions in the question papers. For most of the question papers the layout of the memorandum was satisfactory.



#### 4.1.7 Technical criteria

The moderators reported that the instructions were clear, layout of the question papers was learner friendly, and that the relevant formula sheets, answer sheets, etc., were attached.

## Areas of concern

- Late or non-submission of some question papers to the external moderators for follow up moderation is of serious concern.
- Omission of certain diagrams, sketches, etc., from the question papers submitted for external moderation is of concern.
- The quality of certain diagrams, sketches, etc., in the question papers was not of the required standard.
- The question papers were not in the print ready format when submitted for external moderation.

## 4.2 Internal assessment

#### 4.2.1 State of readiness

The state of readiness of colleges for the implementation of NCV differed.

The unavailability of vital resources needed for the practical component of specific programmes is a serious concern. The planning, building and or converting of classrooms into simulation and practicum rooms differed from college to college and a substantial number of rooms/workshops were not completed when visited during September 2007. Some workshops were also found to be poorly equipped or poorly organized.

#### 4.2.2 Moderation of internal assessment

Based on the interviews conducted and the moderation of the portfolios, it is evident that the standard of internal assessment and moderation differs from province to province, college to college and even from campus to campus of the same college.

#### a. Policies and assessment guidelines

The national policy on internal assessment was made available at a very late stage of the year. Some provincial departments of education did develop policies e.g. Mpumalanga, Free State and Western Cape, but in others there was no standardized provincial policy e.g. Eastern Cape.



Most colleges monitored have assessment and moderation policies in place. The policies cover most of the aspects that should be included, but the colleges admitted that some sections of the policies need refinement.

Aspects that were often not included were:

- late or non-submission of tasks,
- authentication of candidates' work,
- absenteeism
- multiple assessment opportunities.

It was also found that the information provided was sometimes limited and not clear enough.

#### b. Training

Training was mostly conducted at college level by service providers (assessor/moderator training) and the national Department of Education.

It was evident that there is a need for training in understanding outcomes based education and the design of relevant learning and assessment activities.

#### c. Portfolios

The educator portfolios were not readily available in some of the provinces – this caused tremendous frustration for the external moderators.

From the evidence contained in the portfolios the following was found:

- The college policy was included only in some of the educator portfolios. This might be because of a lack of instruction that it should be part of the portfolio rather than that the policies do not exist.
- Most educator portfolios contained plans, but the format of the plans varied from very detailed to scanty. A common problem was drafting a work scheme aligned to the syllabus/topics and subject/learning outcomes. This was more evident with the Engineering than General and Business Studies programmes.
- A substantial number of portfolios were not arranged in an orderly manner, which complicated the task of external moderators to find relevant information.
- Very often no requirements were stated for the assessment tasks, there were no recording instruments, no mark sheets or reports for assessment tasks.



#### d. Assessment tasks

Because it was the first year of implementation of level 2 of the NCV, tasks were developed progressively and in phases.

The main form of assessment is still tests, but some good examples of other forms of assessment were found.

Most portfolios contained the assessment tasks with marking memoranda for the tests, but no evidence of tools for the assessment of assignments, projects, etc. There were very few examples of other assessment tools e.g. grids, rubrics and criteria for assessment.

The cognitive demand of portfolios is of concern. Most of the sites visited put too much emphasis on knowledge and too little attention was given to the practical component. Pockets of good demand were found, e.g. at Asherville Campus of Thekwini College where the tasks provided for a good spread of knowledge, application and analysis.

Major problems with the submission of tasks were encountered due to a lack of interest and commitment, absenteeism and dropout.

There were vast differences in the number of tasks included in the learner portfolios. Furthermore, the number of tasks included was often not in line with that prescribed in the Assessment Guidelines.

#### e. Moderation of portfolios

Although there was evidence to suggest that the portfolios were internally moderated, this was in most cases by way of checklists and the emphasis was on checking compliance rather than quality. There was very little evidence of comments and feedback to learners. Some pockets of good practice were observed however.

Educator as well as learner portfolios were internally moderated, but most of the moderation was done only once during October and thus done too late to enhance the development of the learners. Very little evidence of feedback was found and where it was found it lacked comprehensive comments. In some of the portfolios there was no evidence that moderation took place at campus or college level e.g. Springs (Sustainable Tourism), Mnambithi (Marketing at College level), Western College (Financial Management).

There were, however, also some examples of good practice e.g. Northlink, South Cape and Boland colleges had good documents and adequate feedback was provided for Automotive Repair and Maintenance. The same applies to many colleges in KwaZulu-Natal, where good practice was observed. It was found that, in general, small numbers of portfolios (less than



10%) were moderated at different levels due to time constraints.

Some of the provinces went to great lengths to ensure that the moderation process could be conducted in a structured and organized way, e.g. Western Cape and Mpumalanga. The Western Cape, for example, also had definite plans in place to provide feedback after the provincial moderation.

What was found to be lacking at college and campus level were the plans on frequency and levels at which the moderation would be done as well as criteria for the moderation of tasks.

#### f. Recording and reporting

In general, record was kept of the performance of learners in the form of mark sheets. The records were sometimes poorly presented and therefore could not be used for diagnostic purposes. In general there was no evidence of progress reports.

#### g. Monitoring and evaluation

Not all colleges have staff members that are designated to ensure the quality of the new qualifications at campus level. At some campuses the staff interviewed indicated that assessors, moderators, heads of departments and campus managers are all responsible for the quality assurance function.

Quality management systems are developed at colleges. The progress with and the extent to which these systems provide for integration of different aspects of quality management differ. At some of the colleges the development of these systems are in an advanced stage and it is effectively used to improve quality through addressing non-conformance.

At most of the colleges visited, it was found that not enough thought was given to implementing systems that would ensure the credibility of assessment.

The Western Cape Department of Education deserves to be commended for the detailed monitoring reports that were sent to each of the colleges after the provincial monitoring visits.

## **Strengths**

The following strengths were observed:

- At the majority of sites visited, there are assessment and moderation policies in place.
- Substantial progress has been made with the development of quality management



- systems.
- Subject and/or assessment committees, as well as other forums (e.g. reference or focus groups), have been established to ensure that standards are set and maintained.
- Well planned assessment schedules at some of the colleges e.g. Gert Sibande (Evander Campus)
- Examples of good assessment tasks that could be used as exemplars include:

Westcol – Tourism Project - Conservation and heritage;

Lovedale – Economic Environment – good assignment and case study;

Parktown – Sustainable Tourism project;

Eshowe – Entrepreneurship case study;

South West Gauteng College – Financial Management practical project;

Western College – Financial Management – Africa Cash and Carry assignment;

Paarl Campus - Office Practice - certain of the practical assignments.

## Areas of concern

The external moderation of internal assessment reports revealed a number of challenges. Some of these are:

- Existing policies and quality management systems do not make provision for the specifics of the NCV
- Poor standard of assessment tasks the tasks were mostly at the lower cognitive levels with very limited evidence of tasks that included analysis, synthesis and evaluation
- Poor quality of some of the available learning material
- Excessive reliance on exemplar question papers and textbooks. The exemplar papers were used as internal examinations. Sections of these papers were used for tests
- Vast differences in the amount of internal assessment done
- Excessive amount of paperwork
- Limited extent and ineffective internal moderation at different levels.

# 4.3 Moderation of Integrative Summative Assessment Tasks

#### 4.3.1 Assessment Tasks

Quality of the Integrative Summative Assessment Tasks

The external moderators reported that:



- Subjects were not reflected as integrated in the ISAT
- There was no sequence or progression
- There was no instrument to assess performance
- The standard of the ISATs was very low lower order skills were tested
- There were no proper guidelines for the conduct of the ISAT

Examples of tasks that were not integrated are the ISAT for Finance, Economics and Accounting, where three distinctly separate tasks were provided and the focus was mainly on Financial Management. Another example is the Hospitality ISAT, which focused mainly on the Food Preparation subject.

#### 4.3.2 Conducting of assessment

ISATs were either completed in a single assessment or in phases throughout the year. During the site visits it was apparent that the some of the ISATs were not completed yet, or had been completed a long time before the verification e.g. Soil Science and Plant Production. This made it impossible for the external moderators to do verification, as no evidence was available.

In most of the ISATs moderated, it was reported that there was no schedule/timetable for practical assessment, for example:

- Office Administration the ISAT was predominantly completed during class periods, however, aspects were also completed in the learners' own time. The task was completed in late July and middle September.
- Automotive Repair and Maintenance there was insufficient planning to conduct the ISAT. During the external moderator's visit the ISAT assessment was not completed and students had not received formal notification when they would be assessed.
- Finance, Economics and Accounting No schedule provided with only a verbal explanation of the procedure to be followed. Applied Accounting and Financial Management were written under strict examination conditions and performed in a theory venue.

#### 4.3.3 Resources

The workshops in most colleges were reported as being adequately equipped to conduct the ISATs. The moderator for Soil Science was concerned about the underutilization of the good infrastructure as the land and farm implements were only used in the first semester.

Colleges that lacked resources had to improvise. The following findings were noted:

• For Animal Production the ISATs was not done at college



- campuses, instead agricultural colleges were used.
- Classrooms were used as simulated environments to complete the Office Administration task.

#### 4.3.4 The quality and standard of marking

Marking and scoring was reported to be appropriate in terms of most tasks, although in some instances questions were not marked or tasks not completed but the total final mark provided. In the case where assessment was completed, the only report that was presented was the mark sheet reflecting marks allocated to learners.

Where the external moderators moderated the products, it was difficult to prove the authenticity of the learners' work. Authenticity was proven in different ways, for example:

- Students had their numbers stamped on the project.
- The ISAT competency was signed and dated by the student and the assessor.
- Students completed their task in the classroom under the guidance of the lecturer.
- Students were required to sign an authenticity declaration form.
- Students were assessed in groups of four to ensure authenticity.

#### 4.3.5 Internal moderation

The standard and quality of internal moderation of ISATs were reported as being generally of a low standard. In most cases the internal moderators' reports were not included. Reports did not provide any substantive information and were limited to short remarks or a moderator signature. There was no evidence of constructive feedback to either educators or students. Internal moderator reports were supplied for the following subjects: Office Administration, Engineering Fabrication and Marketing.

## Areas of concern

- Late submission of ISATs to Colleges. This is of serious concern, as many colleges could not complete conducting of ISATs at the prescribed time. It also hampered the planning in terms of purchasing the consumables and resources required for conducting an ISAT. Internal and external moderation could not occur in some of the colleges due to the ISATs not being completed.
- Quality of ISATs. The standard of most of the ISATs was not of the appropriate standard and enough skills were not tested. Most ISATs were not integrated they were conducted as three distinct separate tasks. Instructions on most of the tasks were not that clear and could confuse the learners.



- Poor quality and standard of internal moderation.
- Lack of planning for conducting ISAT.
- Scoring and recording of marks. The lack of report for conducting of assessment per student is of great concern as it makes it difficult to determine the authenticity of the learners' work.

# 4.4 Moderation of marking

#### 4.4.1 Management of marking centres

The marking centres were well managed and the following observations were made:

- There were good security measures in place, for example access control, the use of identity and visitor cards, burglar alarms and security gates.
- There were effective measures in place to control the flow of scripts from the time they were received until the time that they were returned to the Department of Education.
- Markers were recruited and appointed from colleges across the province.
- Large numbers of scripts were sent to the wrong marking centres. This put an
  unnecessary additional burden on the marking centre staff and delayed the marking
  process.
- The appointment of examination assistants to assist with the marking process of the NCV proved to be of great value.
- Planning for marking started too late many possible markers were not available to mark and whoever was available was then appointed. This practice could compromise the standard of marking.

#### 4.4.2 Memorandum discussions and pre-marking

- The centralized memorandum discussions for subjects that were marked at more than one marking centre contributed to ensuring that marking could be much more consistent at the different marking centres. The limited sample of scripts in terms of representation of examination centres and number of available scripts on the dates of the memorandum discussions could, however, compromise the addition of alternative correct answers.
- The relevant question papers and answer scripts were not always available on the date of the memorandum discussions.
- Memoranda were not always adjusted in accordance with the changes effected to the question papers.
- Markers were not always prepared when they came to the memorandum discussions.



 Markers attended the memorandum discussions. Where markers did not attend the memorandum discussions they were not allowed to mark before the memorandum was discussed with them.

#### 4.4.3 Standard of marking and moderation

- The standard of marking of the majority of markers was good, as could be detected from small differences in the marks allocated by the markers, internal moderators and external moderators. Most of the errors that occurred were calculation errors.
- A number of novice markers were appointed at the marking centres. The chief markers spent extra time in assisting and guiding them to ensure accurate marking.
- Not all markers followed the marking procedures as stipulated in examination instruction 14 of 2004.
- The internal moderation was of a good standard.

# **Strengths**

- Management of marking centres
  - Marking centres were well organised. Great care was taken to put the necessary systems in place to manage the flow of scripts.
- Marking guidelines / memoranda
  - The centralized memorandum discussions ensured that marking across the marking centres was consistent.
- Internal moderation was of a good standard and great care was taken to moderate
  ten percent of the marked scripts of all markers and to ensure that a wide spectrum of
  performance was included in the moderation sample.

# **Areas of concern**

- Quality of memoranda
  - The quality of memoranda was not always to standard. Changes to the question papers were not always reflected in the memoranda.
- For certain subjects, the original memorandum, instead of the amended memorandum, was made available to markers.
- Numerous minor mistakes were reported, e.g. omissions, typing errors, numbering errors, mark allocation errors, etc.
- Preparation for memorandum discussions
  - Markers were often not prepared when they attended the memorandum discussions, which limited their contribution to the memorandum discussions.



#### Standard of marking

A few markers had to be replaced because of inaccurate marking.

### 5. Recommendations

Based on the findings from the external moderators and monitors reports, the following is recommended:

# 5.1 Moderation of question papers

- The internal moderation of question papers must be done rigorously. All question papers must be accompanied by a full history of the question paper and a typed internal moderator's report.
- A grid or assessment framework to indicate the cognitive levels of the questions must be developed.
- The assessment body must submit the question papers to the external moderators on or before the due dates of each year.

## 5.2 Internal Assessment

- Detailed planning must start in time and clear direction must be provided from the
  national Department of Education and Umalusi on what is expected in terms of
  assessment, internal moderation and portfolios. Clear guidance needs to be provided
  in terms of what should be included in the portfolios and how the content should be
  arranged/organised/filed.
- Although substantial progress has been made with the development of systems for the quality assurance of internal assessment at campus and college level, concrete plans for monitoring and moderation at all levels must be put in place. The frequency and quality of internal moderation on all levels must be improved to ensure timeous intervention and assistance to resolve problems, and to add quality to delivery and assessments. A structure must be developed to provide support to those colleges and campuses of colleges identified where the systems, processes and evidence were not to standard.
- Focus groups/programme specific structures need to be established at the colleges/in the provinces where they have not been established as yet.
- Careful consideration should be given to the viability and value of certain administrative work. Ways to streamline the recording and reporting process without sacrificing quality needs to be found e.g. collapsing of different documents into one



- document. Clear guidance on exactly what would be expected and accepted in terms of paperwork must be given. The format of documentation for portfolios must be standardized.
- Examples of good practice in terms of assessment tasks must be used to develop a bank of exemplars, especially for class work activities, practical activities and assignments/projects that could be used by educators to improve the standard of assessment. A plan should be put in place on how to share examples of good practice that are observed in terms of management as well as assessment tasks.
- Measures need to be put in place to address issues around absenteeism.

Overall, colleges need more support and educators need to be mentored in order to ensure a better understanding of the different processes and procedures. Some campuses of the same college needs more support than others.

# 5.3 Integrative Summative Assessment Tasks

- The ISATs must integrate the contents of the three different subjects.
- The quality and standard of the ISATs needs to be improved extensively in terms of the scope and criteria for the completion thereof. The assessor needs to be provided with a detailed rubric/memorandum in order to ensure fairness and consistency of assessment practices.
- The quality and standard of internal moderation needs to be improved.
- The sequencing and the progression of the practical tasks should be clear, possibly in the format of a flow chart.
- The assessment body must submit the ISATs to colleges at a much earlier stage in the year in order to ensure that planning is done effectively.
- The Department of Education should implement a coordinated monitoring system for conducting ISATs.

## 5.4 Moderation of marking

- Detailed planning for all the processes must be done in time. Specific steps should be taken if the quality process and timeframes are not adhered to.
- Markers for the NCV examination must be appointed before the end of the first quarter of the year. Care must be taken in appointing experienced markers and a few new markers to ensure that the standard of marking is not compromised.
- Memorandum discussions for all subjects (large and small enrolments) must take place on specific dates and at specific times: these dates need to be determined at the beginning of the year. These dates must be communicated to the marking centers/markers before the end of the first semester.



- All markers should come prepared (each with his own prepared memorandum) to the memorandum discussions/pre-marking.
- The procedure that should be followed when marking, (examination instruction 14 of 2004), must be brought to the attention of all marking staff to ensure consistency in the procedures followed.

## 6. Conclusion

The poor quality or absence of evidence of internal moderation for question papers is of serious concern as it impacts negatively on the quality and standard of question papers submitted for external moderation. It is the responsibility of the assessment body to ensure that there is rigorous internal moderation of all papers before they are submitted for external moderation.

The purpose of internal assessment is to enhance the quality of assessment. The development of effective quality assurance systems and procedures for internal assessment is of vital importance to ensure the credibility of the NCV qualifications.

Assessment in the workplace/simulated environment is an area that is new to many lecturers who have not been involved in skills or learnership training and it was evident this caused major challenges to some colleges and educators.

The results of Umalusi's monitoring and moderation of the internal assessment revealed that substantial progress has been made with regard to the establishment and implementation of systems and procedures for, and the internal assessment of the NCV. There are still, however, numerous aspects that need attention to ensure that internal assessment will be effective and of the appropriate standard. The frequency of moderation and exactly what the moderation process should entail, also still requires attention. Regular moderation and monitoring at different levels could detect problems and omissions at an early stage and could improve the quality of internal assessment and the content of portfolios. It is important that continuous support and monitoring is provided to ensure that the necessary capacity is built.

The reports received from the external moderators show that despite the shortcomings the ISAT assessment was not compromised in a significant manner. The reports, however, also clearly indicate that there are major challenges in the system. One such challenge is to ensure that the standard of the ISAT is of the appropriate level.

The marking centres were well organised and the marking was of an acceptable standard. The implementation of centalised memorandum discussions and the appointment of examination assistants by the Department of Education proved to be of great value.