



# Report on the Quality Assurance of the IEB November 2016 National Senior Certificate Examinations



Council for Quality Assurance in  
General and Further Education and Training

REPORT ON THE QUALITY  
ASSURANCE  
OF THE IEB NOVEMBER 2016  
NATIONAL SENIOR CERTIFICATE  
EXAMINATIONS

---

December 2016

PUBLISHED BY:



Council for Quality Assurance in  
General and Further Education and Training

---

37 General Van Ryneveld Street, Perseus Technopark, Pretoria  
Telephone: 27 12 349 1510 • Fax: 27 12 349 1511 • info@umalusi.org.za

COPYRIGHT 2016  
UMALUSI COUNCIL FOR QUALITY ASSURANCE  
IN GENERAL AND FURTHER EDUCATION AND TRAINING  
ALL RIGHTS RESERVED.

While all reasonable steps are taken to ensure the accuracy and integrity of the information contained herein, Umalusi accepts no liability or responsibility whatsoever if the information is, for whatsoever reason, incorrect, and Umalusi reserves its right to amend any incorrect information.

# TABLE OF CONTENTS

---

<b>EXECUTIVE SUMMARY</b> .....	<b>vi</b>
<b>ACRONYMS AND ABBREVIATIONS</b> .....	<b>ix</b>
<b>LIST OF TABLES AND FIGURES</b> .....	<b>xi</b>
<b>CHAPTER 1 MODERATION OF QUESTION PAPERS</b> .....	<b>1</b>
1.1 Introduction and Purpose .....	1
1.2 Scope and Approach .....	1
1.3 Summary of Findings .....	2
1.4 Areas of Good Practice .....	9
1.5 Areas of Concern .....	9
1.6 Directives for Compliance and Improvement .....	10
1.7 Conclusion.....	10
<b>CHAPTER 2 MODERATION OF SCHOOL BASED ASSESSMENTS (SBA)</b> .....	<b>11</b>
2.1 Introduction and Purpose .....	11
2.2 Scope and Approach.....	11
2.3 Summary of Findings .....	13
2.4 Areas of Good Practice .....	16
2.5 Areas of Concern .....	17
2.6 Directives for Compliance and Improvement .....	17
2.7 Conclusion .....	18
<b>CHAPTER 3 MONITORING THE STATE OF READINESS</b> .....	<b>19</b>
3.1 Introduction and Purpose .....	19
3.2 Scope and Approach.....	19
3.3 Summary of Findings .....	19
3.4 Areas of Good Practice .....	25
3.5 Areas of Concern .....	26
3.6 Directives for Compliance and Improvement .....	26
3.7 Conclusion .....	26

<b>CHAPTER 4 MONITORING OF WRITING .....</b>	<b>27</b>
4.1 Introduction and Purpose .....	27
4.2 Scope and Approach .....	27
4.3 Summary of Findings .....	29
4.4 Areas of Good Practice .....	33
4.5 Areas of Concern .....	33
4.6 Directives for Compliance and Improvement .....	34
4.7 Conclusion .....	34
<b>CHAPTER 5 MARKING GUIDELINE DISCUSSIONS .....</b>	<b>35</b>
5.1 Introduction and Purpose .....	35
5.2 Scope and Approach.....	35
5.3 Summary of Findings .....	37
6.3 Areas of Good Practice .....	39
5.4 Areas of Concern .....	40
5.6 Directives for Compliance and Improvement .....	40
5.7 Conclusion .....	40
<b>CHAPTER 6 MONITORING OF MARKING .....</b>	<b>41</b>
6.1 Introduction and Purpose .....	41
6.2 Scope and Approach.....	41
6.3 Summary of Findings .....	42
6.4 Areas of Good Practice .....	45
6.5 Areas of Concern .....	45
6.6 Directives for Compliance and Improvement .....	45
6.7 Conclusion .....	46
<b>CHAPTER 7 VERIFICATION OF MARKING .....</b>	<b>47</b>
7.1 Introduction and Purpose .....	47
7.2 Scope and Approach.....	47
7.3 Summary of Findings .....	47
7.4 Areas of Good Practice .....	69
7.5 Areas of Concern .....	70
7.6 Directives for Compliance and Improvement .....	70
7.7 Conclusion .....	70

<b>CHAPTER 8 STANDARDISATION AND RESULTING</b> .....	<b>71</b>
8.1 Introduction and Purpose .....	71
8.2 Scope and Approach .....	71
8.3 Summary of Findings .....	71
8.4 Areas of Good Practice .....	73
8.5 Areas of Concern .....	73
8.6 Directives for Compliance and Improvement .....	73
<b>CHAPTER 9 CERTIFICATION</b> .....	<b>74</b>
9.1 Introduction and Purpose .....	74
9.2 Scope and Approach.....	75
9.3 Summary of Findings .....	75
9.4 Areas of Good Practice .....	77
9.5 Areas of Concern .....	77
9.6 Directives for Compliance and Improvement .....	78
9.7 Conclusion .....	78
<b>ACKNOWLEDGEMENTS</b> .....	<b>79</b>
<b>ANNEXURES</b> .....	<b>82</b>

# EXECUTIVE SUMMARY

---

Umalusi is mandated by the General and Further Education and Training Quality Assurance Act (Act no. 58 of 2001, amended 2008) to quality assure all exit-point assessment practices for all accredited assessment bodies. Umalusi uses its own systems, processes and procedures to evaluate, inspect, monitor, and report on the examination products and systems, processes and procedures of both public and private assessment bodies and institutions, in order to drive the development, maintenance and improvement of standards in assessment.

Umalusi quality assures the assessment processes of the Independent Examination Board (IEB). This report presents the findings reported by Umalusi's external moderators and monitors on aspects of the IEB assessment processes and examinations. The information contained in this report serves to inform the Umalusi Council of the processes followed, as well as the areas of good practice and the areas of concern identified during the moderation of question papers and the verification of marking. Based on this information, the Council can take informed decisions regarding the formulation of directives for compliance and improvement, as well as acceptance and approval of the release of the results of the NSC examinations as administered and presented by the IEB assessment body.

Nine aspects of the IEB November 2016 NSC examinations have been quality assured and reported on by Umalusi staff, moderators and monitors. The nine aspects form the nine chapters of this report. Each chapter provides a summary and analyses of the findings on the different quality assurance process:

- Chapter 1: Moderation of question papers;
- Chapter 2: Moderation of school-based assessment (SBA);
- Chapter 3: Monitoring of the state of readiness (SoR);
- Chapter 4: Monitoring of writing;
- Chapter 5: Marking guideline discussions;
- Chapter 6: Monitoring of marking;
- Chapter 7: Verification of marking;
- Chapter 8: Standardisation and resulting; and
- Chapter 9: Certification.

The moderation of question papers and the related marking guidelines for the final NSC examination in October/November is carried out annually. The purpose of the moderation is to ensure that the question papers and the marking guidelines:

- Test the content area adequately;
- Sample the total content area that has to be assessed based on the weighting prescribed in the approved assessment guidelines and curriculum policies;

- Measure the knowledge or abilities it claims to measure; and
- Maintain consistent standards and rigour over the years.

The moderation of question papers and the accompanying marking guidelines of the IEB was conducted between February and August 2016. During this process, 81 question papers were moderated for the November 2016 NSC examinations.

The approval of a question paper is determined by the level of compliance with the quality indicators contained in the Umalusi moderation instruments. The moderation found that the development and internal moderation of question papers was generally good. However, some papers required more than two moderations before final approval. The percentage of IEB papers for the November 2016 that were approved at first moderation amounted to 42%, with 51% of papers being approved at second moderation and 7% at third moderation.

The next aspect of assessment to be subjected to Umalusi moderation was the school based assessment (SBA) which, was conducted in two phases. The first phase occurred in July and August 2016 where Umalusi made an independent sampling of subjects and schools for SBA moderation. Subsequently, the second phase of SBA moderation was conducted in September and October 2016 during the IEB regional moderation process. The SBA moderation requires an evaluation of teacher files and evidence of learner performance to determine the appropriateness, fairness, validity and reliability of assessment practices. This was done with teachers' files and evidence of learners' performance from schools registered with the IEB.

The IEB standards are excellent in many respects; however, pre-and post-assessment moderation in some of the sampled schools is lacking. The moderation of tasks is essential for maintaining quality standards and needs to be addressed by the IEB. In eight (8) out of fourteen (14) of the subjects moderated, internal moderation was noted as either lacking or not evident at the different levels of moderation.

Umalusi also monitored the writing of the examinations. The purpose of this exercise was to ensure that verifiable security was maintained prior to, during and after the writing of the examinations. Umalusi monitored a sample of twenty-four (24) examination centres around South Africa. The IEB continues to enhance the safety and security of examination materials through the provision of electronic lockable security bags to their member schools. The exam centres complied in the main with the requirements as prescribed in the IEB examination policy document and the environment was found to be very conducive to the writing of examinations. Every effort was made to ensure that noise levels were kept to a minimum and lighting and ventilation were good.

One IEB marking centre in Gauteng was monitored on 9 December 2016. The marking centre manager was in possession of well-developed marking plans, thus enabling the smooth conduct of the marking process. All marking personnel arrived on time at the marking centre.

There were adequate security personnel to control the flow of visitors to the centre. The IEB has developed a document that was shared with all marking personnel that outlined procedures to be followed in the event of an irregularity being suspected.

The marking guidelines discussion for the IEB were held for twenty-three (23) subjects, consisting of forty-one (41) papers. The IEB marking guidelines discussion were chaired either by the chief examiner or the internal moderator, who guided and directed the process. As part of standardisation, the panel members marked a sample of scripts, which were then discussed and used to inform the final marking guidelines.

Umalusi's verification of marking for the IEB took place on-site for all twelve (12) subjects comprising of twenty-three (23) papers. The findings reflect evidence of the meticulous way in which the IEB conducts its marking. The marking process could not be faulted, except in Physical Sciences Paper 2 where the moderators were not fully satisfied with the amendment of the marking guideline during marking without following proper procedures; and the limited availability (only for the first three days of marking) of both the chief examiner and internal moderator of History Paper 1.

The subject structures were verified and approved and the electronic data sets were verified before the final standardisation booklets were printed. The following data sets were verified and approved after several moderations: the statistical distribution, the raw mark distribution and the graphs per subject, paying particular attention to different colours and raw mark adjustments. The pairs analysis and the percentage distribution per subject were also verified and approved.

The report provides an overview of the status of certificates, as well as the types and number of certificates, issued by Umalusi to the IEB during the period 1 December 2015 to 1 December 2016.

# ACRONYMS AND ABBREVIATIONS

---

AB	Assessment Body
AMP	Agricultural Management Practicess
CAPS	Curriculum and Assessment Policy Statement
CAT	Computer Applications Technology
CE	Chief Examiner
CEO	Chief Executive Officer
DBE	Department of Basic Education
DHET	Department of Higher education and Training
EGD	Engineering Graphics and Design
EM	External Moderator
ELP	Evidence of learner performance
FAL	First Additional Language
GENFETQA	General and Further Education and Training Quality Assurance
HL	Home Language
IEB	Independent Examination Board
ID	Identification Document
IM	Internal Moderator
IT	Information Technology
KZN	Kwa-Zulu Natal
LO	Life Orientation
MCQ	Multiple Choice Question
NSC	National Senior Certificate

NQF	National Qualifications Framework
QI	Quality Indicator
P1, P2, P3	Paper 1, Paper 2, Paper 3
QAA	Quality Assurance of Assessment
SAG	Subject Assessment Guideline
SAL	Second Additional Language
SBA	School Based Assessment
SE	Sub-Examiner
SoR	State of Readiness
SSE	Senior Sub-Examiner
Umalusi	Council for Quality Assurance in General and Further Education and Training

## LIST OF TABLES AND FIGURES

---

Table 1A	Umalusi criteria for the moderation of question papers
Figure 1.1	Status of question papers at first moderation
Figure 1.2	Number of question papers and marking guidelines approved at each moderation level
Table 1B	Comparison of levels of moderation required in 2015 and 2016
Figure 1.3	Percentage overall compliance of question papers and marking guidelines during first moderation
Figure 1.4	Percentage of compliance question papers and marking guidelines according to different criteria during first moderation
Table 2A	Subjects sampled per region in Phase 1 of SBA moderation
Table 2B	Regions and subjects moderated in Phase 2 SBA moderation
Table 2C	Umalusi criteria for the moderation of SBA
Table 3A	The number of registered IEB 2016 NSC candidates
Table 3B	The number of marking centres and marking personnel
Table 3C	Marking period for the 2016 NSC examinations
Table 4A	Examination centres monitored for the writing of examinations
Table 5A	List of subjects where EM attended the marking guidelines discussion meeting
Table 5B	Umalusi criteria used in marking guideline discussion instrument
Table 6A	Marking centres monitored by Umalusi
Table 6B	Level of compliance in relation to the criteria
Figure 7.1	Average performance of candidates for Accounting Paper 1
Figure 7.2	Average performance of candidates for Accounting Paper 2
Figure 7.3	Average performance of candidates for Agricultural Management Practices
Figure 7.4	Average performance of candidates for Business Studies Paper 1
Figure 7.5	Average performance of candidates for Business Studies Paper 2

Figure 7.6	Average performance of candidates for Consumer Studies
Figure 7.7	Average performance of candidates for Economics Paper 1
Figure 7.8	Average performance of candidates for English HL Paper 1
Figure 7.9	Average performance of candidates for English HL Paper 2
Figure 7.10	Average performance of candidates for History Paper 1
Figure 7.11	Average performance of candidates for History Paper 2
Figure 7.12	Average performance of candidates for Life Sciences Paper 2
Figure 7.13	Average performance of candidates for Life Sciences Paper 3
Figure 7.14	Average performance of candidates for Mathematical Literacy Paper 1
Figure 7.15	Average performance of candidates for Mathematical Literacy Paper 2
Figure 7.16	Average performance of candidates for Physical Sciences Paper 1
Figure 7.17	Average performance of candidates for Physical Sciences Paper 2
Table 8A	List of the standardisation decisions made for the NSC examinations
Table 8B	List of the standardisation decisions made for the Advanced Programmes
Table 9A	Certificates issued during the period 1 December 2015 to 1 December 2016

# CHAPTER 1 MODERATION OF QUESTION PAPERS

---

## 1.1 Introduction and Purpose

Umalusi is mandated to ensure that the National Senior Certificate (NSC) examinations conducted each year are fair, valid and reliable. To perform this function, Umalusi is required to ensure the quality and standards, of all the assessment practices associated with the NSC examinations are maintained. The Umalusi moderation of the examination question papers and their marking guidelines, one of the NSC assessment practices, is conducted to ensure that examination question papers and the accompanying marking guidelines comply with the Curriculum and Assessment Policy Statement (CAPS) and the Independent Examinations Board (IEB) Subject Assessment Guidelines (SAGs).

This chapter reports on the moderation of the IEB November 2016 NSC examination question papers and their marking guidelines. This section outlines the subjects moderated, and the instrument used by Umalusi external moderators (EMs) to determine the quality of the examination questions papers submitted by the IEB for approval. The results of analyses of EMs' reports of question paper moderations are summarised, and followed by areas of good practice, areas of concern and directives for compliance and improvement for future moderation processes.

## 1.2 Scope and Approach

All question papers and marking guidelines of the IEB were submitted to Umalusi and moderated between February and August, 2016. A total of 81 question papers and their marking guidelines were moderated for the November 2016 examinations. The moderation reports for all subjects presented for the November 2016 examinations were analysed for the purposes of this report.

The moderation was conducted using the 2016 Umalusi Instrument for the moderation of question papers. This instrument consists of twelve (12) criteria (Table 1A) for moderating both the question paper and the marking guidelines, and each criterion is divided into a variable number of quality indicators (QIs).

**Table1A Umalusi Criteria for the Moderation of Question Papers and Marking Guidelines**

<b>Part A</b> <b>Moderation of question paper</b>	<b>Part B</b> <b>Moderation of memorandum/marketing guideline</b>	<b>Part C</b> <b>Overall impression and remarks</b>
1. Technical criteria (14) <sup>a</sup> 2. Internal moderation (4) <sup>a</sup> 3. Content coverage (5) <sup>a</sup> 4. Text selection, types & quality of questions (22) <sup>a</sup> 5. Cognitive skills (5) <sup>a</sup> 6. Language bias (8) <sup>a</sup> 7. Predictability (3) <sup>a</sup>	8. Development (3) <sup>a</sup> 9. Conformity with question paper (3) <sup>a</sup> 10. Accuracy and reliability of marking guideline (12) <sup>a</sup>	11. General impression (6) <sup>a</sup> 12. General remarks

<sup>a</sup> Quality Indicators (QIs)

When question papers and their marking guidelines are subjected to the Umalusi instrument, both are expected to be perfect, or near perfect, following internal moderation within the IEB. A question paper, which does not comply sufficiently for approval by Umalusi, will need to be moderated more than once. In this report only the first moderation reports were analysed to ascertain the levels of compliance, or lack thereof, according to the Umalusi instrument. It is important to note that all the concerns detected by the EMs during the first moderation were satisfactorily addressed during subsequent moderations to secure final approval.

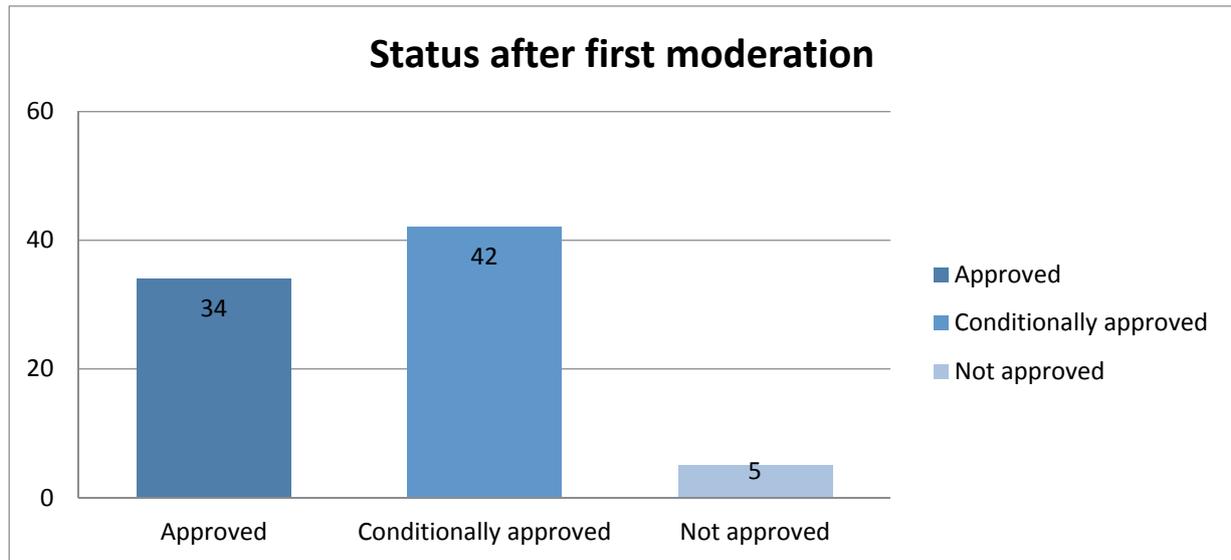
### **1.3 Summary of Findings**

The findings, summarized below, show the number of moderations required for approval, the overall compliance, and the levels of compliance per criterion of the question papers and their marking guidelines at the first moderation.

#### **Compliance per moderation level**

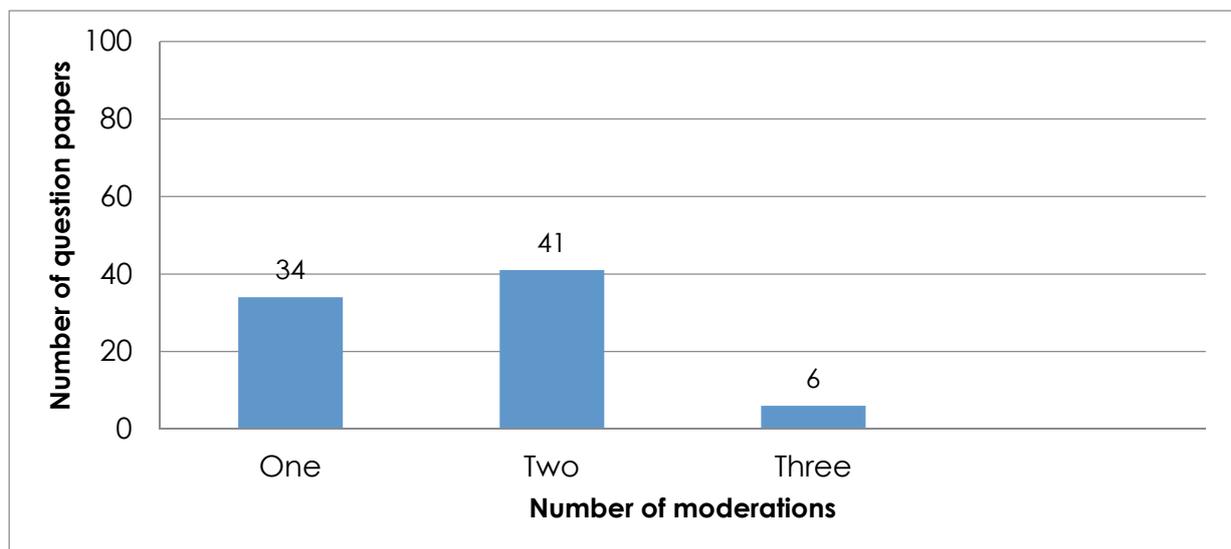
While it is desirable that all question papers and their marking guidelines are approved by Umalusi after the first moderation, this was achieved in only 34 of the question papers (Figure 1.1). Most of the question papers were conditionally approved and five of the question papers (Agricultural Management Practices; Agricultural Sciences Paper 2; Mathematical Literacy Paper 1; Mathematics Paper 2

and Latin SAL Paper 2) were not approved, and were required to be resubmitted for further moderation.



**Figure 1.1 Status of question papers at first moderation**

More than half of the question papers and their marking guidelines required at least two moderations, and six question papers (IsiZulu Home Language (HL) Paper 1; Mathematical Literacy Paper 1; Mathematics Paper 1; Sesotho First Additional Language (FAL) Paper 1; Sesotho HL Paper 1 and Xitsonga FAL Papers 1) required a third moderation in November 2016 (Figure 1.2).



**Figure 1.2 Number of question papers and marking guidelines approved at each moderation level**

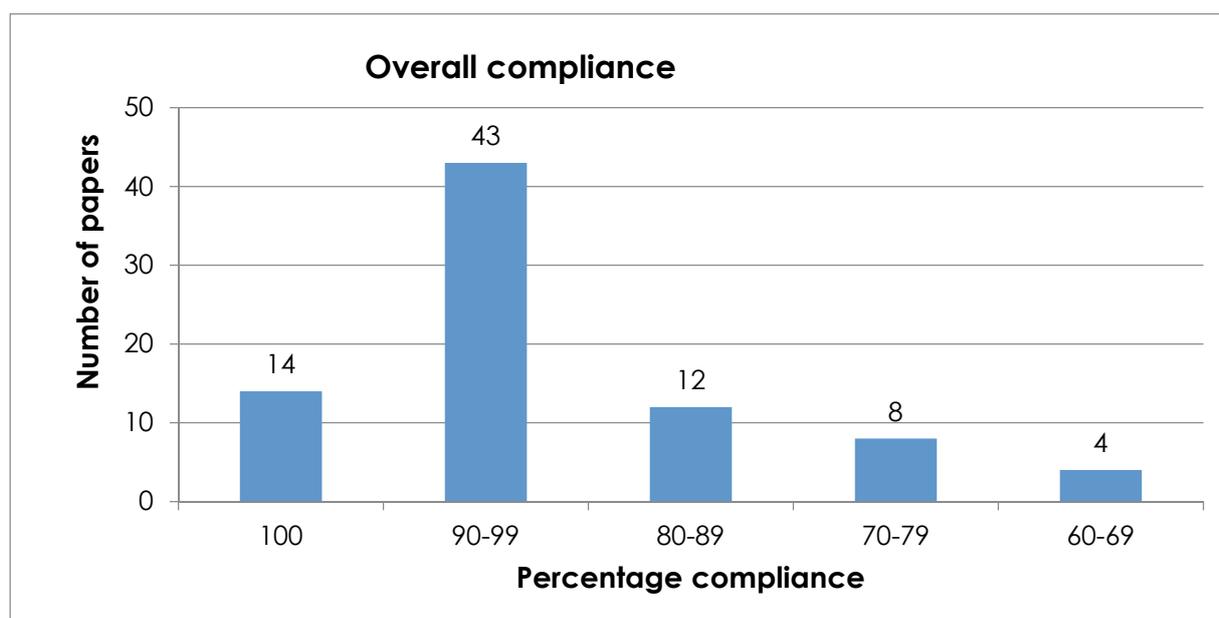
In November 2016, fewer question papers and their marking guidelines required more than two moderations, in comparison to those in November 2015 (Table 1B).

**Table 1B: Comparison of the levels of moderation required in 2015 and 2016**

Number of moderations	November 2015 (% papers)	November 2016 (% papers)
One	45	42
Two	46	51
Three	7	7
Four	2	0

### Compliance per paper

An analysis of the moderation reports to assess the levels of overall compliance in the IEB examination papers and their marking guidelines is shown in Figure 1.3. The overall compliance levels were calculated by combining all the criteria considered.

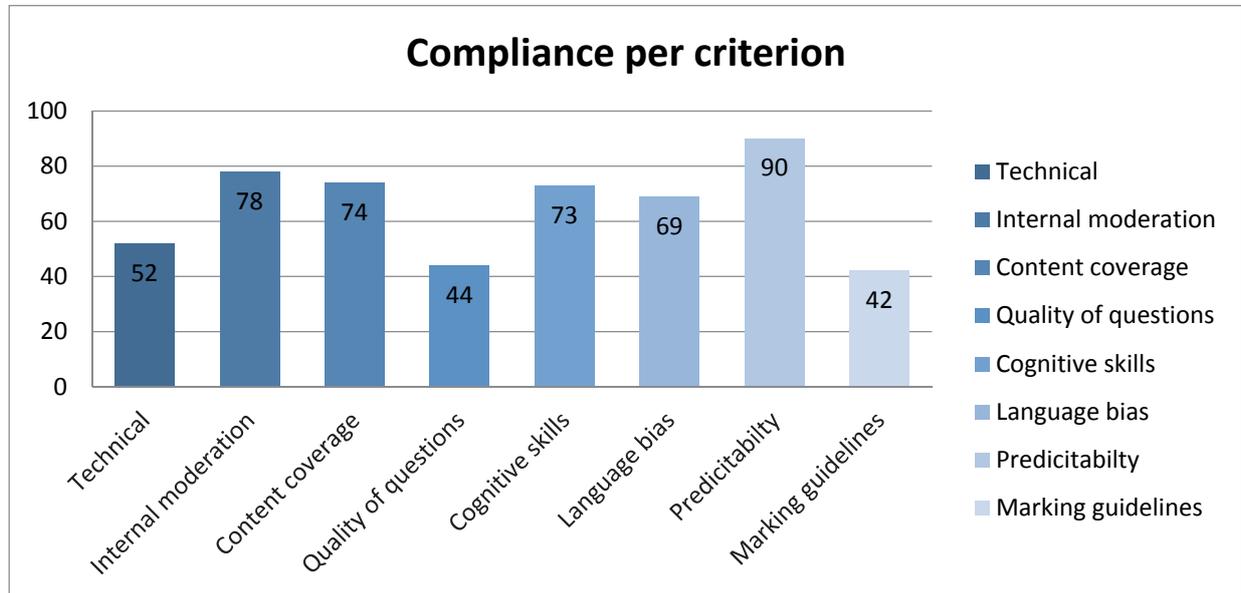


**Figure 1.3 Percentage overall compliance of question papers and marking guidelines during the first moderation**

Most of the question papers for the November 2016 NSC examinations were more than 80% compliant at the first moderation when all Umalusi moderation criteria are considered. The four papers with less than 70% overall compliance were: Agricultural Management Practices; Agricultural Sciences Paper 1 and Paper 2; and Latin Second Additional Language (SAL) Paper 1.

## Compliance per criterion

Despite the relatively high levels of overall compliance indicated in Figure 1.3, the levels of full compliance for different criteria varied considerably at the first moderation (Figure 1.4).



**Figure 1.4 Percentage compliance of question papers and marking guidelines according to different criteria during the first moderation**

In the November 2016 examinations, the highest compliance was observed with respect to predictability, followed by internal moderation, content coverage and cognitive skills, and lowest for the quality of questions and the quality of the marking guidelines.

Some examples of non-compliance are illustrated for each of the criteria below.

### Question paper and marking guideline moderation criteria

The comments about the criteria, which follow, are based on the first moderations. Criteria not met during the first moderations of the November 2016 NSC examinations were addressed by the IEB and were compliant at final moderations.

#### 1.3.1 Technical criteria

Technical criteria had the third lowest degree of compliance (52%). Some technical problems identified in these examinations were: a mismatch in mark allocation between question paper and marking guidelines (Accounting, IsiXhosa FAL Paper 1); mark allocation not clear (Business Studies Paper 2, Consumer Studies, Dramatic Arts, Mathematics Paper 2, Sepedi FAL Paper 1); inconsistent or incomplete instructions (Afrikaans FAL Paper 1 and Paper 2, Afrikaans HL Paper 1, Agricultural Management Practices, Agricultural Sciences Paper 1 and Paper 2, Physical Sciences Paper 1,

Setswana FAL Paper 1 and Paper 2); footnotes or glossary needed (Sesotho HL Paper 1, Visual Arts Paper 1); incorrect format (Sesotho HL Paper 1); incomplete answer sheet(s) (Advanced Mathematics Paper 1 and Paper 2); incorrect numbering (Agricultural Management Practices, Geography Paper 1, IsiXhosa FAL Paper 1); unclear, incomplete or not print-ready diagrams (Agricultural Sciences Paper 2, Engineering Graphics and Design Paper 1 and Paper 2, English HL Paper 1, IsiXhosa FAL Paper 2, Life Sciences Paper 2, Mathematical Literacy Paper 1 and Paper 2, Mathematics Paper 2, Physical Sciences Paper 1, Tourism and Visual Arts Paper 1); not all original texts included (English HL P1); language errors, incorrect wording or omissions of vocabulary (Business Studies Paper 1, Economics, Information Technology Paper 1, Latin SAL Paper 1 and Paper 2); and layout not reader-friendly (Agricultural Management Practices, Agricultural Sciences Paper 1 and Paper 2, Dramatic Arts, Mathematical Literacy Paper 1, Mathematical Literacy Paper 2, Visual Arts Paper 1 and Paper 2, Latin SAL Paper 2).

### **1.3.2 Internal moderation**

Approximately 78% of the question papers were compliant with regard to internal moderation at the first moderation.

Some problems identified were: internal moderation was not sufficiently rigorous (Afrikaans FAL Paper 1, Consumer Studies, English FAL Paper 2, Mathematical Literacy Paper 1, Mathematics Paper 1, Sepedi FAL Paper 1, Sesotho HL Paper 1); and recommendations of internal moderators were not considered by examiners (Advanced Mathematics Paper 1 and Paper 2, Siswati HL Paper 1).

### **1.3.3 Content coverage**

Seventy-four percent (74%) of the question papers were compliant with regard to content coverage at the first moderation. The relatively high level of compliance might be attributed to the design of CAPS, and particularly the IEB SAGs which explicate the specific content to be examined, and the weightings of different components of the content for each subject to be examined.

Some of the problems identified in these examination question papers were: no evidence of content analysis provided, grid not clear, or analyses too general (Afrikaans FAL Paper 1, Agricultural Sciences Paper 1 and Paper 2, Business Studies Paper 2, IsiZulu HL Paper 1) and content not compatible with CAPS and/or SAGs (Agricultural Management Practices, Consumer Studies, Mathematical Literacy Paper 1, Mathematics Paper 1 and Paper 2, Sesotho HL Paper 1, Xitsonga FAL Paper 1, Latin SAL Paper 2).

### **1.3.4 Quality of questions**

The level of compliance with respect to the quality of questions was 44% for these examinations.

Some specific areas of non-adherence to this criterion identified during the first moderation of these examinations question papers were: length of texts (Afrikaans FAL Paper 2); insufficient information given (IsiXhosa FAL Paper 1); type of text selected (Afrikaans FAL Paper 1); cumbersome or confusing language (Afrikaans FAL Paper 2, Business Studies Paper 1, Computer Application Technology Paper 1, Dance Studies, Design, Economics, English FAL Paper 2, History Paper 2, IsiXhosa FAL Paper 1, Mathematical Literacy Paper 2, Mathematics Paper 1, Music Paper 1, Latin SAL Paper 1); incomplete information provided (IsiXhosa FAL Paper 1, Visual Arts Paper 1, Latin SAL Paper 2); spelling and grammatical errors (Siswati HL Paper 1); errors in subject content (Computer Application Technology Paper 1, Hospitality Studies, Information Technology Paper 1, Mathematics Paper 1, Sepedi FAL Paper 2); does not test the full range of practical skills (Computer Application Technology Paper 2); incomplete spectrum of types of questions (English HL Paper 1, Music Paper 1); typographical errors (History Paper 1); contextualisation needs to be improved (History Paper 1, Siswati HL Paper 2); some answers to questions given in other questions (Physical Sciences Paper 2, Xitsonga FAL Paper 1); disproportionate mark allocation between easy and difficult questions or inconsistent mark allocation (Agricultural Management Practices, Agricultural Sciences Paper 1 and Paper 2; Consumer Studies, Dramatic Arts, IsiXhosa FAL Paper 2, Mathematical Literacy Paper 1, Music Paper 1 and Paper 2) and preclusion of creative higher order responses (Siswati FAL Paper 1 and Paper 2, Siswati HL Paper 2, French SAL Paper 1).

### **1.3.5 Cognitive skills**

During the first external moderation process, 73% of the question papers complied with the cognitive skills requirements stipulated in the CAPS and or SAGs for each subject.

Some of the challenges which led to the question papers not comply with this criterion included the following: no analysis grid (Business Studies Paper 2); inappropriate distribution of cognitive skills as per SAGs requirements (Accounting, Agricultural Management Practices, Agricultural Sciences Paper 1 and Paper 2, Consumer Studies, History Paper 1, Advanced Mathematics Paper 2, Mathematical Literacy Paper 1, Mathematics Paper 1 and Paper 2, Music Paper 1, Physical Sciences Paper 1 and Paper 2, Sesotho FAL Paper 1, Sesotho HL Paper 1, French SAL Paper 1, Latin SAL Paper 1) and where choices of questions are offered, cognitive demand differs (Advanced Mathematics Paper 1 and Paper 2).

### **1.3.6 Language bias**

Approximately 69% of the question papers were compliant with regard to language and gender biases.

Some problems identified at the first moderation of these examinations were: grammatical errors (Mathematics Paper 1); confusing instructions or wording (Business Studies Paper 2, Computer Application Technology Paper 1 and Paper 2, English FAL Paper 1, Mathematical Literacy Paper 2, Mathematics Paper 1, Physical Sciences Paper 2, Visual Arts Paper 2, French SAL Paper 1 and Paper 2, Advanced English); diagrams not suited to adjustment for visually impaired (Computer Application Technology Paper 1 and Paper 2); incorrect technical or content language (Consumer Studies, Information Technology Paper 2, Mathematical Literacy Paper 1, Mathematics Paper 1 and Paper 2). In addition, there was incorrect use of language especially in some language subjects.

### **1.3.7 Predictability**

Ninety percent (90%) of the question papers from these examinations were compliant with regard to predictability. Some papers showed evidence of innovative new questioning.

Various problems identified at the first moderation of the November 2016 examinations were: some repetition of questions from previous years' papers (Dance Studies, Mathematical Literacy Paper 1); lack of innovative new questioning (Mathematics Paper 2) and some questions that can be easily spotted or predicted (Xitsonga FAL Paper 1).

### **1.3.8 Marking guidelines**

Few (42%) marking guidelines were compliant with the expectations of this criterion during the first moderations of these examinations than for any other of the criteria. This is possibly because some IEB examiners and internal moderators are becoming more reliant on their marking guideline meetings to perfect their marking guidelines.

Examples of non-compliance with respect to this criterion were: a mismatch between question paper and marking guideline (Agricultural Sciences Paper 1 and Paper 2, Advanced English, Advanced Mathematics Paper 1 and Paper 2, Consumer Studies, Physical Sciences Paper 1, Sesotho HL Paper 1, Tourism, Xitsonga FAL Paper 1, French SAL Paper 1); rewording necessary (Sepedi FAL Paper 1); not marker friendly (Agricultural Management Practices, Agricultural Sciences Paper 1 and Paper 2, Dance Studies, IsiXhosa FAL Paper 1, Sepedi FAL Paper 2); inaccurate subject matter (Accounting Paper 1 and Paper 2, Afrikaans HL Paper 1, Business Studies Paper 1, Dramatic Arts, English HL Paper 1, History Paper 1, IsiXhosa FAL Paper 1, Mathematical Literacy Paper 1, Mathematics Paper 1, Physical Sciences Paper 1, IsiZulu FAL Paper 1, Siswati FAL Paper 1 and Paper 2, Siswati HL Paper 1 and Paper 2,

Tourism, Latin SAL Paper 1); a need for expanded marking guidelines and/or inclusion of alternate answers (Afrikaans HL Paper P1, Afrikaans FAL Paper 1, Consumer Studies, Dance Studies, Design, English HL Paper 1, History Paper 1, Mathematical Literacy Paper 1 and Paper 2, Mathematics Paper 1 and Paper 2, Physical Sciences Paper 2, Sepedi FAL Paper 2, Siswati FAL Paper 1 and Paper 2, Siswati HL Paper 1 and Paper 2, Tourism, Latin SAL Paper 1 and Paper 2); where the allocation of marks within answers was not clear (Dance Studies, Dramatic Arts); mark allocation not in accordance with SAGs (Setswana FAL Paper 1); and no evidence provided to support that the marking guideline was developed in tandem with the question paper (Computer Application Technology Paper 1 and Paper 2).

Other minor ways in which marking guidelines were compromised were the presence of typos and a lack of correlation between the numbering of the marking guidelines and the question papers.

#### **1.4 Areas of Good Practice**

The following areas of good practice were noted:

- The IEB is commended for the improvement in the percentage of question papers (93 %) that were approved during the first and second moderations in 2016 as compared to (91%) in 2015.
- External moderators commended the IEB examiners and internal moderators of the following subjects: Afrikaans HL Paper 2, Geography Paper 2, IsiZulu FAL Paper 2, IsiZulu FAL Paper 2, Sepedi HL Paper 1, Sepedi HL Paper 2, Xitsonga FAL Paper 2, German HL Paper 1, Paper 2 and Paper 3 (DBE), German HL Paper 1 and Paper 2, German SAL Paper 1 and Paper 2. These papers were all approved at the first external moderation and also achieved 100% overall compliance.
- External moderators commented on the innovative and creative questions which appeared in some question papers.

#### **1.5 Areas of Concern**

The following areas of concern were identified during the external moderation of the IEB November 2016 question papers:

- A lack of rigorous internal moderation, which resulted in five of the question papers not being approved during the first external moderation. These examinations papers are: Agricultural Management Practices; Agricultural Sciences Paper 2; Mathematical Literacy Paper 1; Mathematics Paper 2 and Latin SAL Paper 2.
- The failure by both examiners and internal moderators to address recurrent non-compliance that led to some papers (7%) requiring more than two moderations. The six examinations papers concerned are: IsiZulu HL Paper 1;

Mathematical Literacy Paper 1; Mathematics Paper 1; Sesotho FAL Paper 1; Sesotho HL Paper 1 and Xitsonga FAL Paper 1.

- There is still some inconsistency in how some examiners and internal moderators interpret higher order cognitive skills.

## **1.6 Directives for Compliance and Improvement**

The following directives are given to improve the development of NSC examination question papers and to reduce the number of external moderations. The IEB should:

- Address the conduct of those examiners and internal moderators whose papers repeatedly failed to adhere to the requirements for compliance, which resulted in their papers requiring more than two external moderations;
- Retrain some (maybe new) examiners and internal moderators in the art of setting of question papers, especially with respect to: the technical details, the quality of questions and the development of marking guidelines – the three criteria which had the lowest levels of compliance at the first moderations; and
- Continue to develop strategies to improve examiners and internal moderators' abilities to identify and set higher order questions, and balance the distribution of the cognitive levels within question papers.

## **1.7 Conclusion**

This chapter of the report summarized the major findings of the analyses of the external moderators' reports for the moderation of IEB question papers and their accompanying marking guidelines for the November 2016 NSC examinations. Generally, the external moderators reported satisfaction with the question papers that were finally approved, and this is commendable. This section of the report has also highlighted directives for compliance which the IEB will need to address before the next moderation cycle to ensure that the majority of the question papers are approved during the first level of moderation.

# CHAPTER 2 MODERATION OF SCHOOL BASED ASSESSMENTS (SBA)

---

## 2.1 Introduction and Purpose

The National Senior Certificate (NSC) is structured in such a way that the final mark obtained by a learner comprises of both school based assessment (SBA) and the end of year examination. In all subjects, except for Life Orientation and subjects with a practical component, the SBA mark contributes 25% of the final mark attained by a learner. In Life Orientation, the resulting mark at the end of the year is 100% school based whilst it is 50% for subjects with a practical component. The school based assessment is externally moderated by Umalusi to ensure that the assessment instruments used are of the required standard and quality, that they are valid and fair and that the results of learner performance can be reliable.

The focus of this chapter is to summarise the findings of the Umalusi external moderators' (EMs) verification of samples of teacher and learner SBA evidence files. Areas of good practice, as well as areas of concern, are identified followed by directives for compliance and improvement.

## 2.2 Scope and Approach

In 2016, Umalusi external moderators moderated the Independent Examination Board (IEB)'s SBA in two phases. The subjects and schools for SBA moderation in the first phase were independently sampled by Umalusi and moderation took place in three regions, namely; Gauteng, Western Cape and Kwa-Zulu Natal. The sampled subjects at schools were those with a difference of more than 15% between the SBA mark and the examination mark in the 2015 end of year Grade 12 results. Umalusi also requested the schools selected for SBA moderation to submit their 2015 end of year Grade 11 examination question papers in all the sampled subjects to ascertain their quality and standard and to check their compliance against the requirements as outlined in the IEB Subject Assessment Guidelines (SAGs).

In Phase 2, Umalusi moderated the SBA in subjects sampled by the IEB in two regions, namely; Kwa-Zulu Natal and Gauteng. Tables 2A and 2B below show the regions and subjects sampled for phase 1 and phase 2 SBA moderation respectively.

**Table 2A: Regions and subjects sampled in Phase 1 of SBA moderation**

Region	Sampled subject
Gauteng	Accounting

Region	Sampled subject
KwaZulu-Natal	Afrikaans First Additional Language (FAL)
	Computer Applications Technology
	Dramatic Arts
	Economics
Western Cape	English Home Language (HL)
	Geography
	History
	Information Technology
	Life Orientation
	Life Sciences
	Mathematical Literacy
	Mathematics
	Physical Sciences

**Table 2B: Region and subjects sampled in Phase 2 SBA of moderation**

Region	Subject
KwaZulu-Natal	Economics
	Geography
	History
	Information Technology
	Physical Sciences
Gauteng	Life Orientation

### **Moderation instrument**

The moderation instrument for the SBA consists of three parts, as depicted in Table 2C below. Part A consists of seven criteria focusing on the moderation of the teacher files. Part B has three criteria focussing on the moderation of the evidence of learner

performance (ELP). The last part of the instrument, Part C, consists of three criteria that summarise the findings.

**Table 2C: Umalusi criteria for the moderation of SBA**

Part A Moderation of Teacher portfolios	Part B Moderation of learner portfolios	Part C Summary
1. Technical criteria 2. Content coverage 3. Quality of tasks 4. Cognitive demand 5. Quality of marking tools 6. Adherence to policy 7. Internal moderation 8. Overall impression	9. Learner performance 10. Quality of marking 11. Internal moderation	12. Areas of good practice 13. Areas of concern 14. Recommendations

The combined findings of the moderation of SBA for all of the subjects moderated are then combined into one consolidated report. The findings of the analyses of 47 consolidated reports (42 from phase 1 and 5 from phase 2) are summarised in Section 2.3 below.

## 2.3 Summary of Findings

This section summarises the findings as outlined in the SBA moderation reports of the various subjects for both phase 1 and phase 2. The findings are presented based on the eleven criteria outlined in the Umalusi SBA moderation instrument.

### 2.3.1 Teacher portfolios

#### **Technical criteria**

Generally, the overall presentation and organisation of files was good across the subjects. In the Gauteng region, design grids, completed when setting the assessment tasks, were found in some schools. In a few subjects, for instance Accounting, some tasks were found to be lacking technical aspects such as the time allocation and mark allocation. No dates of assessment were indicated on the assessment papers provided to learners in some schools in Afrikaans First Additional Language (FAL) and Life Sciences. Time allocation of the Grade 11 examination question papers differed from one school to the other in Accounting, Afrikaans FAL

and Life Orientation (LO). Spelling and grammatical errors were observed in Dramatic Arts in one of the schools in the Gauteng region. Furthermore, one of the schools failed to follow a standardised protocol as required by the assessment body for Dramatic Arts. One of the schools failed to include the assessment instruments and tools in the teacher files for Geography.

### **Content coverage**

All the subjects verified during phase 1 and phase 2 of SBA moderation, were found to be fully compliant with content coverage as prescribed in the IEB SAGs and the Curriculum and Assessment Policy Statement.

### **Quality of tasks**

Most of the subjects moderated met the requirements of this criterion. In cases where there was only partial compliance, the tasks were found to be poorly constructed and as a result, compromised the quality. This was found to be the case in subjects such as Accounting, Mathematics and Mathematical Literacy in a number of schools in all the three regions. It was also noted that in some schools, the June and the preliminary examination question papers were recycled through cut and paste in subjects such as Life Sciences and Economics. This practice always makes question papers easily predictable and therefore compromises the reliability of the assessment outcomes.

### **Cognitive demand**

An attempt to satisfy the requirements for the distribution of cognitive demands in the various assessment tasks across subjects has been observed in a number of schools. The distribution of marks in the assessment tasks was generally correct and according to the norms as stipulated in the SAGs. For example, cognitive demand of tasks reflected the full range of cognitive levels in History. Furthermore, in Information Technology the tests were of an appropriate level and academically rigorous at lower, middle and high levels.

However, it was noted in the following subjects that the tasks were not addressing all the cognitive demands as stipulated in the SAGs: tests were not providing learners with the opportunity to read and/or write extensively as is required by the year-end examinations (Life Sciences), some of the tasks were not balanced as they assessed more lower order cognitive demands than prescribed in the SAGs (Accounting, Geography, Mathematics, Dramatic Arts, Economics and Life Orientation). In addition, Mathematics some of the tasks did not assess difficult problem solving type of questions adequately as outlined in the CAPS content topics. It was further noted that all the assessment tasks included in the teacher evidence files were not accompanied by cognitive demand analysis grids, which contributed to the lack of compliance with this criterion in most subjects verified with the exception of Afrikaans FAL, History and Geography.

### **Marking tools**

The designed marking tools were found to be objective and appropriate in general across all the subjects verified. A level of improvement in this aspect was also noted during Phase 2 moderation compared to Phase 1.

However, some schools were found to be struggling with the formulation of the marking guidelines, including mark allocation and distribution, especially in subjects such as Economics, Physical Sciences and Life Orientation. This difficulty led to inaccurate marking. A vague rubric with very subjective criteria was used in some schools to assess the project task in Accounting. Inconsistency in marking and acceptance of incorrect responses as correct, were observed in Economics in one of the five (5) schools moderated. In Physical Sciences, leniency in the marking of laws/statements and force diagrams, and omission of other alternative answers in the marking guidelines, was observed in one of the sampled schools.

### **Adherence to policy**

Most of the schools adhered to this criterion since they complied with the SBA requirements as stipulated in the IEB SAGs. For example, it was clear in Information Technology (IT) that the schools' moderation has adhered to the IEB SAG for IT and had a planned programme of assessment. The teachers implemented and adhered to the prescribed assessment plan for the subject. As per policy, the schools administered an OOP test, SQL test, Normalisation test, Data Aware Components test, Theory tests and the June Practical and Theory examinations.

However, the absence of some critical documents in the teacher evidence files, such as assessment policies was raised as an area of concern in the following subjects: Geography, Accounting, Afrikaans FAL, Life Sciences, Information Technology, Mathematics, and Mathematical Literacy.

### **Internal moderation**

The compliance level for this criterion was found to be the lowest when compared to the others. In most schools, there was lack of evidence of internal moderation in the teacher files, lack of evidence that pre-moderation of tasks is taking place before tasks are administered, shadow marking and a lack of feedback to both teachers and learners.

## **2.3.2 Moderation of learner performance**

### **Learner performance**

The evidence of learner performance (ELP) in the samples moderated showed a range of work from very poor to excellent. Absence of evidence of effecting corrections with learners in all subjects after the administration of assessment tasks,

was raised as a concern since doing corrections of mistakes may well inform learning.

### **Quality of marking**

In most cases, marking was of an acceptable standard and marking guidelines were followed by most schools. However, there were cases where learners were either advantaged or disadvantaged by incorrect marking guidelines, for example in Economics at one of the schools. Furthermore, only two schools provided learners with constructive feedback after every assessment task provided (for example, in Life Sciences).

### **Internal moderation**

It is encouraging to note that in some schools and clusters, moderation was conducted and the compliance levels for this criterion has also shown improvement during Phase 2 of SBA moderation as compared to Phase 1. In Geography, for example, it was noted that most schools had even included the history of assessment tasks in the form of drafts, and in addition, the stages of developing the tasks or question papers was noted until they had reached the level of approval.

However, in some subjects such as History, it was noted during Phase 2 of SBA moderation (IEB regional) that there was an absence of internal moderation at some schools and this was a cause for concern. The quality of the internal moderation of learner work in the following subjects: Accounting, Geography, Life Sciences, Physical Sciences, Mathematics, Mathematical Literacy, Dramatic Arts, and Afrikaans FAL, during both phases of SBA moderation, was not rated high by the EMs. Internal moderation across the moderation levels consisted mostly of a signature and shadow marking of learner work.

## **2.4 Areas of Good Practice**

The following are areas of good practice as observed during the moderation of IEB's SBA:

- Teacher files were found to be meeting the requirements of the IEB subject assessment guideline and both teacher and learner evidence files were found orderly arranged and easily accessible;
- Learners were found to be performing well in general in all the assessment tasks administered;
- The mark sheets containing learner marks for the formal assessment tasks were found in the teacher files in subjects such as Geography, History and Accounting;
- The assessment tasks adequately covered the prescribed topics and sub-topics in most subjects;

- Effective and rigorous moderation at both school and regional levels was noted;
- The design grids, which were completed when setting the assessment tasks, were found in some schools. The availability of the historical evidence when setting papers in Geography was observed in most of the schools sampled for external moderation; and

## **2.5 Areas of Concern**

The following are areas of concern noted during IEB's SBA moderation:

- The technical aspects of the tasks such as the time allocation and mark allocation were not indicated on the assessment tasks in some of the schools verified in the following subjects: Accounting and Physical Sciences, where non-correlation of the total mark and the duration of the assessment paper was detected;
- It was noted in some schools moderated, that moderation of learner tasks was not conducted. It was further noted that the assessment tasks were not moderated at all levels of moderation as prescribed by the SAG, for example, in Accounting in some of the schools sampled during the first phase of SBA moderation;
- There was no evidence of internal moderation in both the teacher and learner files in some schools in Accounting, Information Technology and History. In Geography, the assessment instruments and tools were not kept in files, for example, it was found that both topographical map and orthographic photo for June Paper 2 were not included in the files. It was observed that in some subjects, for example, Afrikaans FAL, Accounting, Economics and Information Technology, insufficient feedback or no feedback was provided to learners and teachers after marking and moderation respectively;
- The questions set in some of the assessment tasks in some schools were found to be cognitively low and not suitable for grade 12 level. It was further noted that some tasks mainly addressed lower and middle order cognitive demands, for example, Accounting. Lack of balancing of the cognitive demand as per IEB SAG was also noted in Mathematics and Mathematical Literacy.

## **2.6 Directives for Compliance and Improvement**

In order to improve, the IEB should address the following:

- The technical aspects of the assessment tasks need to be improved to ensure that the tasks are valid and reliable and do not unfairly disadvantage the learners;
- All the assessment tasks need to be internally moderated and evidence of such moderation should be made available in the teacher files; and

- All the assessment tasks need to address the various cognitive levels and ensure that problem solving questions are included where applicable.

## **2.7 Conclusion**

This section has highlighted the findings of the moderation of a selection of IEB teacher files and evidence of learner performance across a range of subjects. Most of the schools moderated have shown acceptable compliance to the required standards in the implementation of school based assessment as stipulated in the IEB SAGs. Some areas of good practice in the implementation of SBA have been noted in a number of subjects across schools.

# CHAPTER 3 MONITORING THE STATE OF READINESS

---

## 3.1 Introduction and Purpose

Umalusi is the Quality Council responsible for the General and Further Education and Training Qualifications sub-framework. Umalusi has the responsibility to ensure that the conduct, administration and management of examinations is credible. As part of its mandate, Umalusi verifies the extent to which assessment bodies are ready to conduct the national examinations.

The purpose of this report is to provide an update on the state of readiness of Independent Examinations Board (IEB) to administer the November 2016 National Senior Certificate (NSC) examination.

## 3.2 Scope and Approach

The external monitoring by Umalusi was intended to verify the appropriateness of examination processes and procedures that the Independent Examination Board (IEB) has put in place to conduct the November 2016 NSC examinations.

Umalusi officials conducted verification process of the state of readiness of the IEB. Data was collected through observations, interviews, and verification and observing presentations of IEB officials and systems, using pre-determined audit tools. The findings, areas of good practices, areas of concerns and directives for compliance and improvement are detailed hereunder.

## 3.3 Summary of Findings

Umalusi officials visited the Independent Examination Board for the state of readiness verification. The following are the findings of the visit:

### 3.3.1 Registration of candidates and examination centres

#### a) Registration of candidates

Table 3A provides the number of registered IEB candidates for the 2016 NSC examination.

**Table 3A: The number of registered IEB 2016 NSC candidates**

Category	NSC
Full-Time candidates	11 821
Full-Time Candidates in other countries	472
Private Candidates in other countries	32

Schools as examination centres, register candidates online. The learners' details are verified against the identity documents they submit. Verification is done at the point of registration at the school level. Registration data is rolled over from the previous year. The assessment centre ensures the accuracy of registration by sending preliminary schedules of registration once per quarter. Schools had up to the 31 August 2016 to rectify errors on the candidate registration data. After the 31 August 2016 the system was locked, as a result no school had access to the system. Changes on the candidate registration data on the system could only be effected by the system administrator. Each time when a preliminary schedule was sent to schools for verification of candidates' details, the candidate, parent and the school principal signed the declaration of accuracy of data. The parent/guardian consent forms signed by the parent/guardian were availed as evidence to this effect. Each time a school made changes to candidate registration data the assessment body received notification. The system automatically resends the system administrator a message detailing the changes effected by the schools on the system.

Subject changes were finalised by the 31 March 2016. Subject changes were done in line with policy which is in sync with the regulations regarding subject changes. Most changes were of candidates who had registered to do both Mathematics and Mathematical Literacy and were dropping Mathematics.

The assessment body has candidates who are registered to write the examination in Swaziland and Namibia. Candidates register as early as in grade 9 and can only register at the assessment body offices.

#### **b) Registration of examination centres**

Two hundred and thirty (230) examination centres were registered for 2016 NSC examinations. By the time of the verification visit the IEB examination centres were not audited, however, the IEB indicated that the examination centres which experienced problems during the writing of the November 2015 NSC examinations are among those targeted for audit in the November 2016 NSC examinations. In addition, centres which physically moved their premises will be prioritised for audit. However, the IEB indicated that the audit of examination centre will be conducted during the monitoring of the writing of examinations. There are eight (8) schools writing the November 2016 NSC examinations for the first time with IEB. The new

examination centres were given self-evaluation instruments; followed by application for registration; then the IEB conducted the audit for the approval of the centre. The registration of a new examination centre cannot be approved if the centre does not meet the set criteria. IEB does not have NSC centres with a history of serious irregularities, therefore there are no centres categorised as high risk examination centres.

### **3.3.2 Conduct of internal assessment**

IEB developed a policy and a manual for moderation of SBA. The manual is reviewed annually. The policy and the manual are found in the *handbook for the conduct of the NSC examinations*. The SBA requirements for every subject can be found in the Subject Assessment Guidelines.

No formal training is conducted with regard to the implementation and management of internal assessment to schools, however, if schools require special intervention, based on the previous year's results, they are mentored by the regional moderator or experienced teacher in the area. Internal assessments are monitored during two cluster meetings that take place annually. The IEB appoints regional moderators to moderate the tasks in specific regions.

The IEB does not handle manual mark sheets. The schools must capture the mark on-line using the on-line web application. All marks are expected to be captured by 15 November 2016. The web application is then closed and schools can no longer access their marks. The IEB then sends a printout schedule of all the marks to schools so that schools can verify and confirm the accuracy of captured marks. Any changes to the marks must be communicated to IEB by the academic head of the school. At the end of the year, a print out of marks is sent to the assessment specialists of IEB. The assessment specialists randomly check and verify the marks entered against the SBA files that were sent for national moderation.

### **3.3.3 Printing, packaging and distribution**

#### **a) Printing and packaging**

Printing is outsourced and the contract is renewed annually. There was evidence that the existing contract was signed in July 2016. The IEB indicated that the staff at the printers signed confidentiality and oath of secrecy forms issued by the IEB. The plans for the printing have been developed and verified.

Examination timetable is used as the guide for drafting the printing plan to ensure that the printing process is managed effectively. The IEB indicated that the printing site is compliant to the norms and standards for the safety and security of examination materials as the printing site is fitted with alarms, surveillance, biometrics, burglar bars and a security guard on site. Umalusi planned to verify this data during the site verification visit.

Monitoring of printing is conducted once a week and sometimes random unannounced visits are also conducted. Automated printing machines are used and the operator is always on site. Spoil papers are shredded immediately.

The IEB permanent staff members are responsible for packaging of examination materials. The IEB staff were not vetted, however, confidentiality forms are signed annually.

All plans for packaging and distribution found to be in place. Evidence was produced and verified.

The packaging area was under renovation and extension at the time of the visit. The packaging area storage room is monitored by cameras and biometrics. The question papers are quality assured by the IEB packaging staff on delivery.

## **b) Distribution**

Delivery to different examination centres is done by IEB and the selected courier services. The first delivery is for the first week of examinations, thereafter papers are delivered fortnightly. The IEB uses different modes of delivery of examination materials: through courier services to centres, collection by headmasters, to a central nodal point for collection by neighbouring schools; by air to areas that are geographically distanced from the IEB Head Office - escorted by an IEB official, as from this year, and finally some deliveries will be done by the IEB. The distribution of examination materials is managed by IEB staff who escort the cargo.

The delivery and receipt of consignment is well managed and the plan is communicated in advance. Courier services are under constant surveillance and tracking. The use of electronic locking system for packaging of examination materials and the locking seals for containers from the printing side to the printing area enhances the safety and security of examination materials.

### **3.3.4 Conduct of examinations**

#### **a) Appointment and training of invigilators**

The CEO of the IEB appoints the school headmasters as chief invigilators. The headmasters may delegate the function but not the responsibility. Training for all new schools and new chief invigilators was conducted in May and September 2016 respectively.

#### **b) Monitoring**

Monitoring will be conducted by both internal and external monitors using Umalusi monitoring instrument. The assessment specialists, managers and other senior officials of IEB, planned to monitor each school at least once every two years.

By the time of the visit the IEB monitoring instrument was issued to school and schools were expected to return it by 30 September 2016. In turn, the completed instrument will be used for verification during the monitoring of the writing of examinations. Manuals for monitoring have been prepared and issued to external moderators in preparation for the training of external monitors.

Some internal monitors such as those for Life Sciences have already undergone training but others will be trained before the commencement of the examinations.

### **c) Management of irregularities**

There is no recorded history of irregularities with any of the examination centres. However, isolated incidents of suspected irregularities from different examination centres have been identified. In case of irregularities, schools through their School Irregularities Committee, follow the general regulations of dealing with irregularities and inform IEB accordingly.

### **3.3.5 Appointment and training of marking personnel**

Table 3B below indicates the number of marking personnel involved in the November 2016 NSC marking process.

**Table 3B: The number of Marking Centres and Marking Personnel**

<b>Marking centres and personnel</b>	<b>Number NSC</b>
Marking centres	3
Markers	1859
SBA moderators	35
Examination assistants	350
Examiners (chief examiners)	97
Internal moderators	68

### **a) Appointment of markers**

An advertisement for the posts of examiners and internal moderators was sent out in a circular to schools at the beginning of January. Examiners and internal moderators are appointed for a three-year cycle.

A selection panel consisting of the CEO, senior manager: support services and the assessment specialists finalise all appointments.

### **b) Training of marking personnel**

Training will be done on the day of marking. Copies of the scripts will be sent to the examiner and internal moderator of the examination paper before the marking session begins. The examiner and internal moderator must mark these scripts as preparation for the standardisation discussions at the marking centre.

### **3.3.6 Marking centres and centre managers**

#### **a) Marking centres**

The marking centres are IEB schools. They are selected because they have the required facilities. The marking centres are: SAHETI School, Kingsmead College, St Henry's Marist College-Durban, St Stithians College, Roedeane School, St John's College and IEB Offices. Roedeane School, St John's College are close to each other to facilitate the transport arrangements. The table below gives the details of the marking period for the 2016 marking process.

Table 3C below gives the details of the marking period for the 2016 marking process.

**Table 3C: Marking period for the 2016 NSC examinations**

Marking	NSC
Commencement	9 December 2016
Termination	15 December 2016

#### **b) Centre managers**

The marking centre managers have been appointed. They are IEB staff members who work in the Events Section. There was no need for them to be trained. The management of marking centre is part of their job profile.

### **3.3.7 Capturing and release of results and certification**

#### **a) Capturing and resulting**

The capturing of external assessment marks is done in-house by data capturers who are staff members working in the entry and resulting section. Temporary data capturers are also appointed. The manager is the super administrator who is able to grant access to various modules. There is an audit trail in the system that can check when any changes are made. IEB uses a double capture system. Schools capture

their own internal assessment marks. Capturing staff signs a declaration of confidentiality.

### **b) Certification**

There are five (5) people who are responsible for certification. The manager of the certification process is a permanent staff member of IEB.

#### **3.3.8 State of readiness of centres**

This section of the report captures information on the state of readiness of the IEB examination centres. The state of readiness of all new IEB centres will be verified during the monitoring of examinations.

### **a) Findings**

Registration process and return of preliminary schedule has been completed by all examination centres.

Collection and return of examination material will be handled by chief invigilators at the examination centres. All centres have adequate secured storage facility for the examination materials. The examination materials are collected and returned on a daily basis. The headmasters were appointed as the chief invigilators in July 2016 but they may delegate the function and remain responsible and accountable. The process of appointing and training of invigilators was ongoing at the time of conducting the state of readiness.

None of the centres had any previous incidents of irregularity reported. Adequate measures are put in place by all centres to avoid any form of irregularity. IEB has a committee to deal with irregularities.

### **3.4 Areas of Good Practice**

- Registration process of candidates is completed effectively on-line and parents are required to check the accuracy of learners' information, confirm and sign individual learners letter;
- Packaging is done by permanent staff members at IEB offices;
- Restricted entry to the packaging and storage area;
- Training of new chief invigilators is repeated;
- Criteria for the appointment of markers are clearly stated and all marking personnel have been appointed; and
- All marking centres have been identified and secured and centre managers are IEB staff members.

### **3.5 Areas of Concern**

- The limited number of cameras in the packing area poses security risk;
- Control measures for retrieval of exam stationery at the exam centres are not in place;

### **3.6 Directives for Compliance and Improvement**

- The IEB should put stringent measures in place to ensure that the security of the area where packaging of question papers does not pose high security risk for paper leakages; and
- Control measures should be in place for shredding and disposal of waste material.

### **3.7 Conclusion**

The verification of state of readiness of Independent Examinations Board has confirmed that IEB is compliant to most state of readiness requirements to administer the November 2016 NSC examinations. The IEB must consider the directives for compliance and improvement as noted in this report in order to fully comply to administer the November 2016 NSC examinations.

## CHAPTER 4 MONITORING OF WRITING

---

### 4.1 Introduction and Purpose

In terms of the General and Further Education and Training Quality Assurance (GENFETQA) Act (No 58 of 2001, as amended in 2008), Umalusi has the mandatory obligation of ensuring that the examinations for all the qualifications that it certifies, are conducted, administered and managed in a credible manner by assessment bodies.

In verifying the credibility of the writing of examinations, Umalusi undertook a rigorous and extensive monitoring of the conduct of the National Senior Certificate examinations that were administered and managed by the IEB.

This chapter provides an overview of the findings gathered during the monitoring of the conduct of the writing of examinations, and further reflect on the areas of good practice, areas of concern and provide directives for compliance and improvement.

### 4.2 Scope and Approach

Umalusi conducted monitoring visits to a sample of examinations centres during the writing of the NSC examinations, and a total of twenty-four (24) examination centres were selected in order to verify compliance to the regulations and policies pertaining to the conduct, administration and management of examinations. Umalusi deployed monitors during the writing of these examinations in October and November 2016.

Table 4A provides a consolidation of twenty-four (24) examination centres, subjects and dates during which the examinations were monitored.

**Table 4A: Examination Centres monitored for the writing of examinations**

	Province	Centre	Date	Subject	Candidates
1	Gauteng	Southdowns College	02 Oct 2016	Mathematics P1	75
2	Gauteng	Tyger Valley College	09 Nov 2016	English HL P2	39
3	Gauteng	Deutche Internationale Schule	10 Nov 2016	Physical Sciences P1	19

	Province	Centre	Date	Subject	Candidates
4	Gauteng	Yeshiva College of SA	02 Nov 2016	Mathematics P1	37
5	Gauteng	Curro Serengeti	31 Oct 2016	Life Sciences P1	26
6	Gauteng	St Catherine's Convent School	21 Nov 2016	Life Sciences P2	27
7	Gauteng	St Mary's DSG	21 Oct 2016	AP Mathematics P2	17
8	Gauteng	Midstream College	10 Nov 2016	Physical Sciences P1	66
9	Gauteng	Grace Trinity	10 Nov 2016	Physical Sciences P1	04
10	Gauteng	St John's College	21 Oct 2016	AP Mathematics P2	60
11	Gauteng	Henley High and Prep	15 Nov 2016	Mathematics P2	10
12	Gauteng	Henley High and Prep	07 Nov 2016	Geography P1	06
13	Gauteng	Holy Rosary School	11 Nov 2016	Accounting P1	17
14	KwaZulu Natal	St Anne's Diocesan College	10 Nov 2016	Physical Science P1	27
15	KwaZulu Natal	Felixton College	21 Oct 2016	AP Mathematics	3
16	KwaZulu Natal	Crawford La Lucia	1 Nov 2016	English HL	119
17	KwaZulu Natal	Felixton College	15 Nov 2016	Mathematics P2	23
18	KwaZulu Natal	Thomas More College	02 Nov 2016	Mathematics Core P1	79

	Province	Centre	Date	Subject	Candidates
19	KwaZulu Natal	Durban Girls College	21 Oct 2016	AP Mathematics	15
20	Western Cape	Glenwood House School	1 Nov 2016	English HL P1	47
21	Western Cape	Knysna Montesorri School	18 Nov 2016	Physical Sciences P2	15
22	Western Cape	Oakhill School	15 Nov 2016	Mathematics P2	16
23	Limpopo	Maseala Progressive Secondary School	16 Nov 2016	English HL and FAL	68
24	Mpumalanga	Penryn College	20 Oct 2016	CAT P2	7

The monitors used the approved criteria as provided in the instrument 'Monitoring of the writing phase', to verify compliance to the regulation and policies pertaining to the conduct, administration and management of examinations.

The completion of the instrument entailed a rigorous quality assurance process, where the following criteria were used for the monitoring of the writing phase:

- General management of examinations;
- The examination room, with seating plan, and invigilation being the focal point;
- Management of the examination room before commencement, during and at the end of the writing session;
- Packaging and dispatch of answer books to the distribution/nodal point; and
- External monitoring of examination by the assessment body.

### 4.3 Summary of Findings

The findings below are provided in line with Umalusi prescribed criteria for monitoring the writing of examinations.

The majority of the IEB examination centres complied in general with the *Regulations Pertaining to the Conduct, Administration and Management of the National Senior Certificate Examination, published as Government Notice No R872 in Government Regulation Gazette No. 31337 on 29 August 2008* – as amended. In addition to this, the IEB provided its examination centre managers with a simple yet detailed

examination manual which highlighted all the steps that were to be taken to deliver a credible examination.

#### **4.3.1 Delivery and storage of examination material**

In the IEB examination centres, the delivery and storage of examination material was given priority. The IEB delivered examination material to the examination centre on a fortnightly basis in most instances. The precautions taken by the IEB, in ensuring the safety and security of examination question papers need to be commended. The question papers were delivered in a digitally locked plastic bags that could only be opened remotely 45 minutes before the start of the examinations. These bags containing the examination material were stored in the strong room and were only accessed on the day of the examination. The security bags could only be opened once the IEB provided the chief invigilator with the code to open the lock. This system ensured that examination question papers were safe and no leakages could occur. Notably, a courier service was appointed to deliver and collect the answer scripts to the IEB Head Office.

The examination centres were equipped with access control, walk-in strong rooms as well as fire extinguishers. In all centres, the area was generally secured with a functioning alarm system and burglar proofing on the windows.

The answer books which were not collected on the day of the examination were stored in a lockable cabinet in the headmaster's office and the keys to the office were kept by the chief invigilator or the headmaster. Generally, the storage and delivery of examination material was of an acceptable standard, and the IEB is to be commended.

#### **4.3.2 The invigilators and their training**

The Regulation, with regard to the appointment of the chief invigilators, stipulate in Annexure I (1) of the Gazette, that: -

*'The Head of the assessment body must appoint the Principal of a school as chief invigilator. However, the assessment body reserves the right to appoint a competent school or office based educator as chief invigilator, should the Principal of the school be deemed to be incapable of protecting the integrity of the external examination.'*

In sixteen (16) of the twenty-four (24) schools sampled, there was no adherence to this regulation. The chief invigilator in these schools was either the registrar, deputy headmaster or even head of department. In all cases, there was no approved delegation of this function by the assessment body, even though the *IEB Guidelines on the Conduct of the Examination* emphasizes this point, which was not adhered to.

Another area of concern is the training provided to chief invigilators. In ten (10) of the twenty-four (24) selected schools, it was found that there was no evidence provided to show that training of chief invigilators for the current 2016 examination was held. It

was noted from the evidence found at the examination centres that a number of chief invigilators had received training from the IEB either in 2014 or even prior to that year. It is necessary for the chief invigilators to attend training annually so that they are equipped to run their training with appointed invigilators efficiently and effectively, taking into account innovations and trends that are consistent with the current conduct of the examination.

In many instances, the training of chief invigilators was found to be out-dated with reliance on new monitoring guidelines and documents, to brief them on changes that needed be accommodated for the November 2016 NSC examinations. Training should be an annual event organised by the assessment body.

The chief invigilators also mentioned that situational reports were not written at the end of each examination sitting nor was there a need to verify the identity of candidates since the candidates are known to them. In addition, it was stated that examination rules were read out on the first day of the writing and not thereafter. The appointment of other educators and officials as chief invigilators, where there are competent headmasters, who should be assigned this task to ensure full accountability and responsibility, is a matter for concern.

While most invigilators are educators in the IEB colleges and schools, there were cases where retired educators or community members were appointed as invigilators. In many centres it was discovered that the appointment of such invigilators was not done in writing.

#### **4.3.3 Preparations for writing and the examination venues**

The examination centres complied with most of the requirements as described in the policy document. The environments were conducive to the writing of examinations. Every effort was made to ensure that noise levels were kept to a minimum and the lighting and ventilation was good.

However, there is still room for improvement in some centres.

In two (2) centres, study material associated with the day's examination paper was found on tables and the floor around the examination hall/ room. Cell phones were also found in the examination rooms. In one instance, five cell phones were found on window sills and tables. Candidates' bags were also found lying on the floor of the examination hall/room.

A point of concern must be raised about one centre that allowed candidates to bring in large amounts of food which were consumed during the writing of the examination. Candidates were provided with long trestles instead of desks, on which they were allowed to place items of food which included chips, breakfast cereals, hot dogs, biscuit, sweets and other junk food. Unless a candidate has a medical

condition which necessitates consumption of special items of food, no one should be allowed to bring food into the examination room.

#### **4.3.4 Time management**

The management of time at all centres was exceptional. Well before the starting time of 09:00, all the necessary key activities were carried out so that the candidates were not prejudiced or disadvantaged in any way. Time was effectively controlled throughout the examination session. Both candidates and examination officials exercised extreme discipline on starting and finishing times.

#### **4.3.5 Checking the immediate environment**

Prior to the commencement of the examinations, the male and female toilets were checked daily for cleanliness as well as for any concealed material. IEB venues were generally well equipped to cater for emergencies, for example, with generators installed as back-up system ensured that there would be little or no disruption during the examination.

#### **4.3.6 Activities during writing**

There were many centres where the examination rules were not read out at every sitting. It was stated that according to IEB requirements, reading the examination rules at the very first sitting was adequate. The invigilators ensured that candidates completed the cover page of examination answer book.

The attendance register was signed by the candidates either before or during the first fifteen minutes of the commencement of the writing. At the end of the examination session, candidates were requested to sit at their desks while the scripts were collected and verified against the mark sheet, after which candidates were allowed to leave.

#### **4.3.7 Packaging and transmission of answer scripts**

Packaging of scripts was done diligently using the sequence indicated on the attendance register. The scripts were placed in a secured envelope which was then sealed. The attendance register was placed on top of the envelope and secured with an elastic band. The envelopes were placed in the IEB security bag which was sealed with an electronic key. The bag was then placed in the safe. The answer sheets were collected by IEB officials according to the IEB schedule of collection dates and time.

According to the chief invigilators, the IEB does not require of the centres to provide a daily situational report. It was mentioned that in instances where there were irregularities, a situational report was completed.

#### **4.3.8 Monitoring by the assessment body**

It was evident from the centres sampled by Umalusi that most of them had not been monitored by the assessment body during or before Umalusi monitoring had taken place; however, in cases where there was evidence of an IEB monitoring visit, no reports had been left by the assessment body.

#### **4.3.9 Irregularities**

##### *A. Irregularities identified by Umalusi monitors*

- In two (2) centres, study material associated with the day's examination paper was found on tables and the floor around the examination hall/ room.
- Cell phones were also found in the examination rooms. In one instance, five (5) cell phones were found on window sills and tables.
- Candidates' bags were also found lying on the floor of the examination hall/room.
- A particular examination centre allowed candidates to bring in large amounts of food which were consumed during the writing of the examination. Candidates were provided with long trestles instead of desks, on which they were allowed to place items of food which included chips, breakfast cereals, hot dogs, biscuit, sweets and other junk food.

##### *B. Irregularities reported by the IEB to Umalusi during the writing phase*

Nil

#### **4.4 Areas of Good Practice**

- The strict measures put in place to secure examination material were commendable. For instance, the enforcement of the use of an electronic locking and opening system ensured that examination material was safe at all times.
- The IEB venues were generally well equipped to cater for emergencies, especially if there is a power outage. Installed generators as back-up system ensures little or no disruption during the examination.
- Security and access control across the monitored centres was of a high standard. The use of surveillance cameras and other modern security systems helped protect the integrity of the examination.

#### **4.5 Areas of Concern**

The following issues were noted during the monitoring visits which need to be addressed:

- The headmaster of a school is not always the chief invigilator, as is required by regulation. In most instances, there is no approved written delegation of

authority from the assessment body for another competent official or educator to perform this task.

- Chief invigilators and invigilators are not always annually trained and some did not have appointment letters for the current year.
- The candidates were admitted into examination room without verification first being done with approved IDs and admission letters.
- The examination rules were not read out to candidates at every sitting.
- Chief invigilators mentioned that there was no need to write situational reports at the end of each examination sitting.

#### **4.6 Directives for Compliance and Improvement**

- The regulation regarding the appointment of headmasters as chief invigilators must be enforced and the assessment body must provide a 'Delegation of Authority' to appoint another official/educator if this is not the case.
- All chief invigilators and invigilators must be trained annually.
- Candidates must only be admitted into the examination room after verification of ID and admission letters have been completed.
- Rules governing the examination must be read out at every sitting prior to the commencement of the examination.
- The IEB needs to address the completion of a situational report for every sitting. This should be a short summary of what transpired during the duration of the sitting, with a record of all important observations. A template could be supplied by the assessment body for this purpose.

#### **4.7 Conclusion**

The control and organisation of the examinations by the IEB was, to a large extent, carried out in a professional and satisfactory manner particularly as most examination complied with the requirements pertaining to the conduct, administration and management of NSC examinations. However, the report has highlighted areas of concern that need to be managed in order to strengthen the system. This report should be read in conjunction with the attached Annexures.

## CHAPTER 5 MARKING GUIDELINE DISCUSSIONS

---

### 5.1 Introduction and Purpose

The quality assurance of marking comprises of two processes namely, the approval of final marking guidelines and the verification of marking. Umalusi engages in its annual quality assurance of marking exercise in preparation for the marking processes so as to ensure that markers maintain appropriate standards and uphold marking quality.

The marking guideline discussions took place at Independent Examination Board (IEB) schools, namely, SAHETI School, St John's College, Kingsmead College, Roedean School, St Stithians College and the IEB offices. The marking guideline discussion meetings consisted of the panels convened for each subject, which included Umalusi external moderators (EMs) responsible for the moderation of the IEB NSC question papers, internal moderators (IMs), chief examiners (CEs), senior sub-examiners (SSEs) and sub-examiners (SEs). The meetings which were convened served to standardise the marking guidelines and to incorporate the alternative responses into the final marking guidelines before the marking processes began. These meetings, as mentioned, included Umalusi external moderators (EMs) responsible for moderation of the IEB National Senior Certificate (NSC) question papers.

Umalusi requires the assessment bodies to make quality preparations prior to the marking process. Accordingly, the measures taken by the IEB saw chief examiners, internal moderators and senior sub-examiners pre-marking the scripts prior to the marking guidelines discussion meetings. Subsequently, rigorous and thoughtful discussions of the marking guidelines were conducted in the presence of Umalusi EMs.

### 5.2 Scope and Approach

The marking guidelines discussion were held for twenty-three (23) subjects comprising of forty-one (41) papers written in the October/November 2016 NSC examinations.

Umalusi EMs attended the marking guidelines discussion meetings together with the CEs and IMs in all the subjects listed in Table 5A below:

**Table 5A: List of subjects where EM attended the marking guideline discussion meeting**

Subjects sampled for marking guideline discussion		
Advanced Programme Mathematics	Life Sciences Paper 1 and 2	Life Sciences Paper 3
Computer Applications Technology Paper 2	Accounting Paper 2	Computer Applications Technology Paper 1
Engineering Graphics and Design Paper 1 and 2	Business Studies Paper 1 and 2	Geography Paper 1 and 2
English Home Language Paper 1 and 2	Agricultural Management Practicess	History Paper 1 and 2
Mathematical Literacy P1 and 2	Consumer Studies	IsiXhosa First Additional Language Paper 1 and 2
Mathematics Paper 1 and 2	Economics Paper 1	IsiZulu Home Language Paper 1
Physical Sciences Paper 1 and 2	Agricultural Sciences Paper 1 and 2	Sepedi First Additional Language Paper 1 and 2
Sesotho Home Language Paper 1 and 2	Setswana First Additional Language Paper 1 and 2	Sepedi Home Language Paper 1
	Sesotho First Additional Language Paper 1 and 2	

The IEB marking guidelines discussion were chaired by either the internal moderator (IM) or chief examiner (CE) who facilitated the process. After engaging in discussions, each response was endorsed by the EM before final approval of the marking guidelines document as a whole.

The quality assurance of the marking guideline discussions for the IEB was conducted using the Umalusi marking guideline discussions instrument, which comprises three parts. Each part of the instrument consists of a variable number of criteria, and each criterion is made of a number of quality indicators indicated in brackets in Table 5B below.

**Table 5B: Umalusi criteria used in the marking guidelines discussion meeting instrument**

Umalusi marking guidelines discussion meeting instrument		
Part A	Part B	Part C
Pre-marking guidelines discussion meeting (1)  Preparation of Chief Examiners and Internal Moderators (3)	Processes and procedures (14)	Training at marking guidelines discussion meeting (3)  Quality of the final marking guideline (6)  Conclusions and reflections

### 5.3 Summary of Findings

This section reports on the findings arising from the marking guidelines discussion for each IEB paper attended by Umalusi moderators using the instrument for the marking guideline discussions.

#### 5.3.1 Pre-marking guidelines discussions

In terms of the IEB management plan for the marking process, the marking guidelines discussion meetings for each subject began with a pre-marking session attended by the IMs, CEs and senior sub-examiners (sub-examiners in some subjects) prior to the commencement of the marking guidelines discussion. This was done to ensure that participants familiarise themselves with the possible responses that candidates might give to the various questions and very importantly, to thoroughly prepare for the marking guideline discussion meetings.

The pre-marking guidelines discussion were held in only seven (7) subjects, namely, Computer Applications Technology (CAT), Life Sciences, Engineering Graphics and Design (EGD), History, Business Studies, Sepedi First Additional Language and Sepedi Home Language led by the IEB's chief examiners. During the pre-marking discussion meetings, fruitful discussions were held for each question, possible answers were debated and consensus was reached. To a large extent, these meetings involved the IM and CE for each paper in preparation for the main marking guidelines discussion meeting, which included the sub-examiners and Umalusi EMs. The remaining sixteen (16) subjects were not offered the same opportunity to formally meet and fine-tune the marking guideline prior the main marking guideline meeting.

#### 5.3.2 Process and Procedure

The detailed and fruitful discussions were held to increase the sub-examiners' ability to mark interpretatively with insight. The CEs and IMs led the marking guidelines

discussion for each question with particular focus on the questions identified as being potentially problematic in most subjects.

The examining panel was found to be interactive and consultative throughout the discussions in general, and no serious discrepancies were detected during the discussions. The exception was in Physical Sciences Paper 2 where the EM was not in agreement with the omission of negative marking in some questions (4.3, 4.4, and 5.4). The discussions were rigorous, which assisted in the finalisation of the marking guidelines in almost all the subjects.

All relevant alternatives were added to the marking guidelines and clarified in most subjects. To a large extent, the discussions were conducted question-by-question discussing alternative responses fully until consensus is reached.

In Economics, all the senior sub-examiners and sub-examiners attended the marking guidelines discussion and each had submitted the worked-out answers to the question paper online to the CE prior to attendance. In the following subjects, English Home Language (HL), Mathematical Literacy, Mathematics, Geography, Business Studies, CAT, Consumer Studies, and Life Sciences, and Physical Sciences Paper 1 the SSEs brought along their worked-out marking guidelines. The educators from various clusters submitted comments on Life Sciences and English HL in the form of reports completed on the template provided by the IEB. The chief examiners and internal moderators analysed these submissions and took them into account during the marking guideline discussion meetings and thus informed the standardisation of the marking guidelines.

The main marking guidelines discussion for Geography Paper 1 took place in breakaway groups (senior sub-examiners) according to allocated questions. The chief examiner, internal moderator and external moderator spent an hour with each group. The marking of dummy scripts, focussing on the allocated questions followed.

In Sepedi First Additional Language (FAL) Paper 1 and Sepedi HL Paper 1, the Umalusi external moderators were solely observers. The Umalusi moderators were unable to play an active role in the marking guidelines discussion, as the IEB marking policy and related processes document prevented them giving guidance during the marking guidelines discussion meetings. As a result, the EMs could not share ideas where some sub-examiners did not understand certain concepts. Furthermore, the Umalusi EMs could not contribute to the process of finding the alternate solutions and/or the final answer to question. Marking guidelines were, however, finally conditionally signed off because it was felt that alternative responses could still be added to the marking guidelines during the marking process. The addition of new/alternative responses during the marking process is covered in the IEB marking policy and related processes document.

In certain subjects, there was no marking of dummy scripts or where marking of dummy scripts is alleged to have occurred, there was lack of evidence to confirm

that it did indeed take place. In some subjects, for example, Sepedi First Additional Language Paper 1, Geography Paper 2, IsiXhosa FAL Paper 1, Sesotho HL Paper 1 and Setswana FAL Paper 1, the marking of dummy scripts was only confirmed verbally to the external moderators. The non-availability of the marked dummy scripts at the centre could be attributed to the fact that presence of Umalusi EMs was not expected and hence no preparations had been made.

### **5.3.3 Training at the marking guideline discussions meeting and quality of final marking guideline**

This part of the Umalusi moderation instrument establishes whether training of markers took place and that all participants were provided with a sample of scripts during training. The quality of the final marking guidelines, which includes the ability to facilitate effective marking is measured in this section.

Sufficient time for training of senior sub-examiners and sub-examiners was allocated in most subjects. Where dummy scripts were available, they were marked by the SSEs and SEs and moderated by both the CEs and IMs. The marking guidelines discussion focussed on confirming the correctness of answers, providing alternative answers and allocation of marks. All final decisions reached were the results of consensus and where consensus could not be reached, the EMs took the final decision in all subjects except in Sepedi HL Paper 1 and Sepedi FAL Paper 1.

In Physical Sciences Paper 1, the training session did not take place at the marking guidelines discussion as expected. It only took place when the marking guideline was discussed with the entire team including sub-examiners on the following day in the absence of the Umalusi EM. In Physical Sciences Paper 2, the chief examiner and the internal moderator pre-marked a number of scripts and the responses were used in the marking guidelines discussion; however, senior sub-examiners did not engage in this exercise.

In Sepedi FAL Paper 1, it was claimed that both the IM and CE marked six (6) scripts each as prescribed by the IEB marking policy and related processes document. However, the external moderator could not evaluate the assumed prescribed marked scripts as the EM was not given access to those marked scripts. While with Setswana FAL Paper 2, no dummy scripts were pre-marked before the marking discussion took place.

## **6.3 Areas of Good Practice**

The following good practices were noted during the marking guideline discussions:

- Marking guidelines discussion meetings were well attended and chaired by CEs or IMs acting as critical participants and adjudicators in the process.
- In several subjects, Economics, Mathematical Literacy, Mathematics, English HL, Geography, Consumer Studies, Business Studies, Computer Applications

Technology and Life Sciences senior sub-examiners and sub-examiners answered the question papers and submitted their answers prior or at the marking guidelines discussion meeting.

- It should be noted that the preparation for the marking guidelines was found to be impressive in most subjects verified.
- Engineering Graphics and Design Paper 1 and Paper 2, IMs, CEs and SSEs pre-marked ten (10) scripts each.

#### **5.4 Areas of Concern**

The following area of concern was noted:

- The marking of dummy scripts is not consistently done across subjects during the training of markers, was only confirmed verbally to the external moderator, for example, Geography Paper 2.

#### **5.6 Directives for Compliance and Improvement**

In order to improve, the IEB need to address the following:

- The IEB's policy should clarify the number of dummy scripts to be marked in each subject. Evidence of the actual dummy scripts marked should be available at the marking guidelines discussion venue/centre.

#### **5.7 Conclusion**

It is pleasing to note that the marking guidelines discussion meetings were held in most subjects and were well managed. However, the above-mentioned areas of concern need to be addressed. Umalusi has issued a directive in this regard with which IEB should comply.

## CHAPTER 6 MONITORING OF MARKING

---

### 6.1 Introduction and Purpose

In accordance with its quality assurance mandate and processes, Umalusi has verified the integrity and credibility of the conduct of National Senior Certificate (NSC) marking of examinations that the IEB conducted and managed on the 09<sup>th</sup> December 2016.

This chapter reports on the findings gathered from the monitored marking centres. The report further acknowledges areas of good practice, highlight areas of concern, and provide directives for compliance and improvement.

The report will include, but is not limited, to:

- The appointment of key examination personnel which includes administration staff, all marking personnel and security personnel;
- The measures taken to ensure the safe-keeping of the answer scripts and any other examination material; and
- The processes related to the administration and conduct of the marking of the scripts as well as the capturing of marks.

### 6.2 Scope and Approach

Umalusi monitored the marking of the National Senior Certificate Examination, managed by the Independent Examination Board (IEB), on Saturday 09 December 2016 at St Stithians College in Sandton where thirteen (13) subjects were marked. An Umalusi monitor administered the Umalusi instrument for marking to determine if the IEB managed the marking processes in accordance with the regulation and policy pertaining to the conduct, administration and management of examinations. Table 6A below indicate the marking centre monitored and the date of the monitoring. Data was collected through observations and interviews, using an approved monitoring instrument as prescribed by Umalusi for monitoring the marking.

**Table 6A: Marking centres monitored by Umalusi**

No.	Province	Centre	Date
1	Gauteng	St. Stithians College	09 December 2016

Monitors visited the marking centre and were required to complete the Umalusi monitoring instrument by recording observations and verbal responses from the marking centre managers on the administration of the marking processes. The

monitor also verified documents available at the marking centre. The levels of compliance are summarised in Table 6B below,

**Table 6B: Level of compliance in relation to criteria**

Criteria	Compliance in all criteria	Compliance in most criteria	Satisfactory compliance
Planning for marking		X	
Marking centre	X		
Security	X		
Training of marking personnel	X		
Marking procedure	X		
Monitoring of marking	X		
Handling of irregularities	X		
Quality assurance procedures	X		
Reports	X		

### 6.3 Summary of Findings

The findings below are provided in line with Umalusi prescribed criteria for monitoring the marking of examinations.

#### 6.3.1 Planning for marking

Extensive planning went into the preparations for the marking process in each of the subjects. The centre manager was a fulltime employee of the IEB and was closely supervised by the events manager who was overall in charge of all three marking centres of the assessment body.

Sample marking by the (chief) examiner and the internal moderator commenced before the marking session so that they were better prepared for the process of standardising the marking guidelines which had to be sufficiently comprehensive to accommodate all the varieties of responses and approaches candidates adopted. Marking personnel were appointed from across the country, and had to make their way to the marking venues and those who required accommodation had to provide for themselves, at venues close to the marking centre. Marking personnel included

chief examiners, internal moderators, examiners, senior sub-examiners and sub-examiners.

However, while systems were in place to ensure effective and efficient marking, controlling and capturing systems, the centre manager did not have a centre management file where information could be organised and stored for easy access and retrieval. Information was electronically available on computer.

### **6.3.2 Marking centre**

St Stithian's College, was utilized for the purpose of marking. All scripts from a subject were marked at a single venue. This was to ensure central control as well as to allow marking guidelines to accommodate changes during the marking session as all relevant persons and scripts are available at that marking centre. At St Stithian's, which was monitored by Umalusi, 65 rooms were used. The marking rooms were equipped with modern communication facilities and allowed for easy e-mailing, telephoning, printing and photocopying. Furniture used included tables, desks and chairs, all of which were suitable for marking. Since most of the marking personnel were accommodated locally, they were provided with breakfast and lunch daily. Marking at the venues commenced at 07:00 and proceeded until 19:00.

### **6.3.3 Security**

There was excellent security, with access control at more than one entrance and exit points. School security was beefed up and during the day there were seventeen (17) guards posted at various points on the school campus. At night there were six (6) guards present. Security was 24 hour based with alarm system and surveillance cameras in operation.

Scripts were transported to the venue in trucks from the IEB head office in Parktown and these trucks were followed by unmarked cars belonging to the IEB. There were no police escorts.

### **6.3.4 Training of marking personnel**

There was a two-hour training for all three centre managers, conducted by the events manager and senior manager. Training of examiners took place in 2014 over two days at Kingsmead College, when they were appointed for the new marking cycle. The training included a subject specific workshop that was facilitated by subject assessment specialist for each subject. Examiners trained their marking personnel on the morning of the first day of the marking. In all subjects at least 10% of novice sub-examiners were appointed each year. Checkers were deployed to the various subjects and also received training from the subject examiner on the first day of marking.

### **6.3.5 Marking procedure**

Attendance registers were completed on the first day of marking. This was backed up by a claims register that was completed every morning thereafter. These were controlled by the examiner. Examiners kept the attendance registers and were aware of the centres from which the sub-examiners had been appointed. In addition, careful control was maintained by senior sub-examiners to ensure that the sub-examiners do not mark their own centres.

### **6.3.6 Monitoring of marking**

The monitoring of marking took place at various levels. Internal moderators, examiners and senior sub-examiners monitored the performance of sub-examiners. The sub-examiners mark in groups with a senior sub-examiner as a team leader who quality assured all marking done by that group. The moderation that was conducted at different levels, both question by question as well as whole script ensured that marking was controlled and standards were maintained. The norm of 10% was used for moderation across all levels.

In cases where underperforming sub-examiners were identified, processes had to be put in place to retrain them and to monitor and support them. Novice sub-examiners were twinned with experienced sub-examiners who assisted them through mentoring. If after retraining and support, a sub-examiner was still found to be underperforming, then the examiner together with the centre manager would take a decision to relieve the sub-examiner of his/her duties. Thus far there had not been a single occasion of underperformance by any marker.

### **6.3.7 Handling of irregularities**

The training on how to identify and handle the irregularities was dealt with during the training of the marking personnel. The IEB Irregularity Committee comprises the CEO, senior manager, assessment specialist and a labour lawyer. Only examiners after consultation with the centre manager could declare an irregularity, which could then be investigated by the Irregularity Committee. Thus far, for the 2016 NSC examination, no irregularities had been identified, either at writing venues or at the marking centres.

### **6.3.8 Quality assurance procedures**

Strict quality assurance processes were in place to ensure that marking was effectively controlled. A double checking system for all the totals and transfer of marks to the front page of the answer books ensured that there was no room for errors. Apart from the careful moderation processes, checkers were also deployed to each subject to check that every question was marked and that all totals and transfers were correct.

### **6.3.9 Reports**

Reports were completed by the examiner and the internal moderator separately. These would be submitted to the relevant subject assessment specialists, who after quality assuring the reports would send them to the materials production manager for printing. Copies of the report would reach the IEB schools in the new year and inform teaching, support, training and development for new academic year.

Sub-examiners did not complete their own self-evaluation. However, at a meeting at the end of each session, the sub-examiners had the opportunity to raise their observations which were captured in the examiners' reports. These reports would also be used to assist with the selection of the marking personnel for the next round of marking.

Umalusi external moderators visited the marking centres to lend support to the subjects they were responsible for.

### **6.4 Areas of Good Practice**

The following are some of the areas of good practice which indicate that the assessment body took the marking session very seriously:

- The security of scripts and the quality assurance mechanisms employed ensured a virtual guarantee that the marking and capturing processes would be valid and reliable.
- There was an effective and efficient system for capturing of marks. Marks were captured on site by data capturers, immediately after the process of marking was completed. The 'double-capturing' system ensured that the marks were correctly captured.

### **6.5 Areas of Concern**

All systems associated with the marking of scripts and the capturing of marks showed meticulous planning, however an area of concern was noted as indicated below:

- The unavailability of a centre management file in hard copy version which will ensure easy accessibility of information on all operational planning and processes at the marking venue, should the centre experience load shedding.

### **6.6 Directives for Compliance and Improvement**

Centre managers must make available centre managers file in hard copy as back-up. Sole reliance on technology for access to documents is not always reliable since power outages may render information needed in emergencies unavailable.

## **6.7 Conclusion**

The IEB should be commended for the outstanding manner in which the marking for NSC 2016 was controlled and the manner in which capturing was done. The attention to detail and the commitment to deliver with excellence explains why there is so much public confidence in the results of the NSC examination conducted by the IEB.

# CHAPTER 7 VERIFICATION OF MARKING

---

## 7.1 Introduction and Purpose

Verification of marking is one of the quality assurance processes that Umalusi embarks on to ensure that marking is conducted fairly and that there is consistency in the application of the marking guidelines in all the subjects and papers. This quality assurance process was conducted at selected venues by the IEB, namely, SAHETI School, St John's College, Kingsmead College, Roedean School, St Stithians College and the IEB offices from the 08 to 11 December 2016.

Umalusi conducted on-site verification of marking for all the subjects sampled for the IEB. The on-site verification of marking is a quality assurance approach whereby external moderators are deployed to the various marking centres. The marking of scripts for the IEB occurred immediately after the marking guidelines discussion. This approach is generally preferred by Umalusi as it allows external moderators to identify discrepancies and inconsistencies that might occur during the marking process and make the necessary adjustments immediately.

## 7.2 Scope and Approach

The onsite verification of marking for the IEB was conducted in 16 NSC subjects that were written for the November 2016 NSC examination. The marking of examination answer scripts for all IEB papers commenced on the day after the discussion of the marking guidelines. The external moderators conducted the verification of marking consistently, in line with the criteria contained in the verification of the marking instrument. The criteria outlined below were used by the external moderators to verify the marking:

Part A: Adherence to marking guidelines

Part B: Quality and standard of marking

Part C: Candidate performance

## 7.3 Summary of Findings

This section summarises the combined findings based on the marking verification reports as written by the Umalusi moderators. The findings are categorised according to the criteria listed above and as outlined in the marking verification instrument.

### **7.3.1 Adherence to marking guidelines**

In all the papers, the marking guidelines were generally adhered to except in Physical Sciences Paper 2 where the marking guideline was amended. This amendment was not well communicated and protocol was not followed where the relevant Umalusi moderator had to endorse the amendments before marking could continue.

### **7.3.2 Quality and standard of marking**

The marking was rated as fair and consistent in all the subjects. The calculations were accurate in the majority of the papers, the internal moderation was meticulous and the tolerance range was also well managed.

In a number of subjects, the following concerns were noted:

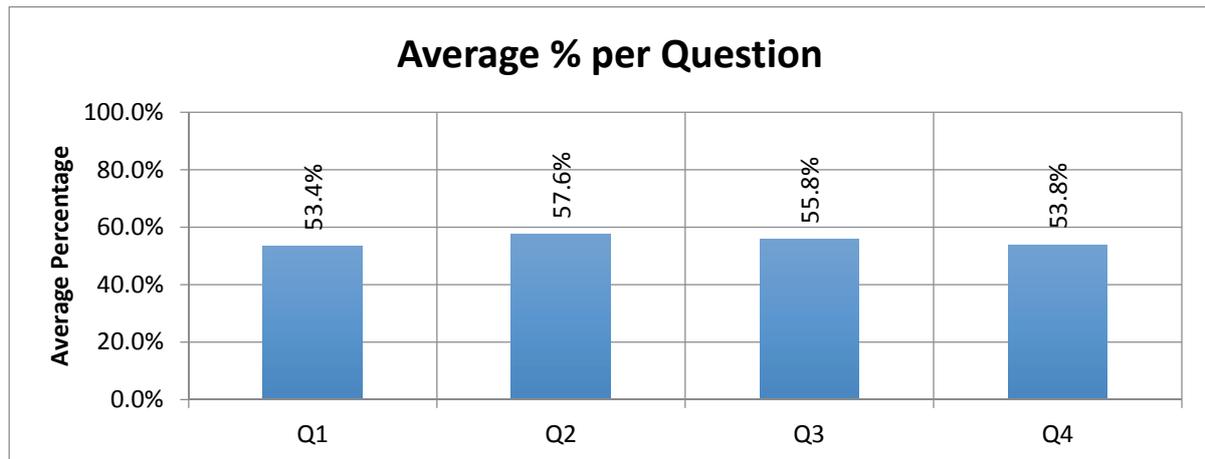
Agricultural Management Practices (AMP) – incorrect addition of marks. Physical Sciences Paper 1 – sub-examiners were found marking without reading all statements and explanatory types of learner responses before awarding marks. In History Paper 1 it was discovered that the internal moderator was only available for the first three days of marking.

### **7.3.3 Candidate performance**

The performance of learners, as presented below, is sampled from the 11 gateway subjects. The general learner performance in these subjects ranged from poor to excellent. In some questions, candidates scored as low as 24% and as high as 95%. The majority of the candidates scored within the range of 40% to 60%.

The graphs below give a summary of candidate performance in each subject. Under each graph is a brief comment by the external moderator on the candidates' general performance.

## Accounting Paper 1



**Figure 7.1: Average performance of candidates for Accounting Paper 1**

The graph in Figure 7.1 above is based on 30 (thirty) Accounting Paper 1 scripts that were verified.

### *Question 1 – Inventory systems*

The question was set out of 32 marks and candidates obtained an average of 53.4%. It was expected that candidates would perform well as this question addressed one of the easiest sections. The majority of candidates verified struggled to answer question 1.7 for 4 marks that was based on accounting equation. It seems teachers are not doing enough in class with this in all sections. It is suggested that focusing on the teaching and learning of accounting equations is vital to increase learner performance.

### *Question 2 – Company financial statements*

This question was set out of 70 marks and candidates obtained an average of 57.6% making it the best performed question in the Accounting Paper 1. This question examined the income statement, a section that candidates usually find straightforward and as a result, one would expect to see a higher performance than the achieved average.

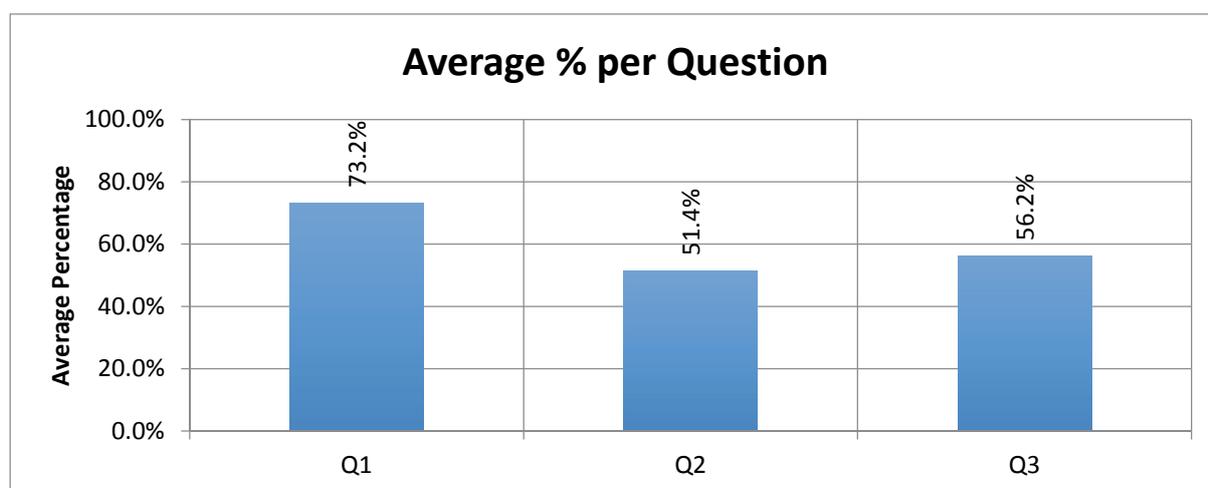
### *Question 3 – Cash flow statements*

Question 3 was marked out of 50 and candidates obtained an average of 55.8%. It is encouraging to see that candidates performed better in this section which is generally perceived to be more difficult. It is recommended that teachers focus on teaching the cash flow statement as a whole and its parts to ensure that learners are confident in answering any questions that are set in this section. Some candidates struggled to complete the financing activities section of the cash flow statement.

#### Question 4 – Manufacturing

This question was set out of 48 marks and candidates obtained an average of 53.8%. As this is one of the easiest sections, a better performance was expected. It was noted that some candidates struggled to do certain simple calculations on break-even points (question 4.6) and then to complete the required comment. It is recommended that focus is given to this section from grade 11 to ensure their confidence and ability to work speedily so that they are able to answer the examination paper within the given timeframe. It was evident during verification that with some candidates the last part of this question was not attempted.

### Accounting Paper 2



**Figure 7.2: Average performance of candidates for Accounting Paper 2**

The averages indicated in Figure 7.2 above are based on a sample of thirty-two (32) scripts.

#### Question 1 - Budgets and problem-solving

This question was set out of 34 marks and candidates achieved an average percentage of 73.2%. This question was well answered by almost all the candidates in general. And it was encouraging to see candidates performing well in problem-solving type of questions.

#### Question 2 - Reconciliations

This question was set out of 30 marks and candidates achieved an average of 51.4% based on the sample verified. This is also a straightforward section and one in which candidates are expected to perform well, but they seemed to find difficulty in answering this question. However, an explanation could be that curriculum change where this section had been moved from grade 10 to grade 11, has had an effect. It is recommended that this section be brought back to grade 10 to ensure that

learners are provided with early exposure to develop more confidence and experience to perform better in grade 12.

### *Question 3 - Company analysis*

This question was set out of 36 marks and the sampled candidates obtained an average of 56.2%. Candidates struggled to answer the questions asked in this section in general. It appeared that candidates did not read the scenario provided thoroughly and were challenged in supplying relevant answers. It would seem that teachers might not be practising enough questions in class that would assist the candidates to deal with practical scenario questions in general. If this is the case, teachers should be encouraged to consistently practice answering questions with practical scenario with learners during the course of the year to assist them in building a skill and confidence to answer questions of this nature.

It is recommended that preliminary examinations and June examinations should include real financial statements as set in the final year examination to ensure that learners are used to this type of questions in the final examination.

### **Advanced Programme English**

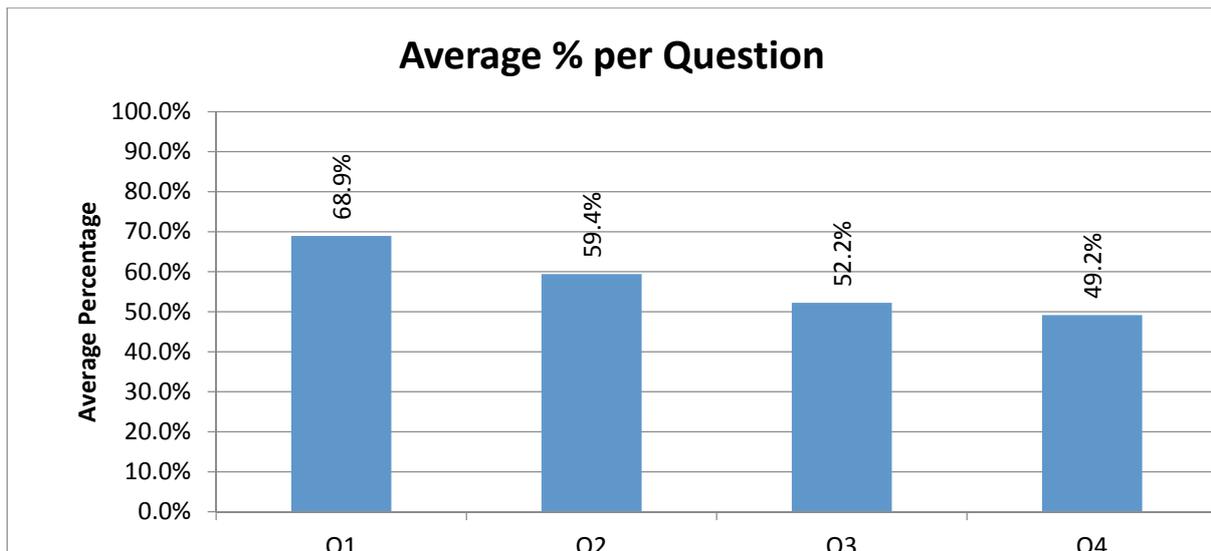
The paper was challenging and required critical insights and proficient writing skills. The sample of twenty-seven (27) scripts, purposefully selected for: range of marks; (range of centres; sub-examiners; and specific question selection), show:

- Very good overall performance by candidates, particularly as a large majority of scripts resulted in a performance in the 70% - 79% category; and
- That the candidates who scored highly, demonstrated critical insights and proficient stylistic writing devices. One candidate scored 100% for one of the questions, and there were quite a few distinctions across the questions.

The candidates who scored poorly displayed one or more of the following: superficial understanding of their reading; provided mostly narrative responses; not responding to the actual question posed; non-adherence to the number of texts required in the questions; not completing the paper; wrote disjointedly; displayed numerous grammatical and stylistic errors.

### **Agricultural Management Practices**

The averages indicated in Figure 7.3 below are based on a sample of 17 (seventeen) scripts.



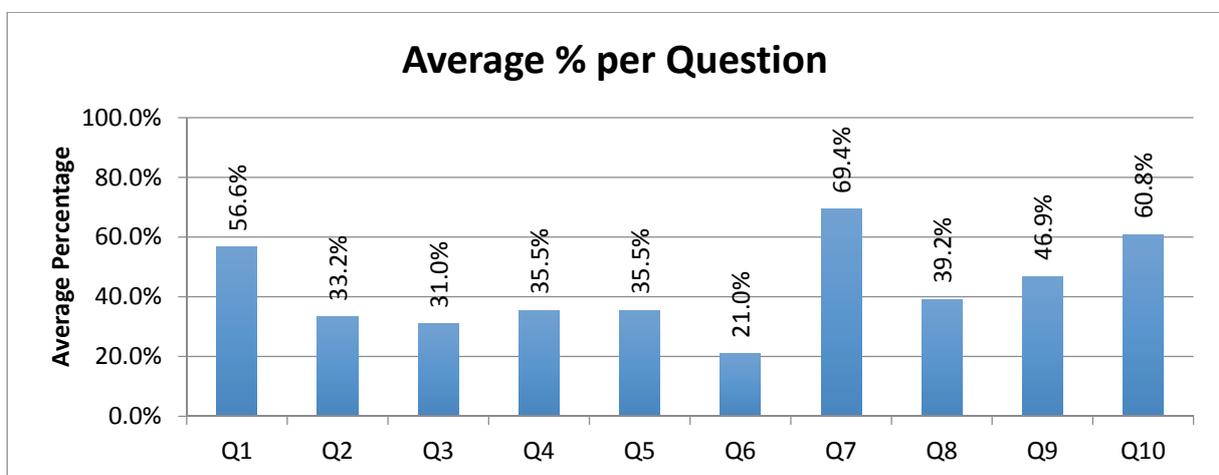
**Figure 7.3: Average performance of candidates for Agricultural Management Practices**

The analysis depicted by the graph above shows that candidates performed well in Question 1 with an average of 68.9%. This is expected since the sub-questions consist of multiple choice questions, matching columns and providing the correct agricultural terminology.

The graph shows that Question 4 was poorly answered resulting in an average of 49.2%. The question covered a wide range of content such as harvesting, processing, management and agri-tourism. The question requires candidates to show competency in the application of knowledge to different contexts, and as candidates seem to struggle with this type of question, this aspect should become a focus of teaching and learning.

### **Business Studies Paper 1**

The averages indicated in Figure 7.4 below are based on a sample of (twenty-eight) 28 scripts.



**Figure 7.4: Average performance of candidates for Business Studies P1**

### *Question 1*

Candidates lacked sufficient skills in answering objective type objections. Some resorted to guessing. The average generally is between the 60 and 70%.

### *Question 2*

Many candidates could not explain the difference between the National Skills Development Strategy and the Human Resources Development Strategy. In Question 2.5.2, some learners failed to link the challenges to the business environment and state the extent of control.

### *Question 3*

There was no candidate in the sample who attained the full 10 marks in the calculation question (question 3.4). This was despite of the fact that similar questions appeared in the past. This also applies to the question of success/failure factors in a partnership, as a form of ownership, in question 3.7. This question had another form of ownership in the past. Question 3.5.3 required learners to focus on 'when presenting'. Learners mixed this with preparation before and after.

### *Question 4*

In question 4.8, some candidates failed to recommend strategies to deal with employees who abuse work time. The context changed slightly from that of previous years.

### *Question 5*

Candidates failed to identify the job analysis components of question 5.1. Quality indicators (question 5.5) appeared in the past, only the business function changed.

### *Question 6*

Question 6.5 was a recap from grade 10/11 work which is examinable in grade 12. Many candidates failed to correctly tabulate the differences.

### *Question 7*

This was a popular question, but some candidates performed poorly in the application of Porters 5 which appeared in the past as a short question.

### *Question 8*

Some candidates could not suggest factors in which the identified leadership style can be applied. Again a similar type of question appeared previously.

### Question 9

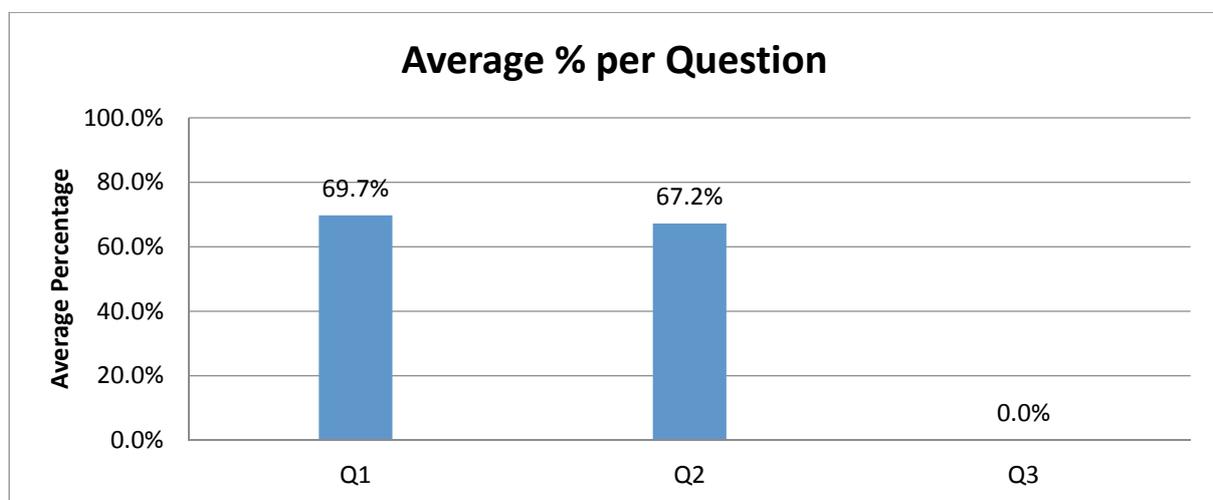
Candidates failed to distinguish between decision making and problem solving.

### Question 10

The application of the placement procedure posed some difficulty in question 10. Candidates performed better here than with the question on employment contract.

## Business Studies Paper 2

The averages indicated in Figure 7.5 below are based on a sample of fifteen (15) scripts.

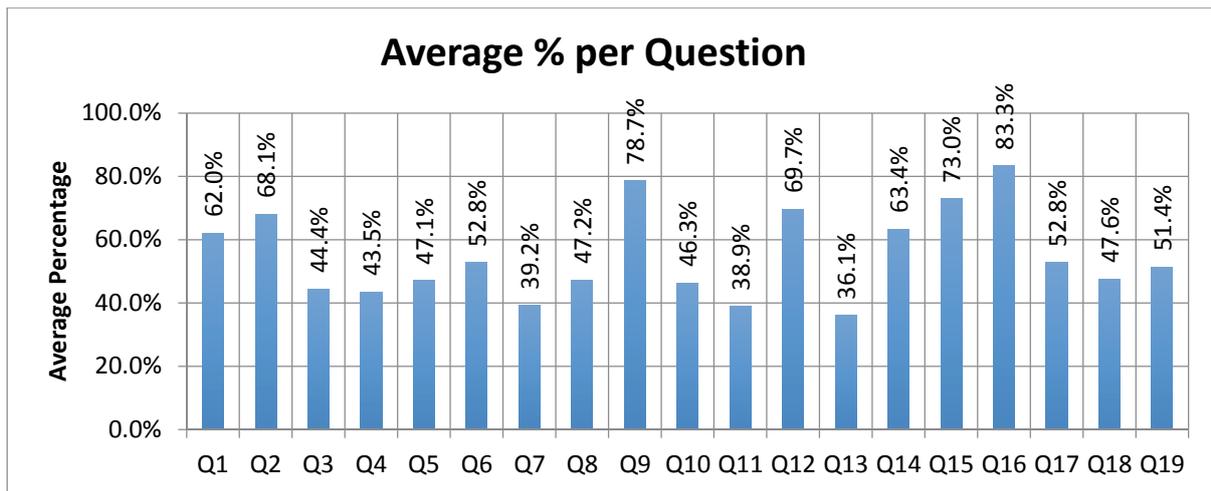


**Figure 7.5: Average performance of candidates for Business Studies P2**

Overall, candidates obtained close to 70% for each question on average. Some candidates did not give comprehensive answers in terms of depth and range within the context of the question. Most candidates scored between 30% and 50% in the higher order rubric constituted of substantiation, application to industry/context, creative problem solving and synthesis.

## Consumer Studies

The averages indicated in Figure 7.6 below are based on a sample of eighteen (18) scripts.



**Figure 7.6: Average performance of candidates for Consumer Studies**

The small sample verified, reflected a fairly good spread of abilities. The level 6 and level 7 candidates showed an excellent understanding of subject content knowledge. The level 2 and level 3 candidates displayed a lack of ability to answer the more demanding questions, especially those demanding analytical and evaluation abilities.

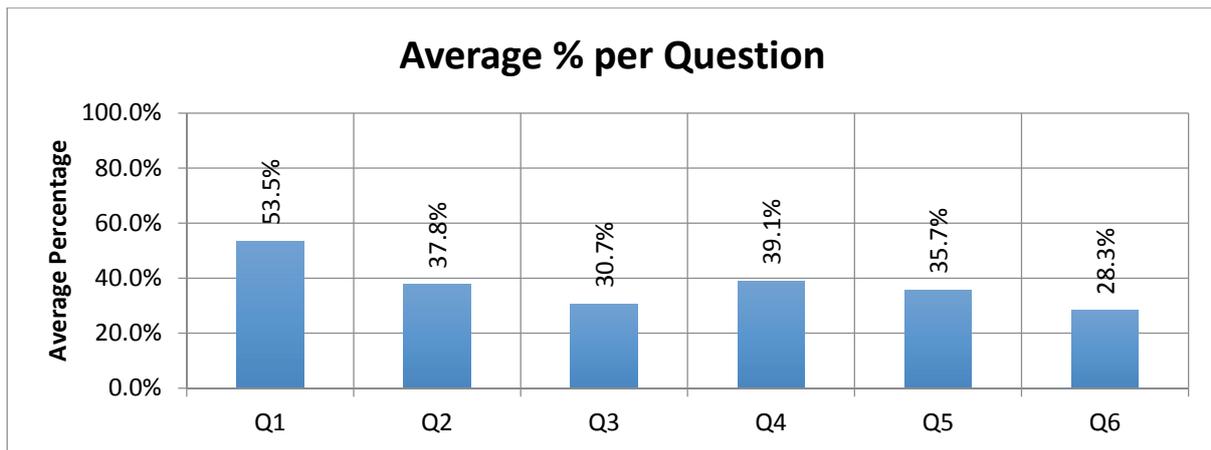
On the whole, question 7, which was based on a case study, required applying knowledge and creating solutions to a specific situation, was not well answered. The subject content, dietary requirements and dietary-related health problems/ diseases, was poorly understood.

The candidates lacked the ability to provide an opinion to the given statement in question 11. Question 13, which required candidates to draw comparisons, was poorly answered as candidates, on the whole, provided insufficient evidence of their ability to synthesise subject content according to the given criteria.

Questions 9, 15 and 16 appeared to be easy to most candidates as they were well answered.

### **Economics**

The averages indicated in Figure 7.7 below are based on a sample of thirty-two (32) scripts.



**Figure 7.7: Average performance of candidates for Economics P1**

In question 1, candidates obtained an average result but were challenged with calculations and graphs. In Section B performance was below average and candidates mostly struggled with calculations (question 2.1.2), graphs (questions 2.3 and 4.4.2), data based (question 2.4.3) as well as questions on elasticity and market (question 3.5), analysis (questions 4.4.1 and 5.5.2). In Section C performance was below average and candidates struggled with graphs and analysis (question 6.2.3).

### **Engineering Graphics and Design (EGD) Paper 1**

Thirty (30) scripts were verified for Engineering Graphics and Design Paper 1.

#### *Question 1*

Candidates scored relatively high in this question which was based on analytic civil. The average score of all sampled learners was 72.5 %. However, whilst most of the candidates performed extremely well in this question, a few performed poorly. As with all the questions in this EGD paper, this question assessed a range of content and concepts across the cognitive range. Some candidates were still unable to extract information directly from the drawing.

#### *Question 2*

This question was based on interpenetration and development. The average achievement in this question for the sampled scripts is 49.3%. As expected candidates generally performed poorly in this question as it required greater spatial perception and was generally of a higher order.

#### *Question 3*

This question was based on perspectives. The average achievement in this question based on the sampled scripts was at 75.5%. Surprisingly candidates answered this question well, which was targeted for the middle to higher order candidates.

#### *Question 4*

This question was also well answered, achieving an average of 69.4%, and considering that it required knowledge drawn from the SANS 10143. This proved that the candidates had a good understanding of this document. However, it was disappointing to notice that many candidates were unable to draw basic components and features. Some of these features are assessed each year. The floor plan, outside elevations and sectional views are always assessed with variations in size and shape of the dwelling. Many were still unable to draw adequately even though they were exposed to these kinds of drawings from grade 10 level.

### **Engineering Graphics and Design (EGD) Paper 2**

The performance of candidates given in averages below was based on a sample of 30 scripts that were verified.

#### *Question 1*

This question was based on the analytical mechanical section of the EGD curriculum content. The average performance of the candidates in the sampled scripts was 58.8%. The question was generally satisfactorily answered and in keeping with expectations. Some candidates performed extremely well while others performed poorly. As with all the questions in this EGD paper, this question assessed a range of content and concepts across the cognitive spectrum. Some candidates were still unable to extract information directly from the drawing. There was adequate spread of cognitive levels in this question, which was in line with the CAPS and SAG for the subject.

#### *Question 2*

This question addressed the cam and mechanism content. The average performance of the sampled candidates in this section was 84.7%. Surprisingly this question was very well answered. It could be that educators spend a good deal of time on this section. The smart candidates were able to complete the drawing accurately and scored good marks.

#### *Question 3*

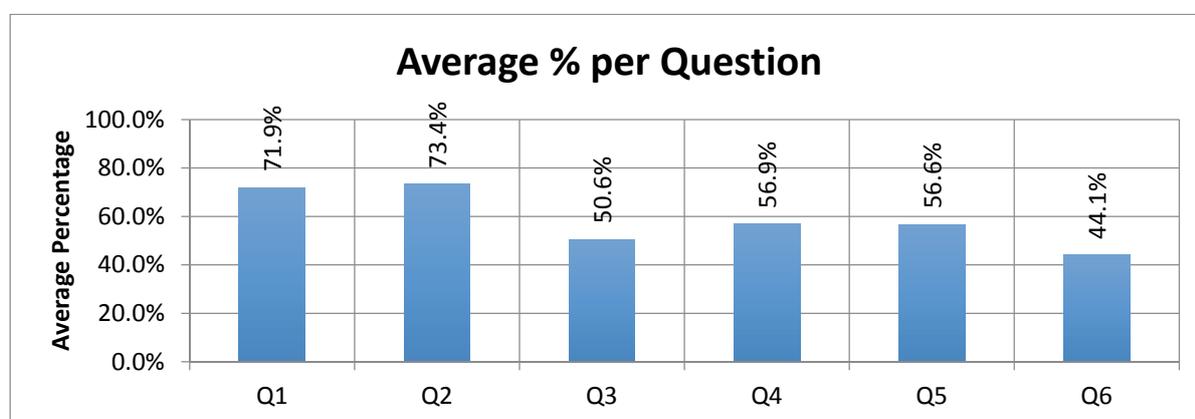
This question was based on the isometric section of the curriculum content in EGD. The average performance of candidates in this section was 78.8%. There was an even spread of marks across the range. It may be that most teachers spend much time on this section and questions of this nature, which may have contributed to the good results. Consequently, the smart candidates were able to complete the drawing accurately and scored good marks. The ability to convert orthographic views (2D) into an isometric drawing (3D) for candidates is not a problem, especially when converting from third angle.

#### Question 4

This question was based on mechanical assembly. The average performance of learners in this question was 71.1%. Candidates at some centres produced very good interpretations of the drawings. However, it is disappointing to see many candidates being unable to draw basic components and features. Some of these features are assessed each year. Many candidates were still unable to draw adequately even though they were exposed to these kinds of drawings from the grade 10 level.

### English Home Language Paper 1

The averages indicated in Figure 7.8 below are based on a sample of thirty-two (32) scripts.



**Figure 7.8: Average performance of candidates for English HL P1**

Of the 32 scripts verified, marks ranged from 26% to 94%. In some centres, the marks were exceptionally good ranging from 62% to 89%, with many candidates obtaining between 70% and 79%. In other centres, marks ranged from 35% to 65% with many candidates obtaining marks between 50 and 55%. In such centres, candidates performed poorly in the poetry and the formal grammar sections of the paper. Generally, it can be stated that candidates found the paper to be fairly comprehensible and manageable particularly for English HL learners.

There was evidence of the inclusion of graded performance with lower to higher order questions. The poor performing candidates managed the lower order questions but struggled as the cognitive levels escalated. The average candidate did well in the lower order questions and showed adequate competence in the middle order questions, but struggled with the higher order questions. The high performing candidates were competent at all cognitive levels.

### *Question 1: Comprehension*

Candidates excelled in all questions but found question 1.5 challenging. The question required candidates to refer to two (2) extracts and then engage with the question referring to both extracts. The question focused on the image of the 'rainbow nation' and candidates were expected to fully explore the image in relation to Rwanda and South Africa. Candidates were not expected to solely make a simple comparison but rather discuss the question using the explanation of the 'meta-narrative' provided. The question, worth 5 marks, was challenging only cognitively but not in terms of levels of difficulty due to the number of aspects needing a response.

### *Question 2: Summary*

This question, which required candidates to write a welcome speech, was facilitated by the emphasis of the presentation of speeches in the oral component of the curriculum. The task seemed comprehensible as most learners scored between 6 and 9.

### *Question 3: Seen poetry*

The only distinction one can make in the performance of this question is whether candidates were well prepared or not. All the questions offered candidates the opportunity to achieve a minimum of 50% to 65% per question. The open-endedness of question 3.4 (for 5 marks), although well-scaffolded, required candidates to respond critically offering a logical argument. Learners performed poorly in this question.

### *Question 4: Unseen poetry*

This question is a challenge due to the inter-textual presentation as candidates are expected to look at various stimuli provided in order to answer the questions. However, one of the stimuli is a seen poem and therefore should be manageable. A glossary for the unseen poem was also provided to support candidates with terminology and assist in answering question 4.5. Weaker candidates struggled this question as it was demanding in respect of the number of components needed to refer to and answer. Most learners obtained between 3 and 4 marks of 5 for this question with the weaker/struggling learners obtaining between 1½ and 2 marks. The final parts of questions 3 and 4 were discriminator questions, progressing from lower order to higher order thinking and would therefore favour candidates who have developed this thinking ability. Weaker candidates managed to obtain a minimum of 44% by answering the introductory question which focused on lower order thinking.

### *Question 5: Visual literacy incorporating formal grammar*

Most candidates performed very well. The visual texts provided were current, relevant and appealed to the candidates. The clarity in the visuals also made it easy

for candidates to respond to the questions set. Marks ranged from 8 to 23 out of 25 with most candidates obtaining between 13 and 18 marks. Once more, the 5-mark question was a challenge for the weaker candidates while with the candidates who coped better managed to obtain 4 out of 5 marks. Question 5.3.2 which focused on the grammatical aspects of the subject and also required a critical evaluation of the intention of the posters provided, was demanding but scaffolded. However, the multi-dimensional requirements of the question made it a discriminator question and cognitively challenging for the weaker candidates.

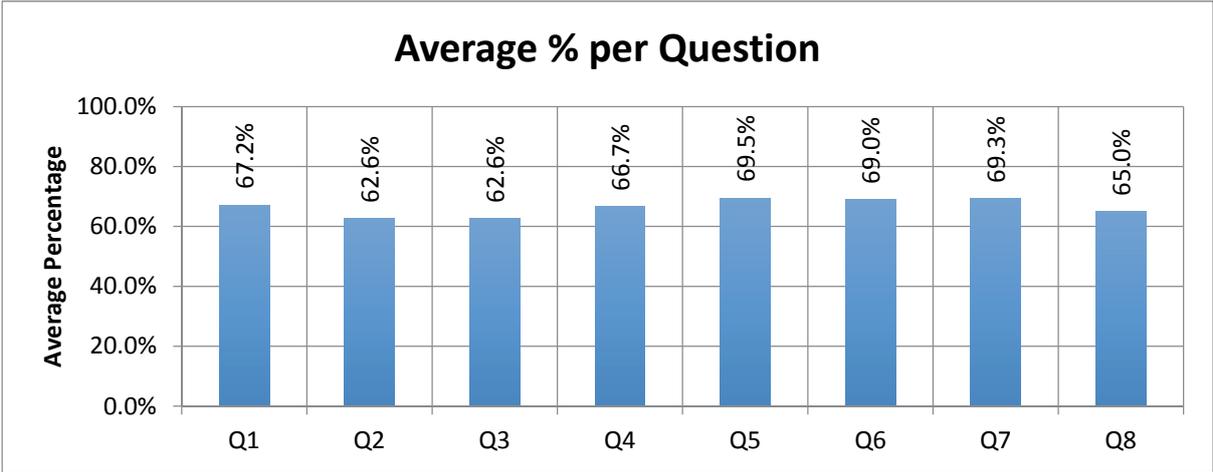
*Question 6*

This question relied on candidates' knowledge and application of grammar and most were unable to complete the last parts of this question, leaving much unanswered. Of the 32 scripts verified, 2 candidates obtained 1 mark and 3 obtained zero (0) marks out of 10. It seems that this was due to a lack of understanding of the grammatical concepts assessed. This question produced an average of 4 marks.

The poor to average performance is indicative of a lack of engaging critically with texts; poor interpretation of questions; and the inability to write using acceptable language. Candidates should be taught the skill of critical thinking; and how to draw on the given text to motivate the argument, instead of drawing from general knowledge independent of the text. This was particularly evident in questions 1, 3 and 4.

**English Home Language Paper 2**

The averages indicated in Figure 7.9 below are based on a sample of twenty-five (25) scripts.



**Figure 7.9: Average performance of candidates for English HL Paper 2**

## Section A: Literature essays

### Question 1: *Coriolanus* mini-essay

Before commenting on the performance in this question, attention is drawn to the following:

- Since 2014, the assessment body has done away with the need for a plan to be completed for the mini essay where a total of 5 marks was allocated. Developing a plan forced candidates to plan for the essay. This decision however, has had a double impact – for the stronger candidates, the advantage was that it opened up the opportunity to focus on the essay in a critical and analytical manner thereby obtaining better marks. For the weaker candidates, who did not bother to plan, there was no focus and direction in the essay and inevitably fair to satisfactory essays were produced.
- A further adaption to the question paper, was that as from 2016, the 'Talking Points', which used to be an essential part of the question, intended to be used by the candidates as a springboard for the essay, was also removed. This made the essay easier to write as there were fewer components to focus on in completing the essay question. This proved to be a good decision advantaging the candidates as many produced good to excellent responses.

Marks ranged from 14/30 (46.6%) to 27/30 (90%). The average for this question for the sample of 25 scripts verified was 67.2%.

### Questions 2 and 3: Novel – *Tess of the d'Urbervilles* and *Absolution*

The literature essays were well answered in the main, but some candidates reverted to narrating the text, losing focus in answering the question by critically engaging with the topic and the text. There was a choice of topics and a choice of novels. Even though essays were reasonably well-answered, schools that chose to study *Tess of the d'Urbervilles*, tended to refer to the film rather than the text version when answering the questions, a problem identified in 2015. Although essays for both novels were well-done, on average, candidates performed better in writing the *Absolution* essay rather than the *Tess of the d'Urberville* essay.

The candidates who answered question 2.1 struggled with the multi-dimensional presentation of three (3) bullets preceding the topic and also failed to understand what 'the essential gesture of a social being meant'. This was further compounded by the glossary which was intended to assist the candidates but ironically had the opposite effect. The same topic in the novel *Absolution* was answered a little better by the candidates as the teaching seemed to have been more intense and rigorous and also the candidates had to rely on their reading and knowledge of the text rather than the film version. Overall, question 3.2 was most popular and better answered than any of the other choices given. The average for this question was 62%.

## *Section B: Transactional writing*

Candidates did well in this section, understanding the demands and focus of the questions, linking the visuals to the questions and responding in an intuitive and mature fashion. Candidates also demonstrated good knowledge of the format and structure of the selected transactional writing pieces. Candidates did particularly well with the compulsory question (question 4) and in question 5.1 as the content of the topics was extremely relevant to the age group. Question 5.2 results were slightly lower as the question demanded a balance in the writing of the eulogy with the prescription that it had to be fun and light-hearted. This balance was difficult to obtain as conventionally the eulogy is a serious piece of writing. Question 5.1 was the more popular choice for most candidates. Poor performance is indicative of a lack of sound and critical knowledge of texts, poor interpretative ability and an inability to write using acceptable, appropriate language.

Based on the observations made from the verification of marking of the literature section, there is a need for candidates to be taught:

- The historical context of each text;
- The various literary elements;
- Skills in critical thinking; and
- The difference between language for speaking and language for writing for academic purposes.

The candidates must also be reminded that they are not being assessed on the film version but rather the written text.

## **Geography Paper 1**

The performance of the candidates shows that they found the paper to be fair. The majority did not find difficulty in responding to questions of a high order cognitive level. All the three compulsory questions had a performance of above 50%. The average pass percentage for the sampled scripts was 59.6%.

### *Question 1*

The average was 62,6%, with a maximum of 92 and the minimum of 33 marks. Candidates were able to apply their knowledge of geographical issues completing a geographical case study (South Peninsula Region, Cape Town). This question was more comprehensive since the candidate had to integrate all aspects of content taught in the classroom.

### *Question 2*

The average was 59,6%, with a maximum of 87 and a minimum of 23 marks. Most of the candidates had good knowledge of climate and weather and geomorphology. They were able to illustrate and label a diagram to explain downslope in question

2.5.2 (b), but the majority struggled in drawing a sketch to explain how a superimposed drainage pattern develops.

### *Question 3*

This question had a lowest performance with an average of 56.5%, with a maximum of 94 and a minimum of 16 marks. The candidates' knowledge of rural and urban settlements and economic geography of South Africa was as well answered the other questions. This is the question where candidates usually score high marks since the exam guide clearly states the "mineral and the industrial region to be assessed in a particular year." Some candidates struggled to write and some did not write a report required for question 3.5.4, which had 24 marks.

## **Geography Paper 2**

Based on the sample of the 27 scripts moderated, the performance of the candidates indicated that the paper was fair. The questions required candidates to display their geographical skills and techniques, by using both the topographic and orthophoto maps. In this sample, the average mark is 55.8 and the average percentage is 55.8%. The minimum mark obtained by a candidate is 27 and the maximum mark is 88.

### *Question 1*

The average was 58.5% and the average mark being 24 with the majority of candidates being able to score all marks in sub-questions assessing atlas use and map orientation (questions 1.1.1 -1.1.6). Some struggled with the topographic map grid in question 1.2.1 which showed a lack of knowledge of the map index. The cross section in question 1.2.4 also proved challenging.

### *Question 2*

An average of 52% and average mark of 12, 5 was attained. The candidates were assessed on climate and drainage, and GIS application. Most of the candidates struggled with question 2.2, in drawing the drainage basin boundary and also the ordering of streams. In question 2.3 some candidates were not able to create a buffer zone.

### *Question 3*

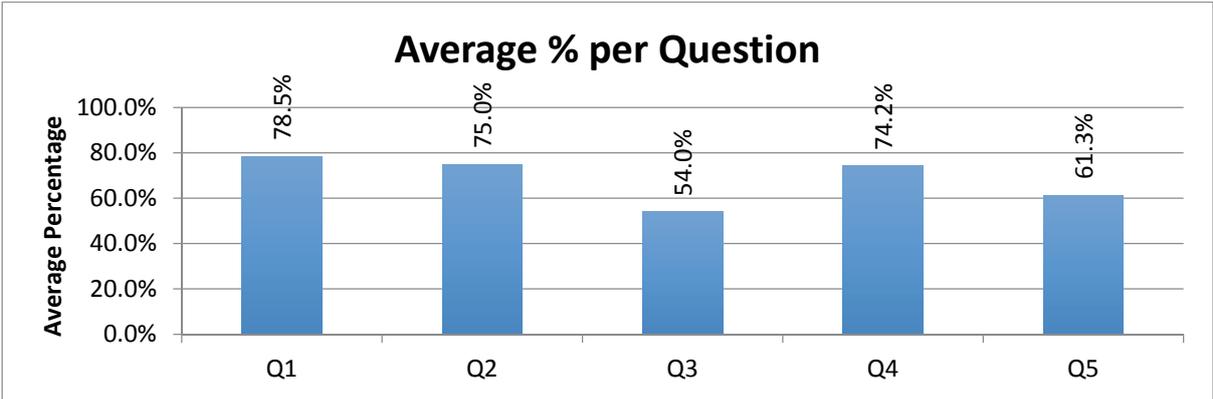
The average was 54.8% with an average mark of 11.6%. The learners showed a better performance in this question which indicated that they were able to analyse the photo.

### *Question 4*

The average was 55.8% with an average mark of 7.7. The candidates were able to design a strategy to prevent rural depopulation in the area using map evidence. Some only applied theoretical knowledge without the evidence on the map and in that way they were not able to achieve good marks.

**History Paper 1**

The averages indicated in Figure 7.10 below are based on a sample of (20) scripts.

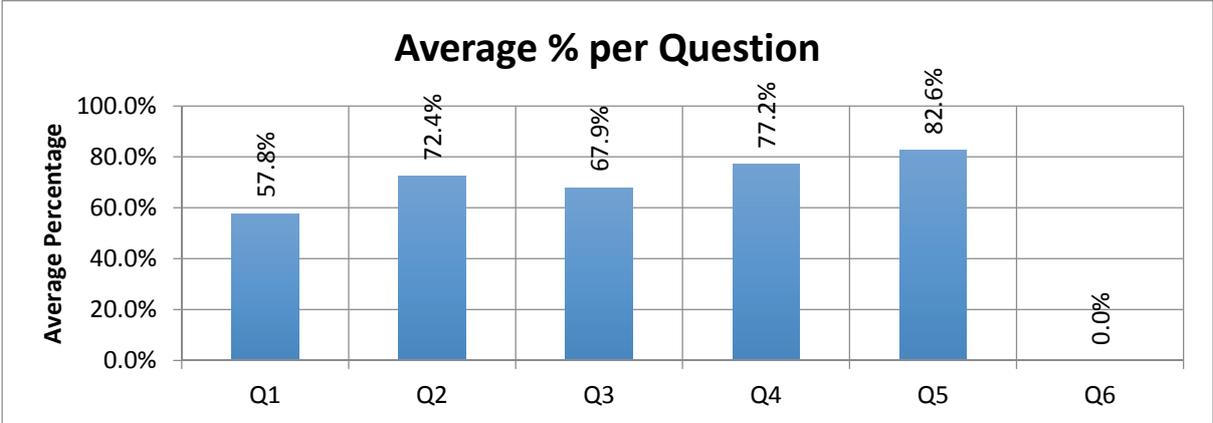


**Figure 7.10: Average performance of candidates for History Paper 1**

The scripts for verification were selected from various centres. The performance of candidates was average in most questions. The total average obtained from the selected scripts was 69.5%. The highest performance from the selected scripts was recorded at 84.5%. Candidates were able to address the requirements of the questions to a large extent. All the questions were compulsory.

**History Paper 2**

The averages indicated in Figure 7.11 below per question are based on a sample of twenty (20) scripts.



**Figure 7.11: Average performance of candidates for History Paper 2**

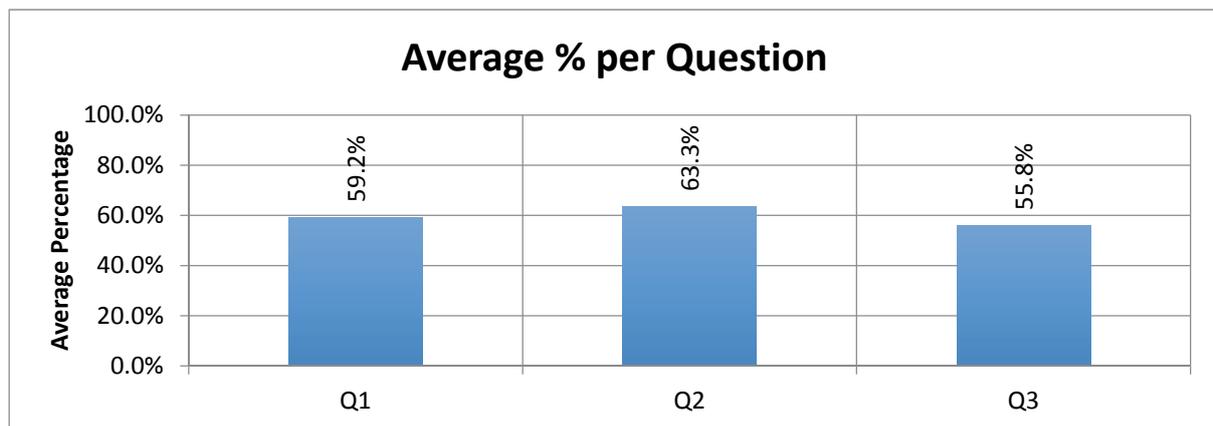
The average of the selected scripts in Paper 2 was at 69.8%. The highest performing candidate obtained 99%. As in Paper 1, candidates were mostly able to address the requirements of the questions fairly well. Questions 1 and 5 were the most popular choice and students who attempted them registered scores ranging from 58% to 83%.

### Life Sciences Paper 1

The discussion on learner performance in this paper is based on a sample of thirty (30) scripts. The average performance in all questions was above 45%. The best performance is observed in question 1 at an average of 59.6% and the lowest performance was recorded in question 4 at 45.8%.

### Life Sciences Paper 2

The averages indicated in Figure 7.12 below are based on a sample of thirty (30) scripts.

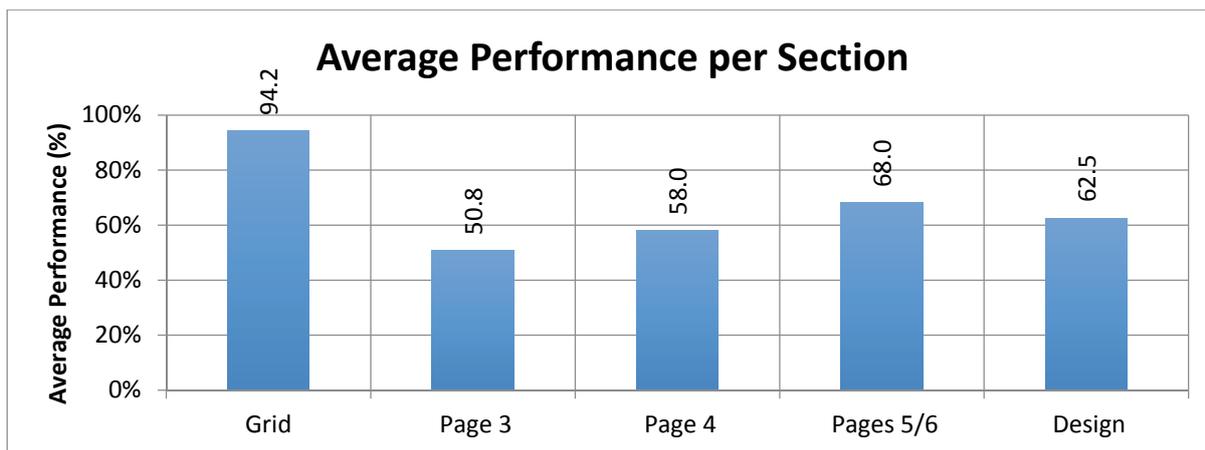


**Figure 7.12: Average performance of candidates for Life Sciences Paper 2**

The average performance in all questions was above 55%. The question with the best performance was question 2 at 63.3% and the lowest was question 3 which scored 55.8%.

### Life Sciences Paper 3

The averages indicated in Figure 7.13 below are based on a sample of forty-six (46) scripts.

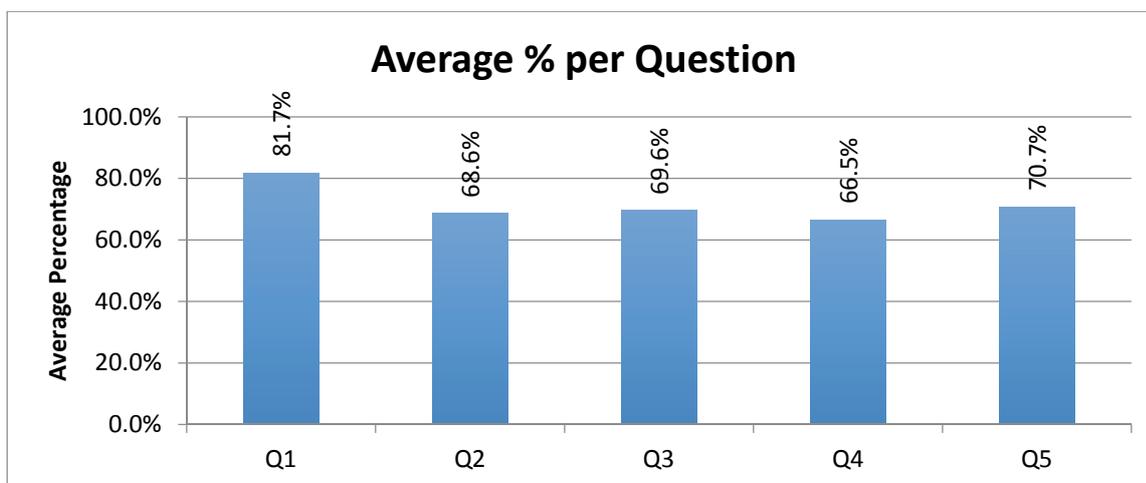


**Figure 7.13: Average performance of candidates for Life Sciences Paper 3**

Candidates performed very well in Life Sciences Paper 3. The best performance is recorded for the grid section at 94.2% for the sampled scripts.

### Mathematical Literacy Paper 1

The averages indicated in Figure 7.14 above are based on a sample of fifteen (15) scripts.

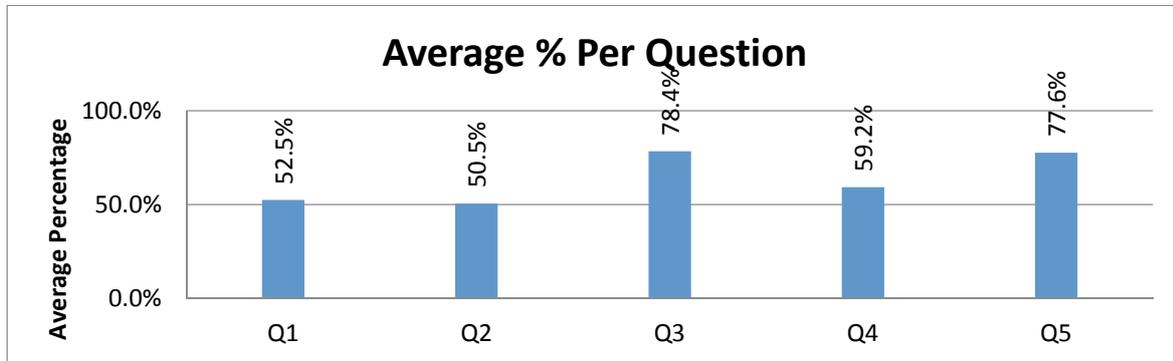


**Figure 7.14: Average performance of candidates for Mathematical Literacy P1**

Most of the questions were fairly well answered. However, question 2, based on measurement, created some problems for candidates, especially conversions using imperial system and rounding off. Question 3 also contained measurement and maps and plans which created challenges for some candidates. Candidates struggled with number formats involving tonnes in question 5. Many candidates failed to calculate the conversion correctly resulting in a failure to gain full marks.

## Mathematical Literacy Paper 2

The averages indicated in Figure 7.15 above are based on a sample of fifteen (15) scripts.

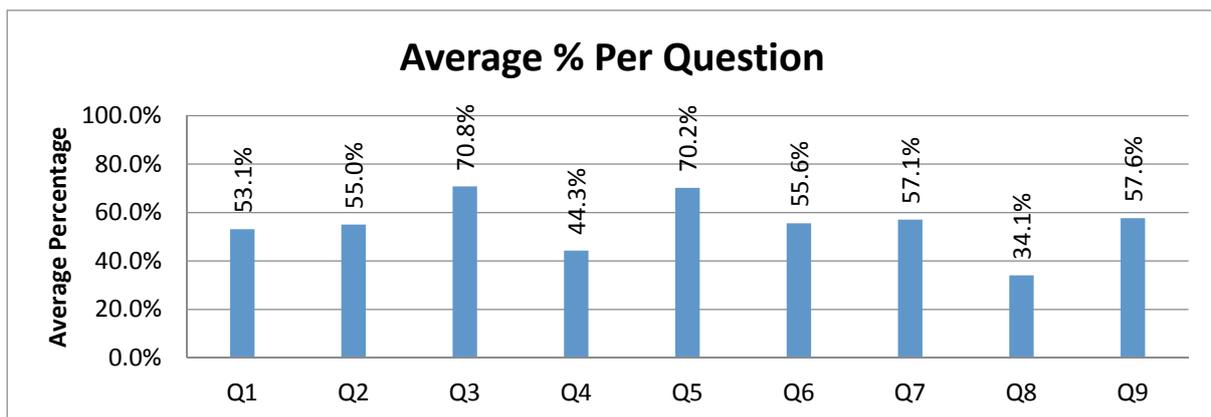


**Figure 7.15: Average performance of candidates for Mathematical Literacy P2**

Question 1 was answered poorly as candidates struggled with scale concept and calculation of perimeter and volume. Question 2 also contained measurement skills which learners found challenging. Question 4 presented challenges to candidates as they found it difficult to interpret given data and thereafter perform calculations involving measures of central tendencies. Questions 3 and 5 were fairly well answered.

## Physical Sciences Paper 1

The averages indicated in Figure 7.16 above are based on a sample of thirty (30) scripts.

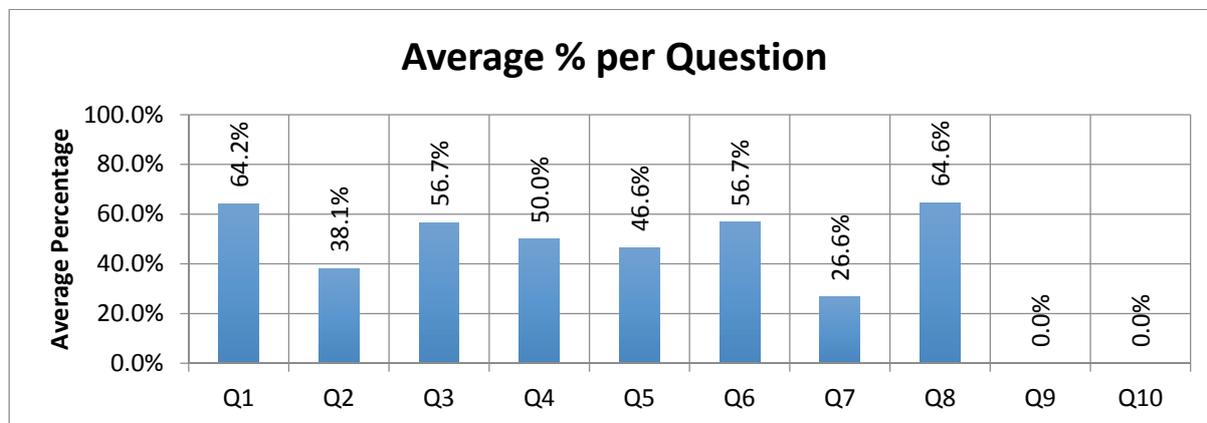


**Figure 7.16: Average performance of candidates for Physical Sciences P1**

Based on the sample, verified candidates performed very well in this paper. There are more candidates falling in the categories of L4 to L7 compared to the number of candidates who fall in the categories of L1 to L3. The paper proved to be manageable for candidates, fair, reliable and valid.

## Physical Sciences Paper 2

The averages indicated in Figure 7.17 above are based on a sample of twenty-six (26) scripts.



**Figure 7.17: Average performance of candidates for Physical Sciences P2**

### Question 1

Most candidates performed very well in this question. However, some candidates struggled with basic terminologies such as “Atom” and Ions” as well as explanation-type questions.

### Question 3

Many candidates failed to observe that the graph passes through the origin in this question. For question 3.5, many candidates did not answer the question fully, omitting the words “more particles per unit volume” or per unit IME” and hence were penalised. In question 3.7, many candidates seem to have misinterpreted the question as they calculated the percentage composition of sulphur instead of the percentage yield of sulphur.

### Question 4

The question, based on chemical equilibrium, was a poorly answered by most of the candidates. Many candidates did not realise that increasing the pressure of the gas also resulted in the increase in its concentration. Many of the candidates seem to have difficulty in applying Le Chatelier's principle to predict the shifting in a state of chemical equilibrium. Candidates in general seemed to do well with questions requiring calculations on the equilibrium constant but struggle to provide answers that require explanations.

### Question 5

Most candidates did well in question 5. The question was mainly based on calculations and many candidates seem to be comfortable with this type of questions.

### Question 6

The drawing of an electrochemical cell in question 6 proved to be very easy for most of the candidates. However, sections of this question that required explanations was poorly answered.

### Question 7

The question was well answered. However, some candidates seem to have difficulty in using the standard reduction table to identify anodes and cathodes and hence failed to answer the calculation question correctly. A few candidates mistook Chromium for Cryolite and therefore chose incorrect half reactions to use in their calculation. Question 7.7 was the most poorly answered in question 7. Many candidates were unable to relate the electrode potential of Aluminium to that of water.

### Question 9 and 10

These questions were poorly answered based on the sampled scripts. It would appear that this section was not covered or adequately covered in the classroom as many candidates were unable to answer basic questions.

## 7.4 Areas of Good Practice

The following areas of good practice were noted:

- Marking was found to be fair, valid and reliable. No candidates were advantaged or disadvantaged during the marking process. This may be attributed to the consistent application of the marking guidelines and the continuous interaction between the senior sub-examiners, (chief) examiners and sub-examiners in general.
- The answer scripts were found to be moderated by both the senior sub-examiner, (chief) examiner and internal moderators. The standard of internal moderation was very good. Where variances in mark allocation occurred, these were within the agreed tolerance range.
- The variance between 1% and 3% across the randomly selected sample of scripts was subjected to internal moderation.
- The level of marking has improved due to the consistent application of the marking guidelines.
- Moderation of more than 10% at the various levels was achieved.

## **7.5 Areas of Concern**

The following are areas of concern should be noted:

- In Economics and Physical Sciences Paper 1, it was noted that markers did not award marks for some alternative answers.
- In History Paper1, it was discovered that both the internal moderator was available for the first three days of marking.
- In English Paper 2, bullets used in the essay topics were found confusing to the candidates.
- In Consumer Studies, half marks were found awarded to candidates which was confusing.

## **7.6 Directives for Compliance and Improvement**

In order to ensure improvement, the IEB should address the following issues:

- Marking of candidate scripts is considered to be one of the most important processes that need to be fair and reliable at all times. Examiners need to apply their judgement correctly go through every answer to be fair to candidates and to ensure reliable results.

## **7.7 Conclusion**

The verification of marking for the IEB for the November/December 2016 NSC examination was a smoothly run process. Based on the sample of scripts verified by Umalusi, it can be concluded that the overall performance of the candidates was good.

# CHAPTER 8 STANDARDISATION AND RESULTING

---

## 8.1 Introduction and Purpose

Standardisation is a statistical moderation process used to mitigate the effects on performance of factors other than learners' ability and knowledge. The standardisation of examination results is necessary in order to reduce the variability of marks from year to year. Such variability may be the result of the standard of the question papers, as well as the quality of marking. Thus, standardisation ensures that a relatively constant product is delivered to the market.

According to Section 17A(4) of the General and Further Education and Training Quality Assurance Act, 2001 (as amended in 2008), the Council may adjust raw marks during the standardisation process. During the standardisation process, which also involves statistical moderation, qualitative inputs from external moderators, reports by internal moderators and post-examination analysis reports, as well as the principles of standardisation, are taken into consideration.

To ensure valid and reliable standardisation, the verification of subject structures, the verification of the electronic data booklets, the development of norms, as well as the approval of adjustments need to be carried out.

## 8.2 Scope and Approach

Umalusi conducted the verification of the capturing of marks, verified the historical averages and the standardisation and statistical moderation and resulting datasets.

The IEB presented a total of 61 subjects for standardisation and statistical moderation in the November 2016 National Senior Certificate (NSC) examinations. The three advanced programmes in Afrikaans, English and Mathematics were also submitted. The verification of mark capturing was carried out by Umalusi at the IEB offices.

This section summarises the verification of the standardisation and resulting system, the areas of good practice, the areas of concern, but also include directives for improvement.

## 8.3 Summary of Findings

### 8.3.1 Development historical averages

The subject structures were verified and approved. The historical averages were also verified and approved after several moderations. A five-year historical average was calculated and no outliers were identified.

### 8.3.2 Capturing of marks

Umalusi monitored the capturing of marks at the IEB offices. The monitoring included the verification of the availability and implementation of guidelines or procedural

documents used for the authentication of marks, the capturing of examination marks, the appointment and training of data capturers, the management of capturing centres and the security systems for the examination materials.

In addition, a status report on capturing, a list of data capturers, a sample declaration of confidentiality forms signed by all personnel involved in the examination processes, were verified. The assessment body provided a detailed training programme for the system administrator and capturers, evidence of meetings held in this regard, as well as an organogram of the examination office.

### **8.3.3 Electronic data sets and standardisation booklets**

The data files required for a dry run testing were not received in time, therefore the systems could not be verified. IEB made at least submission of the standardisation files and all submissions were not approved. Due to time constraints IEB could not resubmit the standardisation files were not approved and the statistical moderation datasets were not submitted. The electronic data sets were verified before the final standardisation booklets were printed and were approved without moderations. The following data sets were verified and approved after several moderations: the statistics distribution, the raw mark distribution and the graphs per subject, paying particular attention to different colours and raw mark adjustments.

### **8.3.4 Pre-standardisation and standardisation**

The principles for standardisation provided direction in the standardisation process. The Assessment Standards Committee considered the external moderators' reports, the internal moderators' reports and post-examination analysis reports as qualitative input in determining the adjustments per subject. The historical averages, pairs analysis and the previous years' statistical distribution per subject were also considered in the decisions.

### **8.3.5 Standardisation decisions**

The decisions for the standardisation of the November 2016 National Senior Certificate and the previous subject statistics as listed in Table 8A:

**Table 8A: List of the standardisation decisions made for the 2016 NSC examinations**

<b>Description</b>	<b>Total</b>
Number of learning areas presented	61
Raw marks	49
Adjusted (mainly upwards)	7
Adjusted (mainly downwards)	5
Number of learning areas standardised:	61

**Table 8B: List of the standardisation decisions made for the 2016 Advanced Programme**

Description	Total
Number of learning areas presented	4
Raw marks	4
Number of learning areas standardised:	4

### 8.3.6 Post standardisation

The assessment body was required to submit the adjusted data sets as per the agreed standardisation decisions. These were verified after several moderations, and adjustments were approved after the rectification of the differences.

## 8.4 Areas of Good Practice

- The IEB applies a “double capture” method for entering the marks in the system, as per requirements.
- The IEB security of mark sheets is commendable.
- The detailed processes/procedures in place for the capturing of marks is highly commendable.
- The IEB’s prompt rectification of datasets is highly commendable.

## 8.5 Areas of Concern

- The IEB’s failure to comply with the timelines set for the verification of systems needs to be addressed.

## 8.6 Directives for Compliance and Improvement

- The IEB should ensure that the due date for the submission of data sets for the verification of systems is adhered to and that the verification is completed prior to the standardisation process.
- IEB should ensure that the colour coding of the raw mark of the current year, the norm and the adjusted mark is effected on the statistics table as follows
  - Norm – blue;
  - All adjusted and adjusted cumulative marks – green;
  - Raw and Cumulative mark of current year – red;
  - All previous years raw and cumulative mark – black.

# CHAPTER 9 CERTIFICATION

---

## 9.1 Introduction and Purpose

This chapter serves to inform interested parties of the current state of the certification of learner achievement for the National Senior Certificate for candidates registered to write the examinations through the private assessment body, Independent Examination Board (IEB).

Umalusi affirms the adherence to policies and regulations promulgated by the Minister of Basic Education for the *National Senior Certificate*, which was written by the first cohort of learners in November 2008.

Through the founding General and Further Education and Training Act (GENFETQA) 2001 (Act No. 58 of 2001), as amended, Umalusi is responsible for the certification of learner achievements for South African qualifications registered on the General and Further Education and Training Sub-framework of the National Qualifications Framework (NQF), including the *National Senior Certificate: a qualification at Level 4 on the NQF* (NSC).

Certification is the culmination of all the quality assurance processes including a final examination process conducted by an assessment body, in this instance the Department of Higher Education and Training (DHET).

This process has a number of different steps, commencing with the registration of students and ending with the writing and resulting of the examination. After the candidate has written the examination, which is administered by the assessment body, the examination scripts are marked, the marks are processed, and only after quality assurance and approval by Umalusi, are students presented with individual Statements of Results (SoR). These documents are preliminary, outlining the outcomes of the examination, and are issued by the assessment body. The SoRs are, in due course, replaced by the final document, a certificate, issued by Umalusi. (Certain additional processes, such as re-marks and/or supplementary examinations may cause changes to marks between the SoR and the final certificate, but these changes *must* be quality assured by Umalusi before certification.)

In order to give further effect to its certification mandate, Umalusi must ensure that certification data have been submitted in the format prescribed by Council, and that the data are both valid and reliable. For that reason, Umalusi publishes directives for certification that must be adhered to by all assessment bodies when they submit candidate data for the certification of a specific qualification.

The IEB must therefore ensure that *all* records of candidates who registered for the NSC examinations, including those who qualify for a subject only in a particular examination cycle, are submitted to Umalusi for certification. It is imperative that datasets *also* include the records of students who have not qualified for a certificate. These will be the students who withdrew from the course/qualification (that is, candidates who registered to write examinations, but did not write any subjects) as well as those who failed all subjects (candidates who wrote the examination, but did not pass any subject).

On receipt of these data, Umalusi verifies that the certification request corresponds with the quality assured results. Where these do not correspond, the IEB is obliged to supply supporting documentation and explanations for such discrepancies. This process serves to ensure that the candidate is not inadvertently advantaged or disadvantaged as a result of a possible programme- and/or human error; it also limits later requests for the re-issue of an incorrectly issued certificate.

The closing of the examination cycle is confirmed by the issuing of certificates, subject statements and confirmation of those candidates who have not qualified for any type of certificate – viz. instances where candidates failed all subjects or did not write the examination.

Umalusi currently only charges private assessment bodies, of which the IEB is one, certification fees. The certification for public assessment bodies is funded by a funding agreement with the Department of Basic Education.

## **9.2 Scope and Approach**

The NSC is a three-year qualification, during which a candidate must meet the requirements for Grade 10, before being promoted to Grade 11 and from there to Grade 12.

IEB assesses candidates registered at private institutions of learning.

The state of readiness visit and records submitted for certification form the basis of this report.

## **9.3 Summary of Findings**

During the state of readiness visit a number of areas were examined. For the purposes of certification, the focus was on the registration of candidate information, the resulting of candidates and the actual certification submissions.

The registration of candidates is completed by making use of an online registration system. Centres are supplied a username and password to access the online registration platform. Registration closed on 28 February 2016, after which the online system is blocked. No changes can be effected by the centre after this date.

An electronic preliminary schedule of entries is generated and submitted to the centre for verification. Should any changes need to be effected, these can only be made by the assessment body.

All subject changes were completed by 31 March 2016 and effected on the system by the assessment body. This is a satisfactory state of affairs that obviates problems experienced with the public assessment bodies.

All changes made to the registration record of a candidate are communicated to the relevant centre for verification.

Immigrant candidates are registered in Grade 9 upon submission of all the relevant supporting documentation.

The resulting of candidates is completed in time and few discrepancies are found between the resulting and certification data.

**Table 9A: Certificates issued during the period 1 December 2015 to 1 December 2016**

Type of certificate	Number issued
Subject Statement <sup>1</sup>	1 197
NSC with admission to Higher Certificate study	145
NSC with admission to Diploma study	1 158
NSC with admission to Bachelor's degree study	8 839
Replacement (Change of status) <sup>2</sup> NSC with admission to Higher certificate study	18
Replacement (Change of status) NSC with admission of Diploma study	21
Replacement (Change of status) NSC with admission to Bachelor's degree study	48

---

<sup>1</sup> A Subject Statement is issued where a candidate has not met the requirements for the awarding of the qualification, but has passed certain subjects. The Subject Statement reflects the subjects passed.

<sup>2</sup> A replacement certificate change of status is issued where the candidate has met the requirements for the awarding of the qualification over multiple examination sittings. For each sitting the candidate is awarded a Subject Statement.

Type of certificate	Number issued
Re-issue <sup>3</sup> Subject Statement	1
Re-issue NSC with admission to Diploma study	3
Re-issue NSC with admission to Bachelor's degree study	9
Replacement (Lost) Subject Statement	1
Replacement (Lost) NSC with admission to Higher Certificate study	9
Replacement (Lost) NSC with admission to Diploma study	52
Replacement (Lost) NSC with admission to Bachelor's degree study	251
Combination <sup>4</sup> NSC with admission to Bachelor's degree study	1
<b>Total</b>	<b>14 475</b>

#### 9.4 Areas of Good Practice

School principals are required to sign a declaration of accuracy to confirm the quality of the registration data. This declaration must be submitted to the IEB.

The school must safeguard the declarations of accuracy which are signed by both the candidate and the parent. These records are kept for a period of five years. This ensures that, should a candidate request a correction of personal particulars, the records are available for the five-year period to validate such a request.

#### 9.5 Areas of Concern

The capturing of marks system allows the same person to capture and verify the marks. Thus the double capture method employed by the IEB is not fully functional.

---

<sup>3</sup> A re-issue of a certificate happens when some aspect of the information on the original certificate is not correct. Supporting documentation is required.

<sup>4</sup> A combination certificate is requested where a candidate wrote with two assessment bodies for the same examination date e.g. the candidate wrote one subject with the IEB that is not offered by the Department of Basic Education. One of the assessment bodies requests the combined certificate once all records for the candidate have been certified.

## **9.6 Directives for Compliance and Improvement**

The IEB examination system would be enhanced if the roles of capturing and verification of marks were assigned to different people.

## **9.7 Conclusion**

The IEB fulfils its role in respect of registration in exemplary fashion. Its resulting processes are timeous and satisfactory. The NSC data for certification is reliable. The IEB fulfils these roles as a private assessment body well.

## ACKNOWLEDGEMENTS

---

A special word of appreciation to the following individuals and groups of people for their contribution in compiling this report:

All colleagues from the Department of Basic Education and the nine provincial education departments for their endeavours in developing and offering credible NSC examinations.

The Umalusi team of external moderators for their tireless dedication and personal sacrifices made in their endeavours to conduct the moderation work in the best way possible. Thank you for the comprehensive and analytical reports, resulting in the compilation of this report:

Mr	Jacob	Mamaile
Ms	Sylvia	Fourie
Ms	Martie	Venter
Dr	Fourten	Khumalo
Mr	Saths	Naicker
Mr	Trevor	Haas
Mr	Michael	Chiles
Ms	Diana	Brown
Ms	Susan	Botha
Dr	Raita	Steyn
Dr	Lorraine	Singh
Mr	Patience	Ntuli
Mr	Achmat	Bagus
Ms	Fathima	Suliman
Dr	Visvaganthie	Moodley
Ms	Nomsa	Zindela
Ms	Zamanyuswa	Shabalala
Dr	Surenda	Seetal
Ms	Sarifa	Ismail
Dr	Desmond	Govender
Ms	Nosisa	Beyile
Dr	Isaac	Mndawe
Ms	Fikile	Khuboni
Dr	Anna	Crowe
Mrs	Elizabeth	Cilliers
Dr	Rakesh	Singh

Prof	Poobhalan	Pillay
Dr	Carel	Kriek
Mr	Franklin	Lewis
Ms	Progress	Zuma
Mr	Mervyn	Palan
Dr	Ntepele	Magapa
Prof	Mawatle	Mojalefa
Mr	Molapo	Thito
Ms	Seanokeng	Sehume-Hlakoane
Dr	Mafika	Lubisi
Mr	Rodney	Johnson
Ms	Carina	Delport
Ms	Louisa	Ndobela-Mononyane
Dr	Sabine	Dednam
Prof	Klaus	Von Delft
Prof	Jo-Marie	Claassen

Dr Anna Crowe and Mr Jacob Mamaile who consolidated, evaluated and synthesised the individual reports from the external moderators into the relevant chapters of this report.

Umalusi staff in the Quality Assurance of Assessment:

- Mr Christiaan Geel, Assistant Manager – for coordinating the writing of this report.
- Mr William Chauke, Manager – for quality assuring the content, overseeing the editing, and presentation of this report to the Executive Committee of Council during the approval of the release of the NSC results.

Mr Andy Thulo and Umalusi' monitors for contributing to the three chapters: state of readiness, the conduct of the writing and the marking of the 2016 NSC examinations as well as reporting on their findings and presenting this section to the approval committee.

Dr Celia Boooyse and Ms Bridget Mthembu for reporting on the standardisation and resulting of the NSC examinations.

Ms Liz Burroughs and Ms Anne McCallum for reporting on the status of certification.

Management staff of the Quality Assurance of Assessment (QAA) Unit for their guidance, support and advice, resulting in the final version of this report:

- Ms Faith Ramotlhale for quality assurance, overseeing the editing and typesetting of the report and for her analytical eye and constructive feedback.

- Ms Zodwa Modimakwane for overall quality assurance and approval of the report.

Staff of the PR & Communications Unit for support and guidance given in the design, layout and printing of this report.

- Mr Lucky Ditaunyane
- Mr Sphiwe Mtshali

All members of the Assessment Standards Committee and the Executive Committee of Council who provided invaluable support and advice.

Dr Cilla Dowse for the efficient editing of the report under very tight time constraints.

Ms Annelize Janse van Rensburg for the effective layout, typesetting and printing of the report.

## ANNEXURES

---

### Annexure 4A: Level of compliance in relation to criteria

No.	Criteria	Rating				
		1	2	3	4	5
1.	Delivery and storage of exam material before writing					X
2.	The invigilators and their training			X		
3.	Preparations for writing and the venue				X	
4.	Time management					X
5.	Checking of immediate environment					X
6.	Writing process					X
7.	Packaging and transmission of scripts after writing					X
8.	Monitoring by the assessment body			X		

### Annexure 4B: Summarised areas of concern – Writing Phase

Criteria	Nature of Non-Compliance	Centres Implicated
Invigilators – training and appointment	Principal not the chief invigilator for 2016	Tyger Valley College Deutsche Internationale Schule St Mary's DSG Penryn College Knysna Montesorri Holy Rosary Glenwood House School Felixton College Thomas More College Southdowns College St John's College Yeshiva College of SA Crawford La Lucia Midstream College Curro Serengeti
	No current appointment letters for Invigilators available for verification;	Deutsche Internationale Schule St Mary's DSG Curro Serengeti
	Appointment of chief invigilators not available/ outdated	Durban Girls College Knysna Montesorri Yeshiva College of SA
	Chief invigilator not trained in 2016	Tyger Valley College Deutsche Internationale Schule St Mary's DSG Durban Girls College Felixton St John's College Yeshiva College of SA Henley High and Prep School St Catherine's Convent School Midstream College
	Invigilators not trained or no proof of training	Yeshiva College of SA
Preparations for writing and the examination venues	Incomplete exam file/ not available in examination room	Durban Girls' College Yeshiva College of SA
	Unauthorized material and cell phones in the exam room	Thomas More Yeshiva College of SA
	Candidates not verified before entry into exam room	Tyger Valley College Deutsche Internationale Schule Durban Girls College

Criteria	Nature of Non-Compliance	Centres Implicated
		Glenwood House School St Anne's Diocesan
	Inadequate information on the board in the exam room	Penryn College (only time reflected)
	Invigilator attendance register not available or not signed	Yeshiva College of SA
	Exam rules not read for every examination sitting	Tyger Valley College Deutsche Internationale Schule
Time management	No situational report	Tyger Valley College Deutsche Internationale Schule Penryn College Glenwood Oakhill School St Anne's Diocesan Curro Serengeti
Packaging and transmission of answer scripts	No monitoring/ no record of monitor attendance by the assessment body	St Mary's DSG Durban Girls College Penryn College Southdowns College Yeshiva College of SA Henley High and Prep School Midstream College Curro Serengeti
Monitoring by the assessment body		



37 General Van Ryneveld Street, Persequor Technopark, Pretoria

Telephone: +27 12 349 1510 • Fax: +27 12 349 1511

E-mail: [Info@umalusi.org.za](mailto:Info@umalusi.org.za) • Web: [www.umalusi.org.za](http://www.umalusi.org.za)

 UmalusiSA |  @UmalusiSA



Council for Quality Assurance in  
General and Further Education and Training