Report on the Quality Assurance of the Vocational Education and Training Examination 2005

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Foreword

2005 has been a year of review and improvement of Umalusi's quality assurance processes related to the Senior Certificate, Adult Education and Training and Vocational Education and Training Examinations. In an attempt to further regulate the system and ensure a higher degree of quality and standards across the various assessment bodies, Umalusi began to consolidate the development of a rigorous framework for the quality assurance of assessment. In 2004, research was conducted into the standard of the Senior Certificate Examination. Umalusi began to engage seriously with the issue of standards in the examinations. The research into the comparability of examinations in vocational education and training with the Senior Certificate was another attempt to grapple with the standards issue. At the beginning of 2005, Umalusi conducted an evaluation of all assessment bodies. This helped Umalusi to gain comprehensive insight into the ability of assessment bodies to administer examinations. Umalusi was extremely impressed by the quality of systems, processes and procedures that exist within assessment bodies to deliver a credible examination.

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 the monitoring of the conduct of the examinations, the quality of marking as well as the quality and standard of internal quality assurance processes within the assessment body.

The examination system is incredibly massive. There has been a significant increase in the number of candidates taking examinations across the three sectors: schools, vocational education and training as well as adult basic education and training. Assessment bodies administer this system very smoothly. The system has reached an admirable level of maturity. There was open disclosure to Umalusi of all kinds of irregularities. These were reported to Umalusi on a daily basis. Umalusi was also very vigilant in following up irregularities. Umalusi can confidently report that assessment bodies, **on the basis of the reports we have received**, have handled irregularities efficiently and in line with policy.

Ensuring the credibility of examinations in the general and further education bands of the National Qualifications Framework is part of Umalusi's mandate. In order to improve its performance in this regard, Umalusi has interrogated, revised and improved all its quality assurance of assessment processes and procedures, namely:

- Moderation of question papers
- Moderation of marking (centralised and on-site)
- Moderation of Continuous Assessment (CASS)
- Monitoring of the conduct of the Senior Certificate Examination
- Standardisation of Examinations and Continuous Assessment (CASS).

In 2005, Umalusi has paid particular attention to the cognitive challenge of question papers. The level of challenge of question papers for 2005 was significantly higher. The examination has become less predictable and this enhances its reliability and validity. This aspect has received Umalusi's attention as a result of the research conducted in 2004.

The monitoring of examinations has also received particular attention from Umalusi. In 2005, Umalusi monitored three key stages of the examination: the state of readiness, the conduct of the examination as well as the resulting phase. Umalusi has put measures in place to ensure that assessment bodies have the required systems in place to monitor examinations.

Furthermore, the quality assurance of marking has been greatly improved through the implementation of centralized moderation of marking for the six national subjects: Accounting, Mathematics, Physical Science, Biology, History and English Second Language. Assessment bodies were required to send a sample of scripts to Umalusi. This sample was then moderated by Umalusi external moderators. Feedback was provided on a daily basis to the assessment bodies to improve the quality of marking.

The Executive Committee of Umalusi Council has concluded, from the reports submitted by all personnel involved in the quality assurance of examinations, that assessments in Level 4 Adult Basic Education and Training, Vocational Education and Training as well as the Senior Certificate Examination were conducted in line with policy and regulations governing the conduct of examinations. The results were, therefore, found to be reliable, valid, fair and credible. The Committee met at Umalusi offices in Pretoria this morning and declared that the examinations were beyond reproach.

2005 is a special year for the Senior Certificate Examination. This year's cohort are the first graduates of Outcomes-Based Education. They have had to deal with the difficulties of navigating through OBE and then back to the old system. This has both been a test for the new system and also marked the maturity of the old system.

Umalusi will continue to strengthen its quality assurance of examinations in the general and further education band. The quality assurance processes for continuous assessment will receive some attention in the forthcoming year. The standard of examinations in practical subjects will also receive close attention in the near future.

Umalusi takes this opportunity to thank all its stakeholders for their co-operation and support provided in each of its quality assurance process. Festive Greetings!

J. Pampallis
22 December 2005

Chapter 1

Overview of Report
1. Introduction

Umalusi reports on the standard of the Vocational Education and Training 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 ensure credible Vocational Education and Training Examinations.

Umalusi judges the quality and standard of the Vocational Education and Training (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 conduct of the VET Examinations; the quality of marking as well as the quality and standard of internal quality assurance processes within the assessment body.

In the Vocational Education and Training (VET) sector, examinations are conducted during March, April, June, August and November. The Natural Sciences examinations are conducted during April, August and November, while the General Studies examinations are conducted during June and November and the supplementary N3/NSC examinations are written in March. The responsibility of Umalusi is restricted to the quality assurance of the N1 - N3/NSC Report 191 qualifications.

In this sector, the National Department of Education is responsible for all aspects pertaining to appointment of examiners, setting, editing, printing, packaging and distribution of all the externally written question papers. The involvement of the provincial departments of education with regard to VET examinations is mainly in the monitoring of the conduct of examinations.

Examinations are written at public and private colleges, prisons and technical high schools. Care is taken to include a sample of all the different types of examination centres in the quality assurance process.

Umalusi strives to ensure continuous improvement of its processes to enhance confidence that the examinations meet the required standards. Umalusi, during 2005, fulfilled a quality assurance role in all VET examinations, but the major emphasis was on the June and November N3/NSC examinations.

A new approach to monitoring was adopted to ensure closer cooperation and coordination between the provincial departments of education, Umalusi and the National Department of Education. In addition, the tools for the moderation of question papers have been reviewed and sharpened.

Chapter 1 of this report outlines the purpose of the report, its scope and briefly discusses the quality assurance processes used by Umalusi to ensure that the VET examinations meet the required standards. The second chapter reports on the findings of the moderation of question papers. This chapter reports on the standard of the question papers. The third chapter discusses the findings from Umalusi's monitoring of the conduct of the VET examinations. Chapter 4 discusses in brief detail the moderation of marking. The next chapter reports on the standardisation of VET results and the sixth and final chapter summarises the findings of the quality assurance of the 2005 Vocational Education and Training examinations and makes some recommendations for

improvement.

2. Purpose

The purpose of this report is to report on Umalusi's quality assurance of the 2005 Vocational Education and Training examinations with respect to the following:

- The findings from the external moderators' reports which are synthesized, analysed and used to make judgements on the standard of the question papers and marking.

- The efficiency and effectiveness of processes for the conduct of the VET examinations within the assessment body.

- The moderation of marks during the standardisation process.

- Make recommendations for the improvement of assessment processes.

3. Scope

The report covers all the quality assurance of assessment processes currently used by Umalusi to ensure that the VET examinations are of the required standard; namely, the moderation of question papers, moderation of marking, monitoring of the conduct of the examinations as well as the moderation of marks. In addition, it briefly covers the monitoring of the moderation of practical assessment that was done for the first time during November 2005.

The report covers each of the processes in the various chapters. Each chapter captures only the salient observations with respect to each of the processes, highlights some problem areas and ends by offering recommendations for improvement.

4. Quality assurance of assessment processes used by Umalusi

A brief outline of Umalusi's quality assurance of assessment processes and procedures used for the Vocational Education and Training examinations process will help the reader to understand the extent of Umalusi's quality assurance function. This section aims to provide an overview of the processes that are used to ensure the quality of the VET examinations.

Umalusi is responsible for the quality assurance of the N1 - N3/NSC Report 191 qualifications. In keeping with its mandate, Umalusi focuses on the quality assurance of the exit examinations. The quality assurance activities undertaken by Umalusi include the following:

- Moderation of selected N3 question papers.

- Monitoring of the design phase of the examinations at national and provincial level, as well as at a selected examination and marking centre in all nine provinces.

- Monitoring of the conduct of examinations, including practical examinations, at selected examination and marking centres across the country.

- Moderation of marking at selected marking centres across the nine provinces as well as at the National Department of Education.

- Standardisation of results.

- Monitoring of capturing of marks and processing of results.

4.1 Moderation of question papers

In order to accomplish this function, Umalusi utilises the services of external moderators who are highly qualified and experienced professionals in their respective subjects. The moderation process focuses on ensuring that question papers are of an acceptable standard, cover the appropriate content as prescribed in the syllabus, and are presented

in a professional manner. Moderators are required to consider the following criteria:

- Adherence to policy
- Content coverage
- Cognitive challenge
- Technical criteria
- Language usage
- Quality and standard of internal moderation.

4.2 Monitoring of the different phases of the examinations

Umalusi has been involved in the monitoring of the VET examinations since 2003. The monitoring focused on:

- The conduct of the General Studies and Natural Sciences examinations.
- The audit of the monitoring systems of the assessment body. From the November 2005 examination, the state of readiness of the assessment body to administer the examinations was also monitored.

With regard to monitoring the examinations, Umalusi uses uniform criteria and elaborate monitoring instruments. The criteria focus on the following:

- Management of examination and marking centres
- Delivery of question papers and collection of scripts
- Invigilation and suitability of examination centres
- Security and storage of scripts

- Credibility of markers
- Training of markers
- Checking of marked scripts
- Transfer of marks to mark sheets.

4.3 Monitoring of the moderation of practical assessment

The summative assessment of some of the General Studies instructional offerings consists of a practical examination session (e.g. Applied Hair Care). The syllabi of such instructional offerings stipulate that these practical examination marks and the practical component of the year marks must be "externally moderated", i.e. Moderated by a subject specialist who is not a staff member of the college/examination centre involved. This moderation is imperative to ensure that the standard and quality of the practical component is good.

In order to ensure that the standard of the practical examinations is of the required level, the examinations of two practical subjects were monitored at selected centres during October/November 2005.

4.4 Moderation of the marking process

Umalusi moderates the marking of scripts by deploying external moderators to selected marking centres during the marking process. Where a subject is marked at more than one marking centre, a sample of marked scripts of the centres not included in the moderation of marking exercise is moderated off-site before the standardisation of results. External moderators are deployed to the marking centres to ensure the following:

- The memoranda are correctly interpreted.

- The standard of marking and internal moderation of scripts is maintained across all marking centres and throughout the marking process.

- All the systems and processes that relate to marking are in place and effective.

- The product of marking is a true reflection of the performance of individual candidates.

4.5 Statistical moderation of the Vocational Education and Training results

Standardisation of marks is necessary to address the variation in the standard of question papers and marking that may occur from one examination to the next.

Statistical moderation of marks consists of comparisons between the current mark distributions and the corresponding average distributions over the last six examinations. Standardisation meetings take place between the completion of marking and publication of results. These meetings are attended by a team from Umalusi's Statistics Working Group, representatives from the Chief Directorate: Educational Measurement, Assessment and Public Examinations; all the provincial departments of education and the unions.

The Kolmogorov-Smirnov goodness of fit procedure in conjunction with fixed norms is used for the standardisation of the Vocational Education and Training results. The norms for the different subjects need to be adjusted from time to time. To add value to this process it was decided at the norm change meeting that took place during April 2005 to involve Umalusi statisticians.

Chapter 2

Moderation of question papers

1. Introduction

Moderation of question papers is one of the key quality assurance measures that Umalusi puts in place to ensure credibility of the Vocational Education and Training examinations.

In order to maintain public confidence in the examination system, the question papers must be seen to be relatively:

- fair;
- reliable;
- representative of an adequate sample of the syllabus;
- representative of prescribed conceptual domains; and
- representative of prescribed levels of cognitive challenge.

Umalusi appointed external moderators who are subject specialists with extensive assessment experience to moderate question papers. These moderators carefully moderate the question papers according to Umalusi set criteria.

2. Purpose

The purpose of this section is to report on the quality of the question papers of the 14 N3 VET subjects that are currently moderated by Umalusi. The aim is to extract salient findings from the external moderators' reports, synthesise and analyse these and make judgements on the standard of the Vocational Education and Training examinations.

The chapter, in addition, highlights problems that need to be addressed and finally makes recommendations for improvement of the system.

3. Scope of the moderation practice

A total of 15 moderators were involved in the moderation of 29 question papers for the June, August and November examinations of 14 selected N3 subjects. A further two moderators were involved in the monitoring of the moderation of practical examinations of two subjects. This will be reported on in a latter part of the report.

The 14 N3 instructional offerings that are currently moderated by Umalusi are:

General Studies

Applied Accounting

Business English First and Second Language

Computer Practice

Office Practice

Public Administration

Sakeafrikaans First and Second Language

Small Business Management and Entrepreneurship

Natural Sciences

Engineering Drawing

Engineering Science

Industrial Electronics

Mathematics

Mechanotechnology

These subjects represent the subjects with the largest enrolments in both the General Studies and Natural Sciences fields of study.

4. Approach to moderation of question papers

Umalusi appoints external moderators who are qualified and experienced in the field of assessment to moderate the question papers. The Umalusi appointed moderators who were each responsible for a specific instructional offering, except for Applied Accounting where one moderator was appointed for each of the two papers. In the case of the languages, a moderator was appointed for the first paper of the first and second language and the second paper of the first and second language respectively.

The question papers are sent to the responsible moderators by the assessment body. The moderators moderate the question papers and then report on their findings. The moderators carefully moderate the question papers according to Umalusi set criteria, recommend improvements and finally approve question papers. The criteria are reviewed and improved on a regular basis to ensure that it takes care of all the aspects of the question papers pertaining to quality and standard.

Criteria used by the external moderators covered the following aspects:

- Standard of the question papers
- Coverage of the syllabus
- Cognitive levels assessed
- Presentation of question papers
- Internal moderation of question papers
- Strengths and weaknesses observed

- Overall impression of the question papers.

5. Findings

5.1 Standard of question papers

The standard of the question papers is to a large degree determined by the quality and range of questions set. The question papers have to be comparable to that of previous examinations and it should be ensured that questions are not repeated or set outside the syllabus. Trends in the workplace are constantly changing and it is important that these developments are catered for in the question papers set.

The external moderators were in general very satisfied with the following question papers: Applied Accounting Paper 2; Business English Paper 2; Computer Practice; Public Administration and Engineering Drawing.

The majority of the General Studies question papers, however, had to be re-submitted before it could be approved. Some question papers like the Office Practice question paper had to go through intensive external moderation before it reached the desired standard.

5.2 Coverage of syllabus

This criterion requires the moderators to establish whether the examination question papers accurately represent the content specified in the syllabi. It also seeks to discover whether the key aspects were covered in the examination question paper. Furthermore, the criterion examines whether the question paper consists of constructs that cover crucial subject-specific knowledge. The weighting of questions in relation to areas of subject content is another focus of the criterion.

The overall observation was that the majority of question papers did cover the syllabus and questions were distributed in accordance with the weighting as prescribed in the syllabus. Where deviations in weighting occurred it was well within acceptable limits. Exceptions were the Applied Accounting Paper 1 question papers.

5.3 Cognitive skills and levels

The purpose of this criterion is to establish what conceptual constructs are tested by the examination question paper. It also seeks to determine the challenge or difficulty level of the examination question paper. In addition, the criterion investigates the extent to which the examination question paper is in line with the best and latest developments in the teaching of that particular subject.

The finding was that there were too many question papers that still did not assess the various cognitive levels and skills proportionately. The main emphasis is still on recall and application. An additional problem is that the cognitive demand is not specified in the syllabus of some of the subjects, e.g. Applied Accounting Paper 1.

It was again recommended, like in the past, at a training session held during July, that taxonomy analysis grids should be submitted with question papers as a tool to indicate differentiation in terms of weighting and cognitive skills assessed.
It is encouraging to note that the number of reports received from moderators where a grid was attached increased.

It is encouraging that there is a move towards outcomes-based education types of questioning (e.g. certain questions in Office Practice paper and August Industrial Electronics paper).

5.4 Technical criteria

In judging the technical aspect of the question papers, the moderators looked at :

- the organisation of the paper;
- the technical details like the cover page, layout, numbering and mark allocation; and
- the quality of illustrations, graphs, tables and other graphics.

The National Department of Education is responsible for and has systems in place for the translation and editing of question papers, printing and the distribution of the question papers to the examination centres. The examiners and internal moderators rely to a large extent on the Department to ensure that technical details are correct. Considering the magnitude of the exercise, the Department deserves to be commended on a job well done. The impression is, however, that more problems were experienced than in the past with the dissemination of question papers to external moderators and examination centres. Another concern was that the correct subject terminology was not used in a translated version of a paper (e.g. Office Practice). Other problems that occurred were that an incomplete question paper and memorandum were sent to the external moderator of Business English Paper 1.

The General Studies question papers were sent in the draft form to the external moderators while the Natural Sciences papers were sent out in the print ready form. A common problem and major concern was the lack of a file on the history (all drafts and comments) of the papers that were sent out for external moderation.

5.5 Internal moderation

The standard of internal moderation is still a concern. It was reported a number of times that there was no or very little evidence that the question papers were internally moderated. The proposed changes were often made on the question paper itself with no

comprehensive report as to provide reasons for the proposed changes. Obvious mistakes like typing and spelling errors; incomplete memoranda and mistakes on memoranda; differences in the English and Afrikaans versions of the papers; and errors in the calculation of marks detected by external moderators serve as proof of slack internal moderation.

The external moderators also reported too many mistakes in the memoranda. The nature of mistakes included the following:

- Lack of provision for alternate correct answers (e.g. Engineering Science, Industrial Electronics and Office Practice).

- Mark allocations not indicated or inconsistent (e.g. Industrial Electronics, Engineering Science, Applied Accounting Paper 1 and Sakeafrikaans Paper 2, Office Practice, Small Business Management and Entrepreneurship).

- Errors on the memorandum (e.g. Mathematics, Office Practice).

The opposite of lack of thorough internal moderation is fortunately also true and the external moderators of Applied Accounting Paper 2, Business English Paper 2 and Sakeafrikaans First and Second Language Paper 1 reported that the papers were thoroughly moderated by the internal moderator.

5.6 Strengths

The following strengths were noted:

(a)   The quality of question papers set has improved. Care is taken to ensure that the question papers cover the syllabus.

(b)   The move towards outcomes-based education type of questioning (e.g. certain questions in Office Practice paper and August Industrial Electronics paper) is also commendable.

(c)   In certain papers (e.g. Sakeafrikaans Paper 1) effort is taken to ensure that the text used is appropriate. It was reported by the external moderator that it was an excellent choice for learners of today.

5.7 Areas of concern

The following are the areas of concern:

(a)   The question papers for the August as well as November Natural Sciences examinations were sent out for external moderation at a very late stage. This put the external moderators under tremendous pressure to approve papers despite shortcomings.

(b)   A major concern of the external moderators was the lack of submission of a file on the history (all drafts and comments) of the question papers.

(c)   The question papers follow very closely on patterns established with previous examinations. Learners who master the techniques and skills by working through previous question papers will benefit immensely. The questions are too straightforward and become predictable. Questions are not challenging and do not require creative responses. There were also examples of ambiguous questions or instructions that could disadvantage llearners (e.g. Afrikaans Second Language Paper 2, Office Practice) that had to be replaced. The moderator for Small Busines Management and Entrepreneurship reported the verbatim repetition of questions in consecutive question papers.

(d)   Poor quality or absence of internal moderation of question papers. This matter cannot be over- emphasised.

(e)   The need for subject specific guidelines was imminent and the development of these guidelines started at a workshop during July 2005.

6. Recommendations

Based on the analysis of the reports received from the external moderators, the following is recommended:

(a) The assessment body must submit question papers to external moderators before the set due date of February.

(b) A grid or other form of breakdown of the various questions included should accompany all question papers. This is to ensure that the cognitive demand is at the right level, the syllabus content is   correctly covered and the spread and variety of question is satisfactory.

(c) All question papers must be accompanied by a typed internal moderator's report   in an agreed format and not just the current checklist. This is to improve the standard of internal moderation.

(d) All question papers sent to external moderators must be accompanied by a full history of the question paper.

(e) Interactive meetings between examiners, internal moderators and external moderators should continue, as these are the only forum where crucial issues relating to the setting, quality and standard of question papers can be addressed.

(f) Examiners to sign a code of conduct to ensure that questions asked in previous examination papers will not be repeated verbatim.

(g) All question papers should be submitted to external moderators in a ready - to - print format to prevent problems like typing errors and the like that appear from time to time   (e.g. November paper of Engineering Science N3).

7. Conclusion

It is encouraging that there is a marked improvement in the quality of question papers of instructional offerings where Umalusi has been involved in the quality assurance process for some time. The standard of internal moderation is in general not on an acceptable level. The same applies to the memoranda.

The external moderators worked hard to ensure that question papers reached the desired standard. As a result Umalusi is confident that the standard and integrity of the VET examinations were not compromised by the quality of question papers finally approved.

Chapter 3

Monitoring of the design and the conduct of examination phases

1. Introduction

Monitoring of various types of examination centres and the marking centres is one of the key quality assurance measures that Umalusi puts in place to ensure the credibility of the Vocational Education and Training Examinations.

Umalusi judges the standard of the design and conduct of the examinations by determining the level of adherence to policy in implementing the required systems, processes and procedures in preparation for the examinations, the writing (and in the case of practical examinations, the execution) of the examinations as well as the marking of the answer scripts.

Although some monitoring of all but the March VET Examinations of 2005 took place, the main emphasis was on the June General Studies and the Natural Sciences and General Studies Examinations of November. This chapter of the report will briefly outline the purpose, scope, approach and findings of the monitoring done by Umalusi during 2005 and make some recommendations for improvement.

2. Purpose

(a) The Design Phase was monitored to:

- establish the state of readiness of the National Department of Education to conduct the examination;

- establish the state of readiness of the provincial departments of education for the monitoring of the examination;

- establish the state of readiness of the examination centres to conduct the examination;

- evaluate the effectiveness of the systems in place for the appointment of chief invigilators, invigilators, marking centre managers, chief markers, marking moderators, and markers;

- establish whether the necessary security measures are in place to ensure the safety of the examination material;

- ensure that the processes related to the administration and conduct of the examination is credible.

(b) The Writing Phase was monitored to determine compliance with the relevant aspects in the national policy relating to the formal Technical College instructional programmes pertaining to the:

- preparation for the conduct of the examinations (including venues and invigilation time tables);

- receipt, safe keeping and issuing of question papers;

- appointment and training of invigilators and chief invigilators;

- admission of candidates into the examination room;

- alertness of invigilators;

- collection, control, packaging and dispatch of answer scripts; and

- handling of irregularities.

(c) The marking centres were monitored to determine compliance with the mentioned policy with regard to the:

- security at the marking centre;

- suitability of the venue to serve as a marking centre;

- control of the movement of the scripts;

- marking procedures;

- measures to ensure correct addition and transfer of marks on answer scripts and to

the mark sheets; and

- reporting and recording of irregularities detected at the marking centre.

(d) The moderation of two selected instructional offerings with a large practical component was monitored to:

- make judgements on the current status and standard of the practical examinations;

- highlight certain problems; and

- make recommendations for improvement.

3. Scope

3.1 Monitoring of the design phase

The design phase was monitored for the first time before the November 2005 Examination. The Umalusi convenors of each province were deployed for a day to monitor the state of readiness of the provincial department of education as well as a selected examination and marking centre. A monitor in Gauteng was deployed for one day to monitor the design phase at the National Department of Education.

3.2 Monitoring of the writing phase and marking

Umalusi deployed monitors to visit examination and marking centres and report on the compliance with policy in each of the nine provinces. Although some monitoring of all but the March VET Examinations of 2005 took place, the main emphasis was on the June General Studies and the November General Studies and Natural Sciences Examinations and this section of the report will mainly cover these examinations.

The scope of monitoring with each of the examinations are indicated below:

3.2.1 April 2005 Natural Sciences Examination

Umalusi monitored a sample of examination and marking centres in seven of the nine provinces during the April 2005 Natural Sciences Examination. A total of thirteen examination centres and two marking centres were monitored. Six of the thirteen dates on which the examinations were written were included in the monitoring of the conduct of examinations. The quality assurance plan for the April 2005 examinations made provision for the inclusion of public as well as private FET colleges and prisons.

3.2.2 June 2005 General Studies Examination

The monitoring exercise included a sample of examination and marking centres in seven of the nine provinces. A total of sixteen examination centres and one marking centre were monitored. Seven of the ten dates on which the examinations were written were included in the monitoring of the conduct of examinations. The monitoring plan for the June 2005 examinations made provision for the inclusion of examination centres at public as well as private FET colleges, schools and prisons.

The monitoring by Umalusi included:

- Follow up visits in three of the provinces, viz. Northern Cape, Free State and Limpopo.

- Monitoring of the conduct of an examination and moderation of marking at the same campus of a specific college.

- Monitoring of examination centres at different campuses of the same college in two provinces.

- Monitoring at different branches of the same private college.

3.2.3 August 2005 Natural Sciences Examination

Umalusi monitored a sample of examination and marking centres in three of the nine provinces with the August Natural Sciences Examination. A total of nine examination centres and two marking centres were monitored over a period of six days. The monitoring plan for the August 2005 examinations made provision for the monitoring of examination centres at public FET colleges only.

The monitoring by Umalusi included the monitoring of examination centres at different campuses of the same college in two of the three provinces.

3.2.4 November 2005 Natural Sciences and General Studies Examinations

The nine provincial departments of education and the National Department of Education were included in the monitoring of this examination.

Nineteen of the Umalusi appointed monitors were used to monitor the conduct of examinations at 25 different examination and two marking centres. The examination centres included public colleges, technical schools, prisons and private colleges. An Umalusi staff member in addition monitored the writing phase at two examination centres and three marking centres.

The breakdown of the November visits is as follows:

- Thirteen campuses of eleven different public colleges.

- Three prisons, one each in three provinces.

- Five private colleges across four different provinces.

- Six technical high schools in five different provinces.

- Five marking centres.

3.3 Monitoring of the moderation of assessment of selected practical subjects

Umalusi appointed two moderators for two selected practical subjects. The moderators monitored the moderation of practical examinations at nine different training sites, five for Applied Hair Care and four for Food Preparation or Catering during October/November 2005.

The table below captures the sites monitored:

Practical Hair Care	Province
Melbourne Campus (Thekwini FET College)	KwaZulu-Natal
Lower Tugela College (previously M L Sultan Secondary School)	KwaZulu-Natal
Meadowlands Secondary School	KwaZulu-Natal
Roodepoort Campus (South West Public FET College)	Gauteng
Rustenburg Campus (Orbit FET College)	North West
Hospitality	
Catering Practical	
Sebokeng Campus (Sedibeng College)	Gauteng
Phalaborwa Campus (Mopani South East FET College)	Limpopo
Food Preparation	
Modjadji Community Campus (Letaba FET College)	Limpopo
Senwabarwana Campus (Capricorn FET College)	Limpopo

As can be observed from the table the examinations monitored included public colleges as well as two schools, rural as well as urban areas, old as well as new courses in the case of hospitality, across four different provinces.

4. Approach

4.1 Monitoring of different phases of the VET Examinations

Umalusi set an objective to ensure that all examination and marking centres are monitored over a period of time. Umalusi deploys monitors to visit the head offices of provincial departments of education, examination centres and marking centres to monitor the different phases of the examinations or verify reports on the different phases of the examinations. A total of 19 monitors were deployed -- one to three in each of the nine provinces. One of the monitors in each province acted as a convenor.

In line with Umalusi's approach to continuously improve its quality assurance activities, the design phase was monitored for the first time before the November 2005 examination at the National Department of Education as well as all nine provincial departments of education and a selected college (in each case a site registered as an examination as well as marking centre) in each province. The centres visited included General Studies and Natural Sciences Examination and marking centres. An instrument for specific use in the VET sector was developed for this purpose.

The conduct of the examination, that includes the writing phase as well as the marking, had been monitored in this sector since 2003. During 2005 Umalusi continued with the monitoring of the conduct of examinations at a pre-selected sample of examination and marking centres in all nine provinces. A small sample of marking centres were included in the monitoring exercise since the majority of marking centres were covered by the Umalusi moderators.

Umalusi in 2005 started to adjust its approach to monitoring in the Vocational Education and Training sector with the aim to ensure closer cooperation and coordination of monitoring and to move towards verification of the monitoring done by provincial departments of education and the National Department of Education. This approach started in the Free State and Gauteng with the June 2005 examination and was extended to the other provinces with the November 2005 examinations. The amount of verification done was dependent on the involvement of the particular department of education in monitoring.

The selection of examination and marking centres to be visited by the Umalusi monitors were informed by:

- monitoring visits during 2003 and 2004;
- findings of previous monitoring visits;
- enrolment statistics; and
- available staff and budget.

The monitoring exercises made provision for the inclusion of:

- examination centres at public and private colleges, schools and prisons in urban and remote areas that had not been monitored before;
- examination centres at different campuses of a specific college to compare the standard;
- examination centres at different branches of specific private colleges;
- follow-up visits to public and private examination centres where non-compliance was reported with previous monitoring visits;
- monitoring of marking at selected marking centres; and
- verification visits.

The table below indicates the number of examination and marking centres visited by Umalusi for monitoring purposes during 2005

Examination	March	April	June	August	November	Total
Examination centres						
Public campuses (Colleges)	0	9 (9)	9 (7)	9 (5)	13 (11)	40
Private colleges	0	2	4	0	5	11
Schools	0	0	2	0	6	8
Prisons	0	2	1	0	3	6
Total	0	13	16	9	27	65

Examination	March	April	June	August	November	Total
Marking centres						
Monitoring	0	2	1	2	5	10

In this sector, the National Department of Education is responsible for all aspects pertaining to the appointment of examiners, setting, editing, printing, packaging and distribution of all externally written question papers. Examination papers are sent to and stored at examination centres. The provincial departments of education are also not involved in the selection, appointment and training of marking centre managers, markers and marking moderators. The involvement of the provincial departments of education with regard to VET Examinations is mainly in the conduct of examinations.

Umalusi, the National Department of Education and the provincial departments of education monitor the conduct of examinations.   Umalusi monitors, provincial department of education representatives and representatives from the national Department of Education were trained at the offices of Umalusi on 31 August.

See Addendum 1 and 2 for the sites monitored for the design phase during November 2005 and the sites monitored for the conduct of the examinations with the April, June, August and November 2005 examinations.

4.2 Monitoring of the moderation of assessment of practical subjects

The summative assessment of some of the General Studies instructional offerings consists of a practical examination session (e.g. Applied Hair Care). The syllabi of such instructional offerings stipulate that these practical examination marks must be "externally moderated", i.e. be moderated by a subject specialist who is not a staff member of the college/examination centre involved. The practical component of the term marks of the various instructional offerings that have a dominant practical component must also be "externally moderated". This moderation is imperative to ensure standards as there are no national examinations to measure performance and to maintain/ensure standards for these practical subjects. The Chief Directorate: Educational Measurement, Assessment and Public Examinations appoint these "external" moderators, on recommendations made by the respective colleges.

The final mark of learners in the Vocational Education and Training sector comprises 40% internal assessment (year/semester/trimester mark) and 60% external assessment (examination mark). Apart from the standardisation of the year and examination marks, Umalusi has thus far not been involved in the moderation of internal assessment/practical examinations.

The challenge in the FET College sector remains that of curriculum transformation. Great strides have been made with the reform of the Hospitality (for the purpose of this monitoring exercise, Food Preparation or Catering) and Hair Care instructional offerings. Umalusi monitored the moderation of the practical examinations of these offerings during the October/November 2005 examinations.

Umalusi appointed two external moderators, who are qualified and experienced in the assessment of the two selected instructional offerings, for the above purpose. They were trained on 6 September 2005.

Umalusi selected a sample of nine training and learning sites.   The necessary arrangements were made with the sites, including the provision of the instrument to be

used for the monitoring. The moderators spent a day at each of the sites to collect the relevant information.

5. Findings

5.1 Design phase

The system of the assessment body for the translation, editing, printing, safekeeping and distribution of question papers to the examination centres is impressive. The major concerns are in the finding, appointment and training of suitable examiners and moderators. Deadlines can often not be met because of the large numbers of question papers that need to be handled. The Chief Directorate: Educational Measurement, Assessment and Public Examinations (EMAPE) is currently busy with the development of several documents that will improve processes and procedures in the sector

The Chief Directorate: Educational Measurement, Assessment and Public Examinations provided Umalusi with a schedule of their monitoring visits to the nine provinces. On a request from Umalusi for a plan indicating the centres to be visited, their response was that such was not available but that monitoring will receive the due attention as from 2006.

The majority of provincial departments of education had monitoring plans in place, the exceptions were Limpopo and KwaZulu-Natal. The approach to, as well as the type of sites that are monitored, and extent of the monitoring exercise vary from province to province. In certain provinces only examination centres at public colleges are monitored (e.g. Mpumalanga), others only monitor the writing of examinations, e.g. the Eastern Cape, while in other provinces the different phases (design, writing and marking and even internal marking) of the examinations are monitored at all the different types of centres (public and private colleges, schools and prisons), e.g. the Free State and Northern Cape. The examinations and marking centres were well prepared for the examinations.

Great care was taken to:

- ensure the organising and safekeeping of question papers;

- the necessary preparation for candidates with special needs;

- issuing of examination permits;

- the appointment and training of chief invigilators and invigilators;

- the planning of venues and time tables;

- the selection and appointment of markers, chief markers and marking centre managers; and

- planning for the training of markers especially new markers.

Considering the magnitude of the exercise, the examination centres deserve to be commended on their efforts. At Bloemfontein Campus, twenty-three venues had to be prepared to make provision for 1677 candidates that wrote examinations on a specific date during the June examinations.

Special training booklets containing all relevant information on the duties of chief invigilators and invigilators were prepared at some examination centres, e.g. in the Eastern Cape and Free State.

Strengths

The following strengths were noted:

(a) The system and double checking procedures that are used for the registration of candidates proof to be very effective and only a few cases of problems with the registration of candidates were reported.

(b) The process for control of question papers received from the National Department of Education is effective and all nine colleges visited reported that all the question papers were received in time except the Natural Sciences papers which were received later than expected.

Areas of concern

The following are the areas of concern:

(a) Lack of involvement of provincial departments of education in the monitoring of the sector e.g. Limpopo.

(b) Lack of realistic and long term monitoring plans in certain provinces e.g. Eastern Cape.

(c) Exclusion of certain phases of the examination process and/or certain types of examination centres in the monitoring exercise, especially the marking phase.

(d) Exclusion of certain types of examination centres in the monitoring exercise especially private colleges.

(e) Slack control over examination stationery.

5.2 Conduct of examination phase

The overall impression is that examination (especially the public centres) and marking centres are eager to ensure that everything possible is done to ensure compliance with policy. Where recommendations for improvement were made in the past, efforts were made to implement such. In provinces where the provincial departments of education are involved in the monitoring process like in the Free State and Western Cape, few and in most cases minor deviations from policy were reported.

5.2.1 Examination centres

5.2.1.1 General management of the examination

All aspects with regard to the receiving and safekeeping of examination papers, registration of candidates, planning of timetables, etc., received the necessary attention. A marked improvement in the training of chief invigilators and invigilators were reported. Reports were, however, still received that at some centres no formal training of invigilators is taking place (M C Kharbai, Technicol, Bushbuckridge Technical College, Senwabarwana Campus). Appointments of invigilators and chief invigilators are also still not always confirmed in writing (e.g. GSF Education, Senwabarwana Campus, Bushbuckridge Technical College, Hendrina Combined School, City Campus).

5.2.1.2 Seating of candidates

Despite the fact that seating plans were not available at some of the centres monitored, all other aspects received the necessary attention.

5.2.1.3 Procedures before and during the writing of the examination

The correct procedures for the issuing, opening of question papers and dealing with matters like errata were followed. At some of the examination centres the question papers were not checked with the candidates when handed out. The importance of this measure was confirmed at Kimberley Technical High School where a question paper with two blank pages was found during the checking process. Invigilators were mobile and attentive at all but one of the centres monitored (Slack invigilation was reported at Lagunya Finishing school).

The practice of allowing the lecturers of computer subjects to invigilate their own candidates is a concern. Although the reason behind this practice is understood, it can lead to malpractices and indeed the majority of irregularities that are reported at this stage are for the computer subjects. It was reported that the prescribed ratio for candidates to invigilators were not observed at both centres monitored in Limpopo.

5.2.1.4 Packaging and transmission of answer scripts

The prescribed procedures were meticulously adhered to.

5.2.1.5 Strengths

The following strengths were noted:

(a) The venues were conducive for the writing of examinations.

(b) Great care was taken with the preparation of invigilation timetables.

(c) The correct procedures were followed with the counting, recording and dispatch of answer books. The only aspect that did not receive proper attention at some of the centres was the keeping of an additional record of the dispatch of scripts and not just the waybill as proof of the dispatch.

5.2.1.6 Areas of concern

The following are the areas of concern:

(a) A few incidences of question papers that were not received in time were reported. The Afrikaans Paper 2 was not received at Cradock and several Natural Sciences papers were not received at Rooigrond Prison. The non-receipt of the question papers lead to another violation of the examination policy in that the examinations started late.

(b) Although there is an improvement in the availability of contingency plans, too many centres did not have contingency plans in place.

(c) Question papers are not stored in a safe or strong room. This problem was observed at a number of colleges in the Eastern Cape as well as private centres across the different provinces.

(d) The impression is that examination centres do not realise the consequences of not having a seating plan and the signing of an attendance register should an alleged irregularity be detected at a later stage.

(e) Lack of written records for control of examination stationery.

(f) The practice at certain centres is to use examination permits as the only means of identification of candidates.

(g) No record kept of monitors that visit examination and marking centres.

(h) More non-compliance with policy were reported at private centres and prisons visited than at public colleges.

5.2.2 Marking centres

5.2.2.1 Security

Effective security measures are in place at the entrances to marking centres. At certain marking centres (e.g. Pretoria Campus), markers are issued with security cards and need to punch in a code to gain access to the marking venue. At the majority of centres visited, the security at the rooms where marking takes place is not stringent enough and needs to be improved.

5.2.2.2 General condition of the marking centre

The conditions at the marking centres were found to be conducive for marking. All the necessary communication facilities were in place and the furniture allowed for the required comfort while marking. The availability of catering facilities differs from centre to centre. Accommodation facilities are not provided as markers mostly come from the vicinity of the marking centre.

5.2.2.3 Appointment of markers

Forums, consisting of staff members from all the colleges in the vicinity of the marking centres are responsible to ensure that the laid down criteria for the appointment of markers are met. They screen through the applications, select suitable candidates and make recommendations to the CD:EMAPE on the appointment of markers.

It was admitted that it is sometimes difficult to find suitable candidates to appoint as markers.

The CD:EMAPE appoints the markers and chief markers. The examiner is usually appointed as the chief marker and fulfils the function of internal moderator at the marking centre.

5.2.2.4 Marking

Marking is preceded by memorandum discussions. Two memorandum discussions are held before the actual commencement of marking. After the first memorandum discussion, each marker receives a sample of scripts to mark. The marked scripts are moderated and then the second memorandum meeting takes place. The memorandum discussions often serve as the "training of markers" and attention is given to the interpretation of the memorandum, mark allocation and other aspects of marking. Administrative issues are also sometimes discussed.   An area that is neglected is training on the identification of alleged irregularities and the handling of irregularities. Minutes of the memorandum discussions must be kept.

Scripts are handed to the chief markers who divide scripts among the markers. The handing of scripts to markers and return of marked scripts to chief markers are controlled but the daily return of scripts for safekeeping is not controlled at some of the marking centres.

The appointment of examination assistants is not a common practice in this sector. Various means are implemented to ensure that all questions are marked and marks are allocated and transferred correctly to the cover page as well as to mark sheets. There is, however, not a uniform way of ensuring the above and at certain centres there are no additional quality assurance measures in place to ensure the above.

A new report format that makes provision for the evaluation of the performance of markers was introduced by the CD:EMAPE during 2004. The new report format is not as yet used by all marking centres.

5.2.2.5 Internal moderation

To ensure consistency in marking a sample of 10% of all marked scripts is moderated by the chief marker.   A good practice is to initially moderate a larger than 10% sample of marked scripts. The sample is selected to include candidates that obtained low, average and high marks and care is also taken to include scripts of all the markers.

5.2.2.6 Strengths

The following strengths were noted:

(a) Memorandum discussions are held as prescribed.

(b) Great care is taken to ensure that conditions are conducive for effective marking.

5.2.2.7 Areas of concern

The following are the areas of concern:

(a) The late arrival of scripts or scripts that are sent to the wrong marking centre is still a problem. It is important that the person responsible for the dispatch of scripts is au fait with all the information.

(b) Final approved memorandum not signed off.

(c) No record keeping of visits by monitors of the assessment body or quality assurance body.

(d) Lack of measures to ensure that scripts are indeed only marked at the marking centre.

(e) Practice of advertisement of positions for markers at colleges in the vicinity of the marking centre only.

(f) Lack of training on detection and handling of irregularities.

5.2.3 Monitoring of the moderation of assessment of practical subjects

The following section provides a brief report on the Umalusi moderators' findings:

5.2.3.1   Hair Care

In the case of Applied Hair Care the examinations appear to be standardised to a large extent. The Chief Directorate: Educational Measurement, Assessment and Public Examinations provides an uniform instruction sheet and mark sheet/instrument to be

used for the practical examinations (These cover the Report 191 syllabus and the unit standards). Moderation must be done with each modular examination. It is stipulated that the appointed "external moderator" must be selected from the Hairdressing industry.

The sites of delivery are responsible to carry the costs of the external assessors/moderators. To save costs the same person that is used as external assessor is used as moderator. The moderator is present for the entire duration of the practical examination.

At the colleges visited, salons are well equipped to perform the services required for hairdressing. The learners are equipped with the supporting and underpinning knowledge and marketable skills required in the hairdressing industry. A wide range of professional hairdressing products are used and continuous assessment takes place on application of these products in rendering various services to arranged models and booked clients. At the schools visited there was a lack of equipment and professional hairdressing products. Another problem that is experienced at some centres is the problem to find enough models for some of the services that must be demonstrated during the examination.

Colleges are in a dilemma in that the:

- New Department of Education courses have not been finalised yet and the Services SETA informed the colleges that it is no longer willing to acknowledge the Report 191 qualifications offered.

- Department of Education prescribes that colleges are only allowed to offer a percentage of their qualifications as non Department of Education qualifications (SETA qualifications). This has implications for staff as well as learners.

5.2.3.2 Hospitality
(for the purpose of this monitoring exercise Food Preparation or Catering)

Two of the four campuses visited offer the old Report 191 programme, while the other two campuses offer the new (pilot) programmes.

The approach to and standard of the practical examination differ from campus to campus. The syllabus of the old Report 191 programme does not stipulate that a final practical assessment is required. Although there are some guidelines available for the final integrative practical assessment of the pilot programme, it is vague and indeed interpreted very differently. This impacts on what is expected of learners in terms of preparation for the examinations as well as the difficulty level and techniques required to prepare the dishes.

The instruments used for the examination differ from campus to campus. Several of the important aspects that should be assessed are underspecified.

The kitchens where the examinations took place are equipped with basic equipment but learners are not exposed to the use of large-scale equipment.

The approach to the moderation also differs. At some campuses only the marks are moderated while at other campuses the moderator is present for the duration of the practical examination.

5.2.3.3 Strengths

The following strengths were noted:

(a) The standardisation of practical examinations in Hair Care.

(b) The involvement of experts in the moderation process.

5.2.3.4 Areas of concern

The following are the areas of concern:

(a) The Catering syllabus does not specify that a final integrative practical Examination should be conducted. The lack of specification of the content for the Food Preparation practical examinations leads to very different interpretations and standards.

(b) The tools used for assessment in Hospitality differ tremendously which can easily lead to unbalanced assessment.

(c) In Hospitality, the practice of moderation of marks obtained for the practical examination instead of moderation of the product and or development of the product is of concern.

6. Recommendations

(a) The monitoring plans of the provincial departments of education and the CD:EMAPE should make provision for the monitoring of the different phases as well as the different types of examination centres. The monitoring of marking is an aspect that has always been neglected and should receive greater attention. (Cognisance is taken of provinces where it is done already.)

(b) Examination stationery should be controlled more effectively.

(c) The reasons for the late receipt of question papers should be determined to prevent it from happening again.

(d) No centre should be allowed to register as an examination centre if the requirement of a safe or strong room in which to store examination papers is not met.

(e) Examination and marking centres must comply with all policy stipulations. Where non-compliance is pointed out during monitoring visits, the necessary measures need to be put in place to ensure compliance. If the necessary measures are not put in place, examination centres must be de-registered.

(f) The control over the flow of scripts must be improved. Measures must be put in place to ensure that all scripts are handed back to the chief marker/mcm at the end of each day to prevent markers from removing scripts from the premises. The same form that is used as the attendance register for the markers can be used for this purpose

(g) Where subjects are marked at more than one marking centre, centralised memo discussions should take place to ensure consistency in marking.

(h) The criteria for the appointment of the moderators responsible for the moderation of practical examinations, should be revised to ensure that all moderators appointed have the necessary training and experience in industry. These moderators should be trained to ensure that the same standards are set and maintained.

(i) In practical subjects like Food Preparation and Catering where there is a lack of uniformity, clear criteria for the moderation of the practical year marks/ practical examinations should be developed. Prescription is needed to ensure that standards are set and maintained.

(j) Minimum equipment requirements for a specific programme need to be determined and only sites that meet these requirements should be allowed to offer the training.

7. Conclusion

A high degree of compliance with policy is found at the public examination centres. There are, however, certain issues which might seem to be less important that needs attention at these centres. The degree of compliance with policy at the private examination centres is much less and these centres need to be monitored closely.

The VET marking centres are well organised with some good systems and procedures in place. There is, however, room for improvement in certain areas of which the most important is:

- the flow of scripts;

- the training of markers; and

- the implementation of measures to ensure consistent marking where instructional offerings are marked at more than one marking centre.

The monitoring of the practical examinations of the two selected subjects provided Umalusi with in-depth information on the capacity of the various sites to effectively implement practical assessment /examinations.

Chapter 4

Moderation of marking

1. Introduction

Marking is a critical step in the assessment process. Moderation of the marking process is an essential quality assurance measure that Umalusi puts in place to ensure confidence in the Vocational Education and Training Examinations.

Umalusi appointed external moderators who all have significant experience in marking and moderation of examinations. These moderators carefully evaluate the systems, procedures and practices at marking centres by means of instruments developed by Umalusi. These instruments are reviewed and revised on a regular basis.

The marking of a sample of subjects of all the VET examinations during 2005 was moderated, but the main emphasis was on the June General Studies and the November Natural Sciences and General Studies Examinations. This chapter of the report will briefly outline the purpose, scope, approach and findings of the Umalusi moderation of marking exercise of 2005 and make some recommendations for improvement.

2. Purpose

The purpose of this chapter is to report on the quality of the marking of the 14 N3 VET subjects that are currently moderated by Umalusi and in addition report on the systems, processes and procedures at the marking centres. The aim is to extract salient findings from the external moderators' reports, synthesise and analyse these and make judgements on the standard of the marking and the systems, processes and procedures at marking centres.

3. Scope

A total of 15 moderators were involved in the moderation of marking of the 14 subjects that are currently moderated by Umalusi during the Vocational Education and Training

Examinations of 2005.

The moderation of marking process entails the:

- attendance of memorandum discussions;
- moderation of marking; and
- report on systems, processes and procedures in place at the marking centre.

The scope of moderation of marking with each of the 2005 VET examinations is discussed below:

(a) February 2005 General Studies supplementary Examination

The number of candidates enrolled for this examination is small in comparison to the other examinations. Umalusi moderated the marking of two subjects of this examination, namely Business English 2nd Language Paper 1 and 2 and Office Practice for the first time during 2005.

(b) April 2005 Natural Sciences Examination

The Umalusi moderator for Mechanotechnology attended the memorandum discussion at Hillside View and the Industrial Electronics moderator moderated the marking at Atteridgeville marking centre.

(c) June 2005 General Studies Examination

Marking was moderated on site at two of the nine N3 marking centres namely at Welkom and Bloemfontein (Computer Practice and Office Practice respectively) as well as off-site (Computer Practice at the Chief Directorate: Educational Measurement, Assessment and Public Examinations).

(d) August 2005 Natural Sciences Examination

Marking was moderated on site at one of the N3 marking centres namely St Marks (Engineering Science) as well as off-site (Mathematics at the Chief Directorate:

Educational Measurement, Assessment and Public Examinations).

(e) November 2005 Natural Sciences and General Studies Examinations

All but one of the Umalusi moderators was deployed to moderate the marking of the subjects that is moderated by Umalusi. A total of thirteen memorandum discussions were attended at twelve different marking centres across the country. Marking was moderated at nine different marking centres across the country.

See Addendum 3 for those subjects for which the marking was externally moderated and the centres at which the moderation took place.

Number of marking centres visited by Umalusi for the moderation of marking during 2005

Examination	March	April	June	August	November	Total
Marking centres						
Memo discussions	0	1	0	0	13	14
Moderation of marking – on-site	0	1	2	1	9	13
Moderation of marking – off-site	2	0	1	1	0	4

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

4. Approach

Umalusi has been involved in the moderation of marking in the VET sector since 2003 and the process continued during 2005.

Memorandum discussions are conducted to ensure that the memorandum that is finally accepted makes provision for all possible alternate answers.

The marking is moderated to:

- ensure that marking is done in a fair manner and is of an appropriate and acceptable standard;
- ensure that marking of the same subject at different marking centres is consistent.

In addition the moderators report on the effectiveness of systems, processes and procedures at the marking centres to:

- control movement of scripts;
- ensure accuracy in marking;
- ensure accuracy in addition of marks; and
- ensure accuracy in transfer of marks to the cover page and mark sheets.

Marking of N2 and N3 scripts takes place at centres that were carefully selected by the CD:EMAPE to meet minimum requirements with regard to security and availability of communication facilities, etc. Marking of N1 scripts is done internally.

Each subject is marked at different marking centres depending on the enrolment for the specific subject. Where a subject is marked at more than one marking centre, the challenge is to ensure consistent marking across the centres. Umalusi aims to visit all the centres at which a specific subject is marked over a period of time and this is borne in mind with the decision on the selection of marking centres to be visited. Other factors that influence the selection are the availability of moderators; and where a moderator is responsible for more than one question paper of a subject, the aim is to ensure the attendance of the memorandum discussion and moderation of marking of the same paper at two different marking centres.

The CD:EMAPE is responsible for the appointment of markers, chief markers, moderators and marking centre managers. A forum at the marking centres is responsible for the screening, selection and recommendation for appointment of markers, moderators and marking centre managers. The general practice is that the examiner of the subject becomes the chief marker cum internal moderator of the subject at the marking centre. Markers are appointed in accordance with the number of expected scripts.

Scripts are sent directly from the examination centres to the marking centres.

The actual marking process is preceded by two memorandum discussions. The first memorandum discussion takes place shortly after the question paper is written. After this discussion each marker marks a small sample of scripts that is moderated by the chief marker. A second memorandum discussion takes place to finalise the memorandum.

5. Findings

The marking centres are well managed. The efficiency of marking centre managers and chief markers were reported at several centres (e.g. the marking centre manager of Bloemfontein and chief marker of Business English Second Language 1st Paper at Kimberley). Where dissatisfaction is reported with the marking of a subject at a marking centre, the marking is moved to another centre with the next examination.

Strengths

The following strengths were noted:

(a) The chief marker moderates 10% of all scripts marked. Great care is taken to ensure that scripts from the different levels of performance, all batches and thus all markers and examination centres are moderated.

(b) Good guidance is given to the markers but the training is often not formalised. The standard of marking of the majority of markers is of a good standard as can be observed from the small differences in the marks allocated by the marker, chief marker

and where applicable, the external moderator. Exceptions were, however, reported by the chief markers (e.g. a marker of Business English 2nd Language 1st Paper at Kimberley, two markers of Office Practice at Isidingo and a marker of Public Administration at Bloemfontein). The marking of all these markers was reported to be unsatisfactory.

(c) There are good security measures in place, for example, access control.

(d) There are effective measures in place to control the flow of scripts. The only area of concern is that some centres do not make provision for the signing back of scripts at the end of each marking day (to ensure that scripts do not leave the marking premises).

(e) Checks and balances are in place to ensure the accurate allocation and transfer of marks, but some marking centres do not have a process in place to ensure the accurate addition and transfer of marks.

Areas of concern

The following are the areas of concern:

(a) Marking centres sometimes struggle to find suitable markers because of the unavailability of suitably qualified and experienced markers in the vicinity of the marking centre. A concern was raised about the ability of the markers and chief marker at CS Barlow to mark Business English First Language .

(b) Where a subject is marked at more than one marking centre the communication between the different marking centres with regard to adjustments to the memoranda are not effective, (e.g. Business English, Mathematics, Sakeafrikaans, Small Business Management and Entrepreneurship.) The finalised memorandum of Computer Practice was communicated to all the marking centres. Good communication also took place between the two marking centres in the case of Public Administration and three marking centres of Office Practice.

(c) Markers often do not come prepared to memorandum discussions (e.g. Applied Accounting Paper 1, Computer Practice, Engineering Science, Mechanotechnology, Sakeafrikaans 2nd Language Paper 1 and 2, Small Business Management and Entrepreneurship). The markers of Industrial Electronics came prepared and each one had to submit a copy of his attempted memorandum prior to the memorandum discussion. Some of the markers of Mathematics also came prepared with their own memorandums.

(d) The quality of memoranda is not always up to standard in the sense that it is not specific, changes are effected in writing on the memorandum, or changes to the question papers are not effected on the memorandum, (e.g Sakeafrikaans 2nd Language Paper 2, Mathematics). Credit must, however, be given to some of the examiners (e.g. Industrial Electronics) for a very neat and professional memorandum.

(e) Typing errors on question papers and memoranda were observed on e.g. Business English 2nd Language Paper 1 and Business English 1st Language Paper 2, Applied Accounting Paper 2, Engineering Science. Certain formulae were not provided with the Small Business Management and Entrepreneurship question paper.

(f) Lack of training of staff, e.g. the marking centre manager at C S Barlow was not familiar with all the procedures with regard to the reporting and handling of irregularities, attendance register for markers, etc.

(g) The lack of learners' proficiency in English is cited in almost every report. The following are some of the aspects mentioned:

- They struggle to write down their thoughts in a logical sequence and reach logical conclusions.

- Questions are interpreted incorrectly.

- The language and spelling becomes worse with every examination.

(h) The quality of chief markers' reports and the filtering of findings to the sites of teaching and learning.

6. Recommendations

(a) Measures need to be put in place to ensure that changes to the question paper that cause changes to the memorandum are effected before the memorandum is sent to the marking centres. The final proofreading and signing off of question papers is essential to diminish the number of mistakes in the form of typing errors and the like.

(b) To solve the problem of finding suitable markers, college staff from across the country should be allowed to mark. Although the financial implications of this practice is realised, this practice will also ensure that the best possible markers can be appointed and that capacity of prospective examiners and moderators are built.

(c) Markers need to come prepared to the memorandum discussions, i.e. each marker to work out the memorandum before attending the memorandum discussion.

(d) Where subjects are marked at more than one marking centre, the memorandum discussions should be centralised and attended by the examiner, internal moderator, external moderator and chief markers of the marking centres involved. The official finalised memorandum must be signed off and communicated to all the marking centres.

(e) Measures need to be put in place to ensure more effective feedback to the learning sites on the performance of their learners, e.g in certain sections of the question paper, etc.

7. Conclusion

The moderation of marking reports clearly indicated that there are effective systems, processes and procedures in place at the marking centres, memorandums are discussed in detail to ensure that all possible answers are provided for and that marking is in general up to standard. The discrepancies found did not compromise the examinations and will be attended to in the forthcoming plans for the moderation of marking.

Chapter 5

Standardisation and Capturing of Results

1. Introduction

Umalusi aims to ensure that the VET Examinations yield results that are comparable across examinations of a specific year and also from year to year through the standardisation of results and other quality assurance processes.

Standardisation of the examination and term marks is necessary to address the variation in the standard of the examination question papers, internal assessment and the standard of marking that may occur from examination to examination and between sites of learning. To foster equity in examinations, the examination scores of candidates are adjusted towards a calculated norm. This increases the probability that candidates with equal ability, who write different examination papers in a particular subject, will obtain equivalent achievements. In this way differences in standards between examination papers over time are largely neutralised.

The capturing of the moderated marks was monitored for the first time in this sector starting with the April 2005 examinations.

2. Purpose

The purpose of this chapter is to report on:

- the moderation of marks in the VET sector;
- the extent of moderation of marks during the standardisation meetings in 2005; and
- the monitoring of the capturing of year marks, moderated examination marks and final marks of selected subjects and selected examination centres.

3. Scope

This chapter reports on the standardisation of marks in the VET sector. It outlines the decisions reached during the standardisation meetings. These are reported on in very brief details with the main points of the meetings highlighted.

A total of five standardisation meetings, one after each of the VET examinations (except the March examination) took place. The meetings for the April, June and August examinations were held at the CD:EMAPE. Umalusi hosted the meetings for the November examinations at Umalusi's offices.

The capturing of year and examination marks were monitored with the April examination. After the June and August examinations, the capturing of adjusted marks of a small sample of subjects and centres were monitored.

On 19 December the capturing of a sample of year marks and adjusted year, examination and final marks of selected colleges were monitored.

4. Approach

The Kolmogorov-Smirnov goodness of fit procedure in conjunction with fixed norms is used for the standardisation of the Vocational Education and Training results. The norms are reviewed after the completion of each examination and adjusted if and where necessary. For subjects with an enrolment of less than 25 candidates no norms 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 subjects are compared and considered in the standardisation decisions. The examination raw scores are compared per percentage interval with the norm and where raw scores fall outside the confidence band, it is adjusted up to the band, while the scores falling within the band are not adjusted.

Statistical moderation of examination marks as well as year marks is undertaken. After the examination scores have been statistically moderated, the mark is compared to the mean of the year mark. If the mean of the year mark is within a certain range of the examination mean, then the year mark is accepted as is. If the mean of the year mark is either too low or too high, it is brought within a certain range of the examination mean.

4.1 Principles of standardisation

The following are some of the principles that are applied in the standardisation of results:

- No adjustment in the excess of 10%, either upwards or downwards, will be applied, 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.

- Examiners' and moderators' reports will be referred to.

4.2 Standardisation meetings

Examination results are provided to the Umalusi statistics team (the day before the statistical moderation meeting). A preliminary discussion is held regarding the adjustments to be recommended at the meeting. (A similar meeting is held at the Chief Directorate: Educational Measurement, Assessment and Public Examinations.)

A statistical moderation meeting takes place, at which the examination results for each subject are discussed and adjustments (including no adjustment) are agreed upon, if deemed necessary.

5. Findings and recommendations

The meetings were conducted in a good spirit. In most cases either the raw marks were accepted or modest adjustments were agreed upon. The table below summarises the adjustments that were effected at each of the standardisation meetings for the 2005 N1 - N3 examinations. From the table it is evident that in the majority of subjects the raw marks were sufficiently close to the norm to be accepted without adjustments.

Examination	Number of subjects				
	April Natural Sciences	June General Studies	August Natural Sciences	November General Studies	November Natural Sciences
Raw	66	32	73	115	96
Computer adjustment	44	15	59	13	30
½ Computer adjustment	6	1	5	7	11
Other					
Block + 8			1		
Block - 3			1		
Block + 5				1	
Block + 3				1	
Block + 4					1
TOTAL	116	48	139	137	138

6. Conclusion

The meetings took place in good spirit, and where differences of opinion between the Umalusi team and the team from the assessment body occurred, satisfactory decisions were reached in all cases. The Statistics Working Group is satisfied that the final marks, which in many cases comprise the raw marks, represent a fair reflection of the candidates' performance, while maintaining the standard of the VET Examinations.

Chapter 6

Summary

1. Introduction

The Vocational Education and Training sector, where examinations are run five times a year, a magnitude of subjects are offered and important curriculum issues still need to be resolved pose certain unique challenges. The legacy of the past education system and other factors also contribute to the vast differences from college to college and province to province. These problems cannot be resolved overnight but progress is made in finding and implementation of solutions. Marked progress has been made over the past years in the quality assurance of especially the N3 exit examinations. The renewed interest taken in the sector and the recognition of the good work that is done at different levels in the CD:EMAPE, provincial departments of education and the Umalusi monitors and moderators, as well as initiatives implemented to raise standards, will assist in building this sector and ensuring that it obtains its rightful place in the South African education system.

The 2005 VET examinations were administered in a professional manner and in general high standards were maintained. There are, however, critical issues pertaining to certain aspects of the examination and assessment in general that need to be attended to in the forthcoming year. The most important of these are:

- setting and internal moderation of question papers;
- final proof reading of question papers;
- timely provision of question papers for external moderation;
- standardisation of practical examinations;
- measures to ensure consistency in marking of the same subject at different marking centres;

- feedback to sites of learning on performance of learners;
- revision of current approach to advertisement of positions for markers;
- control over marking;
- co-ordination of quality assurance activities of the assessment body and Umalusi; and
- quality assurance of internal assessment.

2. Recommendations

At the end of each of the chapters in the report, certain recommendations are made. The implementation of these recommendations can ensure marked improvements in the assessment system, processes and procedures of the Vocational Education and Training sector.

3. Conclusion

The reports received from Umalusi monitors and moderators, provincial departments of education and the CD:EMAPE, show that despite certain problems experienced, the 2005 Vocational Education and Training Examinations integrity was not compromised. Umalusi Council is of the opinion that the results are fair and reliable and that the credibility of the November 2005 VET examinations is above reproach. In the absence of any evidence to the contradictory, the assessment body has been advised that the results may be finalised and released.

Umalusi takes this opportunity to thank and express its gratitude to the Minister of Education, Ms GNM Pandor, MP, the National Department of Education and the provincial departments of education for the continued support and co-operation in Umalusi's quality assurance initiatives throughout the year. Your efforts are greatly appreciated.

Addenda

Addendum 1: Colleges at which design phase was monitored

Province	Name of campus/college
Eastern Cape	East London Campus (Buffalo City College)
Free State	Bloemfontein Campus (Motheo FET College)
Gauteng	Germiston Campus (Ekurhuleni West FET College)
KwaZulu-Natal	Durban Campus (Coastal FET College)
Limpopo	Polokwane Campus (Capricorn FET College)
Mpumalanga	Mpondozankomo and Witbank Campus (Nkangala FET College)
North West	Klerksdorp Campus (Vuselela FET College)
Northern Cape	Northern Cape Campus (Urban Public FET College)
Western Cape	Stellenbosch Campus (Boland Public FET College)

Addendum 2: Monitoring of the conduct of the examination

PROVINCE	NAME OF EXAMINATION CENTRE			
	April	**June**	**August**	**November**
Eastern Cape	Zwelethemba Campus (Lovedale FET College)	Engcobo Campus (King Sabata Dalindyebo College)	Mount Frere Campus (Ingwe FET College)	Sterkspruit Campus (Ikhala Public FET College)
	John Knox Bokwe Campus (Buffalo City FET College)	Ntabuzuko Campus (King Sabata Dalindyebo College)	R M Mshuqwana Campus (Ingwe FET College)	Cradock Campus (Ikhala Public FET College)
	Fort Glamorgan Prison	Grahamstown Campus (East Cape Midlands College)	Siteto Campus (Ingwe FET College)	Aliwal North Campus (Ikhala Public FET College)
		Idutywa Community College	H B Tsengwa Campus (King Hintsa College)	Damelin (East London)
			Teko Campus (King Hintsa College)	Bethelsdorp (Dower) ** (Port Elizabeth FET College)
Free State	Sasolburg Campus (Flavius Mareka FET College)	Damelin (Welkom)	None	Ficksburg High School
	Grootvlei Prison	Welkom Campus (Goldfields FET College)		Harrismith Campus (Maluti College for FET)
Gauteng	Kathorus (Usizo) (Ekurhuleni West FET College)	Roodepoort Campus (South West FET College)	None	Krugersdorp Campus (South West FET College)
	Benoni Campus (Ekurhuleni East FET College)	Molapo Campus (South West FET College)		Krugersdorp Correctional Services
	Springs Campus ** (Ekurhuleni East FET College)	Boksburg Prison		Technicol
				GSF Education
				M C Kharbai High School
				Pretoria Campus ** (Tshwane North FET College)
KwaZulu-Natal	Technology Campus (Majuba FET College)	Port Shepstone Campus (Esayedi FET College)	None	Majuba – Centre for People development
	Springfield Campus ** (Thekwini FET College)	Msunduzi Campus ** (Umgungundlovu FET College)		Kwa-gqikazi Campus (Mthashana FET College)
				Kokstad Campus (Esayedi FET College)
				Kokstad Prison
				Eshowe Campus (Umfolozi FET College)

**** indicates marking centres**

PROVINCE	NAME OF EXAMINATION CENTRE			
	April	**June**	**August**	**November**
		(Vhembe FET College)	(Sekhukhune FET College)	Commercial Technical College
	Tshisimani Community Youth Centre	College 2000	Giyani Campus (Letaba FET College)	Senwabarwana Campus (Capricorn FET College)
			Polokwane Campus ** (Capricorn FET College)	
Mpumalanga	None	Piet Retief High School	None	White River Technical College
		H T S Middelburg		Hendrina Combined School
		Damelin (Secunda)		
North West	Taung Campus (Vuselela FET College)	None	None	Potchefstroom Campus (Vuselela FET College)
				Rooigrond Prison
Northern Cape	None	Kimberley Campus (Northern Cape Urban FET College)	None	Kimberley Technical High School
				Emang Mmogo Comprehensive High School
Western Cape	Gugulethu Campus (College of Cape Town)	None	Atlantis Campus (West Coast FET College)	Lagunya Finishing School
			Vredenburg Campus West Coast FET College	Athlone Campus ** (College of Cape Town
	Westlake Campus (False Bay College)		Athlone Campus ** (College of Cape Town	City Campus ** (College of Cape Town)
				Tygerberg Campus ** (Northlink FET College)
				Vredenburg Campus (West Coast FET College)

**** indicates marking centres**

Addendum 3: Marking centres at which moderation of marking took place in the respective subjects during 2005

SUBJECT	Marking Centre				
	March	April	June	August	November
Applied Accounting Paper 1					Vanderbijlpark ** Vanderbijlpark
Applied Accounting Paper 2					Springs ** Springs
Business English 1 st Language Paper 1					
Business English 1 st Language Paper 2					Bloemfontein ** East London
Business English 2 nd Language Paper 1	Off-site				Kimberley ** C S Barlow
Business English 2 nd Language Paper 2	Off-site				
Computer Practice			Welkom & Off-site		Benoni ** Kimberley
Engineering Drawing					Newcastle **
Engineering Science				St Marks	Ellispark **
Industrial Electronics		Atteridgeville			Goodwood **
Mathematics				Off-site	Richtek **
Mechanotechnology		Hillside View **			Hillside View
Office Practice	Off-site		Bloemfontein		
Public Administration					Bloemfontein **
Sakeafrikaans 1 st Language Paper 1					
Sakeafrikaans 1 st Language Paper 2					
Sakeafrikaans 2 nd Language Paper 1					Alberton ** Msunduzi
Sakeafrikaans 2 nd Language Paper 2					Centurion ** Phalaborwa
Small Business Management and Entrepreneurship					City ** George

**Memorandum discussion attended