



# 2009

## Report on the Quality Assurance of the National Senior Certificate Assessment and Examination

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Council for Quality Assurance in  
General and Further Education and Training



Council for Quality Assurance in  
General and Further Education and Training

# REPORT ON THE QUALITY ASSURANCE OF THE NATIONAL SENIOR CERTIFICATE ASSESSMENT AND EXAMINATION

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## 2009

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# Foreword

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2009 is the second year since the introduction of the National Senior Certificate (NSC) examination. The NSC examination is based on a fairly new curriculum that is still finding its feet.

In fulfilling its statutory responsibility of ensuring appropriate standards and the quality of the NSC examination, Umalusi undertook the following:

- Moderation of the question papers;
- Moderation of Site-Based Assessment (SBA);
- Monitoring of the conduct of the NSC examination;
- Verification of marking; and
- Standardisation of marks.

The quality assurance of each of these processes mentioned above is conducted based on Umalusi criteria. The criteria used are subjected to constant review and refinement, to ensure that they are in line with current trends in assessment and examinations.

Umalusi judges the quality and standard of the question papers by determining the level of adherence to policy and guidelines, the appropriateness and weighting of content, the cognitive demand of the question papers, the relevance of the marking memoranda, and the level and rigor of internal moderation. While all these aspects are crucial in determining good examination question papers, the cognitive challenge of the papers remains key to Umalusi. The cognitive challenge provides a fair indication of how well the question papers discriminate between high and low achievers. In the majority of subjects the 2009 question papers showed some improvement on the 2008 ones with regard to the cognitive demand. The weighting of the cognitive skills assessed was found to be in line with the Subject Assessment Guidelines (SAGs), as well as the Examination Guidelines. There were, however, a few question papers wherein the cognitive skills assessed were below the guideline recommendations.

In moderating the SBA portfolios Umalusi seeks to ascertain whether the implementation of SBA is consistent with the national standards, determines the fairness and validity of the assessment tasks, and verifies the level and rigor of the internal moderation conducted. The moderation of the 2009 SBA portfolios indicates clearly that the system is still faced with implementation and assessment challenges. The quality of the assessment tasks developed by educators continues to be below standard. The internal moderation was found to be very superficial in the main.

Umalusi monitored all the aspects of the conduct of the NSC examination through a comprehensive and integrated monitoring system. This integrated system involves self-evaluation by the assessment bodies of their state of readiness to administer the examination, verification of this by Umalusi, sampling of examination and marking centres, direct monitoring, as well as shadowing of monitors.

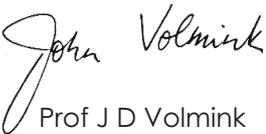
Umalusi ensures that examination irregularities are managed strictly in accordance with the applicable policy and regulations for the NSC examination as well as Umalusi policies, directives, guidelines, and requirements. During the sitting of the NSC examinations, irregularities were reported to Umalusi on a daily basis. Umalusi relied on reports from the Department of Education (DoE) to ensure quick resolutions of the irregularities reported. Generally, there are two types of irregularities: technical and serious. Technical irregularities are those that arise out of administrative errors in the system. Quite a few technical irregularities were reported to Umalusi, these were,

however, resolved accordingly. Serious irregularities are those that threaten the credibility of the examination. A case in point during the 2009 NSC examination was the alleged leak of five question papers in Mpumalanga: Mathematics paper (P)1 and P2, Accounting, and Physical Science P1 and P2. Fortunately, this was discovered before the sitting of the examinations and these question papers were immediately replaced by back-up question papers.

Umalusi moderators verified the marking of the 2009 examination. The marking memoranda for all 130 question papers were approved before marking commenced. Umalusi also conducted a centralised moderation of a sample of scripts from the provinces with a view to establishing the level of consistency in marking across the provinces, as well as adherence to the marking memoranda. Generally there is an improvement noted in the quality and standard of marking.

As a final quality assurance measure, Umalusi moderated the final marks awarded to the candidates. This is done through a rigorous standardisation process carried out in line with established principles and procedures. Through this process, Umalusi ensures the consistency of the NSC examination over time and across the provinces. Apart from the statistical inputs presented, Umalusi considered qualitative inputs, as well as very sound educational reasoning to arrive at the 2009 standardisation decisions. Umalusi is proud to indicate that in the main, the candidates' raw marks were accepted. There were very few instances where it was necessary to perform minor adjustments to the candidates' raw marks.

On the whole, Umalusi is satisfied that the 2009 NSC examination was conducted in line with the relevant policies and regulations governing this examination and strictly in accordance with Umalusi policies, directives, guidelines, and requirements.

  
Prof J D Volmink

4 January 2010

# Acronymns

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ASs	Assessment Standards
CAT	Computer Applied Technology
DoE	Department of Education
FAL	First Additional Language
HG	Higher Grade
HL	Home Language
IECS	Integrated Examination Computer System
LO(s)	Learning Outcome(s)
LPG(s)	Learning Program Guideline(s)
NSC	National Senior Certificate
P1, P2, P3	Paper 1, Paper 2, Paper 3
PDE(s)	Provincial Department(s) of Education
PET	Physical Education Task
SAL	Second Additional Language
SAG(s)	Subject Assessment Guideline(s)
SBA	Site-Based Assessment
SG	Standard Grade



# Chapter 1

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## Overview of the report

### 1. OVERVIEW OF THE REPORT

Umalusi has been assigned the statutory obligation to perform the quality assurance of all the exit points assessments and examinations within its scope of jurisdiction. In fulfilling this statutory responsibility, and also with the express aim of maintaining and improving the norms and standards in the NSC Examination, Umalusi undertook the following quality assurance initiatives:

- (i) Moderation of the NSC November 2009 and March 2010 question papers;
- (ii) Moderation of SBA portfolios;
- (iii) Monitoring of the conduct of the NSC examination;
- (iv) Verification of marking; and the
- (v) Standardisation of marks.

### 2. PURPOSE OF THE REPORT

The purpose of this report is to present the findings of Umalusi's quality assurance of the 2009 NSC examination with respect to the following:

- The salient findings on question paper moderation from the external moderators' reports, which are synthesised, analysed, and used to make judgements on the standard of the NSC examinations;
- The quality and standard of SBA across the assessment bodies;
- The quality and standard of marking across the various Provincial Departments of Education (PDEs);
- The efficiency and effectiveness of the processes for the conduct of the NSC examinations within the PDEs; and
- The moderation of marks during the standardisation process.

The report highlights areas of good practice, where observed, with a view to influencing the sharing of such practices. The report also indicates areas that require improvement, and it presents recommendations for improvement accordingly.

# Chapter 2

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## Moderation of NSC Question Papers

### 1. INTRODUCTION

The moderation of question papers is a critical process in ensuring that question papers which are written at the end of the year and in the March supplementary examination of the following year are of a high standard (fair, valid and reliable) and further, that they comply with all of the prescribed Umalusi criteria.

The question paper moderation process for the November 2009 and March 2010 papers commenced towards the end of 2008 and continued throughout 2009. At the time of this report the moderation of the March 2010 question papers was still being finalised.

The following was notable in the 2009 question paper moderation:

- The Language Paper 2s (literature component) previously developed by the provinces were developed by DoE. This ensured that the standard of these papers was uniform throughout the country and in many cases that the questions were set on the same set works.
- In the majority of cases the November 2009 and March 2010 papers were presented at the same time for external moderation. This helped to ensure that these papers were of a comparable standard.
- Due to the leakage of the question papers in Mpumalanga, the March 2010 question papers for Accounting, Mathematics and Physical Science were used for the November examination. These question papers underwent another round of moderation to ensure comparability with the compromised question papers.
- This year the DoE question papers were signed off by external moderators before they were sent to the provinces for printing. This was done to ensure that the correct, approved versions of papers were dispatched to the provinces.

### 2. SCOPE

This chapter covers findings on the moderation of the November 2009 and March 2010 NSC question papers

The table below outlines the number of NSC 2009 question papers moderated.

**Table 1: Number of NSC 2009 question papers moderated**

Number of subjects	Number of papers	Approved / Conditionally approved at 1 <sup>st</sup> moderation	Approved / Conditionally approved at 2 <sup>nd</sup> moderation	Approved / Conditionally approved at 3 <sup>rd</sup> moderation	4th and beyond
38	130	44	73	13	NIL

At the time of this report 82 out of 130 March 2010 question papers had been finalised. The following table reflects the current status of the papers:

**Table 2: Number of March 2010 NSC question papers finalized**

Number of papers	Number of papers finalised	Approved / Conditionally approved at 1 <sup>st</sup> moderation	Approved / Conditionally approved at 2 <sup>nd</sup> moderation	Approved / Conditionally approved at 3 <sup>rd</sup> moderation	4th and beyond
130	82	41	30	10	1

The following papers were rejected during first moderation:

- Mathematical Literacy P1 and P2 – Both the November 2009 and March 2010 papers.

### 3. APPROACH

As was the case in 2008 and the preceding years, on-site moderation was conducted for all papers developed by the DoE. The moderation of these papers was conducted at the DoE offices. For these papers, a panel of external moderators was used to moderate the papers. In the majority of cases two external moderators were appointed for each paper. They jointly moderated the papers and generated a detailed report on the standard of each paper.

### 4. FINDINGS

Findings are presented in terms of the Umalusi criteria for the moderation of question papers.

#### (i) Technical aspects

Generally question papers complied with this criterion in most respects. In a few cases the level of compliance was reportedly limited during first moderation. This was however rectified in the subsequent moderations. Problems pertaining to technical aspects were observed in the following subjects: Geography P1, Afrikaans HL P1 and 3, English SAL P2, IsiZulu HL P3, Consumer Studies, Music P1 and IsiZulu SAL P2.

Paper	Finding / Concern
Geography P1	Errors in the paper as a result of ineffective internal moderation. Reference numbers in the orthophoto map were not visible.
Afrikaans HL P1 and 3; English SAL P2; IsiZulu HL P3; Consumer Studies	Quality of pictures and diagrams was a concern.
Music P1; IsiZulu SAL P2	Numbering was not accurate. Instructions were not clear. There was no correlation between mark allocation, level of difficulty and time allocation.

The problems in the table above were addressed in the subsequent moderations except in Afrikaans HL P1 where the external moderator was still of the opinion that the pictures were not of a good quality in the third moderation when the paper was conditionally approved. The examination panel however felt that the quality of the pictures was acceptable.

The length of the paper was a concern in Music P1 and Mathematical Literacy P2. The latter was addressed in the second moderation while in Music P1 the examination panel did not have a problem with the length of the paper.

### **(ii) Internal moderation**

There was improvement with regard to compliance with this criterion as compared to 2008. Fewer cases of no and / or limited compliance during first moderation were reported this year. No compliance with respect to internal moderation was reported for Sesotho HL P3 in the first moderation. This was due to the absence of the internal moderator's report.

Concerns regarding the quality, standard and relevance of input from the internal moderator were raised in Geography, Agricultural Management Practices, Consumer Studies, Sesotho FAL and SAL, Sepedi FAL and SAL P1 and 3, Afrikaans FAL P3 and English HL P2 and 3. These concerns are highlighted in the table below.

<b>Paper</b>	<b>Finding / Concern</b>
Geography; Consumer Studies; Agricultural Management Practices; Sepedi FAL and SAL; Afrikaans FAL P3	Internal moderation was reportedly ineffective and not rigorous enough.
Sesotho FAL	Allegations that the internal moderator's report was similar to the one compiled for last year's papers.
English HL P2 and 3	Thorough internal moderation was only evident in the first two moderations.

### **(iii) Content coverage**

The majority of question papers complied with this criterion in most respects, but inadequate coverage of content was reported in Business Studies, Mathematical Literacy, Physical Science P2 and Mathematics P1 as highlighted in the table below.

<b>Paper</b>	<b>Finding / Concern</b>
Business Studies	Learning Outcome 4 (LO4) not covered
Mathematical Literacy	Learning Outcome 2 (LO2) not covered
Physical Science P2	Assessment Standard 1 (AS1) in LO3 not covered
Mathematics P1	Shortage of questions that tested creativity.

In Physical Science P2 the inadequate coverage of AS1 in LO3 was ascribed to the shortage of documented evidence on indigenous knowledge.

Concerns were raised about the appropriateness of the content assessed in the following subjects: Music P2 and Civil Technology.

Paper	Finding / Concern
Music P2	Assessment of Grade 11 content in Grade 12
Civil Technology	Content assessed was not applicable to Grade 12 as per Learning Programme Guidelines (LPG).

These issues should be properly addressed through amendments to the Learning Programme Guidelines (LPGs) and Examination Guidelines.

Non-submission of analysis grids was not a major concern as was the case in 2008. The analysis grids provide an indication of weighting in terms of content covered, weighting of the cognitive skills assessed, LOs assessed, as well as correlation between mark allocation and level of difficulty. The non-submission of analysis grids was only noted in Sepedi SAL P2 and English HL P3, and was rectified in the subsequent moderation.

#### (iv) Cognitive demand

Compliance in respect of the cognitive demand was generally not a major problem in the November 2009 and March 2010 question papers. During the first moderation suggestions and recommendations were made towards the improvement of the cognitive demand in certain papers. In some cases inadequate compliance with this criterion was blamed on the inconsistencies in the DoBE policy and guideline documents.

The comments that follow below are based on the interpretation of Bloom's taxonomy regarding the weighting of the cognitive skills assessed. *Level 1: Recall; Level 2: Comprehension; Level 3: Application and Analysis; and Level 4: Synthesis and Evaluation.*

Problems relating to cognitive demand were noted during the first moderation in the following subjects: Geography P1, Afrikaans FAL P3, IsiZulu HL P1, Mathematics and Physical Science:

Paper	Finding / Concern
Geography P1	The level of difficulty of the questions was not balanced.
Afrikaans FAL P3	There was no appropriate distribution of cognitive skills assessed.
IsiZulu HL	Comprehension questions were not classified according to the appropriate levels.
Mathematics P1	There were not enough questions that would clearly separate the 'high fliers' from the rest.
Mathematics P2	There were too many questions on lower cognitive skills, i.e. Knowledge and Routine procedures (level 1 and 2): 98 instead of 75 marks; Complex procedures (Level 3): 14 instead of 45; Problem solving (Level 4): 38 instead of 30.

The concerns mentioned in the table were rectified in the subsequent moderations.

In Mathematics P3 a concern was raised with respect to level 1 and 2 during first moderation. These

were not within the acceptable range. This concern was addressed in the second moderation.

In Physical Science P1 there was a general concern that the paper was on the difficult side. In Physical Science P2 non compliance with the Examination Guidelines was observed with regard to cognitive skills in the first moderation as follows:

Cognitive level (1-4)	Weighting	
	Examination Guidelines	Paper
Recall	15%	19.3%
Comprehension	40%	32.7%
Application and Analysis	35%	39.3%
Synthesis and Evaluation	10%	8.7%

The external moderator viewed the discrepancies in the table above as acceptable and approved the paper in the third moderation.

#### (v) Marking memoranda / marking guidelines

Compliance was generally a concern during first moderation judging by the number of papers in which concerns regarding memoranda were raised.

Paper	Finding / Concern
Economics, Accounting, Sesotho HL P3, Xitsonga FAL P1, Setswana HL & FAL, IsiZulu FAL P3, Mathematical Literacy, Life Sciences, History P1, Afrikaans HL P1&3, IsiZulu HL P3, Consumer Studies, Music P1, Physical Science P2 and Mathematics P3.	Lack of accuracy, use of outdated and non-user friendly rubrics, lack of correlation between question papers and memoranda, lack of alternate responses and papers not being print ready.

The issues above were addressed at the marking guideline discussions.

#### (vi) Language and bias

Compliance in all respects was noted in the majority of papers. Problems related to language and bias were found in the following papers during the first moderation: Economics, Geography P1, Afrikaans FAL P3, History P2, Music and Setswana HL.

Paper	Finding / Concern
Economics, Geography P1, Afrikaans FAL P3, History P2 and Setswana HL	The language register was judged to be too complex, recommendations were made that the language should be simplified.

Paper	Finding / Concern
History	A recommendation was made that certain words needed to be explained in brackets after their use.
Geography, Afrikaans FAL and Music	Bias was a concern. In Music for instance, the use of orchestral score in Question 1 was considered too complex and catered for a select few candidates who played orchestral instruments.

### (vii) Predictability

As was the case in 2008, predictability was not a major problem in the 2009 question papers. Only in very few papers was the issue of predictability raised.

Paper	Finding / Concern
Geography P2	A predictable question was cited. The format of this question was almost identical to the one that appeared in 2008. This was subsequently rectified in the second moderation.
Afrikaans HL P2	Some questions showed similarity to material produced in the study guides.
Physical Science P2	Two predictable questions were noted. These questions were asked in the November 2008 question paper.

The predictable questions noted in Geography P2 and Physical Science P2 were removed in the subsequent moderations, however in Afrikaans HL P2, the examination panel and the external moderator did not hold the same opinion regarding the similarity of some of the questions to material produced in the study guides.

### (viii) Adherence to assessment policies or guidelines

Non-adherence to the Subject Assessment Guidelines (SAG) was not a serious concern as was the case in 2008. This problem has probably been alleviated by the introduction of Examination Guidelines.

Instances of non compliance with assessment policies or guidelines were noted in Setswana FAL and SAL, Sepedi FAL P3, Civil Technology, Music, Physical Science P2 and Mathematics P3.

Paper	Finding / Concern
Civil Technology and Music	Assessment of Grade 11 content in Grade 12 not prescribed in the policy or guideline documents.
Mathematics P3	Examination Guidelines with regard to theorems and converses that candidates had to prove in the examination were not clear. The Examination Guidelines only suggested the theorems related to AS 11.3.2 and contained nothing about AS 12.3.2.
Physical Science P2	The distribution of cognitive skills was not in compliance with the Examination Guidelines as indicated under (iv) above.

### **(xi) Overall impression**

Generally, the standard and quality of the papers submitted in the first round of moderation was not a serious concern as was the case in 2008. This was shown by the reduction in the number of papers being rejected in the first moderation as well as the number of papers going beyond second moderation, i.e. only 10%.

Only Mathematical Literacy was found not to be within the required standard in the first moderation hence it was rejected. All the concerns were however addressed in the third moderation leading to the final approval of the paper.

## **5. AREAS OF GOOD PRACTICE**

The following aspects can be noted for positive comment, once the final moderation had been completed:

- Broadly, the DoE question papers were free of gender, race, cultural and provincial bias, and were suitable for the level of comprehension of the learners. Crucially, the papers catered both for the weaker (previously Standard Grade) candidates as well as highly gifted (previously Higher Grade) candidates.
- In many cases the DoBE November 2009 and March 2010 papers were presented at the same time for external moderation. This ensured that these papers were of a comparable standard.
- The development of the Examination Guidelines by the DoE helped to ensure that question papers covered the required content.
- Signing off of question papers by external moderators before they were sent to the provinces for printing was a good innovation.

## **6. AREAS FOR IMPROVEMENT**

The following aspects can be noted as areas requiring attention during 2009:

- Tension between DoE examination panels and internal moderators had a negative impact on the performance of external moderators in English FAL and Design. A similar situation was reported in Computer Applications Technology, where it was alleged that the panel was divided which in turn led to a number of disagreements.
- Some of the DoE selected literary works for English FAL P2 were inappropriate for the level. Too many literary setworks were prescribed for Sepedi, resulting in a paper that was too long.
- A concern was raised over the DoE's memorandum guideline with regard to the summary question in Paper 1 for Home Languages. According to this, an answer not written in a paragraph form would not be assessed. This was considered too harsh.

## 7. CONCLUSION

There has been a marked improvement in the standard of moderation and the moderation process in general this year compared to 2008. Question papers were well-balanced and of the required standard. Internal moderation was thorough.

As opposed to in 2008, problems pertaining to the reluctance of the internal moderator to implement the changes suggested by the external moderators were not experienced this year. In many instances external moderators expressed gratitude for the manner in which cordial and harmonious working relations prevailed during moderation.

In summary, the question papers that were written in November 2009 and those that will be written in March 2010 comply in most respects with the Umalusi criteria and are of the required standard.

# Chapter 3

## Moderation of site-based assessment

### 1. INTRODUCTION

Site-based assessment (SBA) forms the internal assessment component of the NSC examination. Umalusi, the Quality Council for General and Further Education and training is responsible for quality assuring this component in addition to the external written examination. In order to assure the credibility and integrity of the SBA component, Umalusi conducts a verification of the internal moderation of the educator and learner portfolios as well as statistically moderating the SBA component.

SBA contributes 25% of the total pass requirement in all the NSC subjects with the exception of Life Orientation. Life Orientation constitutes 100% internal or school-based assessment. Every Grade 12 learner must satisfy the requirements of the SBA component in order to be awarded an NSC. Umalusi, therefore, conducts moderation of the SBA with a view to the following:

- Ascertaining whether it is consistent with the national standards;
- Determining the fairness and validity of the assessment tasks; and
- Verifying the internal moderation process conducted at various levels within the system.

The 2008 SBA moderation report highlighted the followings areas of concern that needed attention: the poor quality and standard of the tasks set by educators; the low validity of internally set assessment tasks; the unreliability of marking instruments and the discrepancies in allocation of marks; and the unbalanced weighting of the cognitive demand and difficulty level of the tasks. The 2009 moderation therefore also sought to establish if any improvement has been made regarding these areas of concern.

### 2. SCOPE

This chapter covers the verification findings of the internal moderation of learner and educator portfolios from the nine (9) Provincial Departments of Education (PED)

**Table 1: Subjects moderated per province**

Subjects	Province								
	EC	FS	GP	KZN	Limp	MP	NW	NC	WC
Accounting	✓			✓		✓		✓	
Business Studies			✓			✓			✓
Economics		✓		✓			✓		
English First Additional Language		✓			✓		✓		
Geography			✓	✓		✓			
History	✓						✓	✓	✓
Life Sciences			✓		✓	✓			✓
Life Orientation	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mathematics	✓	✓			✓				
Maths Literacy	✓	✓		✓					
Physical Science		✓	✓					✓	

### **Sampling procedure**

Umalusi selected four districts in each province. Each province was required to randomly select a maximum of six schools in each of the four districts.

Further to this each of the selected schools was required to present nine learner portfolios for moderation, as well as the accompanying educator portfolios.

It should be noted that all the provinces presented the required sample of portfolios with the exception of the Free State in the case of the Life Orientation portfolios. The Free State presented three out of the required four districts and only one district presented six schools as requested. The other two districts presented only three schools each instead of six.

## **3. APPROACH**

Each moderation session commenced with the assessment bodies' presentation of an overview of their practices regarding SBA implementation, monitoring, and moderation.

The verification approach used by Umalusi moderators entailed the following processes:

- The moderation of learner and educator portfolios; and
- The provision of post-moderation feedback to assessment body officials.

### **3.1 Moderation of the learner portfolios of evidence**

Moderation was conducted using the Umalusi criteria for the moderation of SBA as indicated in the findings below.

### **3.2 Post-moderation feedback**

Umalusi's external moderators presented preliminary feedback to the assessment body officials based on the findings of the moderation conducted.

## **4. FINDINGS**

### **4.1 Provincial Education Departments**

The findings are presented in two parts, Part A and Part B, as reflected below.

#### **PART A (All the 10 moderated subjects excluding Life Orientation)**

##### **(I) Compliance with policy and guidelines**

Generally, all assessment bodies were found to have complied with this aspect, and are to be commended on their efforts in implementing the National Curriculum Statement (NCS) policy, the SAG, and related policy documents.

## **(ii) Training of educators on SBA implementation**

The moderators' reports indicated that the assessment bodies expended much effort to support, guide, and inform educators on the implementation of the current 2008/9 NSC SAG through training sessions or workshops and circulars across districts. However, these were often once-off training sessions and were not sufficient to train educators on how to competently manage SBA. In view of this, Umalusi recommends that educators receive more intensive training on the management of classroom assessment.

## **(iii) Monitoring SBA implementation**

The monitoring of the implementation of SBA at the cluster and district levels was reported as one area that all assessment bodies prioritised in 2009. Provincial coordinators conducted monitoring visits to ensure that SBA was conducted. The monitoring visits however failed to address pertinent issues relating to the development of good SBA tasks.

## **(iv) Quality and standard of internal moderation**

There are clear indications that most of the assessment bodies conducted a compliance check (audit) and did not moderate the standard of SBA at the school, cluster, and district levels.

- In the Eastern Cape, however, it was found that there were isolated instances where the standard of some tasks was checked, going beyond a mere check for compliance.
- The Thabo Mofutsanyane district in the Free State was reported as fully compliant with the moderation of set tasks as expected. A good moderation instrument was which made provision for both moderation and monitoring.

The table below provides an overview of instances where internal moderation was compromised.

<b>Subject</b>	<b>Assessment body</b>	<b>Finding</b>
Business Studies	Gauteng	In a few schools, there was no evidence that any school-based moderation / actual remarking of tasks was conducted. The only evidence of some kind of moderation was the school stamp in the portfolios.
Mathematics	Limpopo	In some portfolios it was evident that school-based moderation was not conducted appropriately.
Maths; Business Studies; Economics; Physical Science; Geography	Limpopo; Mpumalanga; North West; Northern Cape; KwaZulu-Natal; Western Cape	Internal moderation entailed a mere audit of tasks.

## (v) Quality and standard of assessment tasks

### Cognitive demand

Generally, most of the set tasks were pitched at an acceptable standard especially where exemplars and 2008 final examination papers were used, but for internally set tasks it was noted that the majority of tasks were pitched at a very low standard. However, some positive comments relating to cognitive demand were noted in the following subjects:

Subject	Assessment body	Finding
Accounting	Eastern Cape; KwaZulu-Natal	The trial papers, which were provincially set, were of a good standard.
	Northern Cape	The assessment body does not encourage provincially-set trial papers. However, overall, the learners performed well as the trial papers had a well balanced distribution of cognitive levels.
Geography	Gauteng	All the tests and tasks assessed all the cognitive skills as suggested in the SAG.
English First Additional Language	North West	The assessment tasks were generally up to standard, and the distribution of cognitive levels was in accordance with SAG requirements.

The following concerns were however raised:

Subject	Assessment body	Finding
Accounting	Eastern Cape	Not a single school that was moderated had made use of grids in order to analyze tasks according to the cognitive levels and degree of difficulty. Another major problem picked up was that most of the new sections were not adequately taught in class. Learners have generally fared very badly in sections like stock valuation, manufacturing, age analysis, and VAT.
	KwaZulu-Natal	A large percentage of the controlled tests were copied from previous final papers / exemplars.
	Mpumalanga	It was noted that there was no originality in the trial paper, in that questions were copied from previous papers.
Mathematics	Eastern Cape	Most questions in most tasks (with the exception of the common exam papers) were pitched at the lower cognitive levels.
Life Science	Mpumalanga	In general, the tasks, especially the practical component and assignment, were not creative and of low cognitive challenge.
Business Studies	Limpopo	The cognitive levels for the different tasks varied between low and middle. Higher-order questions were neglected.

## Validity of tasks

The following positive findings were noted regarding the validity of tasks:

Subject	Assessment body	Finding
Business Studies	Limpopo	Generally, the projects and assignments had a fair degree of correlation between theory and practice and required application of content in context.

The following concerns were however raised:

Subject	Assessment body	Finding
Mathematics; Geography	Eastern Cape; Limpopo; Gauteng	Over-reliance on past examination papers was noted.
Maths Literacy	Free State	In one district 33% of the tasks were set on mathematical content not prescribed for Mathematical Literacy.  Most of the investigation tasks set did not assess investigative skills.
	KwaZulu-Natal; Eastern Cape	The memoranda of the trial papers did not adequately provide alternative solutions to some of the questions.

## Marking reliability and mark allocation

A significant improvement was generally noted in the marking of SBA tasks. The following aspects were highlighted:

Subject	Assessment body	Finding
Accounting	Eastern Cape; Mpumalanga	Generally marking was of a satisfactory standard and it was pleasing to note that method marking was used. <b>'Method marking' means that if an error is made the learner is penalized, but thereafter the error is carried if the correct method is used.</b>
Geography	Gauteng	The rubric used for the research component developed by the provincial advisors was user friendly, and was uniformly implemented.

The following concerns were however raised:

<b>Subject</b>	<b>Assessment body</b>	<b>Finding</b>
Accounting	KwaZulu-Natal	The use of rubrics posed a challenge to most of the educators as they did not assess the tasks in a fair manner. This was specifically observed in Mathematics in the Eastern Cape. Method marking was still not used by educators in the assessment of tasks.
	Mpumalanga	Generally, marks achieved for the trial papers were very low.
Business Studies; Geography; Life Science	Limpopo; KwaZulu-Natal; Mpumalanga	There were inconsistencies with regard to the total mark allocated for control tests. Rubrics were poorly constructed and hence poorly applied with a great deal of subjectivity leading to a lack of reliability and fairness.
Mathematics	Eastern Cape	The mark allocation and weighting of tasks deviated from what is suggested in the guidelines in some instances. Rubrics were used with limited consistency to assess tasks.

### **Recording of marks**

In general, the recording and transfer of marks were fairly accurate. All the assessment bodies provided their schools and districts with electronic and hard copies of mark sheets for the recording of SBA marks.

### **(vi) Learner performance**

The findings across the subjects moderated in 2009 clearly indicate that the overall learner performance in the SBA component varied from average to below average; in only very few instances was the performance good to exceptionally good. It was also found that the majority of learners performed poorly in the September 2009 trial examinations and term control tasks, especially for those subjects where the 2008 examination papers and exemplars were used. These papers were clearly of a more appropriate standard.

It is worth noting that the majority of learners responded very well to tasks that were at the lower cognitive levels, whilst poor responses were found to questions that demanded middle and higher cognitive level responses, e.g., data response, problem-solving, and long answer questions.

Generally learners performed extremely poorly in the trial papers.

## **PART B: Life Orientation**

### **(i) Compliance with policy and guidelines**

Generally, almost all the assessment bodies complied with the required policies and guidelines in terms of the number of assessment tasks included in the portfolios, the exception being one district

in the Free State – Fezile Dabi. This district had three exams instead of two, one other task and no evidence of Physical Education Task (PET). Most schools enclosed some form of evidence for PET, although limited in some instances. There was also marked improvement in the assessment of Physical Education from a theoretical to a practical approach, except in the Western Cape and Mpumalanga where in many schools PET had remained theoretical rather than practical.

### **(ii) Quality of assessment tasks**

Generally the quality of the assessment tasks is still a **serious** challenge. This problem was observed especially where tasks were set internally at schools. The standard and level of these tasks were not appropriate, neither were the tasks linked to the assessment standards.

It should be noted however that all of the common tasks that were used were of a better standard and quality than the individually set tasks. A marked improvement was noted in the quality of the task set by the following provinces: KwaZulu-Natal, Gauteng, and Mpumalanga.

#### **The following concerns were raised regarding the quality of tasks:**

- **Assessment of the PET component still poses a serious problem.** Generally, PET tasks were without clear instruction sheets and assessment criteria, thus compromising the quality of the tasks. The assessment of PET differed greatly between provinces. In most instances it was not clear how PET was assessed.
- In most cases the marks allocated did not match the amount of work required, e.g., ten (10) marks were allocated for attaching one's photo to a document, and fifty (50) marks for drafting a Curriculum Vitae (CV). In one case learners were required to complete a mission statement – they were provided with a step-by-step template for drafting such a statement and completing the statement required filling in only **one** word.

These are examples of poor quality assessments. Assessment standards were not adequately considered and the marking tools were either inappropriate or not correctly used.

### **(iii) Cognitive demand of the assessment tasks**

The consideration of cognitive demand and the weighting of questions according to cognitive levels as recommended in policy and guideline documents remain a challenge. Generally, the majority of questions called for factual recall rather than application of skills.

### **(iv) Quality of internal moderation**

Internal moderation is still a challenge in most provinces. It was mostly completely superficial and lacking in quality and depth.

The following **general** concerns were raised:

- Moderation at schools and cluster / district level was not conducted in a useful and consistent manner. In particular, the absence of Heads of Departments or other relevant personnel with content knowledge of Life Orientation as well as knowledge of the moderation processes is seen as a critical shortfall.

- Due to a lack of proper moderation and detailed moderation reports, no intervention or developmental feedback was given to schools.
- At the provincial level a verification process, which focused mainly on compliance, was conducted – the moderation of the standard of SBA tasks is clearly an area that needs urgent attention.

The following **specific** concerns were raised:

<b>Assessment body</b>	<b>Finding</b>
Northern Cape	There was no evidence of moderation at the school and/or district levels, with the exception of one district where thorough moderation had taken place.
KwaZulu-Natal	There were many checklists in the files, with no distinction between school, cluster / district, and provincial tools. The evidence provided confirmed that compliance checks had taken place but there was no indication of actual moderation having taken place.
Free State	It was difficult to verify different levels of moderation as most of the educator and learner files did not have copies of reports or any other evidence of moderation. The moderation at the provincial level was better than that of the other levels.

There were, however pockets of good work observed as indicated below:

<b>Assessment body</b>	<b>Finding</b>
Gauteng	Face-to-face moderation of PET was conducted, and there were clear guidelines in terms of the management of PET from lesson planning to recording and reporting.
Western Cape	An excellent structure was in place with various tools to guide and ensure an informed moderation process. Amongst these were tools for pre- and post- moderation of tasks. The tools had been specifically designed to assist the Heads of Departments with school moderation as well as to ensure a uniform approach for district and provincial moderation.

#### **(v) Marking reliability and mark allocation**

In most cases mark allocation was in accordance with the SAG, with the exception of mark allocation for the PET component.

Challenges remain with regard to the appropriateness and use of marking tools, especially in PET. Some marking tools were not appropriate for the purpose of the tasks and/or incorrect criteria were used in allocating marks. This compromised the quality of assessment tasks as mark allocation in some cases did not correspond to the content asked.

The absence and/or incorrect use of marking tools impacted negatively on mark allocation. There were a number of discrepancies with regard to allocation of marks and the prescribed criteria. For example, where the correct criteria of participation (15) + performance (10) were used, all candidates were given 100% for attending ten sessions of PET. This is not possible as not all schools

would have had ten sessions and not all learners would have been at school every day to participate in all the PET sessions.

- An example cited was in the Western Cape where most schools made use of a different set of criteria from the one suggested in the SAG. This had a negative impact on the learners' marks.

It should also be noted that inconsistencies in the assessment of PET allow for discrepancies in mark allocation. Physical Education counts for 25% of the total mark in Life Orientation, therefore, if incorrectly assessed it can have a substantial impact on the overall mark, considering the fact that only 30% is required to obtain a pass in Life Orientation. A school in KwaZulu-Natal that had ten PET sessions, which is unlikely, recorded the lowest Life Orientation final mark of 60% and most marks were within the 60%-69% range with only a few learners attaining 70% and above. This raises a concern regarding the authenticity of the marks.

#### **(vi) Recording and reporting**

There was generally a marked improvement in terms of the capture and transfer of marks and the correlation between teachers' and learners' marks. Gauteng was found to be ahead in terms of the proper control and handling of incomplete marks and allocation of 'zero' marks. These were well documented and accompanying evidence was submitted.

In the remaining eight of the nine provinces, however, there was inconsistency concerning, and largely an absence of, explanations and evidence for incomplete marks or allocation of 'zero' marks.

- In Mpumalanga, a large number of learners in one school obtained 100% for PET in Terms 1 and 2, while 21 learners had a 'zero' mark for PET which was not accounted for. There was no evidence of or explanation for the 'zero' marks.
- PET recording sheets were not included in most files. As a result it was difficult to verify the marks.

## **5. AREAS FOR IMPROVEMENT**

- Actual moderation of the standards of SBA is not conducted in the majority of the provinces, especially at the school and cluster levels. Instead, there is a tendency towards conducting audits for compliance.
- The development and use of rubrics is a challenge for educators.
- The over reliance on past examination papers continues.
- The tasks developed by educators focus mainly on assessing the lower cognitive skills.
- The implementation, assessment, and recording of PET are still widely misunderstood. This had a serious negative impact on the authenticity of results as most marks could not be accounted for.

## 6. RECOMMENDATIONS

- Moderation of the standard of SBA must be implemented at the school and cluster levels. Checks for compliance can still be part of the moderation process to ensure adherence to policy.
- All the assessment bodies should ensure that all educators are familiar with the policy requirements to ensure the meeting of national standards.
- The assessment tasks and their marking instruments should be moderated thoroughly to eliminate non-compliance with policy and guidelines and to ensure the quality, fairness, and reliability of the tasks. This becomes crucial in view of the fact that educators still require a lot of support in the development of good tasks.
- Schools, clusters, and districts / regions are encouraged to network and share best practices in assessment.

## 7. CONCLUSION

Looking at the findings above, it is clear that much more needs to be done to improve the quality of SBA. The one area that is receiving attention is monitoring to ensure that SBA is conducted, as well as conducting checks for compliance. The area that needs a great deal of attention is educator training and support with regard to the development of valid, good quality tasks.

It is clear, particularly looking at the Life Orientation findings, that there is a need for common tasks as a way of ensuring and setting standards. The criteria and mark allocation for PET assessment need to be reviewed; a more valid, fair, and reliable measure needs to be applied nationally to enhance the credibility of the subject. Currently, it is difficult to ascertain the authenticity of the Life Orientation results. As indicated in the report, Physical Education counts for 25% of the total mark in Life Orientation, therefore, if it is incorrectly assessed it can have a huge impact on the overall mark, considering the fact that only 30% is required to obtain a pass in Life Orientation. If the assessment of PET is not corrected it is likely that a 100% pass in Life Orientation will be achieved.

# Chapter 4

## Monitoring of the conduct of the examination

### 1. INTRODUCTION

The monitoring of the conduct of the NSC examination is another critical component of Umalusi's quality assurance processes as it provides valuable information required to pass judgment on the credibility of the examinations.

The process was carried out in three phases, namely, monitoring the state of readiness of the assessment body to administer the examination, monitoring the writing of the examination, and monitoring the marking of scripts.

### 2. SCOPE AND APPROACH

This chapter covers the monitoring of the three phases as alluded to above. The monitoring of the examination was conducted in the nine PDEs. The monitoring of the state of readiness began with the provinces submitting a self-evaluation report to Umalusi. This was followed by the deployment of Umalusi staff and monitors to the provinces to verify the information provided and to ensure that all the necessary systems were in place and that the provinces were indeed ready to administer the examinations.

The table below provides information on the scope of monitoring conducted with regard to the writing of the examination.

**Table 1: Monitoring of writing**

<b>Assessment Body</b>	<b>Number of examination centres</b>	<b>Number of candidates enrolled</b>	<b>Number of exam centres monitored by Umalusi monitors</b>	<b>Number of Umalusi monitors per assessment body</b>	<b>Number of exam centres monitored by Umalusi staff</b>
Eastern Cape	908	76 242	17	4	1
Free State	314	31 412	17	4	1
Gauteng	787	109 535	14	2	1
KwaZulu- Natal	1 670	132 931	29	4	1
Limpopo	134	101 658	30	4	1
Mpumalanga	528	58 759	34	4	1
Northern Cape	135	11 461	14	2	1
North West	382	32 420	22	3	1
Western Cape	416	48 198	12	3	1
<b>TOTAL</b>	<b>5 272</b>	<b>602 616</b>	<b>189</b>	<b>30</b>	<b>9</b>

## 3. FINDINGS

### 3.1 Monitoring the state of readiness

Monitoring of the state of readiness was conducted in September 2009, and not all provinces had by this time completed all of the processes evaluated to determine the state of readiness.

#### **(i) Registration of candidates**

All provinces except North West had already finalized registration of candidates at the time of the monitoring of the state of readiness. Registration in the North West was at the final stages. The system was cleaned and the corrections on part-time repeaters were being finalised.

#### **(ii) Internal assessment**

At the time of monitoring, the provinces had not yet captured internal assessment marks. The assessment bodies had measures in place though to ensure the correct capture of internal assessment marks. This was to be done during the fourth term. However, the capture of internal assessment marks was monitored by Umalusi staff in the following provinces: Gauteng, KwaZulu-Natal, Eastern Cape, Limpopo, and Mpumalanga, during the first two weeks in November.

#### **(iii) Appointment and training of markers**

At the time of monitoring all the provinces had appointed markers, except North West and Western Cape. Training of markers in all the assessment bodies was scheduled to take place when markers reported for marking.

#### **(iv) Appointment and training of centre managers**

Limpopo, Mpumalanga, Northern Cape, and North West had not yet appointed centre managers. All other assessment bodies had plans in place for the training of centre managers in a future date.

#### **(v) Printing of question papers**

At the time of the completion of the self-evaluation report, only Gauteng and North West had received the National papers, but the papers were not yet printed by both assessment bodies.

### 3.2 Monitoring of the writing of the examination

#### **(i) General management of the examination**

Generally, the examinations were well managed and conducted in a credible manner. There was marked improvement in the general management of the examinations.

- Security measures for the storage of question papers both at District offices and examination centres were intensified through the use of strong rooms, safes, burglar alarms, and security guards.

- In most provinces the papers were either collected or delivered through courier services or district officials in batches on a weekly basis. Only the Chief Invigilator had control and access to the strong rooms and would issue the papers as and when they were due to be written.
- There was proper control in the issuance and receipt of examination material through registers kept at the District offices and in the examination centres.
- Most centres reported that question papers were received on time on the days the examinations were to be written. Boxes were properly wrapped and question papers sealed. However, there were delays in some provinces as a result of incorrect registrations where copies of question papers had to be made or faxed from Head office. This was more evident in Mpumalanga where the English version papers were delivered instead of the Afrikaans version during the writing of Tourism, Geography P1 and P2, Computer Applied Technology (CAT) P2, Accounting, Mathematical Literacy P1 and P2, and History P1.

## **(ii) Examination rooms**

Examination centres were conducive to the writing of the examinations.

- Generally, the examination centres were clearly marked, clean, with adequate light, and well ventilated. There was no noise in and around the examination centres.
- Candidates were seated according to the plans. In some venues, e.g., Western Cape, seating plans were put at the entrance of the venue. In most provinces seating is arranged numerically and the 'one-meter distance in between candidates' rule was maintained.

## **(iii) Proceedings before the commencement of the examination**

Proceedings were in accordance with the prescribed rules and regulations. In some centres candidates were seated 30 minutes before the start of the examination and ten minutes reading time was observed.

There were, however, centres in certain provinces that did not adhere to some examination regulations as indicated below:

- In Limpopo, the invigilator of the Geography P2 examination mistakenly stopped the candidates writing at 14h30 instead of 15h30 as she said she was under the impression that the duration of the paper was only 30 minutes. The candidates were immediately called back to complete the examination. Another reported incident was of one candidate who finished before the first 30 minutes and was allowed to go (which is contrary to a regulation that requires candidates to leave after an hour, even if they finish earlier than the stipulated duration). The candidate who was allowed to leave the exam room early could not be traced.
- In the Western Cape candidates were erroneously informed that the duration of the Consumer Studies paper was two hours instead of three hours. On realisation of the mistake the school called the candidates back into the examination venue to finish writing. However, the school could not get hold of two candidates who had immediately left the school premises. The Chief Invigilator and the attending invigilator were subsequently suspended.

- In one centre in Gauteng, when the Dramatic Arts paper was written the school did not discuss the erratum with the candidates. The notice was only discovered at the end of the examination.
- Uncertainty with regard to clearing of memory from programmable calculators is still a concern in many assessment bodies. Policy requires that programmable calculators should not be allowed in the examination centres unless cleared of memory. It was suggested in KwaZulu-Natal that the clearing of memory from programmable calculators be addressed during the training on the conduct and management of examinations.
- Cell phones are generally not allowed in the examination centres. Where candidates did not observe the policy regarding cell phones, e.g., Western Cape and North West, the phones were confiscated, and were to be sent to fraud units to check if they contained any information that might have assisted candidates during the examination.

#### **(iv) Proceedings during the writing of the examination**

Generally, order and discipline were maintained during the writing of the examinations. Invigilators in most assessment bodies were vigilant, attentive, and mobile, being quite conversant with their roles and responsibilities during the writing. There were, however, cases where invigilators did not carry out their duties as expected and in accordance with the procedures outlined in the policy on the conduct, administration, and management of the conduct of the examination:

- In the Eastern Cape, Free State, Limpopo, and Western Cape scripts were taken out of the examination centre and returned either later that day or the following day. In the Eastern Cape a script was left in the examination centre. This was because the correct procedure regarding the collection of scripts whilst candidates are seated was not followed.
- In one centre in the Eastern Cape there was no relief invigilator and the candidates were left unattended when the invigilator went to relieve herself.
- The Western Cape and Limpopo made use of Chief Invigilators other than principals of schools. Some of those Chief Invigilators did not perform as expected and did not comply fully with the policy on the conduct, administration, and management of the conduct of the examinations. There were cases where the reading of instructions before commencement of the examination was not done and the correct procedure in terms of the collection of scripts was not followed.
- Emphasis needs to be put on procedures to be followed in handling irregularities. There were a few instances where candidates who were alleged to be drunk were allowed to write and in the Eastern Cape one such candidate had to be accompanied in and out of the centre every fifteen minutes disturbing other candidates.

#### **(v) Packing and transmission of scripts**

The scripts were collected, controlled, and packed according to mark sheets in secure plastic bags for transfer to and from examination centres and the District offices. Some provinces used courier services on a daily basis to deliver and collect scripts after writing. In other cases school principals were responsible for this.

### 3.2.1 Irregularities

Most of the irregularities that occurred were of a technical nature. Most were investigated and addressed timeously by the provinces. However, there were some serious recurring irregularities which if not dealt with appropriately could compromise the credibility of the examinations. Such irregularities are outlined below:

#### (i) Registration-related irregularities

- Shortage of question papers: This caused unnecessary delays in terms of the start and finishing times of the examinations as question papers had to be photocopied or invigilators had to wait for provincial Head Offices to fax the correct papers to them.
- In almost all the subjects written at the Hoërskole in Mpumalanga the English version papers were delivered instead of the Afrikaans version papers. The correct papers were either photocopied or faxed by the Head Office to the affected centres.
- Some candidates did not appear on the mark sheets, thus hand-written mark sheets were developed to accommodate them.
- Some candidates were registered for Mathematics instead of Mathematical Literacy.
- Some candidates wrote language papers different from the ones they registered for, e.g., a candidate would write First Additional language when in fact he was registered for Home language. This was observed in almost all assessment bodies.
- Shortages of question papers and maps, especially in Geography, were also experienced as a result of incorrect registrations. In Limpopo a shortage of question papers was experienced due to an unauthorised subject change.
- The absence of literature question papers in Limpopo to cater for repeat candidates was reported. Repeat candidates were not informed of the circular from the National Department of Education regarding changes in Literature set works. The literature paper was re-written in the Limpopo province.

#### (ii) Non-compliance to procedures as outlined in the policy for the conduct, administration, and management of the conduct of NSC examinations

- Candidates should be seated 30 minutes before the start of the examinations so that regulations, instructions, and errata, where applicable, can be read to them. This practice was disregarded by invigilators in some centres in Gauteng, Limpopo, and the Western Cape.
- Procedure regarding the collection of answer scripts when candidates complete writing was not followed in some centres in the Western Cape, Free State, Limpopo, and Eastern Cape. As a result, candidates took scripts out of the examination centres and returned them later or the following day.
- There were a number of cases where candidates were found in possession of unauthorised material, crib notes and/or previous years' question papers and memos during the examination.

- In the Eastern Cape a principal did not register a candidate claiming that the candidate displayed weak performance in Grade 11, and was mistakenly promoted to Grade 12. The principal, however, allowed the candidate to write, and intended to give the scripts to subject teachers to mark for inclusion in the candidate's Grade 11 report. The candidate's scripts were, however, batched with the rest for marking. The principal was subjected to a disciplinary hearing.
- Two candidates in Limpopo missed the English FAL P1 because the principal refused to give them their admission letters. The matter was declared a serious irregularity and was referred to the Provincial Examinations Irregularity Committee.

### **(iii) Irregularities due to external factors**

- Several cases relating to power failure and/or technical problems were reported by almost all provinces during the writing of CAT. Arrangements were made to have the paper written on another date.
- The disruption of examinations at three schools in the Western Cape was unexpected and traumatic for the officials and candidates. Scripts, mark sheets, and registers were torn up when disgruntled community members entered the exam venues. Arrangements were made to have the English FAL P2 back-up paper written on another date.

### **3.2.2 Areas of good practice**

- There was great improvement in the monitoring of the examinations by the provinces. In almost all of the centres visited by Umalusi there was evidence that the provinces visited the centres, sometimes on more than one occasion.
- Security measures were intensified in the majority of exam centres across the provinces.
- Gauteng is applauded for the appointment of invigilators for private schools as a way of dealing with incidents of mass copying.

### **3.2.3 Areas for improvement**

- Incidents of improper registration of candidates resulted in duplications and some candidates not registered or registered for the incorrect subjects.
- Some invigilators did not comply with the correct procedure in terms of the collection of scripts after writing, which resulted in candidates taking scripts out of the examination room.
- Candidates should be seated 30 minutes before the start of the examinations so that regulations, instructions, and errata, where applicable, can be read to them. This was not always the case.
- The appointment of suitable Chief Invigilators is encouraged. This will address problems relating to the flouting of even basic examination regulations.
- Proper control and record-keeping of examination material should be put in place. Records should also be kept of all officials monitoring the examinations.

In particular, the provinces need to train personnel on the proper categorization of irregularities in terms of whether they are serious or technical irregularities. This will assist in ensuring that proper channels and processes are followed in resolving the irregularities.

- The security systems in Mpumalanga during the printing, distribution, and storage of question papers require urgent attention.

### 3.3 Monitoring of marking

The processes and procedures put in place by the assessment bodies have ensured a successful and fair marking process for 2009. In all marking centres, internal moderators, chief markers and senior markers arrived a day or two before the markers. Training was conducted which focused on operational and quality assurance measures including the discussion of examination papers and final memoranda.

**Table 2: Scope of the monitoring of marking**

Assessment body	Number of marking centres	Number of marking centres visited by Umalusi monitors	Number of centres visited by Umalusi staff
Eastern Cape	14	5	1
Free State	15	6	1
Gauteng	7	2	1
KwaZulu-Natal	31	8	1
Limpopo	19	8	1
Mpumalanga	16	8	1
Northern Cape	3	3	1
North West	14	3	-
Western Cape	2	2	-
TOTAL	121	45	7

#### (i) General conditions of the marking centres

Most of the marking centres were well suited for marking.

- The venues were spacious and well ventilated, except in the Western Cape where the majority of rooms were without air conditioning and the tiered lecture theatres were not comfortable. All centres had the required communication facilities such as telephones and fax machines and most had computers for e-mail and script control.
- Accommodation is still a challenge in some centres in KwaZulu-Natal, the Free State, and Limpopo. There was no privacy as markers were expected to share rooms, sometimes three of them were accommodated in one room.

#### (ii) Security issues

Security was very tight at all centres.

- Access in and out of the centres was well controlled. Centre managers were responsible for

opening and locking their centres. The security guards were visible and vigilant throughout and some centres were equipped with alarm systems.

- The control of scripts was also well managed. In some centres examination assistants would be accompanied by security guards when moving scripts, while in other centres senior markers and markers were responsible for the moving of scripts.

### **(iii) Appointment of markers and examination assistants**

- Markers and examination assistants were generally appointed according to the prescribed criteria. Most of the provinces adhered to the 20% appointment of new markers, who were then well supervised and supported by senior markers.
- The Northern Cape, however, experienced an increasing shortage of markers in certain subjects, e.g., CAT, English HL, Afrikaans HL and FAL, IsiXhosa HL and Hospitality Studies, due to a shortage of educators.
- In the Free State and in Mpumalanga changes were made by Head Office to the agreed-upon list of markers without consulting with the examiners and chief markers.
- The Free State also made use of markers who had not taught the subject in question during the last three years, including the current year. Also, the limited number of staff at the examination section of the department led to the late delivery of scripts to the Free State marking centres.

### **(iv) Training of markers**

The training of markers was well conducted and intense in most centres. It focused mainly on memoranda discussions, marking approach, quality of marking, identification and handling of irregularities, and allocation and proper transfer of marks.

### **(v) Marking procedure**

Generally the approach was question by question. Other subjects marked section by section. In a case where candidates answered both optional questions, only the first response would be marked.

### **(vi) Internal moderation of marking**

Internal moderation was conducted by senior markers, chief markers, and internal moderators in that order. Their role was to check and control the marking standard. On average, a minimum 10% sample was moderated through all the above-mentioned levels of moderation.

If the moderators found that certain candidates had been advantaged or disadvantaged during marking, it was discussed with the marker concerned and if a remark was necessary, it would be done by the same marker after guidance and support.

### **(vii) Handling of irregularities**

Markers were informed at the initial training of what constitutes an irregularity and they were aware of the procedures to be followed when an irregularity is detected.

No serious irregularities were reported emanating from the marking. The technical irregularities were addressed in accordance with policy at the level of the assessment bodies. All the assessment bodies had a way of recording such irregularities, either on special forms or on registers.

#### **3.3.1 Areas for improvement**

- Chief markers should be involved in the selection of markers as they know the underperforming markers.
- Criteria for the appointment of markers should be strictly adhered to so as not to disadvantage candidates.
- All stakeholders need to be consulted when changes are made relating to the appointment of markers.

## **4. CONCLUSION**

It is evident from the report that the provinces endeavored to ensure the integrity and validity of the NSC examination. The writing and marking of the examinations were, to a reasonable extent, carried out in accordance with policy and regulation requirements. On the same note, however, provinces are urged to ensure even stricter adherence to the policy and regulations governing the conduct of examinations. This will prevent any possible incidents and irregularities occurring during the appointments of examination officials, registration of candidates, and management of the examination centres.

# Chapter 5

## Verification of marking

### 1. INTRODUCTION

The verification of marking consists of two processes, namely, memorandum approval and centralised verification of marking. Verification of marking is done to verify the consistency and accuracy in the application of the marking guideline, which results in consistency and accuracy in marking.

One innovation in the memorandum discussion and approval phase was the introduction of 'training'. This is an exercise which entails the marking of sample scripts by the entire discussion panel followed by a rigorous discussion.

### 2. SCOPE

#### 2.1 Memoranda discussions

Memoranda discussions were conducted for all 38 NSC subjects (130 papers) that were written in the 2009 NSC examination. All Umalusi external moderators were involved in the process. The discussions took place at the venues arranged by the DoBE and included the internal moderators, chief examiners, curriculum specialists and, in some cases, representatives from the PDEs.

The table below indicates the subjects for which the memoranda were discussed and their respective categories.

**Table 1: Subjects and papers and their respective categories**

Category A	Category B	Category C
Agricultural Management Practices	Civil Technology	Electrical Technology
Geography	Agricultural Technology	Consumer Studies
Mathematics	Afrikaans HL & SAL	Mechanical Technology
Mathematical Literacy	Sepedi HL	Design
Accounting	Setwsana HL	Religion Studies
Physical Science	Xitsonga HL	Dance Studies
Economics	Tshivenda HL	Visual Arts
Afrikaans FAL	isiZulu HL	Dramatic Arts
Life Sciences	IsiXhosa HL	Sepedi FAL & SAL
History	IsiNdebele HL	Setwsana FAL & SAL
Business Studies	SiSwati HL	Xitsonga FAL & SAL
English FAL	Music	Tshivenda FAL & SAL
Agricultural Science	Engineering, Graphics, and Design	isiZulu FAL & SAL
Mathematics P3	Computer Applications Technology	IsiXhosa FAL & SAL
	Information Technology	IsiNdebele FAL & SAL
		SiSwati FAL & SAL

Category A	Category B	Category C
		English HL & SAL
		Tourism
		Hospitality Studies
		Religion Studies

## 2.2 Centralised verification of marking

Centralised verification of marking was conducted on the so-called 'gateway' subjects and three African languages at Home Language level. The scripts for the following subjects were received from the PDEs.

- Accounting;
- Afrikaans FAL P1, P2, and P3;
- Agricultural Science P1, P2, and P3;
- Business Studies;
- Economics;
- English FAL P1, P2, and P3;
- Geography P1 and P2;
- History P1 and P2;
- Life Sciences P1 and P2;
- Mathematics P1, P2, and P3;
- Mathematical Literacy P1 and P2;
- Physical Science P1 and P2;
- IsiXhosa HL P1, P2, and P3;
- Sesotho HL P1, P2, and P3; and
- Setswana HL P1, P2, and P3.

## 3. APPROACH

### 3.1 Memoranda discussions

As has been the case in the previous years, memorandum discussion meetings were held at venues arranged by the DoBE, namely, the DoBE offices and Pretoria Boys' High School. According to the DoBE marking guideline discussion schedule, papers were divided into three categories as follows:

- Category A: Subjects with large candidate entries. Two PDE representatives were invited to these meetings.
- Category B: One PDE representative was invited to these meetings.
- Category C: Subjects with very small candidate entries. These meetings were attended by the national panel team only: internal moderator and chief examiner.

Umalusi moderators were thus deployed to these meetings to sign off the final memoranda. Vibrant discussions ensued between Umalusi moderators and the members of the national examination panel and/or PDE representatives, these discussions culminated in standardised memoranda.

Notable in the 2009 memoranda discussions was the inclusion of training on the second day in the case of papers with large entries. This entailed the marking of the sample scripts by all the members of the panel at the memorandum discussion. This was followed by another round of rigorous discussions based on what transpired from the marking session.

## **3.2 Centralised verification of marking**

Centralised verification of marking was conducted at the Umalusi offices over a period of four days. The PDEs were required to send samples of 20 scripts per paper to Umalusi according to the prescribed Umalusi criteria. One of the criteria was that the 14 of the 20 scripts (70%) must have been moderated at the marking centres, and the remaining six scripts (30%) must have been marked but not moderated. Vigorous moderation of the scripts was undertaken to ensure that there was consistency in the marking across the provinces and to establish adherence to the memoranda.

The Western Cape scripts were, however, not received on time as a result of the late commencement of marking. The Western Cape scripts were subsequently moderated off-site. They were then sent by courier to the external moderators who were available to conduct the moderation. At the time of this report only the reports on Accounting and English FAL P1 had been received.

# **4. FINDINGS**

## **4.1 Memoranda discussions**

Findings in the memoranda discussions are presented according to the subsections below.

### **(i) Processes and procedures followed**

Generally, each meeting was chaired by the internal moderator. The discussion of the marking guidelines for the following papers was led by the chief examiners: English FAL P1, Mathematics P2, Physical Science P2, and Information Technology.

In the case of subjects with large entries, the discussions would commence with reports from chief markers from all the provinces. The meeting participants, having marked the sample scripts, would then reflect on the general performance of the candidates as well as on how the candidates performed in each question. This elicited vibrant and fruitful discussions. In small subjects, however, the discussions were only limited to the national internal moderator, chief examiner, and the external moderators. Vibrancy in these discussions was hampered by the size of the group as well as the absence of inputs from the provinces. The provinces did provide reports for a few of the papers, but the number of provinces and the number of papers was tiny.

In Mathematics it was noted that the process was thorough though it took place under tremendous time constraints due to the backup paper being used. In some cases an official from the DoBE addressed the meeting on issues pertaining to the quality of marking. In one of the addresses, the DoBE expressed concern with regard to the appointment of markers – that the best markers are not always appointed due to the magnitude of interference in the selection process.

## (ii) Role of Umalusi moderators

Generally, and especially in the case of big subjects, the external moderators observed and contributed to the discussions only when it was appropriate. They also guided the discussions towards the acceptance of a common position on amendments and additions to the memo, in other words, they verified the appropriateness and correctness of additional alternatives. Finally, together with the internal moderator, they approved and signed off the memoranda.

However, in the case of small subjects, where only the national panel was involved, the external moderators had to play an active role throughout the discussions, even to the point of leading the discussions.

## (iii) Marking of sample scripts and submission of inputs

There were two categories to the marking of scripts:

- Marking of sample scripts by chief markers in their respective provinces just after the papers had been written.
- Marking of sample scripts that took place at the memorandum discussion meeting itself but only with respect to big subjects.

Sample marking did not take for all papers or in all provinces. This phenomenon was more prevalent in the small subjects and was further complicated by the fact that provincial delegates were not invited to participate in these smaller discussions. As alluded to before, very few provinces submitted inputs to the memorandum discussions, and in actual fact they would have submitted inputs if they had been able to mark. Marking in respect of small subjects also did not take place during the memo discussions as only one day was allocated to these papers / subjects.

Generally, sample marking took place in big subjects, however, there were instances reported in some provinces of sample marking not having taken place or inputs not being provided, as detailed in the table below:

Paper	Province(s)	Remarks
Afrikaans FAL P1	Limpopo	Chief marker could not mark
Physical Science P2	Northern Cape	Chief examiner did not receive scripts to mark
Information Technology P2	Eastern Cape & Limpopo	No marking took place
Computer Applications Technology P1	Northern Cape	No marking took place
Computer Applications Technology P2	Limpopo & Mpumalanga	No marking took place
Civil Technology	Limpopo	No marking took place
Visual Arts	All except Western Cape	Only Western Cape Chief marker had marked
Mathematics P3	All	No sample marking because the paper had been written on 3 <sup>rd</sup> December and the memorandum discussion took place the following day

Lack of enough time between the writing of the papers and their memoranda discussions was cited as a reason for the lack of marking or input. In CAT it was alleged that Chief markers did not receive the sample scripts because the memorandum discussion meeting for the paper was unexpectedly brought forward to an earlier date.

An improvement in the response by the provinces in preparing and presenting their reports was noted across all the subjects for whom provincial representatives were invited to the discussion.

#### **(iv) Changes / additions to the memoranda**

Generally, there were no drastic changes in the memoranda. In most cases there were merely additions in the form of alternate answers. In other cases, marks were adjusted and re-allocated. In English FAL P1, for instance, most of the changes were to the distribution of marks in the comprehension test and not to the memorandum per se. Generally all changes were made after thorough discussion and full agreement. There was no essential departure from the original memorandum and they served to make allocation of marks more logical and to add alternatives that examiners and internal moderators had not thought of.

Predominantly, the cognitive demand of the response required was not affected by the changes and/or additions to the memoranda however some skepticism in this regard was expressed in Accounting and Mathematics.

- In Accounting there was a general feeling among the members of the panel that the paper might have been on the easy side. Care was taken, however, that there was still a sufficiently high level of cognitive skill requirement in the paper. Therefore, despite requests from the officials to ease up on the marking and allow more method marks, this was not accommodated.
- A few of the changes in Mathematics were said to have the effect of making it easier for the candidates to obtain a partial score on a higher-order level question.

An opinion was expressed in Civil Technology that due to the vastness of the subject content, and the fact that technology changes and expands rapidly, it was not always possible to cater for all possible answers.

#### **(v) Status of the question paper and memorandum**

In the majority of cases the question papers and the memoranda represented the final version of the papers moderated by the external moderators. This is attributed to the proofreading and final signing-off of the question papers and memoranda before they were sent to the provinces for printing.

A few minor cases of question papers and memoranda not representing the final version of those moderated by the external moderators were, however, reported in certain papers. This was mainly as a result of problems experienced during the printing process. These are highlighted in the table below:

<b>Paper</b>	<b>Province</b>	<b>Remarks</b>
History P1	North West	The paper that was translated into Afrikaans had some English words in Question 1.3.3.
Computer Applications Technology P1	Western Cape	The paper written by the sight-impaired appeared to be slightly different to that written by sighted candidates.
Mathematical Literacy P1	Free State	The word "of" was included in one of the questions. This however did not disadvantage the candidates.
	Mpumalanga	The unit for litre, 'ℓ', was replaced by the Greek symbol 'λ' in three questions. The inclusion of this symbol in two of the three questions (worth 5 marks) resulted in meaningless questions which disadvantaged the candidates.
	North West	The map on the annexure was of very poor quality due to the printer. This resulted in two of the questions worth 3 marks being problematic.
Information Technology P2	Western Cape	Question 6.6.2, worth 5 marks, differed from the official memorandum which contained (a) and (b) sub-questions worth 6 marks.
Civil Technology	Mpumalanga	Numbers were missing in Fig. 2.1.2 of the Afrikaans-version paper.
Agricultural Science P1	North West	A page was missing in the Afrikaans-version paper with 12 marks' worth of questions.
Life Sciences P2	Gauteng	The Afrikaans version of the paper seemed to be different with respect to Question 3.3.

Other concerns regarding the version of the question papers and memoranda were as follows:

- In Dramatic Arts, though the questions and the memorandum were a true reflection of the paper moderated, the layout posed some problems in the following manner:
  - ✓ The quality of the pictures was poor; and
  - ✓ The layout in respect of Question 12.5.3 was badly placed to the point that many candidates omitted it.
- Three sub-questions in the Afrikaans-version paper differed from the English one in Agricultural Management Practices.
- In Agricultural Technology subject sketches in the question paper differed from the original ones sent to the provinces due to different computer systems. For instance, in the papers written by the Western Cape, the labeling of the sketches on concrete lintel lines was totally misplaced in Question 2.5, thus causing confusion among the candidates.

- In Tourism the cartoon in Question 2.2 in the paper written by the Free State and the North West was not clear.

#### **(vi) Areas / problems not appropriately addressed during the setting and moderation process**

A few issues were picked up by the external moderators which they felt should have been addressed appropriately during the setting and moderation process. These were picked up in the following papers: Language papers, Information Technology P2, Dance Studies, Dramatic Arts, Agricultural Technology, Music, and Agricultural Management Practices.

<b>Paper</b>	<b>Remarks</b>
Languages	In the guidelines for the marking of the summary it was indicated that if a summary was presented in the wrong format it should not be marked. This was seen as harsh and an appeal was made to the DoBE for a change in the Guidelines for the setting of examination papers. This change was approved.
Information Technology P2	A trace table was introduced. This appears in the Subject Content Framework for Grade 10-12, however, many provinces were skeptical about its relevance in an NSC paper.
Dance	There were huge discrepancies in the assessment of the practical component between the provinces due the lack of national standard setting on the practical component.
Dramatic Arts	The paper was too long.
English FAL P2	There were too many explanation questions worth 3 marks, and it was felt that the open-ended questions were not fairly distributed across the genres. Question 6 on water management posed a serious problem to candidates since the compiled subject notes do not cover it at all.
Agricultural Technology	The LPG does not clearly state the subject content depth for some of the topics.
Music	There was an emphasis on Western music to the exclusion of other styles.
Agricultural Management Practices	Question 2.1 should be avoided by the examination panel in future. It was considered not suitable for a generic AMP paper because candidates who did not have exposure to pasture sciences would find it difficult. It was therefore designated an unfair question.

#### **4.1.1 Areas of good practice**

- The representation by all provinces with respect to the high enrolment subjects was considered extremely valuable. The presence of the chief markers and internal moderators enhanced the quality of the discussions, gave an insight into the standard of these papers, provided information on the expectations of each province with regard to the papers, and rendered good suggestions for improvements in 2010.

- The introduction of 'training' on the second day for big subjects whereby all members of the panel marked sample scripts proved to be very fruitful.
- The general feeling among the members of the discussion panel was that the papers were of a good standard, NCS compliant, and in line with the 2009 Examination Guidelines.

#### **4.1.2 Areas for improvement**

- In English FAL it was observed that not all the chief markers appeared to be equally knowledgeable. The external moderators were concerned about the competence of some of the chief markers, as well as the argument that the panel needed to be lenient because of the poor teaching that candidates might have been exposed to.
- In CAT, some provinces loaded candidate folders on to a network server and then marked from these electronic files. This could provide opportunity for some unscrupulous markers to change candidate data files, thus advantaging them.
- CAT P1 and Information Technology P1 discussions took place on the same day. This created problems for smaller provinces such as the Northern Cape who have one person responsible for both subjects.
- Memoranda discussion meetings for small subjects were generally a disservice to the external moderators due to the non-attendance of the relevant provincial delegates. Added to this was the absence of input from the provinces. In addition, even though the meeting programme indicated a closing time of 16h00, some delegates left earlier without consulting with the external moderators. This was the case during the Business Studies and Tourism meetings – in the Tourism meeting, the external moderators were left behind to print out the English and Afrikaans memoranda. It is thus recommended that the duration of the discussions be extended if necessary and that delegates should be compelled to stay for the duration of the sessions.
- The problems caused by the provinces printing the papers are of great concern as they had the potential to disadvantage candidates. Printer errors included certain parts of the question papers being blurred or even omitted.
- The problems with the improper translation of question papers into Afrikaans are still of great concern.

## **4.2 Centralised verification of marking**

It should be noted that the purpose of the external verification of scripts is to determine consistency in marking across the provinces and establish adherence to the memoranda. This verification therefore has no immediate impact on the marking, but rather points out areas for improvement in the future.

Findings are presented according to the Umalusi criteria for the verification of marking as outlined on the next page.

### (i) Adherence to the marking memorandum

Generally, markers adhered to the memoranda. For instance, in Mathematical Literacy the overall variance in mark allocation after external moderation varied from -4 to +2 marks with an average deviation of 1 mark. The following cases of non-adherence to the memoranda were, however, noted.

<b>Subject / Paper</b>	<b>Province</b>	<b>Findings</b>
Physical Science P1	Limpopo	Some markers and internal moderators made several small errors in the interpretation of the memorandum. A common error picked up was where the internal moderator made changes to the marks at the relevant question, but failed to transfer the changed marks to the cover page.
Mathematics P1	KwaZulu-Natal	There were several instances of non-adherence to the memorandum with respect to Questions 2.2; 4.4; and 12.3. Inaccurate marking was picked up from the scripts of three candidates. This resulted in their marks being raised by the external moderator as follows: Candidate 1613827: 123 to 133 marks Candidate 1550763: 37 to 40 marks Candidate 1609205: 98 to 101 marks.
Mathematics	6 provinces	Non-adherence to the memo was more conspicuous in Paper 1. Boxes to guide marking were inserted at the memo discussion but some provinces ignored the guidance in these boxes.
Mathematics P3	Northern Cape; KwaZulu-Natal	Geometry was inconsistently marked and in some cases wrong answers were marked correct and vice-versa.
Geography	Free State; Mpumalanga; Northern Cape	Although the adherence to the memorandum was satisfactory, these provinces did not send their memoranda with the scripts.
Agricultural Science	Limpopo	Some of the answers which were discarded at the memorandum discussion were considered once again at the marking centre. This was due to the absence of the Limpopo chief marker from the memorandum discussion.
Life Sciences P2	Gauteng	Too many incorrect answers were marked correct and the correct answers marked wrong.
Agricultural Science	North West; Northern Cape	Candidates were marked wrong on the digestibility co-efficiency in Question 2.3.2 because markers were apparently not fully conversant with the calculation.

<b>Subject / Paper</b>	<b>Province</b>	<b>Findings</b>
Agricultural Science P2	All	There were cases where markers were not crediting candidates for their relevant creative thinking in Questions 2.2; 3.1; and 3.2.
Sesotho HL P2	Mpumalanga	Candidates were given marks for wrong answers.

## **(ii) Provision of alternative answers**

Although each memorandum was a final document after the memorandum discussion meetings as extensive alternative answers had been exhausted during the meetings, additional alternative answers could emerge during the training of markers at the marking centres. In this case, a protocol would be observed in terms of whether or not the alternative answers would be considered. This might not be rife in the big subjects due to the large representation at the memorandum discussion meetings, however, for small subjects, where the discussion was only confined to the members of the national panel, i.e., internal moderator, chief examiner, and the external moderator(s), this was likely, as the alternative answers might not all have been exhausted owing to the small size of the group.

The following findings were noted with respect to the provision of alternative answers:

<b>Subject / Paper</b>	<b>Province</b>	<b>Findings</b>
Geography	Gauteng	Alternative answers were added to the memorandum without consultation with the DoBE and Umalusi.
Mathematics	North West	This province provided a list of small variations to the known alternative solutions.
Mathematical Literacy	Free State; KwaZulu-Natal; Northern Cape	Copies of the memorandum were not sent with the scripts, thus it was not possible to ascertain if any changes or additions were made to the final memorandum.

### (iii) Consistency and accuracy in the allocation of marks

There was generally consistency in the allocation of marks and in many cases whatever differences there were, were minimal and did not call for concern. There was little variation in the marks allocated by the markers, internal moderators, and external moderators. In many cases, considerable improvements in consistency and accuracy were commended. However, the following discrepancies in the allocation of marks were noted:

Subject / Paper	Province	Findings
English FAL P3	Limpopo	There were major discrepancies in the allocation of marks by markers, senior markers, and internal moderators. The mark allocation differences were vast and ranged between 9 and 16 marks. In some cases the inaccuracy was caused by the miscalculation of marks by the markers, e.g., mark allocation of 92 instead of 76.
Agricultural Science P1	KwaZulu-Natal; North West	Several cases of marks not being transferred correctly to the cover page were noted.
Economics	All	Sub-totals and totals were not always appropriately entered thus making it difficult to verify total marks.
Mathematics P3	Free State	Some markers were slipping in their marking, these anomalies were, however, picked up by internal moderators who then awarded marks appropriately.
Physical Science P1	Limpopo; Mpumalanga; KwaZulu-Natal	The interpretation of the mark allocation as per the agreed memorandum both by the markers and one of the moderators was a problem in Limpopo. Also, a moderator made changes to the marks allocated by the marker but did not transfer the changes to the cover page. In the case of Mpumalanga, the mark allocation was accurate, however, several totaling errors (albeit small) were picked up from even those that had been checked by the moderator. A few totaling errors were also picked up in KwaZulu-Natal.
Sesotho HL	KwaZulu-Natal	There was inconsistency in the allocation of marks in all three of the papers.

#### (iv) Markers' performance

A general improvement in the standard and quality of marking compared to that of 2008 was noted this year. Most markers made a good effort at ensuring quality marking across the nine PDEs.

Some markers, however, were either unnecessarily careless in the calculation of marks or were not sure how to interpret the rubrics in the case of essay-type questions and creative writing in the languages.

Subject / Paper	Province	Findings
Economics	Northern Cape	The deviations in mark allocation were too vast.
Accounting	Limpopo; North West	Marking in these provinces was very poor. In Limpopo, for instance, there were deviations of up to 19 marks in mark allocation.
Geography P2	All	Some markers had a problem in marking Question 4 on GIS. As this is relatively new content, markers were probably not yet familiar with it.
Geography P1	All	Novice markers with limited geographical knowledge had difficulty in marking higher-order and open-ended questions.
Agricultural Science	Some	Markers generally had difficulty in marking questions that required calculation.

#### (v) Internal moderation

The internal moderators played an important role in ensuring quality and consistency in marking. Internal moderation identified marking errors and corrected them in a sufficient manner. The Northern Cape, for instance, was commended for the manner in which internal moderation was executed.

The following findings were noted with respect to internal moderation:

Subject / Paper	Province	Findings
Agricultural Science	KwaZulu-Natal; Limpopo; North West	There were huge differences in the marks allocated by the markers and those of the internal moderator.
Sesotho HL P2	KwaZulu-Natal	The internal moderator(s) did not always pick up candidates' non-adherence to instructions. Candidates were required to choose a long text question and a short one from Section B and C, however some candidates answered short questions in both sections and were credited for both.
IsiXhosa HL P2	KwaZulu-Natal	One candidate answered all three 'seen' poem questions, whereas one 'unseen' poem should have been chosen, the candidate was nevertheless given marks for all three poems.

### (vi) Candidates' performance

Based on the sample scripts externally moderated, the general performance of the candidates ranged from excellent to very poor. There were, however, certain specific questions in which the candidates performed satisfactorily and specific ones in which they performed poorly. This is highlighted in the table below:

Subject / Paper	Province	Findings
Agricultural Science P1	All	Candidates performed poorly in Questions 2.3.4 and 3.1. Question 3.4 was set on organic farming, a new concept in the agricultural sector. It was revealed that the resource materials available to teachers do not include any information on organic farming.
Agricultural Science P2	All	Candidates performed fairly well in the questions set on processing (indigenous knowledge system), however, none of them was able to mention the characteristics of good quality meat, a question more related to Agricultural Management Practices.
Life Sciences	All	The performance was poor in 'Genetics' and 'Evolution and Computation' questions.
Accounting	All	Question 6, regarding 'Cash Budget', was the worst performed question.
Business Studies	All	Questions 3.2; 3.3; 4.3; 4.4; 4.5.1; and 8 highlighted poor candidate performance.
Afrikaans FAL P1	All	It was evident that candidates found the paper too long.
Economics	All	Many candidates struggled to respond appropriately to the data response questions in Section B of the paper.
Mathematics P3	All	Candidates performed best in Questions 4 and 5 and poorly in questions on normal distribution curves and standard deviation as well as on geometry.
Physical Science P1	All	Question 5 on the work-energy theorem had the worst performance. This may be ascribed to incorrect versions of the formula in some texts. A surprisingly good performance in Question 7 on the Doppler effect was noted. This is a new topic that teachers have had difficulty with.

#### **4.1.1 Areas of good practice**

- There has been improvement in the standard of marking and moderation.
- There has been improvement in the performance of learners in Chemistry.

#### **4.1.2 Areas for improvement**

- Additions were made to the final memoranda without the consent of the DoBE and Umalusi.
- The provinces not submitting the memoranda with the scripts made it difficult to determine alternate responses and whether or not there was adherence to the memoranda.
- Some markers did not have the ability and experience to handle higher-order cognitive level questions that required insight and logical reasoning.
- There were instances of inaccurate totaling of marks and incorrect transferring of marks to the cover page.

## **5. CONCLUSION**

The two processes of the verification of marking, namely the memorandum discussions and the centralised moderation of marking, were undertaken well. The memorandum discussions proved to be very effective especially as a result of the introduction of the marking of sample scripts by the discussion panel. This was followed by another round of intensive and critical discussions, which together ensured that all memoranda were of the required standard. After the discussions the external moderators signed off the final memoranda.

The centralised verification of marking attempted to highlight the good practices observed as well as areas that require improvement in marking. These findings will assist in improving the standard of marking in the ensuing years.

A specific area of concern that requires urgent attention is that the provinces need to ensure that suitably qualified and trained markers are appointed to mark.

# Chapter 6

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## Standardisation of examination results

### 1. INTRODUCTION

The 2009 NSC Standardisation Meeting was the second meeting for the new qualification, which was first assessed and standardised in 2008. The 2009 results were standardised based on the following:

- The 2008 raw data and standardisation decisions; and
- Qualitative information emanating from the Umalusi external moderators and the Umalusi Maintaining Standards Project.

### 2. PURPOSE OF STANDARDISATION

The purpose of standardisation is to ensure consistency over time and across assessment bodies. Marks are adjusted where it is found that learners have been unfairly advantaged or disadvantaged in the examination of a particular subject.

### 3. SCOPE OF THE STANDARDISATION

A total of 57 subjects were subjected to the standardisation process at the main Standardisation Meeting. The non-official languages and Equine Studies were, however, standardised at the Standardisation Meeting for the IEB's subjects.

### 4. UMALUSI'S APPROACH TO THE STANDARDISATION OF THE NSC

Umalusi utilises an evidence-based approach to standardisation. Decisions are based on the thorough consideration of historical and situational factors, and careful and systematic reasoning. Umalusi introduced the following measures to facilitate these processes to ensure that standardisation decisions are systematic, appropriate, and fair:

- (i) Historical averages were presented to the Umalusi Assessment Standards Committee in booklet form for each achievement level for each subject to be standardised. These averages were determined by using five-year averages across the nine provinces, as well as combining Higher Grade (HG) and Standard Grade (SG) averages, where applicable. Where subjects were new, hybrid historical averages were constructed from the average performance of learners across provinces and levels (HG and SG) in the past five-year period. In similar cases, up to 10 subjects were incorporated in these hybrid historical averages.
- (ii) 2008 raw and adjusted scores were also used to inform the 2009 standardisation decisions.

- (iii) Pairs analysis' shows correlations between the average performance of learners in the subject being standardised and that in other subjects, e.g., the learners' performance in schools that offer both English Home Language and Visual Arts are compared for both subjects.

Added to the above, evidence-based reports were presented to the Umalusi Assessment Standards Committee with a view to informing the standardisation decisions as follows:

- (iv) 2009 is the second year in which the Maintaining Standards Project was conducted. The 2009 study was conducted for the selected ten 'gateway' subjects. This year's study was useful to the standardisation process in that it provided an evaluation of the cognitive demand of the 2009 NSC examination papers in the selected subjects, it provided an indication of how the 2009 papers catered for the low- and high-performing candidates, and it also gave an indication of the standard and quality of the 2009 question papers in relation to the 2008 ones. The study also included a comparative evaluation of the old and new curricula for selected subjects.
- (v) The Umalusi external moderators presented detailed reports that gave an overview impression of the question papers moderated. The reports also provided an indication of general learner performance based on a sample of scripts moderated.
- (vi) The DoE was given an opportunity to present a report on strategic interventions carried out nationally and provincially.
- (vii) The DoE Internal Moderator and Chief Marker reports were presented, and these provided a post-exam analysis of the question papers, as well as an indication of general learner performance.

The following principles were applied in the standardisation of the 2009 examination results:

- No adjustments, either upwards or downwards, will exceed 10% or the historical average;
- In the case of individual candidates, the adjustment effected should not exceed 50% of the marks obtained by the candidate;
- If the distribution of the raw marks is above or below the historical average, the marks may be adjusted downward or upwards, respectively;
- Computer adjustments are calculated on the principles outlined in the bullets immediately above; and
- Umalusi retains the right to amend these principles as deemed necessary based on sound evidence and educational principles.

## **5. PROCEDURES FOR THE 2009 NSC STANDARDISATION**

- 5.1 A Qualitative Input Meeting was held by Umalusi on the 20<sup>th</sup> December 2009. At this meeting the reports of the Maintaining Standards Project, external moderators, and the DoE strategic interventions were discussed and analysed in preparation for the Pre-Standardisation and Standardisation meetings.

- 5.2 Pre-Standardisation meetings were held by Umalusi on the 28<sup>th</sup> and 29<sup>th</sup> December 2009. These meetings were used to consider the raw marks in relation to all the evidence accumulated relating to the examination results. The Standardisation Meeting was held at the Burgers Park Hotel, Pretoria, on the 30<sup>th</sup> December 2009.

## 6. 2009 STANDARDISATION DECISIONS

The final outcome of the standardisation of the 57 NSC subjects is as follows:

- Raw marks : 41 subjects
- Upward adjustments : 10 subjects
- Downward adjustments : 6 subjects

## 7. VERIFICATION OF THE RESULTING PROCESSES

- 7.1 Umalusi developed its own standardisation, moderation and resulting modules on its mainframe. The same principles and requirements as per the Umalusi requirements and specifications were applied. This system was used to verify the datasets generated by the Integrated Examination Computer System (IECS) and the backup system.
- 7.2 The adjustments approved at the Standardisation Meeting were verified as correct on both the IECS and the backup system.

## 8. AREAS FOR IMPROVEMENT AND RECOMMENDATIONS

### 8.1 Information in the statistical booklets was not accurate

The data on the raw mark distribution for 2008 did not correspond with last year's booklet. The number of candidates reflected in the pairs analysis was also not accurate.

### 8.2 Datasets submitted for verification incomplete

The data sets submitted for verification was incomplete and sometimes not in accordance with the Umalusi specifications. This resulted in a delay of the verification process

#### **Recommendation:**

**The computer system and related functions including the statistical booklets should be ready for verification by Umalusi by no later than the 30<sup>th</sup> June 2010.**

## 8.3 Four subjects need to receive priority attention next year

- Physical Science;
- Mathematics;
- Life Orientation; and
- Accounting.

(i) **Physical Science:** The research report indicates that the curriculum is too challenging in terms of the breadth. The level at which the examination was set is not appropriate for the Grade 12 learners; it is closer to university 1<sup>st</sup> year level.

### **Recommendation:**

**The curriculum needs to be reviewed urgently. It is also recommended that the schools be informed of which sections will be assessed in 2010, based on a reduced assessed curriculum.**

(ii) **Mathematics:** The learners performed poorly even though the paper was set at the appropriate level in line with the SAG. The 2009 paper is viewed to have been more demanding than the 2008 paper, this is mainly because the 2008 paper did not differentiate sufficiently.

### **Recommendation:**

**More vigorous teacher training and learner preparation should be conducted in 2010.**

(iii) **Life Orientation:** Umalusi is concerned about this subject as the marks are much too high in relation to all other subjects. Umalusi does not have any objective way of standardising this subject as it is assessed 100% internally, and the standards vary across and within provinces. The raw marks were therefore accepted because there is no basis on which to standardise the Life Orientation marks.

### **Recommendation:**

**There is a need to establish a basis for the standardisation of this subject. Umalusi recommends that an externally-written component be introduced for this subject, as is the case in the NCV. Externally-set national SBA tasks should also be introduced to set standards for the assessment of this subject.**

(iv) **Accounting:** There is generally poor performance in this subject. The reports, however, indicate that the paper was fair and appropriate. There are indications of a lack of content knowledge, language barriers, poor reading and conceptual skills, and a lack of preparation skills amongst learners. There is also a huge problem with the teaching of this subject. The previous curriculum catered mostly for financial accounting. The curriculum has changed and includes only 30% financial accounting, the rest being management accounting, and aspects of auditing. Many teachers are not equipped to deal with the new curriculum.

**Recommendation:**

**There is an urgent need for very intensive teacher training focusing on the content of the new Accounting curriculum. This must then translate into the effective teaching, learning, and assessment of the subject.**

## **9. CONCLUSION**

The 2009 standardisation process was conducted in a very systematic and as objective as possible manner. The decisions taken to accept raw marks or perform slight upward or downward adjustments were made based on very sound educational reasoning, backed by the qualitative supporting information presented to Umalusi. It is once again worth noting that the majority of the DoE proposals were consistent with those of Umalusi. This is a clear indication of a maturing assessment and examination system.

# Chapter 7

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## Conclusion

The findings of the quality assurance processes given in this report are a clear indication of a maturing system that has, on the one hand, made positive strides towards improvement in certain areas of assessment and examination, but, on the other hand, still has a few challenges that need to be addressed.

There has been a marked improvement in the quality of the 2009 question papers as compared to the 2008 ones when the NSC was first introduced. The 2009 question papers were well-balanced and of the required standard, and the internal moderation conducted by the DoE was generally thorough. Umalusi ensured that the question papers were signed off as print-ready before being dispatched to the provinces, thus ensuring minimal errors relating to the authenticity of the question papers. The one area that needs to be tightened is around the printing of question papers done by the PDEs. The DoE needs to issue instruction on the specifications of the printing program and software to be used for printing. This will address the problems experienced currently where certain aspects of the questions are altered due to printing programs used in provinces.

The standard of marking and moderation has generally improved in that there was noted adherence to the approved marking memoranda. Be that as it may, the provinces are still urged to ensure that suitably qualified and trained markers are appointed so as to address issues where markers are not able to handle higher-order cognitive level questions that require insight and logical reasoning.

SBA continues to present definite challenges that require a review of policy and of implementation processes. It is quite clear that educators need guidance with regard to the development of suitable assessment tasks. This became even more evident in the moderation of Life Orientation where the standard and quality of the tasks varied not only across, but also within provinces. The internal moderation of learner work needs to be taken seriously as this is one of the ways in which proper feedback can be given to learners and in which it can be ensured that SBA maintains its formative aspect. Currently, the internal moderation conducted is mainly in the form of administrative checks for compliance.

The 2009 standardisation process was as objective as possible. The statistical and qualitative inputs presented were able to point towards issues that require crucial attention so as to improve the quality of teaching and learning, as well as assessment. The subjects that stood out as requiring immediate intervention relating to curriculum content and teacher training as well as learner preparedness are as follows: Accounting, Mathematics, and Physical Science. Life Orientation needs to be standardized so as to ensure comparability across the provinces, as well as the validity of the assessment tasks and the reliability of the scores awarded.

In general Umalusi is pleased with the manner in which the 2009 NSC examination was administered. Umalusi acknowledges that a number of technical irregularities were reported, but these were addressed in a fitting manner. The few serious irregularities reported were also afforded proper investigation and resolution to ensure that the credibility of the 2009 NSC examination is maintained. Investigation will still continue in a few other serious irregularities, but these will not impact on the decision taken by Umalusi at its approval meeting held on the 4th January 2010. The decision was to approve the release of results for all provinces with the exception of Mpumalanga.

The release of results for Mpumalanga will be approved pending the outcome of further analysis.

To this end, Umalusi takes this opportunity to express appreciation to the national and provincial departments of education for their concerted effort in ensuring a credible examination. The support and co-operation you gave to Umalusi in line with the quality assurance initiatives did not go unnoticed. We thank you!

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