

Report on the Quality Assurance
of the SACAI 2017
National Senior Certificate
Supplementary Examinations

March 2017

UMALUSI



Council for Quality Assurance in
General and Further Education and Training

REPORT ON THE QUALITY ASSURANCE OF THE SACAI 2017 NATIONAL SENIOR CERTIFICATE SUPPLEMENTARY EXAMINATIONS

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TABLE OF CONTENTS

CHAPTER 1 MODERATION OF QUESTION PAPERS	1
1.1 Introduction and Purpose	1
1.2 Scope and Approach	1
1.3 Summary of Findings	3
1.4 Areas of Good Practice.....	11
1.5 Areas of Concern	12
1.6 Directives for Compliance and Improvement	12
1.7 Conclusion	13
CHAPTER 2 MONITORING OF THE WRITING OF EXAMINATIONS	14
2.1 Introduction and Purpose	14
2.2 Scope and Approach	15
2.3 Summary of Findings	15
2.4 Areas of Good Practice.....	18
2.5 Areas of Concern	18
2.6 Directives for Compliance and Improvement	18
2.7 Conclusion	18
CHAPTER 3 MONITORING OF THE MARKING	19
3.1 Introduction and Purpose	19
3.2 Scope and Approach	19
3.3 Summary of Findings	20
3.4 Areas of Good Practice.....	22
3.5 Areas of Concern	22
3.6 Directives for Compliance and Improvement	22
3.7 Conclusion	23
CHAPTER 4 VERIFICATION OF MARKING	24
4.1 Introduction and Purpose	24
4.2 Scope and Approach	24
4.3 Summary of Findings	24
4.4 Areas of Good Practice.....	25
4.5 Areas of Concern	26
4.6 Directives for Compliance and Improvement	26
4.7 Conclusion	26

CHAPTER 1

MODERATION OF QUESTION PAPERS

1.1 Introduction and Purpose

A critical mandate of Umalusi is to ensure that the question papers for the South African Comprehensive Assessment Institute (SACAI) summative assessments, which includes not only the high stakes examinations, written at the end of the year (the final examinations), but at the beginning of the following year (the March, supplementary examinations) – and their respective marking guidelines, meet the criteria and quality indicators to certify them fair, valid and reliable. The supplementary examinations question papers are awarded the same status as the November question papers (even though they are written by a significantly fewer number of candidates) and thus undergo external moderation with equal rigour. This process is undertaken by subject experts in the field. Umalusi, in consultation with external moderators and other professional assessment experts have designed a quality assurance (QA) framework that comprises 11 criteria and a total of 85 quality indicators. It is only once the criteria specific to the subject are in compliance with curricula and examination guidelines, are the question papers and marking guidelines certified 'quality assured'.

This chapter reports on the findings of reports for 42 question papers across 22 subjects for the SACAI 2017 supplementary examinations, submitted by the external moderators. It provides the scope and approach, and focuses on summary of findings on first moderation, areas of good practice, areas of concern and directives for compliance and improvement.

1.2 Scope and Approach

The March SACAI submitted a total of 22 subjects, totalling 42 question papers and their respective marking guidelines to Umalusi for external moderation between 01 February 2016 and 31 August 2016. However, five subjects namely, Civil Technology, Dramatic Arts, Electrical Technology, Hospitality Studies and Mechanical Technology, were excluded from this process as they were drawn from the "Bank" of previously approved question papers. In this chapter of the report, both the question papers and their accompanying marking guidelines are referred to as 'question papers'. The external moderation was conducted using the 2016 Umalusi instrument for the moderation of question papers. This instrument comprises three (3) parts (moderation of question paper, moderation of marking guidelines and overall impression and general remarks) with a total of 12 criteria. Each criterion consists of a variable number of quality indicators (QIs), totalling 85.

Table 1A, indicates the 8 fields of learning and the 42 question papers of 22 subjects that were moderated.

Table 1A: Organising fields of learning and question papers moderated by Umalusi

No.	Organizing fields of learning	Selected papers within field
1	Agriculture and Nature Conservation	Agricultural Management Practice Agricultural Sciences Paper 1 and Paper 2
2	Business Commerce and Management Studies	Accounting Business Studies Economics Paper 1 and Paper 2
3	Communication Studies and Languages	Afrikaans First Additional Language (FAL) Paper 1, Paper 2 and Paper 3 Afrikaans Home Language (HL) Paper 1, Paper 2 and Paper 3 English FAL Paper 1, Paper 2 and Paper 3 English HL Paper 1, Paper 2 and Paper 3
4	Human and Social Studies	Geography Paper 1 and Paper 2 History Paper 1 and Paper 2 Religion Studies Paper 1 and Paper 2
5	Physical Science, Mathematics, Computer and Life Sciences	Computer Application Technology (CAT) Paper 1 and Paper 2 Information Technology Paper 1 and Paper 2 Life Sciences Paper 1 and Paper 2 Mathematics Paper 1 and Paper 2 Mathematical Literacy Paper 1 and Paper 2 Physical Sciences Paper 1 and Paper 2
6	Culture and Arts	Visual Arts
7	Manufacturing, Engineering and Technology	Engineering Graphics and Design (EGD) Paper 1 and Paper 2
8	Services	Consumer Studies Tourism

Table 1B below is a summary of the criteria used for the external moderation.

Table 1B: Umalusi criteria for the moderation of question papers

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

^a Quality Indicators (QIs)

Using the above criteria, the question papers were moderated for four degrees of compliance, namely, no compliance, limited compliance, compliance in most respects and compliance in all respects. External moderators engaged with the examination question papers until each criterion was pitched at 'compliance in all respects' and the final evaluation (general remarks) is either 'Approved' (where there are no changes to be made to the paper) or 'Conditionally approved, not to be submitted for second/subsequent moderation' (where there were minimal changes to be undertaken by the internal moderator of the question paper). Hence, the question papers could undergo any number of moderations until they are evaluated as being fair, valid and reliable.

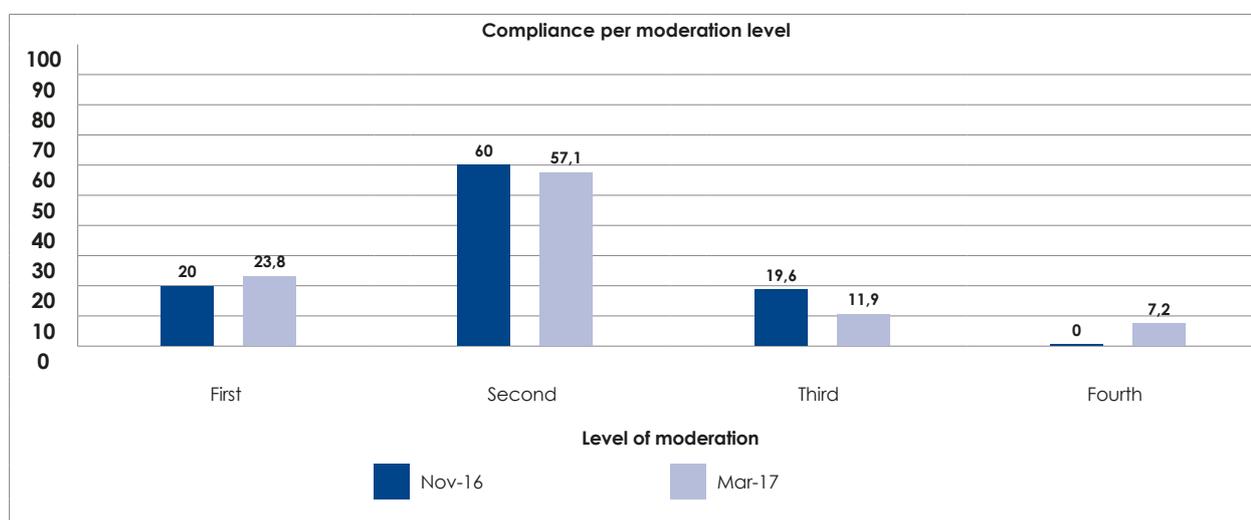
1.3 Summary of Findings

The summary of findings that follow illustrate the number of moderations for approval, the overall compliance, and the levels of compliance per criterion of the question papers and their marking guidelines at the first moderation.

1.3.1 Compliance per moderation level

Figure 1A below, presents a comparison between November 2016 and March 2017 National Senior Certificate (NSC) examination papers with regard to the level of approval of 46 and 42 question papers, respectively.

Figure 1A: Comparative compliance per moderation level



The graph above depicts a comparative study of November 2016 and March 2017 examination question papers. It shows that there was a 2.1% improvement at first moderation, but a deterioration at second and third levels. The percentage for March 2017 examination question papers approved at second and third levels were 2.9% and 7.7% lower than those of 2016, November, respectively. Whereas, for the November 2016 examination none of the question papers underwent a fourth moderation, for the March 2017 examination, 7.2% of the question papers underwent moderation at fourth level. The question papers that underwent a fourth moderation are English Home Language (HL) Paper 2 and Mathematical Literacy Paper 1 and Paper 2.

1.3.2 Compliance per Criterion

A detailed analysis of the four (4) levels of compliance (no compliance, limited compliance, compliance in most respects and compliance in all respects) according to each of the 11 criteria mentioned above, was conducted. The following, Table 1C, illustrates the number and percentage of the 42 question papers that were in full compliance per criterion at first moderation.

Table 1C: Umalusi criteria for the moderation of question papers

Criterion	1	2	3	4	5	6	7	8	9	10	11
Compliance in all respects	10	28	32	13	15	12	34	36	34	11	14
Percentage	23.8	66.7	73.2	31	35.7	28.6	81	85.7	81	26.2	33.3

The table shows that the three (3) criteria that were most in compliance are predictability (criterion 7), 34 question papers, development of marking guidelines (criterion 8), 36 question papers, and conformity with question paper (criterion 9), 34 question papers. This is a significant improvement from November 2016 question papers for these criteria. There is also a large majority of question papers, 32, that were in full compliance with content coverage (criterion 3). The criteria that had the lowest conformity, at less than 40% compliance, are technical criteria; text selection and quality of questions; cognitive skills; language and bias; accuracy and reliability of marking guidelines; and overall impression. Overall, however, there was a significant improvement between November 2016 and March 2017 question papers in all criteria, except for language and bias (criterion 6).

Question paper and marking guideline moderation criteria

The following in-depth analysis and subsequent comments with regard to each of the three (3) sections comprising 11 criteria outlined above, draw on readings of the first moderation only. The criteria that did not meet 'compliance in all respects' at first moderation were satisfactorily addressed in subsequent moderations.

Section A: Moderation of question paper

Criterion 1: Technical criteria

Table 1D below, presents a summary of the number of question papers that did not meet compliance for each of the quality indicators for technical criteria.

Table 1D: Non-compliance for technical criteria

QI	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	1.11	1.12	1.13	1.14
QI Deviance	3	0	1	15	9	3	1	2	5	0	2	4	17	1
QI Deviance %	7.1	0	2.3	35.7	21.4	7.1	2.3	4.6	11.9	0	4.6	9.5	40.5	2.3

The table shows that of the 14 quality indicators (QIs) only two were in full compliance; these are QI 1.2 (submission of a full history of documents) and QI 1.10 (clear indication of mark allocation). This is an improvement from the November 2016 question papers where there was no compliance across the question papers for any of the 14 QIs. The least deviance by one question paper each was QI 1.3, QI 1.7 and QI 1.14. The greatest lack of compliance was for QI 1.13 (quality of visual materials), 17 papers, and QI 1.4 (instructions to candidates), 15 question papers. QI 1.13 is particularly significant as it impacts directly on the reading and interpretation of visual texts and questions by the learners. Quality indicator 1.4 is also of significance as unclear and ambiguous instructions could elicit unintended responses, thus compromising the performance of learners. Generally, even though there is an improvement in the number of question papers that complied with each criterion between November 2016 and March 2017 examination question papers, it is clear that adherence to technical criteria continues to be a challenge.

Criterion 2: Internal moderation

Table 1E below, shows the number of question papers that did not meet compliance for each of the quality indicators for internal moderation.

Table 1E: Non-compliance for internal moderation

QI	2.1	2.2	2.3	2.4
QI Deviance	0	0	14	1
QI Deviance %	0	0	33.3	2.3

Quality indicator 2.1 (the inclusion of the internal moderator's report) and QI 2.2 (evidence of internal moderation) were in full compliance, showing equal comparability with 2016, November 2016. However, QI 2.3 (appropriateness of quality and input by internal moderator) continues to be problematic. Generally, some of the reasons provided for the latter are that the various errors in the question papers could have been identified by the internal moderator (IM) and that the quality of input by the IM must be more rigorous (for example, Afrikaans HL, English HL, Economics and Mathematical Literacy). Overall, the external moderators, with specific regard to QI 2.3, indicated that the IMs should align more closely with the external moderation instrument.

Criterion 3: Content coverage

Table 1F below, shows the number of question papers that did not meet compliance for each of the quality indicators for content coverage.

Table 1F: Non-compliance for content coverage

QI	3.1	3.2	3.3	3.4	3.5
QI Deviance	3	8	3	3	0
QI Deviance %	7.1	19.0	7.1	7.1	0

The purpose of this criterion is to assess whether question papers have complied with content coverage as stated in the curriculum and the guidelines prescribed in the policy documents. There was generally a high level of compliance for content coverage across the five (5) QIs, with full compliance with QI 3.5 (the questions are representative of the latest development of the subject). General compliance could be attributed to the design of the policy documents and examination guidelines which explicate the specific content to be examined and the weightings of different components of the content.

Computer Applications Technology (CAT) Paper 2, and Religion Studies Paper 1 and Paper 2 are the three (3) question papers that did not comply with QI 3.1 (analysis grid did not show how each question is linked to a topic). The three question papers that did not comply with QI 3.3 were Mathematical Literacy Paper 2 and Religion Studies Paper 1 and Paper 2. CAT Paper 2, English HL Paper 2 and Mathematical Literacy Paper 2 did not comply with QI 3.4 were CAT Paper 2, English HL Paper 2 and Mathematical Literacy Paper 2. There was a significant number of question papers that did not comply with QI 3.2 (adequate coverage of topics as prescribed by policy), namely:

Accounting	Business Studies	Consumer Studies
CAT Paper 2	English HL P3	Religion Studies P1
Religion Studies P2	Physical Sciences P2	

Religion Studies was also deviant in the November 2016 examination in this criterion.

Criterion 4: Text selection, types and quality of questions

This criterion, comprising a total of 22 QIs, consists of three general QIs (4.1 – 4.3), six selection of text QIs (4.4 – 4.9), seven quality of questions QIs (4.10 – 4.16) and six multiple-choice questions (MCQs) QIs (4.17 – 4.22). For ease of reading, the former two sub-criteria and the latter two sub-criteria are presented as Table 1G and Table 1H respectively.

Table 1G: Non-compliance for general questions and text selection

QI	General questions			Text selection					
	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9
QI Deviance	0	2	8	1	3	10	3	3	6
QI Deviance %	0	4.6	19	2.3	7.1	23.8	7.1	7.1	14.3

Table 1H: Non-compliance for quality of questions and MCQs

QI	Quality of questions							MCQs					
	4.10	4.11	4.12	4.13	4.14	4.15	4.16	4.17	4.18	4.19	4.20	4.21	4.22
QI Deviance	0	15	11	9	9	1	6	0	0	1	0	0	2
QI Deviance %	0	35.7	26.2	21.4	21.4	2.3	14.3	0	0	2.3	0	0	4.6

The QIs of general questions, showed greatest deviance for QI 4.3, for eight question papers. To this regard, question papers such as Accounting, Agricultural Sciences P1 and P2, Business

Studies, CAT P2, English HL P1; and Mathematical Literacy P1 and P2 indicated that there was a lack of correlation between the mark allocation and level of difficulty. All 42-question papers were compliant with QI 4.1, which requires a range of question types to be included in the question paper.

The QI that relates to the selection of text, QI 4.6 had the largest number of anomalies, as 10 question papers did not comply, for example, Accounting, English HL, Geography and Mathematical Literacy indicated that their question papers were not functional, appropriate and relevant. Six question papers indicated lack of compliance with QI 4.9; Accounting, Afrikaans FAL Paper 2, Economics Paper 1 and Paper 2, and English HL Paper 1 and Paper 2 stated that text selection did not generate questions across the cognitive levels.

For the sub-criterion 'quality of questions'; the least compliant were QI 4.11 and QI 4.12 with 15 and 11 question papers, respectively. The subjects that were non-compliant with QI 4.11 were Afrikaans FAL, Afrikaans HL, Business Studies, English HL, Geography, Mathematical Literacy, Mathematics, Religion Studies and Visual Arts. These subjects maintained that questions contained vaguely defined problems, ambiguous wording, extraneous information and unintentional clues to answers. For QI 4.12, eight subjects, Accounting, CAT, English FAL, English HL, Geography, Mathematical Literacy, Mathematics and Tourism, reported that questions failed to provide clear instructional verbs. The moderation reports for Mathematical Literacy and Mathematics showed that there was a lack of compliance for each of QI 4.13 and QI 4.14; these subjects indicated that some questions did not contain sufficient information to elicit appropriate responses and that double negatives were used in the questions. However, there was full compliance for QI 4.10, indicating that the questions related to what is pertinent to the subject.

Of the four (4) QIs for the MCQs, QI 4.20 and QI 4.21 were in full compliance while QI 4.19 and QI 4.22 were deviant in one and two question papers, respectively. Geography Paper 1 showed that options were not free from absolute terms such as 'always' and 'never', and Economics Paper 2 and Physical Sciences Paper 1 indicated that the correct answer included elements in common with the other options.

Criterion 5: Cognitive Skills

Table 11 below, shows the number of question papers that did not meet compliance for each of the quality indicators for cognitive skills.

Table 11: Non-compliance for cognitive skills

QI	5.1	5.2	5.3	5.4	5.5
QI Deviance	6	21	8	2	3
QI Deviance %	14.3	50	19	4.6	7.1

The purpose of this criterion is to assess whether the cognitive levels in each question are appropriately matched to an appropriate educational taxonomy for the specific subject. This criterion is critical for ensuring that the cognitive levels of each question paper are aligned with

policy and examination guidelines per question paper. However, on first moderation, as for March 2017 each of the five QIs was flouted. For QI 5.1, six question papers (Accounting, CAT Paper 2, English HL Paper 1, Geography Paper 1, Religion Studies Paper 2 and Visual Arts) failed to clearly show the cognitive levels of each question/sub-question. The greatest deviance is situated in QI 5.2; 21 question papers indicated an inappropriate distribution of cognitive levels according to the norm. There was also evidence of instances of incongruence in interpretation of the cognitive domain in questions between the IM and EM. This particular criterion has remained a cause for concern since November 2015.

Criterion 6: Language bias

Table 1J below, shows the number of question papers that did not meet compliance for each of the quality indicators for language bias.

Table 1J: Non-compliance for language bias

QI	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8
QI Deviance	6	7	12	16	6	1	2	1
QI Deviance %	14.3	16.7	28.6	38.1	14.3	2.3	4.6	2.3

This criterion, comprising eight QIs, aims to establish whether the language used is grammatically correct; that the register and level of complexity is at the level of the target candidates; that there are no biases; and that questions accommodate special needs students. This criterion was flouted across all eight QIs. As for November 2016 examination question papers, the most salient deviations for March 2017 examination question papers, were that for QI 6.4 (16 question papers) and QI 6.3 (12 question papers). These question papers showed evidence of grammatical errors and subtleties in grammar that could create confusion in interpretation of the questions. Evidence also depicted that for some subjects (Afrikaans FAL, CAT, English HL, Geography and Tourism) the subject terminology and/or data were incorrectly used (QI 6.2). For QI 6.1, some subjects, for example, Afrikaans HL, Business Studies, Mathematical Literacy and Mathematics indicated that subject terminology was incorrectly used; for QI 6.5, Agricultural Management Practices, Agricultural Sciences, Consumer Studies, English HL and Visual Arts reported that questions contained over-complicated syntax. For QI 6.7, there was evidence of gender bias (Business Studies) and political, region and religion bias (English HL Paper 1).

Criterion 7: Predictability

Table 1K below, shows the number of question papers that did not meet compliance for each of the quality indicators for predictability.

Table 1K: Non-compliance for predictability

QI	7.1	7.2	7.3
QI Deviance	5	3	3
QI Deviance %	11.9	7.1	7.1

The purpose of this criterion is to assess the level of originality in the question papers as proof that questions have not been repeated from the previous three years' examination question papers. Overall, a total of 11 question papers showed some deviance for the criterion of predictability. The large majority of question papers, 31, were in compliance, attesting to the vigilance to the criterion of predictability. However, Accounting showed no compliance for all three (3) QIs. English HL Paper 2 and Paper 3, Geography Paper 2 and Mathematics Paper 2 indicated that the questions were of such a nature that they could be predicted (i.e. QI 7.1); Business Studies and Mathematical Literacy specified evidence of verbatim repetition of questions from previous examination question papers (i.e. QI 7.2); and English HL Paper 1 and Mathematical Literacy Paper 2 indicated that their question papers lacked appropriate degree of innovation (i.e. QI 7.3).

Section B: Moderation of marking guidelines

This section presents findings and discussion of the three (3) criteria of moderation of marking guidelines namely, development, conformity with question paper and accuracy and reliability of marking guidelines.

Criterion 8: Development

Table 1L below, shows the number of question papers that did not meet compliance for each of the quality indicators for development.

Table 1L: Non-compliance with development

QI	8.1	8.2	8.3
QI Deviance	2	4	2
QI Deviance %	4.6	9.5	4.6

The above table suggests that this criterion was mostly in compliance. For QI 8.1, only two question papers (Business Studies and Visual Arts) indicated that the marking guidelines had not been developed alongside the question paper; for QI 8.2, four question papers (Afrikaans FAL Paper 2, Economics Paper 1 and Paper 2 and English HL Paper 1) showed that the marking guidelines did not reflect the assessment objectives of the curriculum in correct proportions; and for QI 8.3, two question papers (English HL Paper 1 and Paper 2) revealed that the marking guidelines did not maintain the intellectual challenge from one year to the other.

Criterion 9: Conformity with question paper

Table 1M below, shows the number of question papers that did not meet compliance for each of the quality indicators for conformity with question paper.

Table 1M: Non-compliance with conformity with question paper

QI	9.1	9.2	9.3
QI Deviance	4	5	2
QI Deviance %	9.5	11.9	4.6

Four questions papers (Afrikaans FAL Paper 1, Business Studies, English HL Paper 3 and Mathematical Literacy Paper 2) indicated that for QI 9.1, the marking guidelines did not correspond with the questions in the question paper. For QI 9.2, five question papers (Business Studies, Economics Paper 1 and Paper 2, English HL Paper 2 and Mathematical Literacy Paper 1) specified that the marking guidelines failed to match the command words in the question. Two question papers (Mathematical Literacy Paper 2 and Visual Arts) indicated that, for QI 9.3, there was a lack of correspondence between the marks for each sub-question shown in the marking guidelines and the question paper.

Criterion 10: Accuracy and reliability of marking guidelines

Table 1N below, shows the number of marking guidelines that did not meet compliance for each of the quality indicators for accuracy and reliability of marking guidelines.

Table 1N: Non-compliance with accuracy and reliability of marking guidelines

QI	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	10.10	10.11	10.12
QI Deviance	18	15	10	7	1	9	0	0	0	2	9	0
QI Deviance %	42.9	35.7	23.8	17.7	2.3	21.4	0	0	0	4.6	21.4	0

The table shows that there was full compliance for four of the 12 QIs i.e. QIs 10.7, 10.8, 10.9 and 10.12. However, QI 10.1 showed the most deviance; 18 of the 42 question paper marking guidelines did not comply, as they were incorrect in terms of the subject matter. The subjects that showed non-compliance in most or all of their respective making guidelines for this QI were Afrikaans HL, Life Sciences, Mathematical Literacy and Mathematics. The second highest level of non-compliance was QI 10.2; making guidelines of 15 question papers across nine subjects (Afrikaans FAL, Afrikaans HL, CAT, Consumer Studies, English FAL, English HL, History, Mathematical Literacy and Mathematics) indicated that there were typographical errors or errors in language. The third highest level of non-compliance was for QI 10.3, where the marking guidelines of ten (10) question papers were not clearly laid out. Next in non-compliance were QI 10.6 and QI 10.11; marking guidelines of nine question papers indicated that the allocation of marks was not commensurate with the demands of the questions and marking guidelines of nine question papers showed that relevant alternative responses were not provided. Marking guidelines of seven question papers were non-compliant for QI 10.4, specifying that they will not facilitate marking. Lastly, for QI 10.10, making guidelines of two questions papers, and for QI 10.5, marking guideline of one question paper showed deviance.

Section C: Overall impression and general remarks

This section examines only Criterion 11, overall impression, of the 42 question papers. Criterion 12, general remarks was discussed in paragraph 1.3 - Summary of Findings.

Criterion 11: Overall impression

Table 1O below, shows the number of question papers that did not meet compliance for each of the quality indicators for accuracy and reliability of marking guidelines for the 42 question papers.

Table 1O: Non-compliance with overall compliance

QI	11.1	11.2	11.3	11.4	11.5	11.6
QI Deviance	5	20	2	20	11	3
QI Deviance %	11.9	47.7	4.6	47.7	26.2	7.1

This criterion provides the overall impression of the question paper and the marking guidelines informed by the foregoing criteria and which informs the general remarks. The question papers that showed the most non-compliance across the six QIs are Accounting, English HL Paper 1 and Paper 2, Mathematical Literacy Paper 1 and Paper 2, and Religion Studies Paper 2. The two most flouted QIs were QI 11.2 and QI 11.4. Quality indicator 11.2 indicated that 20 question papers were not fair, valid and reliable at first moderation while QI 11.4 pointed out that 20 question papers and accompanying marking guidelines were not of the appropriate standard. The next highest degree of non-compliance was QI 11.5; the standard of 11 question papers did not compare favourably with those of the previous examination papers. QIs 11.1, 11.3 and 11.6 had fewer question papers that were non-complaint, in five, two and three question papers respectively. The only two question papers that showed non-compliance for QI 11.3, were Mathematical Literacy Paper 1 and Religion Studies Paper 2, which reported that the paper as a whole did not assess the outcomes of the National Curriculum Statement (NCS).

1.4 Areas of Good Practice

The following areas of good practice were noted:

- The improvement in the percentage of question papers that were approved during the first and second moderations; that is, from 20% to 24% and from 60% to 58% respectively as well as the reduction of question papers approved at third from 20% to 12%.
- There was evidence that all question papers were internally moderated and that all internal moderators submitted their reports.
- For the large majority of papers, there is sufficient evidence to show that the recommendations of the IM were adopted.
- Question papers included questions of various types as required of the subject.

- For the MCQs, the options followed grammatically from the stem; were free from logical cues that make one of the options an obvious choice; options were approximately of the same length and language comparability; and a word or phrase in the stem was not repeated in the correct answer.
- With regard to the marking guidelines, marks were commensurate with the demands of the question; the guidelines encouraged a spread of marks; the allocation of marks was such that discrimination between high and low performers was not compromised; and the guidelines used appropriate levels of response.

1.5 Areas of Concern

The following areas of concern were identified during the first moderation of question papers::

- The approval of question papers only at the third and fourth moderation levels is of grave concern as this suggests that the requested changes and recommendations by the external moderators at first moderation were not rigorously applied. The question papers of concern were: Accounting, Afrikaans FAL Paper 2, Afrikaans HL Paper 1, Business Studies, CAT Paper 2, English HL Paper 2, and Mathematical Literacy Paper 1 and Paper 2.
- The high degree of non-compliance with the technical criteria: if the assessment policy and examination guidelines were closely adhered to, there should be no reason for flouting the various QIs of this criterion.
- The quality, standard and input from the IM are lacking in rigour for a large number of papers. These include:
 - the criteria of content coverage; text selection, types and quality of questions;
 - appropriate distribution of a relevant educational taxonomy in accordance with the norm provided for the subject;
 - meticulous scrutiny of language use – for grammatical accuracy, level of complexity and clarity in phrasing;
 - ensuring that question papers are free from any form of bias; and
 - ensuring that there is no repetition of texts and/or questions from previous examination papers and accuracy of the marking guidelines.

It is critical that the IM ensure that the question paper adheres to the various criteria outlined in the moderation instrument before it is submitted for external moderation.

1.6 Directives for Compliance and Improvement

The SACAI is required to ensure compliance with the following directives for compliance and improvement:

- The subjects for which question papers were approved at third and fourth levels should be investigated to ensure that a repeat of this is avoided in future examination sessions.

- SACAI should consider training/re-training its internal moderators on:
 - the use of the question paper moderation and marking guideline evaluation instrument;
 - effective application of the relevant educational taxonomy; and
 - developing editorial and proofreading skills.

Such training should draw on Umalusi's expectations of and quality standards for an examination. It is Umalusi's firm belief that such training could address the high levels of non-compliance in the various criteria.

- SACAI should also train its examiners on questioning style as well as the effective and appropriate application of the relevant educational taxonomy.

1.7 Conclusion

Drawing on the question paper moderation reports across the 42 question papers, Umalusi is confident that the examination question papers and marking guidelines were progressively brought to the point of print-readiness. They were thus deemed fair, valid and reliable and approved. The examination question papers have displayed varying degrees of compliance and non-compliance across the specified criteria and their respective quality indicators. SACAI is encouraged to continue with the areas of good practice identified, take note of the marked areas of concern and apply the directives for compliance and improvement.

CHAPTER 2

MONITORING OF THE WRITING OF EXAMINATIONS

2.1 Introduction and Purpose

In order to achieve the objectives of the National Qualification Framework Act, (Act 67 of 2008), with regard to quality assurance within its sub-framework, Umalusi must ensure integrity and credibility of exit examinations.

Annually, in February/March, the Supplementary examinations are administered to qualifying candidates and these examinations undergo the same quality assurance processes as the November examinations. Given the high-stakes status of the National Senior Certificate (NSC), the Assessment Bodies are responsible for ensuring that these examinations are conducted and managed in a fair and credible manner.

The Supplementary Examination is an examination granted under special conditions as contemplated in Section 18 of the Regulations pertaining to the conduct, administration and management of the National Senior Certificate Notice No. R872 in Gazette No. 31337 of 29 August 2008, as amended. The candidates that write this examination together with the November examination are regarded as having participated in one examination sitting.

In order to qualify and be admitted to write the supplementary exam, the following conditions apply:

- A candidate may register for a maximum of two subjects for the supplementary examination in the year following the final external examination. These two subjects must be among the subjects that the candidate sat for in the previous end-of-year examination;
- Candidates who absent themselves without a valid reason from end-of-year examinations, must not be permitted to register for the supplementary examinations;
- If a candidate is unable to write or complete one or more of the National Senior certificate examinations question papers for reasons other than illness or injury, a written report in which the circumstances are explained to the Head of the assessment body must be submitted, who will then decide whether or not the candidate will be allowed to sit for the supplementary examinations;
- Candidates who write supplementary examinations and who are unsuccessful, and wants to satisfy the outstanding requirements for the National Senior Certificate, such candidate will be allowed to meet the requirement within three(3) years, after the completion of the first NSC examination written by the candidate in that subject.

The South African Comprehensive Assessment Institute (SACAI) conducted its national NSC supplementary examinations nationally during 15 February 2017 – 14 March 2017.

In carrying-out its mandatory obligation as required by its founding Act, GENFETQA Act No.58 of 2001 as amended in 2008, Umalusi undertook a rigorous and adequate monitoring of the conduct of the examinations across the SACAI examination centres.

This chapter provides a summary of findings gathered from the examinations centres monitored, and highlights areas of good practice observed, identifies areas of concern and further outlines directives for compliance and improvement to be addressed by the assessment body.

2.2 Scope and Approach

SACAI registered one hundred and seventy seven (177) candidates for 2017 NSC supplementary examinations. During these examinations, SACAI used only two (02) designated examination centres, the Dynamic Academy in Western Cape (WC), and its head office in Pretoria. Umalusi monitored both centres. The table below details the examination centres and subjects that were monitored.

Umalusi deployed its monitors for the monitoring of the writing phase during the same period, and essential data was collected using the monitoring instruments prescribed by Umalusi. The data collection methods used included observations, interviews, and verification of examination related documents available at the examination centres.

Table 2.1: Examination Centres monitored for the writing of examinations

	PROVINCE	CENTRE	DATE	SUBJECT
1	Gauteng	SACAI Head Office	6 March 2017	Physical Sciences P2
2	Western Cape	Dynamic Academy	3 March 2017	Afrikaans HL P3 and Afrikaans FAL P3

2.3 Summary of Findings

The findings below are presented in accordance with Umalusi's eight (8) critical criteria for monitoring of the writing of examination.

2.3.1 Delivery and storage of examination material

The examination materials were delivered to the (WC) examination centre via courier whereas delivery was not necessary for the Head Office. The question papers were secured in sealed plastic bags and delivered in security coded crates. All the material was delivered as one consignment and the consignment was packaged in tamper proof bags. At Dynamic Academy the examination material was stored in a small indoor safe whereas at head office the examination material was stored in a strong room. The keys in both examination centres were kept by the chief invigilators.

The following security measures were in place for storage of examination material in both examination centres: burglar bars; alarm system; access control and fire extinguishers. The head office had 24-hour security guards. Both of the examination centres had additional security measures such as surveillance cameras in place.

2.3.2 The Invigilators and their training

The appointment of Chief Invigilators differed. At the SACAI head office, the chief invigilator was a senior staff member whereas at Dynamic Academy an external person was appointed as the chief invigilator. The same approach was used to appoint the invigilators; a management staff member was appointed as an invigilator at the head office and an external person was appointed as an invigilator for the Dynamic Academy Centre.

The invigilator of Dynamic Academy presented Umalusi with an appointment letter dated 7 October 2016 whereas the invigilator at the Head Office did not have one.

Furthermore, invigilators who were responsible at the head office were trained on 2 February 2017 and the one at Dynamic Academy was last trained on 7 October 2016.

2.3.3 Preparations for writing and the examination venues

It was found that the area and environment where examinations were written, was conducive. The following were noted:

- Both centres had clear signage of where the examination took place;
- The examination rooms in the examination centres were conducive for the writing of examinations;
- Examination rooms were clean; had good ventilation; adequate lighting; no noise inside and outside the examination rooms and moderate temperature.
- There were adequate tables and chairs, and the space between candidates was of acceptable distance as provided in the regulation.
- There was no material that could be of assistance to the candidates in any of the examination venues monitored;
- Relevant information like date; centre number and subject was displayed on the board. Clocks were displayed in both examination centres and the seating plans were available.
- All the candidates at both centres were properly registered for the subjects written and verification was done.
- At both centres candidates were prohibited from bringing their cell phones into the examination rooms.

2.3.4 Time management

The management of time was adhered to by both the invigilators and candidates in terms of arrival into the examination room and ten (10) minutes reading time; however, a discrepancy occurred at one centre where the examinations were started at 13h45 i.e. fifteen minutes earlier than the required and regulated time 14h00. The Centre Manager informed Umalusi monitor that SACAI has indicated that if all candidates are seated, they can start writing and adjust the time accordingly. This action by centre, is viewed as deviation to the regulations that governs the examinations.

2.3.5 Checking the immediate environment

It was established that the invigilators inspected the surroundings to ensure that there was no material that could be used to advantage the candidates.

2.3.6 Activities during writing

The two centres confirmed the cover page details at different times. At the head office it was done at the end of the session and at the Dynamic Academy it was done before the commencement of the examination.

The following pockets of good invigilation were evident:

- The invigilators were vigilant, attentive and mobile;
- At both centres monitored, invigilators did not clarify any aspect or questions in the question paper to candidates;
- Candidates were not allowed to leave the examination room before the hour elapsed and during the last fifteen (15) minutes.

2.3.7 Packaging and transmission of answer scripts

Packaging and transmission of answer scripts was also closely monitored and the following was observed:

- A differentiated approach was used during the collection of scripts at the end of the session.
 - at one centre candidates remained seated and the invigilator collected the scripts from each of them,
 - at the other centre the invigilator collected the scripts from those candidates who indicated by raising of hands that they finished the writing.
- The examination rooms were used to count and pack the candidates' answer scripts.
- Packaging of scripts followed the examination number sequence as indicated on the mark sheet;
- The scripts were packed in sealable plastic bags provided by the assessment body; these bags were stored in the strong rooms. At the Western Cape centre the collection by courier services was provided.
- A daily report was completed by SACAI head office centre only.

2.3.8 Monitoring by the assessment body

The evidence gathered indicated that the exam centre in Western Cape was last monitored by SACAI head office official in November 2016, however there is no evidence of any visits in the 2017 supplementary examinations.

2.3.9 Irregularities

(a) Irregularities identified by Umalusi monitors

- A candidate number 9801255096085 did not appear on the attendance register though he had an official admission letter. The invigilator indicated that was caused by late registration.

(b) Irregularities reported by SACAI to Umalusi

SACAI submitted an irregularity report, and it was discovered that during the conduct of the supplementary examinations, no examinations irregularities were encountered.

2.4 Areas of Good Practice

- SACAI is commended for the credible manner in which the examination was conducted.
- Availability of all administrative records.

2.5 Areas of Concern

- Starting examination ahead of scheduled time is irregular;
- Appointment letters of Chief Invigilator and Invigilator not signed.

2.6 Directives for Compliance and Improvement

- Scheduled times for commencement of examination sessions must be adhered to.
- Appointment letters of chief Invigilators and Invigilators must be signed.

2.7 Conclusion

The examinations under the supervision of the SACAI were generally conducted in such a manner that would not compromise the integrity and credibility of the NSC supplementary examinations of 2017. SACAI must address the directives for compliance and provide Umalusi with an improvement plan on how the directives will be attended to.

CHAPTER 3

MONITORING OF MARKING

3.1 Introduction and Purpose

As part of its mandate, Umalusi has the responsibility of verifying the extent to which assessment bodies comply with regulation pertaining to the conduct, administration and management of the National Senior Certificate (NSC), Notice No. R872, in Gazette No. 31337 of 29 August 2008, as amended.

The marking of answers scripts on every examination written is a very crucial process in quality assurance of assessment. In terms of the National Qualification Framework Act, (Act 67 of 2008), Umalusi has the responsibility with regard to quality assurance within its sub-framework, to ensure integrity and credibility of exit examinations, including quality assurance of the conduct of writing and marking processes.

This chapter reports on the findings gathered during the monitoring of 2017 Supplementary NSC Examination administered by South African Comprehensive Assessment Institute (SACAI). The report acknowledges areas of good practice, areas of concern observed during the monitoring of the conduct of examinations across monitored centres and it suggests directives for compliance and improvement with which the assessment body must comply.

3.2 Scope and Approach

SACAI centralised the marking of the 2017 Supplementary examinations answer scripts and all related processes to its Head offices in Pretoria. The marking of the examinations scripts was conducted on the 18 March 2017. Umalusi monitored the process.

It is worth indicating that data was collected using the approved monitoring instruments prescribed by Umalusi and this valuable information was collected through observations, interviews and verification of records.

Table 3.1 below, provides a list of subjects marked, number of scripts controlled markers appointed per subject.

Table 3.1: List of subjects marked, number of scripts controlled, and appointed number of markers.

Centre	Date	Subject	No of Scripts	No of Markers
SACAI office	18/03/2017	English Home Language (Paper 1,2 and 3)	54	2
		Accounting	5	1
		Business Studies	23	1
		Economics	10	1
		Engineering Graphics and design	8	1

Centre	Date	Subject	No of Scripts	No of Markers
SACAI office	18/03/2017	Geography (Paper 1 and 2)	20	1
		History (Paper 1 and 2)	8	1
		Life Sciences (Paper 1 and 2)	20	1
		Mathematics (Paper 1 and 2)	26	1
		Mathematical Literacy (Paper 1 and 2)	22	1
		Physical Sciences (Paper 1 and 2)	16	1
		Tourism	2	1
		Computer Application Technology	24	1

3.3 Summary of Findings

The findings below are presented in terms of the criteria used for the monitoring of the marking phase of examinations, as prescribed by Umalusi.

3.3.1 Planning for marking

SACAI presented Umalusi with its marking management plan well in advance. This assisted Umalusi in planning and deployment of staff to the marking centre.

The marking personnel were provided with marking guidelines on 13 March 2017 that enabled them to prepare for the marking.

3.3.2 Marking centre

As indicated above, SACAI marking was conducted at its head office at 278 Serene Street, Garsfontein, Pretoria, and the conference and training rooms were used for this undertaking. The training hall was used as the script control room. All scripts were dispatched from the storage room in the morning and collected after being checked back into the strong room.

It was noted that the general conditions at the marking centre were excellent and all markers were properly appointed. The centre was open from 07h00 to 16h00. The one day allocated was enough and all processes were able to be concluded within the scheduled time.

3.3.3 Security

The monitoring established that the norms and standards prescribed for marking centres were found adequately adhered to.

The following security measures were in place:

- A security guard was stationed at the entrance into the premises and at the entrance to the building;

- The alarm system linked to armed security response; and
- surveillance cameras installed.

3.3.4 Training of marking personnel

Training of marking personnel was managed by the marking centre manager and was limited to administrative matters. Each subject was allocated a marker with an exception of English Home Language where two markers were appointed. The internal moderator for the English Home Language subject led the marking guideline discussion since two markers marked the subject. All markers involved in the marking session were previous chief markers and had undergone detailed training during the November 2016 marking session.

3.3.5 Marking procedure

SACAI followed the approach of entire script marking not the question approach. The following were observed:

- All markers signed the attendance register on arrival;
- All markers were not attached to any learning Centre of SACAI which means they will not mark scripts of their own candidates;
- In the event of a candidate answering more than required questions or answer same question more than once, only the first answer was marked.
- The Examination Assistants did the verification of marks.

3.3.6 Monitoring of marking

One of the SACAI Managers had an oversight responsibility of the marking centre and took charge of the management of all the marking processes. Again, it was found that due to the low number of candidates writing the supplementary examination, each subject was allocated a single marker who had to assume both marker and moderator responsibilities. This approach, however, had serious implications on verification and the accuracy of captured marks despite the fact that the markers were experienced and had previously been appointed as chief markers and internal moderators.

3.3.7 Handling of irregularities

It was noted that all markers were trained on the handling of examination irregularities and were fully aware of what constituted an examination irregularity. Furthermore, it was highlighted that the detected irregularities were to be reported in accordance with prescribed processes, using the prescribed instruments, to the centre manager. An irregularity register was available at the marking centre. SACAI has appointed an irregularity committee to handle any irregularities.

During the marking and on the day of the monitoring, no irregularity was reported or detected at the marking centre.

3.3.8 Quality assurance procedures

Quality assurance of the marking process was limited to verification of technical aspects by the examination assistants, and further noted that the accuracy in the transfer of marks did not receive the rigor it deserves.

3.3.9 Reports

It was observed that markers completed a qualitative report at the end of their marking session and submitted it to the centre manager on a pre-determined template. The report would be used for standardization and statistical purpose as well as training of the teaching personnel at the learning centres.

3.4 Areas of Good Practice

Monitors acknowledged the following areas of good practice at the SACAI marking centre:

- SACAI has drawn a proper management plan for the 2017 supplementary examination and adhered to it;
- All markers appointed were former chief markers.

3.5 Areas of Concern

The following areas of concern were noted during the monitoring visits:

- There was no dedicated marking guideline discussion for markers;
- There was no moderation of the marking process as there was only one marker per subject;
- Quality assurance procedures are limited to verification of technical aspects by examination assistants.

3.6 Directives for Compliance and Improvement

SACAI must consider the following directives to improve the marking processes of the NSC examinations in future:

- Marking Guideline Discussions for all subjects must be conducted.
- Moderation of marked answer scripts must be done for accuracy of marking.

3.7 Conclusion

SACAI's 2017 NSC supplementary examination marking process was managed satisfactorily, except for the areas of concern as noted in the report. The findings has provided a clear indication of the level at which SACAI complied with the regulation, and as such the management of the marking process is considered to be credible.

CHAPTER 4

VERIFICATION OF MARKING

4.1 Introduction and Purpose

As one of its key quality assurance practices, Umalusi verifies the marking process of the National Senior Certificate examinations administered by South African Comprehensive Assessment Institute (SACAI). The verification process ensures that there is consistency in the interpretation and application of the marking guidelines, and safeguards fairness in marking across the subjects.

Umalusi conducted the verification of marking for SACAI supplementary examination on-site, for a selected number of subjects. A significant benefit of conducting the verification process on-site is that inconsistencies or discrepancies in marking could immediately be identified and addressed by the EMs. The marking of the SACAI supplementary examinations took place immediately after the marking guideline discussions, in the presence of Umalusi moderators for the relevant subjects who were deployed to SACAI premises during the marking process.

4.2 Scope and Approach

The onsite verification of marking for the SACAI was conducted in seven (7) gateway National Senior Certificate (NSC) subjects that were written for the 2017 NSC supplementary examination. The external moderators conducted the verification of marking consistently, in line with Umalusi criteria for the verification of marking as outlined below:

Part A: Adherence to marking guidelines

Part B: Quality and standard of marking

Part C: Candidate performance

4.3 Summary of Findings

The final part of the verification of marking Instrument requires the EM to provide informative comments to be noted by the IM and CM. The following is a summary of significant comments made by the EMs for the seven subjects:

Table 4.3: List of comments made on subjects.

CRITERIA	SUBJECTS						
	Accounting	Business Studies	Economics	English Home Language	Life Sciences	Mathematical Literacy	Physical Sciences
Adherence to marking guidelines							
Adherence to marking guidelines	√	√	√	√	√	√	√

CRITERIA	SUBJECTS						
	Accounting	Business Studies	Economics	English Home Language	Life Sciences	Mathematical Literacy	Physical Sciences
Adherence to marking guidelines							
Changes effected to marking guidelines	x	x	x	x	x	x	x
Quality and Standards of Marking							
Consistency in allocation of marks	√	√	√	√	√	√	√
Accuracy in addition of marks and calculation of totals	√	x	√	√	√	√	√
Internal moderation of marks	√	x	x	√	x	√	√
Fairness, Validity and Reliability	√	x	√	√	√	√	√
Candidates' Performance							
	Candidates lacked basic conceptual knowledge and subject terminology.	Poor performance.	x	x	x	x	x

The following recommendations are made to markers and internal moderators:

- The Internal Moderator (IM) should be alert for repetition of facts and irrelevant responses by candidates (Economics).
- Method marks should be allocated only if there is one part correct in the workings (Accounting).
- The IM should guard against generosity in marking and adhere to the rubric (English HLP3). Moderation has been very thorough (English HL P2).
- The IM could not moderate because he was the marker (Economics).
- The chief marker or experienced marker should mark the supplementary examination scripts and not a novice marker (Business Studies).

4.4 Areas of Good Practice

The following areas of good practice were noted:

- There was adherence to marking guidelines and consistency in marking in the six of the seven subjects, namely, Accounting, Economics, Physical Sciences, Life Sciences, Mathematical Literacy and English HL.
- The detection and immediate correction of inconsistencies in (Business Studies) by external moderator and examination assistant have contributed significantly to the overall fairness, validity and reliability in marking.

4.5 Areas of Concern

The following areas of concern were noted:

- The appointment of a novice marker who lacked knowledge of the content of the marking guidelines (Business Studies).
- Candidates not familiar with English HL texts provided poor narratives and understanding of the novels and very shallow responses in essay writing.
- Lack of subject knowledge in all verified subject resulting in poor performance by candidates.
- No internal moderation done in Economics, Life Sciences and Business Studies.

4.6 Directives for Compliance and Improvement

The following directives are given to SACAI for compliance and improvement:

- SACAI should put measures in place to ensure that quality internal moderation in all subjects written during the supplementary examinations is conducted.

4.7 Conclusion

The reports from Umalusi on the verification of marking for the March 2017 supplementary examinations for SACAI have indicated that marking was conducted in a fair, valid and reliable manner. Adherence to the marking guidelines and consistency in marking observed across the selected subject.

The inconsistencies in the addition of marks in Business Studies was resolved and corrected immediately to ensure that the integrity of the marks awarded to candidates is not compromised. The general poor performance by learners across the selected subjects is a cause for concern.

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