UMALUSI

Quality Council for General and Further Education and Training

Report on the Quality Assurance of the Independent Examinations Board (IEB) November 2021 National Senior Certificate examinations and assessment

20th Anniversary

REPORT ON THE QUALITY ASSURANCE OF THE INDEPENDENT EXAMINATIONS BOARD NOVEMBER 2021 NATIONAL SENIOR CERTIFICATE EXAMINATIONS AND ASSESSMENT

UMALUSI

Quality Council for General and Further Education and Training

TABLE OF CONTENTS

FOREWORD BY THE CHIEF EXECUTIVE OFFICER

Over the past years, Umalusi has made great strides in setting, maintaining and improving standards in the quality assurance of the National Senior Certificate (NSC).

Umalusi has managed to achieve its success by establishing and implementing an effective and rigorous quality assurance of assessment system with a set of quality assurance processes that cover assessments and examinations. The system and processes are continuously revised and refined.

Umalusi judges the quality and standard of assessments and examinations by determining the:

- Level of adherence to policy in the implementation of examination and assessment processes;
- Quality and standard of examination question papers, their corresponding marking guidelines and school-based assessment (SBA) tasks;
- Efficiency and effectiveness of systems, processes and procedures for the monitoring of the conduct, administration and management of examinations and assessments; and
- Quality of marking, as well as the quality and standard of quality assurance processes within the assessment body.

Umalusi has established a professional working relationship with the Independent Examinations Board (IEB). As a result, there has been an improvement in the conduct, administration and management of the NSC examinations and their assessments. There is ample evidence to confirm that the IEB, learning institutions/schools, as well as the examination and marking centres, continue to strive to improve systems and processes relating to the NSC examinations and assessments.
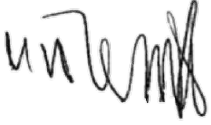
The Assessment Standards Committee (ASC), which is a committee of Council, and the Executive Committee of Umalusi Council (EXCO) met in January 2022 to scrutinise evidence presented on the conduct of the November 2021 NSC examination. Having studied all the evidence at hand on the management and conduct of the NSC examination administered by the IEB, Umalusi is satisfied that there were no systemic irregularities reported that might have compromised the credibility and integrity of the November 2021 NSC examination.

The EXCO approved the release of the IEB November 2021 NSC examination results based on available evidence that the examinations were largely administered in accordance with the examination policies and regulations. However, the IEB is required to address the directives for compliance and improvement and submit an improvement plan to Umalusi by 15 March 2022.

The EXCO commends the IEB for conducting a successful examination despite the challenges presented by COVID-19.

Umalusi will continue to ensure that the quality, integrity and credibility of the NSC examinations and assessment are maintained. Umalusi will also continue in its endeavours towards an assessment system that is internationally comparable through research, benchmarking, continuous review and improvement of systems and processes.

Umalusi would like to thank all the relevant stakeholders who worked tirelessly to ensure the credibility of the November 2021 NSC examination.

Dr Mafu S Rakometsi
CHIEF EXECUTIVE OFFICER

EXECUTIVE SUMMARY

The National Qualifications Framework (NQF) Act mandates Umalusi to develop and implement policy and criteria for the assessment of qualifications registered on the General and Further Education and Training Qualifications Sub-framework (GFETQSF).

Umalusi is mandated, through the General and Further Education and Training Quality Assurance (GENFETQA) Act (Act No. 58 of 2001, as amended in 2008) to quality assure all exit point assessments and approve the release of examination results. The Act, in terms of this responsibility, stipulates that Umalusi, as the Quality Council for General and Further Education and Training:

- Must perform the external moderation of assessments of the different assessment bodies and education institutions;
- May adjust raw marks during the standardisation process; and
- Must, after consultation with the relevant assessment body, approve the publication of the results of learners if the Council is satisfied that the assessment body:
    - conducted the assessment free from any irregularity that may jeopardise the integrity of the assessment or its outcomes;
    - complied with the requirements prescribed by the Council for conducting assessments;
    - applied the standards prescribed by the Council with which a learner is required to comply to obtain a certificate; and
    - complied with every other condition determined by the Council.

The Independent Examinations Board (IEB) is one of the three assessment bodies in the schooling sector that administers and manages the examinations of the National Senior Certificate (NSC) qualification. Umalusi undertakes the quality assurance of the NSC qualification through a rigorous process of reporting on each of the assessment processes and procedures. The quality and standard of assessment is judged by the adherence to policies and instructions designed to deal with the critical aspects of administering credible national assessments and examinations.

The purpose of this report is to give feedback on the processes followed by Umalusi in the quality assurance of the November 2021 NSC examination and assessment. The report also reflects on the findings, areas of improvement, areas of non-compliance and directives for compliance and improvement in the conduct, administration and management of these examinations and assessments. The findings are based on information obtained from Umalusi moderation, monitoring, verification, and standardisation processes, as well as from reports received from the IEB. Where applicable comparisons are made with the November 2020 NSC examination.

Umalusi has over the years, established a suite of quality assurance of assessment processes that are continuously enhanced. This report covers the following quality assurance of assessment processes implemented by Umalusi:

- Moderation of question papers (Chapter 1);
- Moderation of school-based assessment and practical assessment tasks (Chapter 2);
- Monitoring the state of readiness to conduct the examination (Chapter 3);
- Audit of appointed markers (Chapter 4);
- Monitoring of the writing and marking of the examination (Chapter 5);
- Marking guideline standardisation and verification of marking (Chapter 6);

- Standardisation and resulting (Chapter 7); and
- Certification (Chapter 8).

Umalusi moderated and approved 82 question papers and their marking guidelines in preparation for the writing of the November 2021 IEB NSC examination, while one question paper, Electrical Technology: Power Systems, was previously approved and was thus sourced from the bank to be used in this examination. The external moderation of question papers and their accompanying marking guidelines is critical to establish the standard of assessment. The moderation of question papers is, therefore, one of Umalusi's key quality assurance of assessment processes. The aim is to ensure that the examination question papers are correct, fair, valid and reliable in that they comply with the appropriate curriculum in terms of content coverage and cognitive demand. The moderation of question papers also aims to ensure that question papers are of a standard comparable to that of question papers from previous years so that candidates of a specific year are not advantaged or disadvantaged when compared to those of previous years. The marking guidelines of the question papers are moderated to ensure correctness, fairness, validity and reliability. The first external moderation findings were that most of the question papers and marking guidelines were of appropriate standard with some amendments required. The technical details: text selection, types and quality of questions, accuracy and reliability of marking guidelines, and overall impression, were some of the criteria that required intervention.

The quality assurance of school-based assessment (SBA) is of great importance as it constitutes 25% of a candidate's final mark of all the NSC subjects, except for Life Orientation, which constitutes 100% SBA. The SBA tasks are set and marked at school level. Umalusi sampled and moderated eight subjects in 40 schools using an online platform. The moderation of SBA entailed rigorous scrutiny of both teachers' and learners' files, using an Umalusi-developed SBA moderation instrument consisting of 12 criteria, of which nine focused on teacher files while three focused on learner files. The verification scrutinised whether tasks covered content and cognitive demands appropriately and that internal moderation had taken place at all moderation levels and observing all directives and policies. Umalusi then verified the files for accuracy of marking of the SBA tasks, records of learner performance and other relevant information.

The conduct, administration and management of the SBA was found to be mainly of a good standard, with most schools satisfying most requirements. There is, however, a need for improvement in the conduct, administration and management of the practical assessment tasks (PAT). The same common approaches and standards established for the conduct, administration and management of the SBA need to be established and enforced in the conduct, administration and management of the PAT. The IEB has also shown a systemic stability in the application of the assessment practices in the SBA and the same knowledge and understanding need to be replicated in the conduct, administration and management of the PAT.

A risk management-based approach was utilised to verify the state of readiness of the IEB to conduct, administer and manage the 2021 November examinations. This approach aims to identify any potential risks that might hinder the IEB in delivering a credible examination. It was done as follows:

- The IEB conducted and submitted a self-evaluation report.
  This allowed the IEB to conduct a self-evaluation on its state of readiness to administer and manage the examination and to submit a report to Umalusi. This was evaluated by Umalusi, who developed a risk profile for the IEB state of readiness, registration of candidates and examination centres; and
- Evidence-based verification.
  Umalusi conducted on-site verification to evaluate the supporting evidence that the IEB had submitted with the self-evaluation report.

The IEB registered 12 915 full-time and 979 part-time candidates to write the examination in 267 full-time registered examination centres: 253 were established locally and there were 14 registered examination centres outside the borders of South Africa. The verification found that the IEB had met the prescribed key indicators for state of readiness through strategies, measures and documented procedures. The IEB also put measures in place to address challenges related to the COVID-19 pandemic.

Umalusi sampled ten subjects for the desktop audit of appointed markers. A desktop audit of the evidence submitted by the IEB was conducted on 11 October 2021. Umalusi analysed the electronic files the IEB submitted for the audit of appointed markers using five criteria:

- Compliance with notional marking times;
- Qualifications and subject specialisation;
- Teaching experience;
- Marking experience; and
- Adherence to Personnel Administrative Measures (PAM).

The IEB satisfied the stipulated requirements for the appointment of the marking personnel except for the ratio of senior markers to markers in two subjects, namely, Mathematics and Engineering Graphics and Design.

Umalusi monitored the conduct, administration and management of examinations at 61 centres where the examination was administered. Monitoring of the writing of the examinations and the monitoring of the marking processes are conducted to ensure that the examinations and marking thereof are conducted in accordance with the "Regulations pertaining to the conduct, administration and management of the National Senior Certificate Examination".

The findings of the monitoring of the writing and marking of the IEB NSC examination revealed that there was an improvement in the conduct, administration and management of the examination, as demonstrated at the monitored examination centres, including the 23 examination centres granted concessions to conduct the 2021 NSC examination. The monitoring of the marking centres also continued to illustrate the high standard of compliance with the requirements for the establishment of marking centres.

Umalusi participated in the standardisation of marking guidelines for 27 question papers. Marking guideline standardisation is conducted with marking personnel to ensure that all possible alternative responses and corrections are agreed upon and that any changes or additions are approved before the commencement of marking. This process ensures that all marking personnel have a common understanding of how to mark candidates' responses. This serves the purpose of eliminating inconsistencies in marking and ensures that justice is done to the process, and that the finalised marking guidelines would ensure fair, accurate and consistent marking. The deliberations also include the finalisation of mark allocations ensuring that candidates are not advantaged or disadvantaged.

External moderation of marking by Umalusi served to verify that marking was conducted according to agreed and established practices and standards. Umalusi verified the marking of 15 NSC subjects consisting of 27 question papers. Verification of marking was conducted to ensure that the IEB marked according to the approved, signed-off marking guidelines and also to ascertain that effective internal moderation took place, possible anomalies were identified and to confirm that the standard of marking was consistent and fair. The marking process has improved over the years and the IEB has addressed a number of shortcomings found in previous marking sessions. The IEB should be commended for the many improvements. While marking in general was fair, there were areas that would further enhance the

marking process if a concerted effort is made by the role players. Some of the recurrent issues included the use of annotated marking guidelines because the final, approved marking guidelines were not printed; and the use of a single moderator in some subjects with more than one question paper.

Standardisation and statistical moderation of results are used to mitigate the effects of factors other than learners' ability and knowledge, on performance and to reduce the variability of marks from one examination to another. Umalusi standardised the marks of 65 subjects presented by the IEB. Decisions made to accept raw marks or to perform slight upward or downward adjustments were based on sound educational reasoning. In the majority of cases, the proposals by the IEB corresponded with those of Umalusi, clearly indicating the maturity of the system.

The closing of the examination cycle is confirmed by the issuing of certificates and confirmation of those candidates who have not qualified for any type of certificate, namely, instances where candidates failed all subjects or did not write the examination. Information on certification is included to inform interested parties of the state of the certification of learner achievements. As an assessment body, the IEB has the responsibility to process and submit records of candidate achievements to Umalusi for certification. Every effort must be made to ensure that all learners who qualify for a certificate receive this as soon as possible. The information technology (IT) system must be enhanced to ensure that once candidates' results have been approved, no changes to the marks will, or can, be made. Umalusi must give its approval to any mark changes made after the results have been released. In terms of the registration of learners and the certification processes, Umalusi was satisfied that all systems were in place to achieve a successful certification and issuing of certificates for the November 2021 NSC examination.

Based on the findings of the reports on the quality assurance processes undertaken during the November 2021 NSC examination, the Umalusi Executive Committee of Council (EXCO) concluded that the examination was conducted in line with the policies that govern the conduct of examinations and assessments and were generally conducted in a professional, fair and reliable manner. There were no systemic irregularities that could jeopardise the overall integrity of examinations and the results can therefore be regarded as credible. The EXCO approved the release of the IEB NSC examination results.

Umalusi trusts that this report will provide the IEB and other stakeholders with a clear picture of the strengths and weaknesses of the different assessment systems and processes; and that directives on where improvements are required will be attended to.

Umalusi will continue to collaborate with all stakeholders in line with its mission and vision to assure education standards in the GFETQSF and to be a trusted authority in fostering high educational standards in general and further education and training.

ABBREVIATIONS AND ACRONYMS

ASC	Assessment Standards Committee
CAPS	Curriculum and Assessment Policy Statement
COVID	Coronavirus disease
EIC	Examination Irregularity Committee
EMIS	Education Management Information System
EXCO	Executive Committee of Council
FAL	First Additional Language
FET	Further Education and Training
GENFETQA	General and Further Education and Training Quality Assurance
GFETQSF	General and Further Education and Training Qualifications Sub-Framework
HL	Home Language
IEB	Independent Examinations Board
IPT	Integrated Performance Tasks
IT	Information Technology
NCS	National Curriculum Statement
NQF	National Qualifications Framework
NSC	National Senior Certificate
PAM	Personnel Administrative Measures
PAT	Practical Assessment Task/s
SAG	Subject Assessment Guidelines
SAL	Second Additional Language
SAQA	South African Qualifications Authority
SBA	School-Based Assessment
SLA	Service Level Agreement
SOR	State of Readiness
Umalusi	Council for Quality Assurance in General and Further Education and Training

LIST OF FIGURES AND TABLES

CHAPTER 1 MODERATION OF QUESTION PAPERS

1.1   Introduction

The Independent Examinations Board (IEB) is responsible for the development and internal moderation of the examination question papers and their marking guidelines. After internally moderating and approving the question papers and their marking guidelines, these are submitted to Umalusi for external moderation. The main objective of the external moderation process is to ensure that the candidates are assessed using fair, valid and reliable question papers. Umalusi must ensure that the standard of the question papers administered in a particular year is comparable to that of the ones approved in previous years. To achieve this, Umalusi moderates the question papers and their marking guidelines by mapping them against a set of criteria. The question papers and their marking guidelines should, therefore, cover the prescribed content, relevant conceptual domains and appropriate cognitive challenges.

This chapter reports on the extent to which the IEB November 2021 National Senior Certificate (NSC) examination question papers and their marking guidelines met the set criteria. The findings in this report are solely based on the first moderation; however, if a question paper and its marking guideline were not approved at this level, they had to be rectified and resubmitted for further moderation until they fully met all criteria.

1.2   Scope and Approach

The IEB administered 83 question papers for the November 2021 NSC examination. Eighty-two of these question papers and their marking guidelines were submitted by the IEB to Umalusi for external moderation during this cycle. One question paper, Electrical Technology: Power Systems, had been approved previously and was thus sourced from the bank for use in this examination.

Table 1A portrays the ten criteria against which the question papers and their marking guidelines were gauged. Each criterion has a varied number of quality indicators, as indicated in brackets:

   a. Part A focuses specifically on the moderation of question papers and is comprised of seven criteria;
   b. Part B focuses on the moderation of the marking guidelines and is comprised of two criteria; and
   c. Part C focuses on the overall impression, with one criterion.

Table 1A: Criteria used for moderation of question papers and marking guidelines

Part A Moderation of question paper		Part B Moderation of marking guideline		Part C Overall impression and general remarks	
1	Technical details (12)[a]	8	Conformity with question paper (3)[a]	10	General impression (9)[a] and General remarks
2	Internal moderation (3)[a]	9	Accuracy and reliability of marking guideline (10)[a]		
3	Content coverage (6)[a]				
4	Cognitive skills (6)[a]				
5	Text selection, types and quality of questions (21)[a]				
6	Language and bias (8)[a]				
7	Predictability (3)[a]				

[a] Number of quality indicators

The external moderation process ultimately determines whether the question papers and their marking guidelines are approved, conditionally approved or rejected. When a question paper and its marking guideline comply fully with all the criteria, they are approved. However, if they do not comply fully with the set criteria, they must undergo subsequent moderation.

1.3   Summary of Findings

The findings in relation to the external moderation of the question papers and their marking guidelines is summarised below, starting with an analysis of the status of the question papers and their marking guidelines at first moderation. This report, further, compares this with the outcomes of the past two years. Compliance levels achieved, per criterion, follows.

1.3.1   Status of Question Papers Moderated

Figure 1A is a graphic representation of the status of question papers and their marking guidelines at first moderation. Thirty-five of the question papers were approved while 39 were conditionally approved and the other eight were not approved (rejected). Although the report refers to all the question papers, the findings are mainly based on the 47 question papers and their marking guidelines that required more than one moderation to be approved.
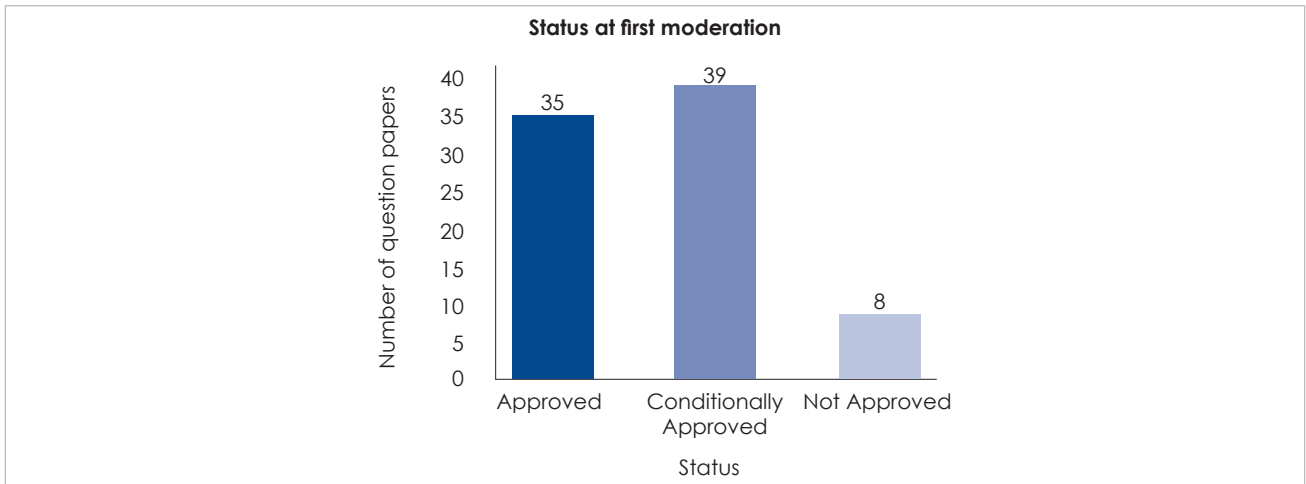
Figure 1A: Status of question papers and marking guidelines at first moderation

Figure 1B is a graphic representation of the status of the question papers and their marking guidelines at first moderation over a period of three years (November 2019, November 2020 and November 2021). This is done to measure the extent to which the directives for compliance and improvement issued to the IEB in the previous years helped the assessment body when capacitating their examining panels.
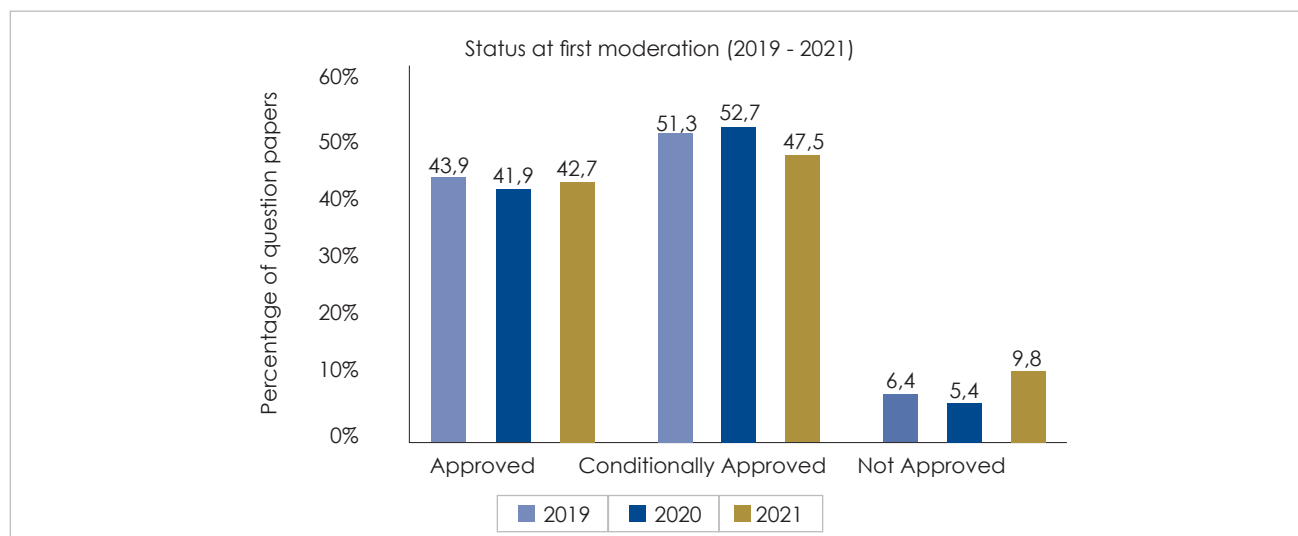
Figure 1B: Comparison of the status of question papers at first moderation for the November 2019, November 2020 and November 2021 examinations

Figure 1B clearly shows that there was an improvement of 0.8% in question papers and their marking guidelines that were approved at first moderation between November 2020 and November 2021. Figure 1B also shows that the percentage of question papers and their marking guidelines approved at first moderation in 2021 (42.7%) remained lower than that of 2019 (43.3%). Furthermore, the question papers that were not approved (rejected) at first moderation increased from 5.4% in 2020 to 9.8% in 2021.

1.3.2   Compliance Rate per Criterion

This section presents findings related to how question papers and their marking guidelines fared, pertaining to the four levels of compliance (no compliance, limited compliance, compliance in most respects and compliance in all respects) in relation to each of the ten criteria provided in Table 1A.

When a question paper and its marking guideline comply with all quality indicators in a criterion, it is rated as 100% compliant. A compliance level of 60%–99% with quality indicators in a criterion is rated as being compliant in most respects, while a compliance level of 30%–59% with quality indicators in a criterion is regarded as limited compliance. Non-compliance is detected when less than 30% of the quality indicators in a criterion are met.

Table 1B: Percentage compliance of question papers and marking guidelines at first moderation

Criteria	Level of compliance per criterion (%)			
	All respects	**Most respects**	**Limited respects**	**No compliance**
Technical details	57	43	0	0
Internal moderation	84	14	2	0
Content coverage	77	18	5	0
Cognitive skills	68	31	1	0
Text selection, types and quality of questions	47	49	4	0
Language and bias	65	34	1	0
Predictability	87	8	5	0
Conformity with question paper	77	22	1	0
Accuracy and reliability of marking guidelines	43	57	0	0
Overall impression	49	38	13	0

Table 1B shows how the question papers and their marking guidelines fared against each criterion. Most question papers and their marking guidelines complied fully with the following criteria: predictability (87%), internal moderation (84%), content coverage (77%), conformity of marking guidelines with question papers (77%), cognitive skills (68%) and language and bias (65%). Full compliance of the other criteria was below 60%. Less than 50% of the question papers and their marking guidelines complied fully with the following three criteria: text selection, types and quality of questions (47%), accuracy and reliability of marking guidelines (43%) and overall impression (49%). .

1.3.3   Question Paper and Marking Guideline Moderation Criteria

This section gives an in-depth analysis of non-compliance of all the question papers and their marking guidelines as mapped against each quality indicator of all the criteria. The levels of compliance, per criterion, of each question paper and its marking guideline are summarised in Annexure 1A.

The following paragraphs focus on compliance and/or non-compliance of each question paper against each criterion and explain the importance of the criterion in the overall moderation process. The report provides an analysis, covering all ten criteria, of the percentage of question papers and marking guidelines that complied in all respects. It states the reasons for non-compliance of the remaining question papers and their marking guidelines.

a)   Technical details

For this examination, 57% of the question papers and marking guidelines complied with all the quality indicators of this criterion. The remainder of the question papers and their marking guidelines failed to comply fully with this criterion, owing to their not satisfying the following quality indicators:

   i.   Instructions must always be clear and non-ambiguous to avoid creating any confusion for candidates. Unclear and ambiguous instructions can lead to nullification of an affected question. Nullification of a question or questions could adversely affect the standard of the question paper. Fourteen question papers had instructions that were deemed ambiguous.

   ii. The layout of a question paper also has a direct connection with the relevant details and instructions referred to earlier, in that if the layout is cluttered and not reader-friendly, it becomes difficult and time-consuming to navigate through a question paper. Five question papers were deemed cluttered and not reader friendly.

iii. Four question papers had incorrect numbering of questions. If questions are not numbered correctly, instructions may not be followed properly.

iv. The page numbering in two question papers was incorrect. Such an error can be detrimental where instructions refer to page numbers.

v. In three question papers there was no consistency in the headers and footers on each page. Headers and footers help in ensuring the identity of a question paper. Failure to adhere to this could lead to confusion.

vi. It needs to be borne in mind that various font types and sizes are intended to communicate different messages to audiences. Therefore the use of non-standard fonts, as was the case in nine question papers, could have misled candidates into reading unintended messages.

vii. Two question papers failed to indicate mark allocations clearly in some instances. Mark allocation has an important role in communicating the expansiveness of an expected response.

viii. Four question papers could not be completed in the time allotted as they appeared too long. Careful consideration must be given to the length of texts in a question paper as they could have an impact, depending on the reading levels of candidates.

ix. Question papers are administered nationally and invigilators are not necessarily subject specialists. Therefore, as with everything that appears on a question paper, the quality of drawings, illustrations, graphs and tables must be appropriate, clear, error-free and print-ready. However, 18 question papers failed to comply with this quality indicator.

x. The format requirements of every question paper are communicated through policies and examination guidelines or subject assessment guidelines. To safeguard the integrity of an examination, the prescribed formats must be strictly adhered to. However, five question papers did not, in some instances, take cognisance of the formats and were, therefore, found to be inappropriate.

b) Internal moderation

Internal moderation plays a pivotal role in ensuring that question papers and their marking guidelines are ready for external moderation. This process is solely meant to eliminate errors. Eighty-four percent of the question papers satisfied this criterion but the rest did not comply, owing to the following:

i. Six question papers were submitted for external moderation without a full history of the development of these question papers and their marking guidelines. Failure to submit this information has knock-on effects for other quality indicators as external moderation needs to establish whether proper guidance was provided during their development. The absence of the history of development of a question paper and its marking guideline could lead to speculation at external moderation level.

ii. As alluded to in the preceding paragraphs, the internal moderation process is primarily aimed at tightening internal processes in the development of a question paper and its marking guideline. As such, the full history of the development process must be submitted so that the source of challenges can be determined and proper guidance provided at external moderation level. However, the quality, standard and relevance of inputs from internal moderators of nine question papers were deemed inappropriate. The knowledge base of an internal moderator of any question paper must surpass that of the examining panel.

iii. In three question papers, there was traceable evidence that the internal moderator's recommendations had not been addressed.

c) Content coverage

Content coverage is spelt out clearly in assessment/examination guidelines. Therefore examining panels must be knowledgeable about the subject matter they are responsible for, as this knowledge is translatable to the composition of a question paper. Although 77% of the questions showed evidence of full compliance, 23% could not, for the following reasons:

i. Analysis grids in four question papers did not clearly link some questions to related topics.

ii. Twelve question papers did not cover the prescribed topics as stipulated in their subject assessment guidelines adequately, which could have had adverse effects on the standard of the question papers. The internal moderators of 12 question papers ought to have ensured that they followed the prescripts of the assessment guidelines religiously.

iii. As a result, some questions in eight question papers were deemed not to have been within the broad scope of the National Curriculum Statement (NCS).

iv. Five question papers had questions that were regarded as not being representative of the latest developments. Subjects evolve. Therefore assessments must strive to gauge candidates' aptitude based on current discourse, rather than assessing dated knowledge.

v. Seven question papers did not comply fully with the quality indicator related to the suitability, appropriateness, relevance and academical correctness of the content.

d) Cognitive skills

The assessment guidelines and the policy documents of the various subjects categorically state the percentages of cognitive skills that must constitute every question paper so as to cater for various candidates' abilities. Care must be taken to ensure that all question papers adhere to these prescripts to afford all candidates an opportunity to showcase their abilities. A balanced question paper will help make a distinction between low performing candidates and those who are performing well. Sixty-eight percent of the question papers complied fully with this criterion, while the failure of the rest to comply fully was due to:

i. Analysis grids of six question papers that did not clearly map each cognitive level of each question. Failure to do this leaves questions related to how an internal moderator can calculate the totals and arrive at the prescribed percentages of the cognitive skills.

ii. Eighteen question papers that had varying degrees of inappropriate distribution of cognitive skills. Three question papers were found to be challenging, while two were deemed to be slightly difficult and three were slightly easy.

iii. Choice questions in two question papers not being of equal level of difficulty. Choice questions must be of equal difficulty to ensure that no candidates are advantaged or disadvantaged over others; yet they are ultimately assessed in the same manner.

iv. When developing a question paper, care must be taken to ensure that a question paper provides an opportunity for it to assess candidates' varying cognitive abilities, such as for them to reason, translate information from one form to another or to respond appropriately and to communicate the message most effectively. However, three question papers lacked the ability to assess other conceptual abilities.

v. Two question papers had instances of irrelevant information that was either intentionally or unintentionally included and increased the level of difficulty of the question.

vi. As alluded to earlier, mark allocation does not only serve to indicate the worth of a question but also plays a pivotal role in communicating the extent to which candidates are expected to respond to a question. There must be strict correlation between mark allocation, cognitive skills and time allocation. Candidates could be misled, as in the case of eight question papers had these disparities not been detected.

e)   Text selection, types and quality of questions

Text selection, types and quality of questions form the crux of every question paper, in that the criterion has a direct impact on other quality indicators such as those for cognitive skills, language and bias and the accuracy and reliability of a marking guideline. Additionally, the three aspects encompassed in this criterion inform one another. Text selection informs the type of question that could be developed and both have a close relation to the quality of such a question. A variety of text selections and types of questions accommodates multiple intelligences of the candidates and provides accessibility to all candidates. Forty-seven percent of the question papers complied fully with this criterion, while the rest did not because:

i.   One question paper was deemed not to have had various types of questions.
ii.   When selecting texts such as prose texts, visuals, graphs, tables, illustrations and examples, several elements must be considered:
- Firstly, the source material must be subject specific. One question paper was found wanting in this regard.
- Secondly, the source material chosen must be of an appropriate length, especially in cases where an examination guideline document prescribes the length. The length of a source material selected can affect several factors in a question paper, such as the candidates' ability to read for comprehension within the stipulated timeframes. Conversely, a noticeably short source material could yield skewed results, in that candidates would be considered to have mastered the assessed aspect when, in fact, they were leveraged by the source material. Four question papers did not take this into consideration.
- Thirdly, the selected materials must be functional, relevant and appropriate in all respects. Nine question papers failed to comply with this quality indicator.
- Fourthly, the source material chosen must allow for testing, or it becomes pointless to include it in a question paper. Three question papers had source materials that failed to comply fully with this quality indicator.
- Lastly, the selected source materials must allow for the generation of questions across the cognitive skills but some of the chosen materials in three question papers fell short in this regard.
iii.   The quality of questions plays an immense role in the development of question papers:
- Five had questions that were not pertinent to their subjects.
- Twenty-one had questions that were not free from vaguely defined problems.
- Seventeen had issues related to instructional key words or verbs.
- Thirteen question papers contained questions with insufficient information that would not have allowed an elicitation of appropriate responses.
- Thirteen question papers had factual errors or misleading information in some of their questions. Some errors can be factual and, therefore, misleading.
- When developing questions, one must ensure that they do not formulate unnecessary double negatives. Three question papers did not comply with this quality indicator.
iv.   References in questions to prose texts, visuals and graphs must be relevant and correct at all costs, otherwise candidates can be misled and forfeit marks if this is not carefully considered. Four question papers had instances of questions that suggested answers to other questions.
v.   Some of the questions in 11 question papers overlapped with other questions.
vi.   In relation to the formulation of multiple-choice questions, some of the options in one question paper did not follow grammatically from their stems.
vii.   In two question papers some options were not free from logical clues, making one option an obvious choice. Options must be of almost the same length to avoid giving away the correct response.

viii. Four question papers had instances that did not comply in this regard.

ix. Another issue of non-compliance related to four question papers that had a word or phrase in the stem being repeated in the correct answer, thus giving away the correct response.

x. A correct answer must avoid including elements in common with other options, as was found to have been the case in one question paper.

f) Language and bias

Language plays a crucial role in formulating question papers since it allows candidates to access the questions. Therefore, care must be taken, particularly given the fact that some candidates do not have a linguistic background that matches the language being used in assessing them. Full compliance of the question papers with this criterion was 65%, while the other question papers did not comply fully, as a result of:

i. Some elements of the subject terminology or data in one question paper being incorrect. Examining panels must strive to refer to the terminology used in the subject policies as they serve as a standard guide.

ii. The language, the register and the level and/or complexity of the vocabulary in four question papers was inappropriate for Grade 12 candidates. These could act as impediments in accessing questions and lead to failure of candidates.

iii. There is no room for subtleties in grammar when developing questions. This must be avoided at all costs, to eliminate any confusion which might lead to nullification of a question. However, ten question papers failed to comply with this quality indicator.

iv. In 25 question papers instances of grammatically incorrect language were detected. These must be eliminated at all costs as they may confuse and disadvantage candidates unnecessarily.

v. Equally as important as language choice, examining panels must formulate questions in simple sentences and avoid over-complicated syntax, as was the case in five question papers.

vi. Foreign names, terms and jargon were used in four question papers. The use of such terms can confuse candidates and may, as a result, disadvantage them. When they come across a term they do not know, candidates tend to block instead of trying to figure out what it means, through its context. This was witnessed in four question papers.

vii. Instances of bias in respect of culture, gender, language, politics, race, religion, stereotyping, province and region, among others, must be avoided as they can advantage certain candidates at the expense of the rest. Six question papers were found to have had instances of these.

g) Predictability

Eighty-seven percent of the question papers complied fully with the criterion on predictability. When developing a question paper, taking questions verbatim from question papers of the past three years must be avoided. Adherence to this criterion indicates a level of innovation. However, 13% of the question papers did not comply with this criterion, as a result of:

i. Seven question papers having questions of such a nature that they could be spotted easily or predicted. This affects the standard of a question paper adversely and must, therefore, be avoided.

ii. Some questions in five question papers were a verbatim repetition of those questions from the past three years' question papers.

iii. In the development of three question papers, the examining panels did not come up with questions that showed an appropriate degree of innovation.

As much as question papers are pivotal in the administration of the examination process, the marking guidelines are equally important in ensuring that the expected responses are fair, reliable and valid for all candidates. To ensure this, marking guidelines are measured against two criteria, namely, conformity with question papers; and accuracy and reliability of marking guidelines. A detailed analysis of non-compliance with these criteria is given in section h) and i) below.

h) Conformity with question papers

To bring about reliability of any assessment, responses must answer to the questions posed. Seventy-seven percent of the marking guidelines managed to meet the criteria. However, 27% of the marking guidelines deviated:

i. Some responses in 14 marking guidelines did not correspond with their questions. This could have negatively affected the reliability of the assessment had it gone unchecked by the external moderators, as markers could have arrived at different conclusions. Hence, it is justifiable to conduct a marking guideline standardisation meeting before marking commences.

ii. Responses in 13 marking guidelines did not match the command words in the questions, which could have affected the cognitive skills criteria since these are what help to make a distinction between low and high performers.

The mark allocation between a question and its response must match. However, there was no alignment in some of the responses in seven marking guidelines

I) Accuracy and reliability of marking guidelines

Forty-three percent of the marking guidelines were accurate and reliable in 2021, a slight improvement, compared to 42% in 2019; and 10% more marking guidelines were accurate and reliable (33%) in 2020. Careful consideration must be taken when developing marking guidelines to ensure that they satisfy a number of quality indicators, which the following failed to do:

i. Some responses to questions in 27 marking guidelines did not address the targeted subject matter. Examining panels must ensure that all responses are correct to avoid disadvantaging candidates.

ii. Marking guidelines must be free from typographical errors. Twenty-three marking guidelines must have not been edited and proofread sufficiently well to weed out the typographical errors. Enough time must be afforded to the process, as incorrect spelling alters a word entirely.

iii. The layout of a marking guideline is an important aid when marking. Eleven marking guidelines did not comply fully with this quality indicator, which could have retarded progress in the marking process.

iv. Ten marking guidelines were found not to have complied with the quality indicator that focuses on the completeness of a marking guideline in relation to mark allocation and mark distribution.

v. Seven marking guidelines were deemed not to have had a spread of marks within an answer. Where responses have a substantial mark, marking guidelines must ensure that they demonstrate how those marks should be spread or this might yield differentiated approaches to awarding marks to candidates.

vi. Two marking guidelines offered such a small range of marks that the ability to discriminate between low and high performers would be virtually impossible.

vii. Two marking guidelines were found not to have awarded marks positively.

viii. Eleven marking guidelines made no allowance for relevant or correct alternative responses. This could have been detrimental to candidates as not all markers are at the same level of understanding of the subject matter.

ix. One marking guideline did not use rubrics where they were deemed appropriate.

j) Overall impression and general remarks

Forty-nine percent of the question papers and their marking guidelines complied fully with the overall impression criterion. Following the external moderation process, an external moderator must evaluate the question paper and its marking guideline and give their overall impression. Fifty-one percent of the question papers were not in compliance, for the following reasons:

i. Contents of ten question papers were generally nullified as they were deemed not to be in line with the curriculum and assessment policy statement (CAPS).

ii. Twenty-nine question papers were generally deemed unfair, invalid and unreliable, given errors that were picked up during the external moderation process.

iii. Eight question papers were deemed not to have assessed the primary objectives of the CAPS coupled with assessment guidelines.

iv. The standard of 22 question papers was generally questionable, while that of 13 was not comparable to the standard of those of the previous years.

v. Similarly, 21 marking guidelines were generally deemed unfair, invalid and unreliable, while those of 18 were deemed inappropriate.

vi. The standard of 11 marking guidelines could not be comparable to those of previous years.

vii. Generally, three question papers and their marking guidelines were found not to have assessed skills, knowledge and values.

1.3.4 Comparison of Compliance Per Criterion and Levels of Moderation: November 2019 to November 2021

This section summarises and compares compliance levels of the various criterion over three years (November 2019, November 2020 and November 2021) at first moderation level, stemming from a numerical representation of the findings in Table 1C. The comparison follows the sequential order of the external moderation tool.

Table 1C: Comparison of compliance, per criterion, of question papers and marking guidelines at first moderation in November 2018, November 2019 and November 2020

Criteria	November 2019 (% of question papers)	November 2020 (% of question papers)	November 2021 (% of question papers)
Technical details	45	43	57
Internal moderation	78	81	84
Content coverage	73	82	77
Cognitive skills	62	64	68
Text selection, types and quality of questions	50	31	48
Language and bias	64	60	65
Predictability	94	93	87
Conformity with question paper	68	64	77
Accuracy and reliability of marking guidelines	42	33	43
Overall impression	22	33	49

Table 1C shows improved compliance levels of the question papers and their marking guidelines with all the criteria, except for content coverage and predictability. The rate of decline in the two criteria was 5% and 6%, respectively, while the rate of improvement in all other criteria ranged from 3% to 17%.

Drawing from the IEB 2021 improvement plan, the following observations were evident:

a) That the examiner and moderator training conducted in December 2020 had a positive impact, evidenced by the increased percentage of question papers that complied fully with eight of the ten criteria.

b) Although the level of compliance with the criteria for content coverage and predictability decreased, the two were among those with higher compliance levels.

1.4   Areas of Improvement

It was commendable that the external moderation of the November 2021 NSC question papers reflected that:

a. Thirty-six question papers were approved at first moderation (see Annexure 1A).

b. There was an upward trajectory in the compliance levels of the question papers and their marking guidelines in eight criteria. This indicates a form of stability in the development of question papers and their marking guidelines.

1.5   Areas of Non-Compliance

As much as there was improvement in compliance with most of the criteria, there remain, however, areas that require intensified support, such as the following:

a. Fluctuations in compliance levels with the criteria for content coverage; text selection, types and quality of questions; language and bias; predictability; conformity with question paper; and accuracy and reliability of marking guidelines.

b. Although there was an improvement in the compliance levels of question papers and their marking guidelines with the criteria for text selection, types and quality of questions; accuracy and reliability of marking guidelines; and overall impression, compliance seems to be limited to 50% or less. This recurrence is concerning.

c. The inability to achieve 100% of the question papers and marking guidelines complying fully with criteria that are technical in nature, such as technical details, conformity of marking guidelines with question papers and predictability.

1.6   Directives for Compliance and Improvement

The IEB is required to:

a. Capacitate the examining panels in the setting of question papers, placing more emphasis on the criteria where most question papers reflected a decline in compliance over the past three years:
   i.   Technical details (45%; 43%; 57%);
   ii.   Text selection, types and quality of questions (50%; 31%; 48%);
   iii.   Accuracy and reliability of marking guidelines (42%; 33%; 43%); and
   iv.   Overall impression (22%; 33%; 49%).

1.7   Conclusion

This chapter highlighted major findings of an analysis of the compliance levels drawn from the moderation of the IEB November 2021 NSC question papers and their marking guidelines. The chapter provided a brief scope and approach of the moderation. The approach followed an in-depth analysis of the findings per criterion. It highlighted compliance and non-compliance levels, drawn from Table 1B, which was preceded by a narrative discussion. The report concluded with a comparative analysis of the compliance levels over the past three years, which painted a vivid picture of the progress made thus far. This preceded a section highlighting areas of improvement noted, followed by areas of non-compliance and directives for compliance and improvement. Non-compliance with some criteria were also flagged in the November 2020 quality assurance report.

CHAPTER 2 MODERATION OF SCHOOL-BASED ASSESSMENT AND PRACTICAL ASSESSMENT TASKS

2.1 Introduction

School-based assessment (SBA) and practical assessment tasks (PAT), together with oral assessments of languages, offer learners an alternative opportunity to demonstrate their competence in a subject and help to assess skills and knowledge that cannot be assessed through conventional examinations. The assessments form part of the final mark towards the National Senior Certificate (NSC) qualification. Umalusi verifies the conduct, administration and management of these assessments to ensure uniformity and comparability of quality and standards. It is essential to ensure, during moderation, that the internal assessments administered by the centres/schools registered with the Independent Examinations Board (IEB) are done in accordance with the IEB's subject assessment guidelines (SAG). They must also resonate with the latest developments in industry and/or the workplace. The internal assessments must be fair, reliable and representative of an adequate amount of work, as prescribed in the curriculum policy documents.

The sample of schools/centres moderated by Umalusi was drawn from the list of independent schools/centres due for monitoring in 2021 for accreditation purposes.

2.2 Scope and Approach

2.2.1. School-Based Assessment

Umalusi sampled eight subjects for SBA moderation of the November 2021 qualification. The moderation of the eight sampled subjects was conducted online in 40 IEB schools, as listed in Annexure 2A. The SBA moderation was conducted between October 2021 and November 2021.

The moderation was undertaken using the Umalusi SBA Moderation Instrument, which consists of two parts, as illustrated in Table 2A. The first part concentrated on teachers' files (nine criteria) and the second examined the moderation of learners' files (three criteria).

Table 2A: Criteria used for the moderation of SBA

Part 1 Moderation of teacher files	Part 2 Moderation of learner files
Technical aspects	Learner performance
Programme of assessment	Quality of marking
Assessment tasks	Moderation of learner files
Technical layout of assessment tasks	
Effectiveness of questioning	
Question types	
Source/stimulus material	
Marking tools	
Pre-moderation of assessment tasks and evidence of post-moderation of evidence of assessment at different levels	

2.2.2. Practical Assessment Tasks (PAT)

Umalusi sampled two subjects for PAT moderation, i.e., Computer Applications Technology; and Engineering Graphics and Design. The November 2021 NSC PAT moderation was conducted online in one school for Computer Applications Technology and on-site at three schools for Engineering Graphics and Design, as listed in Annexure 2B.

The PAT were moderated using the Umalusi PAT Moderation Instrument, which consists of two parts, as illustrated in Table 2B. Part one concentrated on teachers' files (five criteria) and part two focused on learners' files (three criteria).

Table 2B: Criteria used for PAT moderation

Part 1 Moderation of teacher files	Part 2 Moderation of learner files
Technical aspects	Learner performance
Programme of assessment	Quality of marking
Assessment tasks and marking tools	Moderation of learner files
Adherence to assessment policies and systemic assessment practices	
Pre-moderation of assessment tasks and evidence of post-moderation of evidence of assessment at different levels	

2.3   Summary of Findings

This section of the report presents a summary of findings of the eight subjects sampled for SBA moderation and the two subjects sampled for PAT moderation. The findings are reported sequentially, starting with SBA and followed by the PAT moderation.

2.3.1   School-Based Assessment

The moderation of the SBA focused on the conduct, administration and management of the SBA tasks at the different levels.

a)   Teacher files

   i.   Technical aspects

The technical layout of teacher files varied from good to excellent. Teacher files were neat, well-organised and complete, with mark sheets correctly filled in and duly signed by the centres/schools. For instance, In Dramatic Arts, the contents of the teachers' files included all the required evidence, the signed mark sheets, annual teaching plans, programmes of assessment, assessment tasks, marking guidelines, moderation reports and analysis grids. The schools sampled for moderation in Engineering Graphics and Design used colour interleaves for different sections, which enhanced the aesthetic appearance of the files. However, minor deviations were observed in both the Engineering Graphics and Design and Life Sciences subjects. One school did not submit a teacher file for moderation in the Engineering Graphics and Design subject. In Life Sciences, two schools did not submit the annual teaching plans. The three schools partially satisfied the requirements of this criterion.

   ii.   Programme of assessment

Seven out of eight moderated subjects had detailed and neatly typed assessment programmes, with assessment tasks spread evenly across the terms. The school assessment programmes and the annual teaching plans for the seven schools were adhered to. The programmes of assessment contained comprehensive and systematic planning, with evidence of implementation taking place at set times as per the programmes. In certain subjects, i.e., Accounting and Geography, either schools or learners were given options of assessment tasks from which to choose. The chosen assessment tasks were administered according to the programme of assessment.

In Dramatic Arts, a wide range of assessment techniques were used, such as written, performance, group and individual tasks. Detailed marking guidelines and rubrics were all found to be fit for purpose. All six sampled schools adhered fully to the requirement.

In Engineering Graphics and Design, although one school did not submit a teacher file, it could be deduced from the learners' work that the educator in the school followed a programme of assessment. The number and type of course drawings found in the learners' files were evidence of the level of adherence to the programme of assessment.

A deviation was noted in Physical Sciences only, wherein all seven schools sampled for SBA moderation did not include the programme of assessment in their submissions. It could, however, be deduced from the learners' work that a programme of assessment was followed in all seven schools. Tasks were timed and sequenced in an acceptable pattern, which could be attributed to a programme of assessment of some sort.

   iii.   Assessment tasks

The IEB SBA is guided by the requirements detailed in the IEB SAG. These require that the tasks, collectively, assess all the prescribed content thoroughly to ensure sufficient evidence of competence.

Guided by the various IEB subject guidelines, the verified subjects applied varying assessment modes in conducting SBA. Most subjects adhered to the requirements peculiar to the subject, in line with the SAG. Some of the assessment types administered were tests, projects, case studies, oral presentations, assignments, reports, etc. In most subjects, the assessment tasks were appropriate to Grade 12 standards and adequately covered the topics and content

as prescribed in the SAG. The content and topics were appropriately spread, in line with SAG requirements.

For instance, in some subjects, including Geography and Life Sciences, the topics and content used in the assessment tasks were structured in a manner that would enable learners to conduct primary research, thereby exposing them to discovery learning. Research and projects were guided and monitored carefully, with each step indicated. Each school set its individual preliminary examination papers with integrated content and topics derived from the curriculum and aligned with the SAG.

In a few subjects, minor deviations from the expected quality and standards of the assessment tasks were observed. In Accounting, one school deviated from the structure of the two papers of the preliminary examinations by including five questions in Paper 1 and only two questions in Paper 2. There was also a deviation from IEB guidelines in content coverage and topics of the papers.

In Visual Arts, one school presented a task with scanned images. The scanning marred the true reflection of the visuals, which affected the quality of the visuals. The scanned images were small, blurry and monochromatic. The time allocation on tasks was also problematic at one school. The teacher allocated 45 minutes for a 20-mark task. The allocated time was not commensurate with the mark allocation and did not make scholarly assessment sense, particularly for Grade 12 candidates. The candidates are expected to sit for examinations for a prescribed time allocation for a certain, allocated, mark.

iv. Technical layout of assessment tasks
In all subjects the technical layout of assessment tasks was good and, in some instances, excellent. Teachers set tasks according to SAG requirements. Instructions were clear; illustrations and related source materials were helpful. Marks and time allocations of assessment tasks and questions were clearly indicated. The marking guidelines were well presented to ensure appropriate marking. The assessment tasks were uncluttered and reader and learner friendly. Cover pages containing all the necessary information were included in the tasks and pages were correctly numbered.

For example, in Visual Arts the research tasks were very well structured, with step-by-step instructions for learners to follow when working on the task.

In Dramatic Arts, learners made good use of clear and useful pictures and images. The visuals provided good stimuli and inspiration for creative answers. The integrated performance tasks (IPT) were user friendly and appealing to learners, with illustrations and personalised touches. The rubrics and criteria for assessments were included with tasks so that learners were aware of how and what the assessment would entail and require of them.

v. Effectiveness of questioning
All verified subjects showed evidence of good to very good questioning, covering a range of cognitive skills' demand while allowing for creative responses. Most questions in the assessment tasks assessed knowledge, skills and values. They tested the depth and breadth of knowledge acquired through learning, ability to synthesise knowledge, application of knowledge and learners' logical reasoning. Questions were sufficiently discriminative between bands of achievement and the marking guidelines responded accurately to what was assessed.

In Dramatic Arts all assessment tasks, particularly the IPTs, were challenging, but also encouraged creative and critical thinking. Creating memes for the character being portrayed was a good example of an innovative way of testing learner understanding and knowledge of character development. Those innovative and creative tasks ensured that the work produced was fresh and relevant.

The Engineering Graphics and Design assessment tasks were innovative and adequately focused on problem solving.

In Geography, there was sufficient evidence of scaffolding in the tests and preliminary examinations, as questions ranged from easy to difficult. The questions required that learners apply their acquired geographical knowledge to respond correctly, especially to higher-order questions and in essays.

Although adapted questions from past question papers and other assessment bodies were included in the standardised tests and the preliminary examination Paper 2 of the Life Sciences, the assessment tasks had an appropriate degree of innovation.

vi. Question types
Different subjects implemented different question types, yet remained within the prescripts of their respective SAG. The questions clearly indicated the mark allocations, which correlated with the difficulty levels and time allocation.

In Accounting an integrated approach was followed in the design of assessment tasks. The assessment tasks assessed a range of cognitive skills, in line with the IEB SAG. The schools chose a variety of company financial statements for the case study/project, as well as in one of the questions in the preliminary examination Paper 2. The learners had all the necessary support materials and a step-by-step guide towards completing the assessment task. This was all done to help learners elicit appropriate responses.

In Dramatic Arts, owing to its very nature, a variety of question types and modes of assessment were used. The assessments included and catered for the performance-based assessment and written assessment, as well as individual, paired and group work. A wide range of question types, from formal discursive essays to short contextual questions, were administered as written tasks. The performance tasks included a range of activities, such as duologues, monologues and physical theatre, etc. The positive effect of such varied types of assessment techniques can be seen in the good results achieved by most learners in the sampled centres/schools; even weaker learners were inspired to do well. Resource-based responses, problem-solving and real-life scenarios were prevalent in the questions and assessment tasks of Engineering Graphics and Design. They elicited appropriate responses.

In Geography, most of the administered tasks used a variety of question types. The multiple-choice and short, objective questions accommodated all learners, including low performers. The essay (a data/source-based response) challenged the learners' thinking skills. The research topics were real-life scenarios and real-life, problem-solving questions. The same trend was followed in Mathematics, Physical Sciences and Visual Arts.

The assessment tasks for Life Sciences were free of factual errors; vaguely defined problems; ambiguous wording; extraneous, misleading or irrelevant information; and trivial and

unintentional clues to the correct answers. There was full compliance with the criterion and all its quality indicators.

vii. Source/stimulus material

The source/stimulus material used in many tasks administered in most subjects were clear, legible, error-free, relevant and appropriate in both context and length, except at one school that used scanned stimulus material in Visual Arts.

In Accounting teachers used real-life material, in the form of company financial statements. The source material was well presented: relevant information that was within the learners' knowledge and capabilities was extracted from the financial statements. The teachers ensured that although the information was adapted, learners had to read and analyse the data and apply problem-solving skills to respond to questions.

A range of visual sources were used in tests and examinations in Dramatic Arts. In the written tests and examination questions, the visuals formed the sources on which questions were based. Staging concepts, design ideas and technical aspects of staging all required the use of pictures to illustrate ideas. In the IPTs, visual images and pictures were used to set the scene, as it were, and inspire thinking and understanding of the tasks. The images also helped learners in their own choice of visuals suitable to illustrate their work.

In Geography, the stimuli/source materials were used mainly as references for learners to interpret when they gave responses, especially in data-response questions. All the source materials were task specific and aimed at helping learners with interpretation skills.

In Physical Sciences, formula sheets, data sheets and the periodic table formed part of the source materials. The source material used during the administration of the assessment task were the same materials that learners used during the final examination.

A few deviations were realised in a few subjects in some schools. In Life Sciences, on the standardised test about DNA, in one school the extract given in Question 2.1 was not as clear as the rest of the test. In Question 2.1 of Test 2 of another school, the font was too small. In Question 2.1 of Test 4 of a third school, a diagram was included that had label lines that served no purpose. Finally, in Question 2.4 of the preliminary examination Paper 1 of another school, the font used for labelling the axes of the graph was not consistent.

viii. Marking tools

A sound array of marking tools was developed for the sampled subjects to assess a wide range of responses in the various tasks, including open-ended questions. The marking guidelines were accurate, correct, neat and professionally presented. They were appropriate for the relevant tasks and most clearly correlated with the marks allocated and the difficulty levels. The marking guidelines were neatly typed, with alternative responses where applicable. The rubrics had clear marking descriptors and criteria for marking essay-type responses and reports on research projects. The self-assessment grids were also used to good effect in some subjects to facilitate marking. The teachers provided assessment tasks and grids to show the spread of cognitive demand in the questions. The assessment tasks adhered to norm weightings for content coverage and the cognitive levels of questions.

In Visual Arts, however, one school did not provide marking guidelines for the tasks.

ix. Pre-moderation of assessment tasks and evidence of post-moderation of evidence of assessment at different levels

There was a mixed bag of outcomes regarding the pre-moderation of assessment tasks and post-moderation of evidence of assessment across the IEB system. In Accounting, Dramatic Arts and Geography, there was evidence of consistent and thorough pre- and post-moderation for all assessment tasks at cluster and regional level with some invaluable feedback.

In Life Sciences, there were internal moderation reports from all six schools which indicated that the assessment tasks had been internally pre-moderated at the level of the school or cluster. There was a general improvement in the evidence of feedback to the teachers. Where moderation took place, the quality, standard and relevance of inputs from internal moderation were appropriate. The feedback provided by the cluster moderators was precise and informative. Internal moderation reports indicated that learner performances were internally moderated at the school or cluster level.

For Engineering Graphics and Design, two schools submitted evidence of moderation conducted at regional and school levels in the teachers' files. The moderators at the two schools made constructive comments. The same was not true for the other school sampled for the subject.

In Physical Sciences, there was evidence of internal moderation in the teacher files, but the moderation reports were mere tick boxes with very little comments. Pockets of internal moderation were evident in Visual Arts; however, three schools did not submit all assessment tasks for external moderation as required and not all assessment tasks made available were accompanied by marking guidelines. Lastly, moderation reports did not provide much insight into the quality of the assessment tasks or reasons for the adjustment of marks.

b)   Learner Files

i.   Learner performance

The performance of learners in Accounting and Engineering Graphics and Design in five schools was good. In two other schools, learner performance varied between 40% and 90% in one case, and between far below average and 96% in another case.

In Life Sciences, the learners were able to interpret the assessment tasks and provide appropriate responses to the tasks. The learners' responses met the expectations and demands of the assessment tasks, as learners could respond to all the aspects (at different levels of difficulty) as set in the assessment tasks.

In Visual Arts, learners' performance was poor. The poor performance was influenced by many factors; among these, when responding to essay questions, learners did not argue their statements. They struggled to explain their statements in some cases. Learners struggled with referencing in the research essay. Learners provided a long paragraph where a brief description was expected.

In Dramatic Arts, the standard of learner performance was good. The motivations and reflections of learners in respect of IPT tasks that asked why they made certain choices revealed a sound understanding of subject content, knowledge and skills. The June examinations and the preliminary examinations showed good content coverage of the topics and the answers were indicative of sound teaching and learning.

All schools sampled for Geography and Mathematics displayed performances that varied from poor to excellent in different tasks. The learners struggled to respond to certain elements of the different cognitive levels, especially the higher-order questions as set in the assessment tasks. There was, in general, room for improvement in Physical Sciences, where learner exposure to good assessment tasks needed enhancement.

ii. Quality of marking
The quality of marking ranged from good to excellent across all subjects. The learners received marks for partial answers where appropriate. There was evidence of thorough and consistent marking in the moderated scripts. Teachers provided good feedback to learners i.e., praise when well-deserved and helpful advice on how to improve. The computations were correct. The teachers were able to use the rubrics effectively without inflating learners' marks.

The evidence in learner files showed strict adherence to the marking guideline, which constituted marking that was fair, valid and reliable. It was only at two schools where teachers needed guidance with the marking of the research essay.

iii. Moderation of learner files
In Dramatic Arts, there was evidence that moderation of the June examination and the preliminary examinations took place. In Mathematics, SBA moderation at national level took place, but at times it was not possible to determine the level at which moderation occurred. In Engineering Graphics and Design, there was evidence of thorough moderation with constructive feedback provided at two schools.

In Visual Arts, there was a lack of internal moderation in five moderated schools. In one school where internal moderation was conducted, the principal of the school confirmed in a declaration that all work had been quality assured. In another school, teachers did not complete any formal internal moderation reports, but relied on email messages as proof of moderation.

2.3.2   Practical Assessment Tasks

The findings of the moderation of the PAT conducted on one school for Computer Applications Technology and on three schools for Engineering Graphics and Design are summarised in this section.

A link submitted to Umalusi by the IEB to provide evidence of internal moderation of the PAT for Computer Applications Technology at the different levels of moderation could not be accessed: the declaration forms, internal moderation reports and other evidence could not be retrieved from the shared link; thus it could not be established if moderation occurred at the different levels of IEB moderation. The findings, therefore, of PAT moderation are limited to Engineering Graphics and Design and certain aspects only of the Computer Applications Technology.

a)   Teacher files
i. Technical aspects
In Computer Applications Technology, the teacher files were neatly organised and accessible. There were PAT management and assessment plans for the current year in the moderation package, as well as the composite mark sheet and the working mark sheet.

In Engineering Graphics and Design, one school submitted a well-presented teacher PAT file, but for two other schools it was difficult to find the required PAT documents in the teacher files. Neither the actual PAT document nor a PAT management and assessment plan was included in the teacher files of the other two schools.

ii. Programme of assessment

The programmes of assessment for the two sampled subjects for PAT moderation complied fully with the requirements as prescribed in the SAG. In Computer Applications Technology, the working mark sheet and the composite mark sheet showed that the school had completed the three phases of the PAT. The same could be said for Engineering Graphics and Design, as all the sampled schools demonstrated that they had completed the three phases of the PAT as required. The sampled schools adhered fully to the programme of assessment in both Computer Applications Technology and the Engineering Graphics and Design.

iii. Assessment task and marking tools

In Computer Applications Technology, all sampled centres used the prescribed PAT guideline document, assessment rubrics and teacher guidelines. All sampled centres used the approved assessment rubrics for the three phases of the PAT.

Two schools in Engineering Graphics and Design used the correct assessment criteria and rubrics for the assessment of the three phases of PAT. No adjustments nor changes were made to the prescribed assessment criteria and rubrics. The third school did not submit assessment sheets or detailed mark sheets.

iv. Pre-moderation of assessment tasks and evidence of post-moderation of evidence of assessment at different levels

In Engineering Graphics and Design, there was no evidence of any completed pre-moderation of assessment tasks, or evidence of post-moderation of assessment at any level, in any of the schools' general or PAT teacher files.

b)   Learner Files

i. Learner performance

It was evident that the teachers made every effort to support the learners to achieve high marks in all the sampled schools. Although the one school sampled for Computer Applications Technology may not be sufficiently representative of the entire population of schools offering Computer Applications Technology, the learners in the school performed well, judging by the Computer Applications Technology PAT marks for the three phases. On average, the learners performed at 90%.

In Engineering Graphics and Design, the average performance of the candidates in the three phases of the PAT were within the acceptable range. It was evident that all learners from all three schools received adequate support from teachers. All evidence indicated that teachers communicated the PAT management and assessment plan to learners. It was, however, concerning to note that a candidate was awarded a 100% PAT mark in one school.

ii. Quality of marking

The quality of the marking of the Engineering Graphics and Design PAT was acceptable, as the same assessment rubric was used consistently and all learners were marked according to the rubric. The quality of marking was of a high standard.

iii. Moderation of learner files

In Engineering Graphics and Design, there was evidence of constructive feedback provided by the teachers to the learners at one school. Overall, there was no evidence of any phase moderation conducted at any level in any of the teachers' or learners' files.

2.4   Areas of Improvement

No areas of improvement were noted by Umalusi.

2.5   Areas of Non-Compliance

Umalusi noted the following areas of non-compliance:

a. Not all the required PAT documents for Engineering Graphics and Design were included in the teacher files of two schools; and
b. Non-submission of appropriate evidence of assessment and learner performance for external moderation (incomplete marking guidelines with no mark allocations, mark distributions and assessment criteria in Life Sciences in one school and non-submission of a full complement of evidence of learner performance for external moderation in Visual Arts).

2.6   Directives for Compliance and Improvement

The IEB must ensure that:

a. All the required PAT documents for subjects with PAT components are included in the teacher files of all subjects sampled for PAT moderation; and
b. All schools submit the appropriate assessment tasks and evidence of learner performance for external moderation, as required for SBA moderation.

2.7   Conclusion

The conduct, administration and management of the SBA was found to be mainly of a good standard, with most schools satisfying most requirements. There is, however, a need for improvement in the conduct, administration and management of the PAT. The same common approaches and standards established for the conduct, administration and management of the SBA need to be established and enforced in the conduct, administration and management of the PAT. The IEB has also shown a systemic stability in the application of the assessment practices in the SBA and the same knowledge and understanding need to be replicated in the conduct, administration and management of the PAT.

CHAPTER 3 MONITORING THE STATE OF READINESS TO CONDUCT EXAMINATIONS

3.1 Introduction

The monitoring of the state of readiness to conduct national examinations is one of the quality assurance processes which Umalusi use to determine the level of risk the assessment bodies might encounter in their conduct, administration and management of the examination.

The main objective of the audit was to:

i. Evaluate the level of preparedness of the Independent Examinations Board (IEB) to conduct the November 2021 National Senior Certificate (NSC) examination.
ii. Track the progress made in addressing the directives for compliance and improvement issued after the November 2020 examination.
iii. Verify whether the IEB had systems in place to ensure the integrity of the November 2021 NSC examination.
iv. Provide feedback on the IEB state of readiness to conduct the 2021 November NSC examination.

The findings outlined in this chapter account for the state of readiness of the IEB. The chapter, further, considers any areas requiring improvement, areas of non-compliance and, where necessary, directives for compliance and improvement, on which the IEB will prepare and report on an improvement plan.

3.2 Scope and Approach

Umalusi adopted a risk management-based approach in determining the level of preparedness of the IEB to conduct, administer and manage the November 2021 NSC examination. This approach aims to identify any potential risks that might hinder the IEB in delivering a credible examination.

The following process was followed:

a. The IEB conducted and submitted a self-evaluation report.
   This allowed the IEB to conduct a self-evaluation on its state of readiness to administer and manage the examination and to submit a report to Umalusi. This was evaluated by Umalusi, who developed a risk profile for the IEB state of readiness.

b. Evidence-based verification.
   Umalusi conducted on-site verification to evaluate the supporting evidence that the IEB had submitted with the self-evaluation report.

Overall, these processes provided critical information that was instrumental in Umalusi making a judgement on the IEB's state of readiness to conduct, administer and manage the November 2021 NSC examination.

3.3   Summary of Findings

The findings of the IEB state of readiness are presented hereunder.

3.3.1   Compliance Status on the Readiness Levels to Conduct, Administer and Manage Examinations

a)   Management

The IEB appointed adequate and experienced staff to carry out the quality assurance of its systems. The process provided an assurance of the readiness of the IEB to conduct the November 2021 NSC examination.

b)   Registration of candidates and centres

    i.   Candidates' registration

The IEB registered 12 915 full-time candidates and 979 part-time candidates which accounted for 13 894 candidates registered to write the November 2021 NSC examination, compared to 13 200 candidates who registered for the November 2020 examination. The 2021 cohort showed an increase of 693 registered candidates from that of 2020.

A total of 1 247 concessions/accommodations were granted for the November 2021 examination. These concessions/accommodations were consistent with the types needed.

Umalusi verified the candidate registration data and was satisfied that the IEB complied with all the registration requirements set out to conduct, administer and manage the November 2021 NSC examination.

    ii. Examination centres

A total of 267 examination centres were registered. Of those, 253 were established locally and 14 outside the borders of South Africa, in Eswatini, Namibia and Mozambique.

The IEB established five well-resourced schools within close proximity to the IEB head office as marking centres for the November 2021 NSC examination. A total of six marking centres were used for the combined November 2020 NSC examination cycle, which indicated a decrease of one marking centre for the November 2021 NSC examination cycle.

The IEB audited all 267 examination centres and found them to be ready to conduct, administer and manage the examination. Umalusi was satisfied with the outcome of the desktop audit the IEB conducted. Umalusi approved 30 applications for concessions, of which six were new applications for concessions. One application for a concession received, for a designated examination centre linked to an unaccredited independent school, was not granted.

Table 3A indicates the number of registered examination centres outside the borders of South Africa.

Table 3A: Number of examination centres outside the borders of South Africa

NSC examination centres outside SA borders	
NSC (Nov)	**NSC (Nov)**
Eswatini	6
Mozambique	1
Namibia	7
Total	**14**

c)   Printing, packing and distribution

The printing of the IEB question papers was outsourced to a service provider. Both parties had signed a contractual service level agreement (SLA) for the printing, packaging and distribution of examination material, which Umalusi verified.

The SLA specified security measures for the printing, packaging, storage and distribution of question papers and related examination materials. In addition, the IEB established a detailed printing management plan, which integrated the following production line processes: the printing, packaging, storage, collection and distribution of question papers.

It was evident that the IEB had developed acceptable standard procedures and security measures for storage and access control to the areas where question papers were stored. Comprehensive plans for the receipt and storage of consignments, both at examination centre level and during the collection of answer scripts, across all examination centres. Umalusi found the plans, which were made available, to be acceptable. It was clear that the IEB had stringent measures in place to ensure that all areas were closely monitored around the clock.

Central points were established for the collection of question papers. Umalusi was satisfied with the documented procedures the IEB developed for the printing, packaging, storage and distribution of question papers set out for the November 2021 NSC examination cycle.

The staff members appointed at key printing and packaging areas had signed declaration forms and confidentially agreements, as part of the IEB security measures. Temporary staff members also signed contractual agreements, which highlighted the IEB values of integrity, respect, commitment and teamwork.

Overall, Umalusi was satisfied with the outlined security measures and close monitoring of the signed declaration agreement entered into between the IEB and personnel appointed to handle and manage examination materials.

d)   Management of internal assessment/school-based assessment (SBA) and practical assessment tasks (PAT)

The IEB developed SBA moderation strategies and protocols and these were communicated to schools. The IEB also had clear quality assurance systems in place for the management of the SBA, orals and PAT components of assessment.

The IEB conducted regional SBA, PAT and languages' oral moderation after the school-based and cluster-based moderations.

The IEB conducts a rigorous national SBA, PAT and languages oral moderation, which runs concurrently with the November NSC examination marking session. The moderation was targeted at schools and subjects that had unresolved issues or did not satisfy the requirements for the regional SBA, PAT and languages oral moderation, as well as those subjects and schools that did not attend the regional moderation process. The moderation provides initial feedback and secondary feedback to schools to help them improve their standards. Plans for this level of moderation were in place and have been shared with schools and subject' moderation committees.

The findings on the moderation of SBA/PAT will be described in detail in the chapter dedicated to SBA in this quality assurance of assessment report.

e)   Monitoring of examinations

The audit of examination centres was conducted and the evidence required to verify the findings of the audit were submitted to Umalusi. The IEB ensured that all 267 examination centres were equipped with electronic audio-visual monitoring devices. The devices would enable the IEB to monitor the writing sessions virtually.

The IEB developed training plans that were successfully implemented for the appointed chief invigilators, invigilators and monitors. In all the training conducted, the IEB had integrated the directives issued by Umalusi in November 2020, to improve the system. The principals from all eight schools registered with IEB that would be writing the IEB examination for the first time, were trained.

The IEB provided the appointed monitors and invigilators with training manuals, which highlighted the examination rules and regulations. Furthermore, strategies were in place to monitor invigilator training sessions and to monitor the examination centres where private monitors were deployed.

All chief invigilators signed declaration forms and pledged to deliver a credible examination.

f)   Management of examination irregularities

The IEB established a well-structured and fully functional Examination Irregularity Committee (EIC), a structure responsible for the handling and management of examination irregularities. It was noted that in its training sessions, the IEB familiarised the chief invigilators with the irregularity reporting tools that were to be implemented when reporting irregularities.

g)   Marker audit and appointments

The IEB had finalised the process for the appointment of markers. Furthermore, the IEB submitted consistent evidence in compliance with the Umalusi state of readiness requirements for auditing the marker appointment process. The criteria for appointing markers were consistently applied by the IEB in the selection of markers. Comprehensive management plans for marking processes, outlining the timelines for deliverables, were clearly defined.

The IEB's management plan outlined, among others: the training of markers; a list of identified marking centres; allocated subjects; and the norm time. The protocol for marking was in place and was aligned to all the requirements for the marking. The IEB appointed 2 231 markers, 420 mark checkers and 80 mark capturers. The IEB did not register any shortage of markers.

Additionally, all established marking centres would be subject to COVID-19 protocols and social distancing requirements as developed by the IEB.

Table 3B shows the established marking centres and the appointed marking personnel, per centre.

Table 3B: Number of marking centres and the number of appointed marking personnel

Description	Year	Crawford College	Saheti College	St. Stithians	Holy Family College	St. Benedict College	Total
No. of appointed markers	2021	366	831	558	134	342	2 231
	2020	231	713	490	350	243	2 027
No. of mark checkers	2021	50	150	100	60	60	420
	2020	50	150	100	60	60	420
Mark capturers	2021			80			80
	2020			80			80

h)   Systems for capturing of examination and assessment marks

The IEB submitted evidence on the capturing of the examination and assessment marks. The evidence was consistent with the Umalusi audit requirements and the required standards, as stipulated by Umalusi. Furthermore, the IEB mark capture management plans were in order and related preparation towards the end-of-year capturing of marks had been finalised.

3.3.2   Areas with Potential Risk to Compromise the Credibility of the Examinations

The audit and evaluation conducted on the state of readiness of the IEB to conduct, administer and manage the 2021 November NSC examination did not identify any potential risks.

3.4   Areas of Improvement

The IEB ensured that the 267 examination centres were equipped with electronic audio-visual monitoring devices to allow for remote monitoring of the examination proceedings across its examination centres.

3.5   Areas of Non-Compliance

There were no areas of non-compliance identified during the audit.

3.6   Directives for Compliance and Improvement

The IEB complied fully with the Umalusi audit requirements and met the desired level of preparedness to successfully conduct the November 2021 NSC examination. Therefore, no directives for compliance and improvement were issued in this regard.

3.7   Conclusion

The audit found that the IEB had met the prescribed key indicators for state of readiness through strategies, measures and documented procedures. The IEB also put measures in place to address the challenges related to the COVID-19 pandemic.

Umalusi was satisfied with the level of preparation of the IEB. It thus found the assessment body ready to conduct, administer and manage the November 2021 NSC examination.

CHAPTER 4 AUDIT OF APPOINTED MARKERS

4.1 Introduction

Umalusi conducts the audit of appointed markers of all assessment bodies to measure and evaluate the extent to which their internal controls, processes, guidelines and policies for appointing markers for the National Senior Certificate (NSC) examinations are adhered to. The audit is also conducted to monitor the assessment bodies' compliance with the Personnel Administrative Measures (PAM) (Government Gazette No. 39684 of 12 February 2016) and other regulatory measures as determined by the assessment body. The PAM provide assessment bodies with policy provisions to which they must adhere in appointing personnel to the various NSC examination-related positions. This ensures that only personnel with the requisite qualifications, skills and experience are appointed.

This chapter presents the findings of an audit by Umalusi of the Independent Examinations Board (IEB) appointment of marking personnel for the November 2021 NSC examinations.

4.2 Scope and Approach

Umalusi sampled ten subjects (Annexure 4A) for the desktop audit of appointed markers. A desktop audit of the evidence submitted by the IEB was conducted on 11 October 2021. The evidence submitted for the audit included, among others:

a. The IEB requirements/criteria for appointment of markers across the marking levels/positions;
b. The circulars/advertisements used for recruitment of markers and marker application form(s);
c. The spreadsheets/records/electronic files/databases of all appointed markers for all subjects;
d. The lists of all appointed markers, reserve markers and novice markers for all subjects; and
e. Minutes of the meetings held during the selection process.

Umalusi analysed the electronic files the IEB submitted for the audit of appointed markers using the criteria as listed in Table 4A.

Table 4A: Criteria for audit of appointment of marking personnel

Marking personnel	Criteria
Markers	Compliance to notional marking time
Senior markers	Qualifications and subject specialisation
Examiners	Teaching experience
Internal moderators	Marking experience

4.3   Summary of Findings

4.3.1   Compliance to Notional Marking Time

a)   Markers

The notional marking time is the estimated time taken by an average marker to mark a script. Umalusi used the notional marking time as provided by the IEB and the number of days allocated for marking, per subject, to determine the adequacy of number of markers per subject. The notional marking times were found to vary from subject to subject, ranging from 15 minutes to 60 minutes. The IEB criterion number four in the document for the appointment of markers for the NSC stipulates that the norm for the appointment of senior markers per marker is one senior marker to seven markers i.e., 1:7. Therefore, the number of markers appointed per subject for all the subjects audited and the number of days allocated for marking, per subject, were both congruent with the notional marking times, as determined by the IEB.

No shortage of markers was identified in any subjects and question papers sampled for the audit. This was positive, as marking should not be exhausting for the marking personnel.

b)   Senior markers

The number of senior markers to be appointed for a question paper is determined by the total number of the markers appointed for that question paper. It was evident during the audit that certain question papers had a ratio of 1:5 while others had a ratio of 1:7; however, this finding was not in contravention of criterion four of the IEB guiding document on appointment of markers. The IEB adhered fully to the requirement, except for Mathematics Paper 1 and Paper 2, with ratios of 1:10 for each paper, and Engineering Graphics and Design Paper 1 and Paper 2, with ratios of 1:9 for each paper. The non-compliance to the 1:7 ratio implies that a senior marker would quality assure many more scripts than expected. This may put the senior markers in a compromising position, as they are likely to be exhausted and this would impact negatively on the quality of marking or internal moderation. However, for question papers where the ratio went as low as 1:5, the reduced responsibility for senior markers may induce efficiency in marking.

c)   Deputy chief markers

The IEB criteria stipulates that the examiners and internal moderators be appointed for the full examination, i.e., per subject for all question papers for both the November and the June examinations; or for parts of the examination per subject, i.e., for one question paper for the November or the June examination, or a combination of both. Chapter D of the PAM document provides for the appointment of one chief marker (examiner) and one internal moderator per question paper. The IEB appointed examiners and internal moderators for all the sampled and audited question papers. Therefore, the IEB satisfied both the IEB criteria and the PAM requirements for appointing examiners and internal moderators. This would ensure that the marking of all question papers is quality assured internally at various levels.

4.3.2   Qualifications and Subject Specialisation

Applicants are required to have a recognised three-year post-school qualification, with the subject applied for at second- or third-year level, or other appropriate post-matric qualification in the subject, to qualify for appointment as markers. The requirement is provided for in the PAM document and must be considered, together with other requirements, in the selection of marking personnel.

a)   Markers

All appointed markers in the subjects sampled for the audit possessed at least a recognised three-year post-school qualification. Four cases of applicants with foreign qualifications were found to have been appointed in different positions for marking, one as a senior marker and three as markers. Three of the four marking personnel were appointed for Physical Sciences Paper 1 and Paper 2, and one for English Home Language Paper 2. A request was made to the IEB to provide a South African Qualification Authority (SAQA) certificate of evaluation in lieu of foreign qualifications for the four reported cases. These could not be submitted as it was not an IEB requirement. The IEB will have to include this requirement in future for appointment of marking personnel with foreign qualifications to authenticate the credibility of such qualifications.

The requirements for appointing markers were relaxed in the case of Engineering Graphics and Design Paper 1 and Paper 2. The qualifications of the appointed markers did not reflect a specialisation in Engineering Graphics and Design or Technical Drawing, except for one senior marker who was in possession of a Fitting and Turning qualification, which is relevant to Engineering Graphics and Design.

b)   Senior markers

All appointed senior markers had the requisite three-year post-school qualification, like markers. The IEB had submitted copies of qualifications of the three identified senior markers as evidence that they were qualified to be appointed as senior markers. The qualifications were evaluated and indeed satisfied the requirements for the appointment of the sampled senior markers.

c)   Deputy chief markers

The IEB requires that for applicants to be appointed as an examiner or an internal moderator the applicant should have a recognised degree or diploma in the subject for which the application is made, or at least tertiary training in the subject. In addition, internal moderators must have been examiners in the subject previously, while examiners must have been appointed as senior markers in the subject previously. The IEB appointed the current cohort of examiners and internal moderators in line with the stipulated IEB requirements. They are all contracted for three years with the IEB.

4.3.3   Teaching Experience

The PAM document and the IEB policy on marking recognises teaching experience as a vital requirement for applicants to be appointed as markers. Hence, the PAM document states that to be appointed as a marker, an applicant must have extensive experience as an educator in a particular subject or a related area; and at least two years' teaching or other curriculum-related experience, within the last five years and at the appropriate level. The IEB requires that an applicant must have taught the subject at Grade 12 level within the last three years at an IEB school or that of another assessment body.

a)   Markers

The teaching experience of the markers spanned two to 30 years across the sampled subjects, except for one novice marker, appointed for Tourism, who had taught for less than two years. All markers were teaching the concerned subjects in schools registered with the IEB at the time. Hence, it is justifiable to conclude that a large proportion of appointed markers whose appointments were verified taught the subject concerned for at least two years at Grade 12 level at an IEB registered school, while one novice marker was appointed for Tourism with less than two years' teaching experience at an IEB school. The appointment of a novice marker was justified because the PAM document provides for the appointment of novice markers to build capacity and increase the pool of markers.

b) Senior markers

All senior markers are teachers experienced in the subjects they were appointed to mark, with teaching experience ranging from two and five years to more than ten years. The three subjects that appointed senior markers with teaching experience ranging from between two and five years were Mathematics, Consumer Studies and Mathematical Literacy. The IEB examination instruction does not specify the required number of years of teaching experience in a specific subject for appointment as a senior marker but maintains that the teacher must be teaching the subject to be marked at Grade 12 level at an educational institution registered to write Grade 12 with the IEB. It is therefore justifiable to note that the three senior markers in the three identified subjects, as well as the other seven senior markers not mentioned in this paragraph, satisfied the requirements for appointment as senior markers for the IEB in their respective subjects.

c) Deputy chief markers

The IEB requires that applicants for positions as internal moderators should ideally have been an examiner, while for a position of examiner the applicant should have been a senior marker within the IEB system. In addition, all teachers to be appointed as examiners and internal moderators must have subject or subject-related teaching experience, or even general teaching experience. The IEB appointed qualified examiners and internal moderators who satisfied the requirements in all the subjects audited.

4.3.4 Marking Experience

a) Markers

The IEB Circular number 84/2021 requires that applicants for marking positions must either be teaching the subjects for which they are applying at Grade 12 level, or must have taught the subject at Grade 12 level within the last three years. The IEB has fully satisfied these requirements in all the subjects by appointing experienced and less experienced markers who teach the subjects concerned, in all the subjects audited. Thirty novice markers appointed across the audited subjects were within the policy prescripts for each question paper, as they represented fewer than the 15% limit. The IEB had essentially complied with the requirements on marking experience. The appointments made would not affect the marking negatively but, instead, the novices would help to build capacity, as recommended by the PAM document.

b) Senior markers

The appointment of senior markers is determined by three criteria from the IEB criteria for selection of markers' document:

  i. The examiner may nominate one senior marker for every seven markers appointed;
  ii. The nominated senior markers should not teach at the same school as the examiner as it is the IEB's intention to build capacity across schools; and
  iii. The nominated senior markers must have marked the IEB paper previously, preferably at the last marking session.

All the appointed senior markers had the requisite marking experience. The audit could not establish whether the appointed senior markers were teaching at the same school as the examiner, since the IEB did not provide evidence for verification in this regard. The senior markers all had extensive experience in marking the IEB question papers they were appointed to mark. Hence, it would be fair to infer that all appointed senior markers complied with IEB requirements. The IEB did not relax the requirements for this criterion.

c)   Deputy chief markers

The IEB criteria state that for an applicant to be appointed as an examiner or an internal moderator, they must possess IEB marking experience in the subject for which an application is made. If not, the applicant should have some subject-related marking experience in other subjects or must have played a role in IEB marking. The IEB also recognises subject marking experience from other assessment bodies for appointment. The appointed examiners and internal moderators satisfied all IEB requirements.

4.3.5 Enhancements to PAM

The IEB had three measures of enhancement of the PAM criteria for the appointment of the marking personnel, across all the audited subjects:

i.   The appointment of examiners and internal moderators was additionally informed by their record of performance within the school environment, such as the quality of results and portfolios.

ii. The senior markers should not teach at the same school as the examiner.

iii. A requirement of proficiency in both Afrikaans and English for appointment as a senior sub-examiner, in addition to subject expertise.

4.4   Areas of Improvement

There were no areas of improvement observed.

4.5   Areas of Non-Compliance

The following area of non-compliance was noted:

a)   Non-compliance to the 1:7 ratio requirement for appointment of senior markers and markers in Mathematics Paper 1 and Paper 2 and Engineering Graphics and Design Paper 1 and Paper 2.

4.6   Directives for Compliance and Improvement

The IEB must:

a)   Ensure that the ratio of 1 (senior marker): 7 (markers) is adhered to across all subjects.

4.7   Conclusion

The IEB satisfied the stipulated requirements for the appointment of the marking personnel, with the exception of the ratio of senior markers to markers in two subjects. The IEB must ensure that the identified area of non-compliance is addressed in the next selection of marking personnel, while maintaining the good standards the audit revealed during the evaluation of the submitted data.

CHAPTER 5 MONITORING THE WRITING OF EXAMINATIONS

5.1   Introduction

The conduct, administration and management of the 2021 November National Senior Certificate (NSC) examination administered by the Independent Examinations Board (IEB) commenced with the writing of the subjects with a practical component. The Information Technology Paper 1 was examined on 19 October 2021 and Computer Applications Technology Paper 1 on 20 October 2021. The examination ended on 2 December 2021. The marking was conducted from 5 December to 12 December 2021.

This chapter summarises the findings, notes areas of improvement and areas of non-compliance and issues directives for compliance and improvement, for which the IEB must present an improvement plan to Umalusi.

The findings below are described in two sections: the monitoring of the writing of the examination; and the monitoring of the marking centre.

5.2   Scope and Approach

The IEB established 267 examination centres nationally. Fourteen of these administered the examination outside the borders of South Africa: seven in Eswatini, six in Namibia and one in Mozambique. Additionally, nine centres wrote the IEB NSC examination for the first time, presenting 206 candidates. Umalusi monitored 61 of the 267 examination centres (see Annexure 5A) and two of the six marking centres. In the execution of its oversight role, Umalusi adopted the following approach:

    i.   Data collection using the Monitoring of the Writing Instrument;
    ii.   Supplementary data collection through interviews with chief invigilators and invigilators at the monitored centres;
    iii.   An analysis of documented evidence found in the examination files made available to monitors at the examination centres; and
    iv.   Observations made during the monitoring were recorded and reported.

Overall, each of the data collection methods were found relevant and informed the findings, which are outlined in the chapter. See Annexure 5B for details of examination centres implicated in areas of non-compliance.

5.3   Summary of Findings

The information and conclusions in this report are limited to the findings from 61 monitored examination centres only; and were subject to the availability of evidence and data collected at the examination centres at the time of Umalusi's visit.

The three-tier, logical account of the findings from the conducted monitoring process are presented:

    i.   Section A: Monitoring of the writing of examination;

ii. Section B: Monitoring of the independent schools that had applied and were granted concessions for establishing examination centres; and

iii. Section C: Monitoring of the marking.

SECTION A: Monitoring of the Writing of Examinations

5.3.1 General Administration

a)   Management of examination question papers

The IEB developed and furnished all its examination centres with official copies of a comprehensive management plan, which outlined clear timelines for delivery of question paper consignments to the examination centres; and the collection and delivery of the answer scripts to the IEB head office. In addition, the IEB established central collection points for the collection of question paper consignments for provinces outside Gauteng. The receipt and storage of examination consignments at centre level were closely monitored through different security measures, as prescribed and documented by the IEB.

It was evident that the IEB invested highly in the security of the examination material through its central security control point and stringent control measures at the examination centres. This standard has been consistently maintained in the past three examination cycles, i.e., the November 2019, November 2020 and June 2021 examinations.

b)   Appointment records of invigilators

The IEB appoints school principals as chief invigilators annually. School principals subsequently delegated the chief invigilator duties, in writing, to senior staff members. Chief invigilators trained and appointed the invigilators, in writing. Delegation letters and invigilators' appointment letters were obtainable, except at three examination centres where there was no evidence of invigilators appointment letters; nor was there evidence of invigilator training having taken place.

c)   Management of invigilators' attendance

Chief invigilators supervised the invigilators attendance. Invigilators presented themselves sufficiently early and signed attendance registers on arrival. It was noted that signed attendance registers were regularly overseen by chief invigilators.

d)   Examination document management

The monitored examination centres were in possession of examination files that contained examination-related information. The files were made available for verification of relevant documentation.

5.3.2 Credibility of the Writing of Examinations

a) Security and supply of question papers

Monitored examination centres were equipped with adequate security and storage facilities for examination consignments. Reliable courier services delivered and collected examination consignments across examination centres as scheduled. Question papers were sealed, securely packaged, and delivered in lockable "Smartlock" secured bags. The lockable bags were opened using electronic locking system and closed using the same security system after the examination was concluded. Stringent security measures were clearly demonstrated, including effective access control into strong rooms and the presence of 24-hour security guards who patrolled in and around the buildings of the examination centres..

b)   Admission of candidates in the examination venue

In line with IEB health and safety protocols, no candidates were allowed into the examination room if they did not comply with all measures in the protocol. It was noted that all examination centres complied and implemented these protocols appropriately: candidates were checked for the wearing of masks and screened, with temperature checks. The admission of candidates was managed well across examination centres. Candidates were admitted into the examination rooms at least 30 minutes before the writing commenced. It was observed that the swiftness of admission of candidates into the examination rooms was dependent on the number of candidates registered per examination session. At seven examination centres, no admission letters or identity documents were verified on admission to the examination rooms.

c)   Conduciveness of the examination venue

The examination centres were found conducive with adequate spacing, suitable furniture, appropriate lighting and suitable ablution facilities, except at two examination centres where high noise levels were experienced.

d)   Administration of the writing session

Chief invigilators and invigilators managed the writing phase satisfactorily. There were visible wall watches/clocks and information boards where relevant information was displayed. Examination rooms were free from unauthorised material that would have assisted the candidates.

e)   Compliance with examination procedures

All examination centres implemented the examination regulations pertaining to the conduct, administration and management of the NSC examination satisfactorily. The IEB invigilators' manual was also cross referenced to assess whether the invigilators adhered to and implemented the guidelines as required by the IEB. The examination centres were found fully compliant with the regulated examination procedures prescribed by the IEB. The following procedures were noted:

i.   Candidates were admitted to the examination rooms 30 minutes prior the start of the examination;

ii. Question papers were opened in the examination rooms in front of the candidates; however, examination rules were not read at five examination centres and question papers were not checked for technical accuracy at 11 examination centres;

iii. The prescribed 9:00 starting time, as regulated, was adhered to and implemented, including the end and closing of examination writing sessions;

iv. Examination centres followed the IEB procedure on the sealing and safekeeping of answer scripts by sealing the scripts into the IEB bags and locking them; and

v.   The delivery of question paper consignments and collection of scripts were managed appropriately and in line with the documented procedure prescribed by the IEB.

The implementation of the examination procedures was managed appropriately and within the prescripts of the IEB invigilators' manual and the regulations for the conduct, administration and management of the NSC examination.

f)   Handling of answer scripts

High levels of compliance were evident during the closing phase of the writing session, given the fact that the examination was managed within regulated time frames. The following procedure was noted:

   i.   On completion of examinations, invigilators collected the answer scripts and simultaneously verified the candidates' examination numbers against the mark sheets;
   ii. The answer scripts were counted and packaged in sequence, as the names of the candidates appeared on the mark sheet; and
   iii. The scripts were sealed in plastic bags and placed in electronically lockable bags that were immediately locked in strong rooms.

The IEB invigilators' manual was a clear guideline used across all examination centres and was applied to the latter. Overall, Umalusi was satisfied with the procedure demonstrated by all monitored examination centres.

g)   Incidents/occurrences with possible impact on credibility of the examination session

There were no systemic irregularities reported nor identified at the examination centres sampled for monitoring; however, three cases of administrative errors/omissions were declared at three examination centres. These included allegations that 15 minutes' reading time was given to candidates at one examination centre; and the late arrival of a candidate, by one hour and 40 minutes, after the start of the writing at another examination centre. Another case involved a tutor who taught Mathematics who was found invigilating Mathematics Paper 1 at a centre in Gauteng.

SECTION B: Monitoring of the Unaccredited Centres Granted Concessions to Conduct the 2021 NSC Examination

In relation to the determining criteria, evidence of the physical addresses from the 23 sampled examination centres across the provinces, were provided.

The following were noted:

   i.   It was noted that the IEB were the underwriters of the selected monitored examination centres. The selected examination centres were comprised of online and face-to-face teaching and learning centres. The chief invigilators were all appointed by the IEB, in writing.
   ii. Five online schools traded under the name Brainline Learning World and one school as Hatfield Online Christian School. Tuition was conducted online by trained teachers from its head offices. Tuition in this modality was offered from Grade R to Grade 12 in selected subjects. However, the Grade 12 candidates wrote the IEB NSC examination at examination centres established by the IEB. The selected examination centres were mainly church halls that were exclusively rented for the purpose of writing the November 2021 NSC examination.
   iii. Thirteen of 16 examination venues were trading under the name Master Maths, two examination centres as Reunert College and one examination venue as Generations School. It should be noted that Generations School is a private school offering full-time classes.
   iv. The additional 15 tutor centres rent rooms in office blocks or classrooms in schools for face-to-face tuition on a part-time basis. These monitored examination sites specialise in Mathematics and Physical Sciences specifically for Grade 12 candidates, repeaters and candidates who want to upgrade their initial marks. Candidates who were registered with assessment bodies other than the IEB were free to attend the tutoring classes, with the aim being the improvement of Mathematics and Physical Sciences. Tutoring in Mathematics was offered from Grade 4 to Grade 12 and Physical Sciences from Grades 10 to 12.

No systemic irregularities or non-compliance with the concession conditions granted to the centres were noted.

SECTION C: Marking of Examinations

5.3.3   Planning and Preparations

a)   Appointment of marking personnel

The IEB selected and appointed the marking personnel based on the IEB protocols for marking requirements. Evidence was submitted, consistent with the Umalusi requirements for marker audit and appointments. The final list of the appointed marking personnel was obtainable at the marking venues. Personnel were comprised of assessment specialists, internal moderators, senior markers, markers and script controllers. The IEB did not experience any marker shortages across all the subjects and papers.

b)   Availability of marking management plans

The marking centres had well documented marking management plans that reflected feasible marking processes. All the relevant marking-related documents were safely filed and available for verification by the monitors.

c)   Availability of scripts and marking guidelines

The IEB delivered the required scripts and the marking guidelines a day before the marking process commenced. These were stored in secure script control rooms where there were strict access control measures in place. Script control managers were appointed, and very capable staff followed procedure, as prescribed for the management of script and marking guidelines supplied by the IEB.

d)   Storage and safekeeping of scripts

The two marking centre managers were responsible to uphold security measures for the storage and safekeeping of the answer scripts. The scripts were stored in the script control rooms and the marking rooms where marking took place. Only authorised personnel had access to the keys to open the areas where scripts were stored. Umalusi was satisfied with the security measures in place for the storage and safekeeping of the scripts and related material.

e)   Management and control of scripts

The IEB had in place clearly documented procedures, which marking centre managers had to implement and monitor throughout the marking period. A team of assessment specialists and examiners managed and controlled the scripts. Appointed and authorised persons issued the scripts, which were distributed in an orderly manner in boxes to the examiners for marking. Record-control measures were in place, and scripts' record sheets were used for this purpose. Acknowledgment of receipt of scripts was also managed well. Examiners signed off the script control mark sheet summaries when scripts were returned, before these were transported to the IEB head offices for mark capturing.

5.3.4   Resources (Physical and Human)

The marking personnel were sufficiently qualified to perform their duties with distinction. The management of the selected schools made the schools' physical resources and communication facilities available for use by the marking personnel. This sustained the successful management of the marking processes.

a)   Suitability of the infrastructure and equipment required for marking

The marking centres were established in well-resourced schools and the environment was conducive for marking, since these were situated in peaceful locations in Gauteng. Both marking centres were equipped with spacious rooms, good ventilation, adequate furniture and sufficient lighting. The water and toilet facilities were in proximity to the marking rooms. Ample parking facilities were reserved for the marking personnel and patrolling security guards were visible around the buildings.

b)   Capacity and availability of marking personnel

A list of the marking personnel was available for verification at the monitored marking centres. The marking personnel consisted of centre managers, assessment specialists, examiners, internal moderators, senior markers, markers and script controllers. No shortage of marking personnel was reported.

c)   Conduciveness of the marking centre and marking rooms (including accommodation for markers)

The marking rooms were conducive in terms of cleanliness, spaciousness, tight security and peaceful surroundings where limited movement was evident. Overnight accommodation was arranged for markers at various facilities identified by the IEB. Transport was arranged and the marking personnel were shuttled to and from their accommodation and the marking centres.

d)   Quality of food provided for markers

Well-established caterers were appointed for the provision of food and refreshments that met the required standards for the marking personnel. The marking personnel were provided with light snacks during tea breaks and well-prepared lunches catered for different dietary requirements.

e)   Compliance with occupational, health and safety requirements

The IEB implemented COVID-19 protocols at the monitored marking venues. Centre managers were extremely cautious with occupational, health and safety requirements. There were visible fire extinguishers at strategic points, basic first aid equipment available and doctors and nurses on call for extreme emergencies. The marking personnel used the COVID-19 committees of the schools where the marking took place and the available sick bays and isolation rooms for suspected cases of COVID-19 infections.

5.3.5 Provision of Security Measures

a)   Access control into the marking centre

Security guards at the main gate-controlled access to the marking venues by way of positive identification, verifying the purpose of the visit and requesting the approval of the centre manager before a visitor was allowed into the marking centres. The marking personnel received access cards for use during the marking session. Visitors were provided with clear identification cards and had to explain the purpose of their visit before access was granted to the marking centre premises. The strict control measures ensured that no entry was gained by unauthorised persons.

b)   Movement of scripts within the centres: Script control and marking rooms

The marking centres managed the movement of scripts well, from the control rooms to the marking rooms and back. There was a clear distribution of scripts for marking by markers in place and this was adhered to. Examiners signed a script control mark sheet summary when they received the batches of scripts and when these were returned to the script control room for archiving. Script controllers were assigned to assist centre managers and the examiners. The control of scripts took place in the confines of the marking rooms and the designated control room where the centre manager was stationed.

5.3.6 Training of Marking Personnel

Markers were trained on the first day of marking. This covered subject-specific content and the identification of irregularities, followed by a standardisation discussion session. Script controllers were trained by the centre managers and examiners on the general and specific requirements of the responsibilities assigned to them.

a)   Quality and standard training sessions across subjects

The training sessions were organised according to subjects allocated in the marking centres. Markers were trained on subject-specific content to address the relevant areas pertaining to the marking guidelines. In this way, the standardisation of marking process was seen to be adequate and well prepared. The training was conducted by the chief markers.

b)   Adherence to norm time

The IEB determined the norm time for marking as nine hours a day. The daily starting times for the marking personnel varied from 7:00 to 16:00 and 8:00 to 17:00. The norm time was increased by one hour a day, due to the threat of the new COVID-19 variant and to ensure that marking was concluded by the target date.

5.3.7 Management and Handling of Detected Irregularities

The examiners trained the markers on what constituted irregularities and the procedures to be followed if irregularities were detected. The IEB has a well-structured Examination Irregularity Committee (EIC) in place to handle possible examination irregularities. The assessment specialists, who formed part of the EIC, were present at the marking venues for the duration of the marking session.

5.4   Areas of Improvement

Umalusi noted the great strides the IEB took to maintain exceptional health and safety protocols to safeguard the candidates and invigilators at the examination centres and the marking personnel at the marking centres.

5.5   Areas of Non-Compliance

The following areas of non-compliance were noted:

a. Pockets of non-availability of evidence of the training of invigilators at two examination centres and the appointment of invigilators at three examination centres;
b. Evidence that some of the invigilators neglected to perform their roles and responsibilities as required in line with the regulations governing the conduct, administration and management of examinations, as well as the IEB invigilators manual. The following were observed:
   i.   Verification of admission letters/identity documents of candidates was not conducted at seven examination centres;
   ii.   At 11 examination centres the question papers were not checked for technical accuracy; and
   iii. The examination rules were not read at five examination centres.
c. A Mathematics tutor was found invigilating a Mathematics examination session, the subject that the invigilator taught.

5.6   Directives for Compliance and Improvement

The IEB must ensure that:

a. Challenges presented by poor invigilation are improved; and
b. Evidence required for external verification is made available at all examination centres.

5.7   Conclusion

The findings of the monitoring of the writing and marking of the IEB NSC examination revealed that there was an improvement in the conduct, administration and management of the examination, as demonstrated at the monitored examination centres, including the 23 examination centres granted concessions to conduct the 2021 NSC examinations. The monitoring of the marking centres also continued to illustrate the high standard of compliance with the requirements for the establishment of marking centres. Overall, the IEB managed the November 2021 NSC examinations satisfactorily, despite the prevalent COVID-19 pandemic.

CHAPTER 6 MARKING GUIDELINE STANDARDISATION AND VERIFICATION OF MARKING

6.1   Introduction

Umalusi participates in two important processes, namely, the marking guideline standardisation meetings, before the start of the marking; and the verification of marking, which is conducted during the marking, before the candidates' final marks can be pronounced fair, reliable and valid. Umalusi attended and participated in the marking guideline standardisation meetings and verified the marking of the Independent Examinations Board (IEB) November 2021 National Senior Certificate (NSC) examination, to approve the marking guidelines and confirm the fairness, validity and reliability of the marking process.

This chapter reports on the marking guideline standardisation meetings and the verification of marking of the November 2021 NSC examination of the IEB.

6.2   Scope and Approach

Umalusi attended the marking guideline standardisation meetings of the 27 question papers of the IEB, as listed in Table 6A. The marking guideline standardisation meetings were held on 27 October 2021, for Computer Applications Technology Paper 1, and on 4 December 2021 for other sampled subjects.

6.2.1   Marking Guideline Standardisation Meeting

Table 6A lists the subjects/question papers sampled for the monitoring of the marking guideline standardisation meetings.

Table 6A: Subjects/question papers sampled for the marking guideline standardisation meetings

	SUbject		
1	Accounting Paper 1 and Paper 2	9	Geography Paper 1 and Paper 2
2	Afrikaans First Additional Language (FAL) Paper 1 and Paper 2	10	History Paper 1 and Paper 2
3	Business Studies	11	IsiXhosa FAL Paper 1 and Paper 2
4	Computer Applications and Technology Paper 1 and Paper 2	12	Life Sciences Paper 1 and Paper 2
5	Consumer Studies	13	Mathematical Literacy Paper 1 and Paper 2
6	Economics	14	Physical Sciences Paper 1 and Paper 2
7	Engineering Graphics and Design Paper 1 and Paper 2	15	Tourism
8	English FAL Paper 1 and Paper 2		

The marking guideline standardisation meetings were evaluated in three parts, using Umalusi criteria as listed in Table 6B.

Table 6B: Criteria for the evaluation of the marking guideline standardisation meetings

Part B Moderation of marking guideline	Part B Moderation of marking guideline	Part B Moderation of marking guideline
Pre-marking guideline standardisation meetings	Processes and procedures	Training of markers
Preparation by senior marking personnel	Mediation of the marking guidelines	Quality of the final marking guidelines

The focus of Part A was on the pre-marking guideline standardisation meetings held by the examination panels for each question paper. These meetings allowed for the preparation of the chief markers, internal moderators and senior markers as participants in the marking guideline discussions. Part B dealt with processes and procedures followed and the mediation of the marking guidelines during the marking guideline standardisation meetings. Part C explored the quality of the training of markers and the quality of the final marking guidelines.

6.2.2 Verification of Marking

This part of the chapter reports on the findings of the verification of marking, conducted on 15 sampled subjects comprised of 27 question papers, as listed in Table 6A. The Umalusi Verification of Marking Instrument that was used for the quality assurance of marking had five criteria with a variable number of quality indicators, as listed in Table 6C.

Criterion 1 focused on the statistics and official appointment of markers; criterion 2 on adherence to the marking guidelines; criterion 3 dealt with the quality and standard of marking and internal moderation; and criterion 4 explored the candidate performance.

Table 6C: Umalusi criteria for verification of marking

Criterion 1 Policy matters	Criterion 2 Adherence to the marking guidelines	Criterion 3 Quality and standard of marking and internal moderation	Criterion 4 Candidates' performance
Statistics	Application of the approved marking guidelines	Quality and standard of marking	
Official appointment of markers	Evidence of changes and/or additions to the marking guideline and processes followed	Internal moderation of marking	
		Addition and transfer of marks	

6.3   Summary of Findings

This section of the report presents the findings from the marking guideline standardisation meetings elicited from the criteria and quality indicators outlined in Table 6C..

6.3.1 Marking Guideline Standardisation Meetings

a)   Part A: Preparatory work

i.   Pre-marking guideline standardisation meetings
The IEB pre-marking discussion meetings between the chief markers and internal moderators took place a day before the marking guideline standardisation meetings. The aim of this process was to discuss and prepare amended marking guidelines, with alternative responses. Annotations on the marking guidelines and additional responses served as evidence of pre-marking for the guideline standardisation meetings. The examination panels at the meetings agreed on alternative responses to be included on the marking guidelines for all 27 question papers, which were approved by Umalusi.

ii.   Preparation by senior marking personnel
The chief markers and internal moderators pre-marked sample scripts in preparation for the marking guideline standardisation meetings, ranging from three to nine scripts each. In several subjects, the chief markers and internal moderators exceeded the required minimum of three scripts. For instance, for Life Sciences Paper 1 and Paper 2, the chief markers and internal moderator each marked six English scripts and three Afrikaans scripts; for Business Studies Paper 1, the chief markers and internal moderator marked five English scripts and two Afrikaans scripts. The chief markers and internal moderators used valid and alternative candidates' responses from the pre-marked sample of scripts to strengthen the marking guidelines.

b)   Part B: Marking guideline standardisation meetings

i.   Processes and procedures
The IEB internal moderators led the process of standardising the marking guidelines for most of the question papers. During the plenary, the marking panels were cautioned about adherence to COVID-19 protocols before the in-depth discussions could ensue. The internal moderators and chief markers interacted well with the teams in their respective subjects. The processes and procedures were structured well and were conducive for generating marking guidelines that promoted fair and consistent marking. The meetings clarified the roles and responsibilities of each role player in attendance. Umalusi noted that, overall, the IEB logistical arrangements were commendable. The rooms where discussions took place were neat and tidy. The question papers and marking guidelines, as well as photocopied dummy scripts to be used during training, were easily available.

ii.   Mediation of the marking guidelines
The internal moderators of the IEB guided the process of standardising the marking guidelines of all the question papers. Due to unforeseen circumstances, the internal moderator for Computer Applications Technology Paper 2 was not available for this process and was replaced by the chief marker, who was also replaced by the senior marker. In this subject, the process of standardising the marking guidelines was led by the chief markers. During the discussions, the participants contributed meaningfully and enhanced the quality and

accuracy of the marking guidelines to ensure the marking was consistent and fair. Umalusi approved the changes/additions made to the marking guidelines during the marking guideline standardisation meetings.

c)   Part C: Training and quality of the final marking guidelines

i.   Training of markers

The IEB conducted good quality training of the marking personnel in all the sampled subjects. In preparation for the training, the IEB provided the question papers and marking guidelines, as well as sampled scripts for the training of markers, for the scheduled discussions. The internal moderators and chief markers for each subject ensured that the markers were ready to mark the candidates' scripts in accordance with the approved marking guidelines.

Prior to their attendance at the marking guideline standardisation meetings, the marking personnel were requested to answer the relevant question papers, i.e., they had to have their own marking guidelines for the subjects they were appointed to mark. This was to ensure that the markers were familiar with the question papers and fully grasped the expected responses. This ensured a smooth running of the marking standardisation meetings. During the meetings, Umalusi observed that the marking personnel arrived well prepared and engaged in robust discussions. This was also evident in their marking of the sample scripts used for training.

ii. Quality of the final marking guidelines

The quality of the finally approved marking guidelines for all the sampled subjects were acceptable. This was arrived at after rigorous discussion and engagement during the discussions.

6.3.2 Verification of Marking

Umalusi used the criteria listed in Table 6C as a framework for the analysis of the findings to verify the marking of the 15 sampled subjects.

a)   Policy matters

i.   Statistics

This quality indicator aimed to establish whether sufficient marking personnel were appointed to mark the available scripts across subjects and question papers. To conclude if the number was sufficient, Umalusi considered the number of scripts to be marked, number of days scheduled for marking and the number of appointed marking personnel, across levels. There were no marker shortages identified for the marking of all the scripts in the 27 sampled question papers.

According to the IEB policy on marking, the ratio of markers to senior markers is 1:7. This requirement was met in all verified subjects/question papers. There were isolated cases where one senior marker was appointed for eight to ten markers. This occurred in subjects such as Afrikaans FAL Paper 1 and Paper 2, Computer Applications Technology Paper 1 and Paper 2, Physical Sciences Paper 1 and Paper 2, Life Sciences Paper 1 and Paper 2 and Tourism Paper 1. However, this did not hamper the quality of marking in these subjects.

ii. Official appointment of markers

All marking personnel for the sampled subjects had been appointed officially and possessed letters of appointment.

b)   Adherence to the marking guidelines

This criterion sought to establish whether the marking guidelines used at the marking centres were the ones Umalusi approved at the marking guideline standardisation meetings. The aim was to ascertain if any additions or changes had been made to the marking guidelines after the marking standardisation meetings and, if so, whether appropriate processes had been followed to effect the changes; and whether there was adherence to the finally approved marking guidelines during the marking. Umalusi observed that in all the verified subjects, there was adherence to the finally approved marking guidelines.

i.   Application of the approved marking guidelines
The IEB marking personnel applied the finally approved marking guidelines consistently in their marking. All marking personnel included all additions/alternative responses to the marking guidelines as discussed and agreed to during the marking guideline standardisation meetings. All alternative responses included in the marking guidelines were considered during marking.

ii.   Evidence of changes and/or additions to the marking guideline and due process followed
The process of approving the additions to the already approved marking guidelines involved discussion and consultation with the external moderators, with the latter approving these additions after careful consideration. To maintain consistency in marking, the senior marking personnel cascaded the additions to the final marking guideline to the markers.

In Accounting Paper 1, Afrikaans FAL Paper 2, Computer Applications and Technology Paper 1 and Paper 2, as well as Physical Sciences Paper 1, alternative responses to some of the questions were added after the marking guideline standardisation meetings. This was done to enable variations of expression in candidates' responses and to consider crediting the candidates appropriately.

c)   Quality and standard of marking and internal moderation

i.   Quality and standard of marking
Umalusi noted initial inconsistencies in the marking of Accounting Paper 1, Consumer Studies Paper 1, Life Sciences Paper 1 and Mathematical Literacy Paper 1. The markers were inconsistent in the marking of certain questions in different question papers with an upward and/or downward deviation of between one to four marks. The markers who struggled with some of the questions received further training and guidance from the senior markers on how to mark these questions. To further ensure quality and standard of marking, the senior marking personnel also conducted more than 10% moderation for these markers to monitor their consistency in the allocation of marks for the questions they marked. Where discrepancies were larger than three marks, those batches of scripts were sent back to markers for re-marking after the markers received additional training. As the process proceeded, there was consistency in the marking and the awarding of marks in the 27 question papers that were verified.

For all 27 question papers verified, Umalusi asserted that the overall marking process was fair, valid and reliable. There was overall consistency in mark allocations between markers in most of the subjects verified. There were, however, some inconsistencies in the awarding of marks in Accounting Paper 1, Computer Applications Technology Paper 2, Economics, Geography

Paper 2, Life Sciences Paper 1 and Mathematical Literacy Paper 1. The discrepancy in mark allocations ranged between one and seven marks between the markers and external moderators.

The discrepancies in marks for Economics was greater than four marks between one marker and external moderator. The marker was retrained repeatedly but the inconsistency in the allocation of marks was problematic; a higher percentage of moderation had to be done to ensure consistency.

In Geography Paper 2, a few markers marked inconsistently, with a variation of four marks. These markers were also retrained and consistently monitored by senior marking personnel. In Life Sciences Paper 1, Umalusi observed a discrepancy in the marking where one marker deviated by seven marks. The marker was retrained to ensure consistency in marking. The deviations observed in Computer Applications Technology and Accounting were minimal, between one and three marks.

All marking inconsistencies and variations in the application of the marking guidelines that were picked up during marking at all levels of moderation were corrected.

ii.   Internal moderation
To eliminate marking mistakes and variations in the application of marking guidelines during marking at all levels, internal moderation by chief markers, internal moderators and senior markers had to be conducted. In instances where variations in marking were noted, this was timely and was attended to effectively. Umalusi verified if internal moderation was indeed conducted and if the internal moderators engaged in part- or whole-script marking during the moderation process; and, lastly, to determine the degree of variation in the awarding of marks.

The IEB exceeded the expectation of compliance with the minimum requirement of a 10% quota for internal moderation. Internal moderation ranged between 10% and 15%, dependent on the consistency of marking. This strengthened the moderation process of the IEB. Judging from the sample of batches/scripts verified, internal moderation was of good quality and standard.

iii.   Addition and transfer of marks
The IEB captured the candidates' marks directly from the candidates' scripts onto the examination computer system. In the subjects verified, the calculation of marks was accurate.

d)   Candidate performance

The analysis of candidates' performance, based on the sample of scripts moderated by the external moderators, varied in the different subjects and ranged from poor to good. Subjects like Accounting, Business Studies, Engineering Graphics and Design, English FAL, Geography, History and Life Sciences, across papers, achieved an overall average of over 60%. The remaining eight subjects verified achieved an overall average of less than 60%.

6.4   Areas of Improvement

Umalusi noted the following areas of improvement:

a) Internal moderation across the three levels exceeded the required 10% threshold in most subjects verified. This was an improvement from 2020, where 15% moderation was identified only in Business Studies and English Home Language (HL)..

6.5   Areas of Non-Compliance

The IEB had all systems in place for the two processes. Umalusi did not identify areas of non-compliance during the marking guideline standardisation meetings or the verification of marking.

6.6   Directives for Compliance and Improvement

There are no directives for compliance and improvement issued for these processes in the November 2021 NSC examination.

6.7   Conclusion

The 2021 findings of the marking guideline standardisation meetings indicated that the meetings were effective, and the marking guidelines were correctly applied across all question papers verified by Umalusi. Due process was followed in adding new responses to the marking guidelines in subjects where additions were made. The IEB marking personnel were well prepared for the marking standardisation meetings and the process ran smoothly. The IEB is commended for the continuous training of markers when below-standard marking was identified; and the re-marking of the affected scripts ensured that the candidates were not unfairly advantaged or disadvantaged. Overall, marking was found to be fair, valid and reliable in all 27 question papers that Umalusi sampled for verification of marking.

CHAPTER 7 STANDARDISATION AND RESULTING

7.1   Introduction

Standardisation is a process that is informed by the evidence presented, in the form of qualitative and quantitative reports. Its primary aim is to achieve an optimum degree of uniformity, in each context, by considering possible sources of variability other than students' ability and knowledge. In general, performance variability may occur as a consequence of the standard of the question papers, quality of marking and other related factors. It is for these reasons that Umalusi standardises examination results.

Umalusi derives this function from section 17A (4) of the GENFETQA Act of 2001, as amended in 2008, which states that the Council may adjust raw marks during the standardisation process.

In broad terms, standardisation involves verification of subject structures, mark capturing and the computer system used by an assessment body. It also involves the development and verification of norms, which culminate in the production and verification of standardisation booklets in preparation for the standardisation meetings. Standardisation decisions are informed by, among others, principles of standardisation, qualitative inputs compiled by internal and external moderators, examination monitors; intervention reports presented by assessment bodies; and other related information which may be available at the time. The process is concluded with the approval of standardisation decisions per learning area; statistical moderation; and the resulting process.

7.2   Scope and Approach

The Independent Examinations Board (IEB) presented 65 subjects for the 2021 National Senior Certificate (NSC) examination, as well as three Advanced Programme subjects, for standardisation. In turn, Umalusi verified the historical averages, standardisation data, adjustments, statistical moderation and the resulting datasets.

7.2.1   Development of Historical Averages

Historical averages for NSC examinations are developed using the five previous examination sittings. Once that is done, as per policy requirements the IEB must submit to Umalusi historical averages, or norms, for verification purposes. Where a distribution contains outliers, the historical average is calculated, excluding data from the outlying examination sitting. Umalusi applies a principle of exclusion when calculating the historical average for such instructional offerings. Finally, Umalusi takes into account historical averages during the standardisation process.

7.2.3   Pre-Standardisation and Standardisation

The pre-standardisation and standardisation meetings for the 2021 NSC examination were held on 7 January 2022. Umalusi was guided by many factors, including qualitative and quantitative information, to reach its standardisation decisions. Qualitative inputs included evidence-based reports presented by the IEB, research findings from Umalusi's post-examination analyses in selected subjects and the reports of Umalusi's external moderators and monitors on the conduct, administration and management of

examinations. The quantitative information Umalusi considered were historical averages and pairs analyses, together with standardisation principles.

7.2.4 Post-Standardisation

Beyond standardisation meetings, the IEB submitted the final adjustments and candidates' resulting files for verification and eventual approval.

7.3   Summary of Findings

7.3.1 Development of historical averages

The historical averages for the 2021 NSC examination were developed using the five previous examination sittings, which the IEB submitted for verification, in accordance with the Umalusi management plan. The IEB presented the following subjects for the second time in 2021: Technical Mathematics, Technical Science, Electrical Technology (Power Systems, Electronics and Digital), Civil Technology (Civil Services, Construction and Woodworking) and Mechanical Technology (Automotive and Fitting and Machining), for which an interim or fictitious norms were used. Where outliers were found, the principle of exclusion was applied to the outlying examination sittings. Table 7A reflects the subject with an outlier for the November 2021 NSC examination.

Table 7A: Subject with outliers

Subject Code	Subject	Outlying Year`
13352594	Tamil Second Additional Language	201611

7.3.2 Standardisation Decisions

The qualitative reports produced by external moderators, i.e., the monitoring and post-examination analyses of question papers and intervention reports presented by the assessment bodies, were used, together with the principles of standardisation, to inform decisions. The standardisation discussions highlighted issues, such as technical errors reported for subjects such as Afrikaans First Additional Language, which may have adversely affected the candidates' performance and were brought to the attention of the assessment body.

Other subjects which were indicated as problematic and identified for intervention by the assessment body were Consumer Studies, Dance Studies, Sesotho Home Language and Sport and Exercise Science, all of which showed declining trends in performance. Of the subjects presented by the IEB, 44 (or 68%) had their raw marks accepted, mainly due to candidate performance being consistent with previous examination sittings; performance on practical subjects; and subjects having relatively small enrolments. Fourteen of the subjects were adjusted upwards, as a result of performance being misaligned. This misalignment could have been the result of papers being regarded as more difficult in their cognitive demands and/or the possible impact of learning under COVID-19 pandemic constraints, which affected candidates for two consecutive academic years.

Tables 7B and 7C summarise the standardisation decisions taken.

Table 7B: List of standardisation decisions for the November 2021 NSC

Description	Total
Number of subjects presented	65
Raw marks	44
Adjusted (mainly upwards)	14
Adjusted (downwards)	07
Unstandardised	0
Number of subjects standardised:	**65**

Table 7C: List of standardisation decisions for the Advanced Programmes

Description	Total
Number of subjects presented	3
Raw marks	3
Adjusted (mainly upwards)	0
Adjusted (downwards)	0
Unstandardised	0
Number of subjects standardised:	**3**

7.3.4   Post-Standardisation

The adjustments were approved on second submission; statistical moderation and resulting files, after third submission.

7.4   Areas of Improvement

The following areas of improvement were observed:

a.   The IEB submitted all the qualitative input reports as required;
b.   The IEB presented standardisation booklets free from error; and
c.   The IEB completed the verification of systems "dry runs".

7.5   Areas of Non-Compliance

There are no areas for non-compliance and improvement.

7.6   Directives for Compliance and Improvement

There are no directives for compliance and improvement issued for this process in the November 2021 NSC examination.

7.7   Conclusion

The standardisation process, despite being carried out on virtual platforms, was conducted in a systematic, objective and transparent manner. Decisions made to accept raw marks or to perform slight upward or downward adjustments were based on sound educational reasoning. The majority of the IEB proposals corresponded with those of Umalusi, which is a clear indication of a maturing examination system.

CHAPTER 8 CERTIFICATION

8.1   Introduction

Umalusi is mandated by the General and Further Education and Training Quality Assurance (GENFETQA) Act, 2001 (Act No. 58 of 2001) for the certification of learner achievements for South African qualifications registered on the General and Further Education and Training Qualifications Sub-framework (GFETQSF) of the National Qualifications Framework (NQF). The responsibilities of Umalusi are, furthermore, defined as the development and management of its sub-framework of qualifications, the quality assurance of assessment at exit points and the certification of learner achievements.

Umalusi upholds the certification mandate by ensuring that assessment bodies adhere to policies and regulations promulgated by the Minister of Basic Education for the National Senior Certificate: A qualification at Level 4 on the NQF (NSC).

The quality assurance processes instituted by Umalusi for certification ensure that the qualification awarded to a learner complies with all the requirements for the qualification as stipulated in the regulations. The Independent Examinations Board (IEB) is required to submit all learner achievements to Umalusi, the Quality Council, to quality assure, verify and check the results before a certificate is issued. The specifications and requirements for requesting certification are encapsulated in the form of directives for certification to which all assessment bodies must adhere.

Several layers of quality assurance have been instituted over the last few years. This has been done to ensure that the correct results are released to the learners, that all results are approved by Umalusi before release and that the certification of the learners' achievements are done in accordance with the approved results.

This chapter focuses on the overall certification processes and the compliance of the IEB to the directives for certification, as specified in the regulations for certification.

8.2   Scope and Approach

The period covered in this report is 1 December 2020 to 30 November 2021. All the requests for certification received during this period that were finalised, in other words, feedback provided to the assessment body by Umalusi, will be included and addressed in this report. The main examination covered in this report is the November 2020 examination.

Certification of learner achievements cannot be pinned to a single period in the year because it is a continuous process whereby certificates are issued throughout the year. The bulk of the certification happens usually within three months of the release of the results. Throughout the year certificates are requested, either as a first issue, duplicate or replacement due to a change in status, or re-issue.

To ensure that the data for certification is valid, reliable and in the correct format, 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 and a specific type of certificate.

This chapter focuses on the shortfalls in compliance to the certification directives by the assessment body; and how this can affect the quality assurance processes and the certification of learner achievements.

In addition, this chapter includes statistics on the number of requests, in the form of datasets, that were received, with an indication of the percentage of rejections in the applications owing to non-compliance with the directives. The number and types of certificates issued in this period is also provided.

With the processing of the requests for certification during the period of reporting, several findings were made that are highlighted and expanded on. These findings should not be regarded as a comprehensive list of findings but should be seen as key points that need to be addressed.

8.3   Summary of Findings

Every examination cycle starts with the registration of learners for the academic year. The registration of learners must be done according to an approved qualification structure, listing the required subjects, subject components, pass percentages, combination of subjects and the like. The specification of the qualification is an important aspect because it lays the foundation for a credible qualification.

Therefore, the first aspect to focus on is the submission of the subject structures, for approval and alignment of the IT systems. Any changes in the subject structures and/or new subjects must be applied for, at least 18 months in advance, to Umalusi. With the submission of the subject structures, the IEB must ensure that the structures are correctly registered for the new examination cycle and are aligned with those of Umalusi.

During the desktop evaluation, a few areas were examined in terms of certification, with the focus on the registration of candidate information, the resulting of candidates and actual certification submissions.

The registration of candidates is processed through an online registration system. Independent schools access the online registration platform using a username (user identification) and a password. A preliminary electronic schedule of entries is generated and submitted to the schools for verification. Any changes that need to be effected are referred to the assessment body, the IEB, to perform at their offices.

Immigrant candidates are registered in Grade 9 on submission of all relevant supporting documentation. Concessions for learners with learning difficulties are also processed and were managed in a satisfactory manner.

Two submissions of registration data are required: three months after registration and the final dataset at the end of October. The first is regarded as a preliminary registration while the second is the final set of registrations. Both sets of registration data were received by Umalusi. The most notable error detected in the data was that candidates with special needs (SNE) were indicated as such on the dataset, but the special condition was not captured (Deaf, Dyscalculia, etc.). The assessment body was requested to correct this before examination commenced.

After the IEB has conducted the end-of-year examination, all learners' raw marks must be submitted to Umalusi for standardisation, statistical moderation and the resulting of the learner achievements.

Umalusi must approve all learner records before the results are released by the IEB. The approval of results follows several quality assurances processes.

The general principles that must be adhered to are that all results must be approved before release; and the request for certification must be submitted to Umalusi. Any changes to marks must also be submitted for approval. Once a certificate has been issued, correction of marks cannot be effected by submitting mop-up datasets. A re-issue must then be requested to correct marks on a certificate that has already been issued.

The IEB has adhered to this procedure. The datasets for certification were submitted, within three months, together with the declaration forms, as required by Umalusi, this despite COVID-19 challenges. The resulting of the 2020 cohort of learners was also completed without any problems.

Figure 8A is a summary of certificates issued for the period 1 December 2020 to 30 November 2021 by the IEB; and Table 8A reflects the number of datasets processed in the same period.

National Senior Certificates
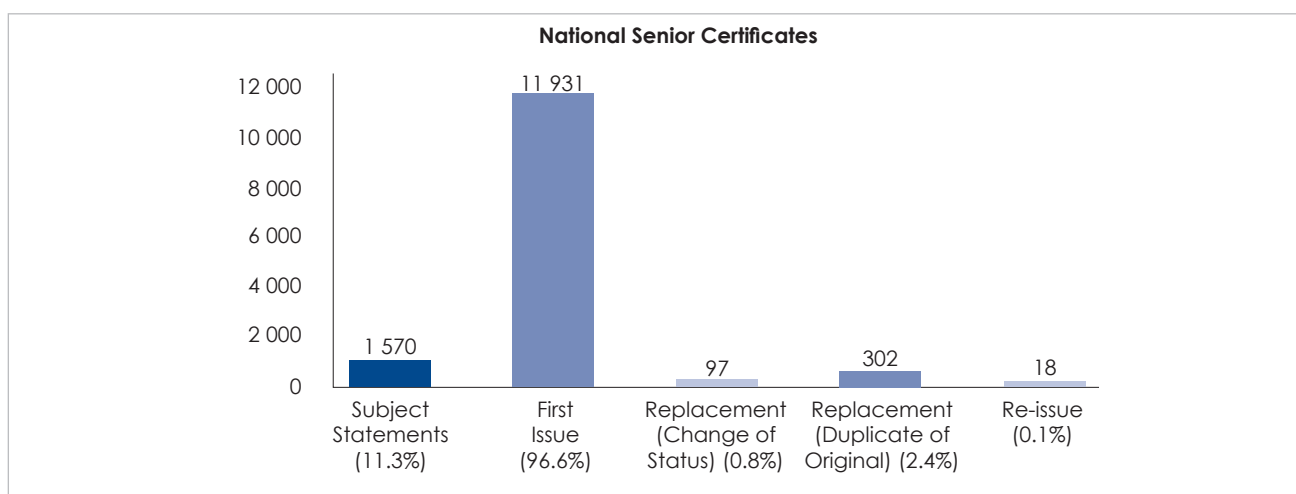
Figure 8A: Certificates issued during the period 1 December 2020 to 30 November 2021

Table 8A: Certificates issued during the period 1 December 2020 to 30 November 2021

Qualification	No. of datasets	No. of datasets accepted	% accepted	No. of records submitted	No. of records accepted	% accepted	No. rejected	Certificates printed
National Senior Certificate (NSC)	381	381	100%	14 661	14 052	95.9%	609	13 918
Senior Certificate (SC)	95	95	100%	187	122	65.2%	65	122

8.4   Areas of Improvement

The following areas of improvement and innovations were noted:

a. The IEB has adapted and aligned their processes to the quality assurance processes of Umalusi and is submitting the requests for certification accordingly; and
b. Irregularity reports were submitted before certification datasets, as per Umalusi directives.

8.5   Areas of Non-Compliance

No areas of non-compliance were noted.

8.6   Directives for Compliance and Improvement

The IEB must ensure that:

    a. All candidate records are approved by Umalusi prior to the extraction of certification datasets to avoid unnecessary rejections and delays in issuing certificates to candidates, especially where candidates have been involved in a re-mark or where marks have changed.

8.7   Conclusion

The IEB, as a private assessment body, was compliant and executed the directives for certification. The candidates enrolled for the NSC through the IEB were resulted and certified without any problems. The IEB has fulfilled its role in respect of certification in an exemplary fashion.

ANNEXURES

Annexure 1A: Compliance per criteria at first moderation of each question paper

No	Subject (question paper)	TD	IM	CC	CS	TS	L&B	Pre	Con	ARM	OI	Approval level
1.	Accounting Paper 1	A	A	M^1	L^2	M^1	M^1	A	A	A	M^3	2
2.	Accounting Paper 2	A	A	M^1	M^2	M^3	A	A	A	M^1	A	2
3.	Afrikaans FAL Paper 1	M^1	A	A	A	M^2	M^1	A	M^2	M^2	M^2	2
4.	Afrikaans FAL Paper 2	M^1	A	A	A	M^1	M^1	A	M^1	M^2	M^2	2
5.	Afrikaans HL Paper 1	A	A	A	A	A	M^1	A	A	A	A	1
6.	Afrikaans HL Paper 2	A	A	A	A	A	M^2	A	A	M^1	A	1
7.	Agricultural Management Practices	A	A	A	A	A	A	A	A	A	A	1
8.	Agricultural Sciences	A	A	A	A	A	A	A	A	A	A	1
9.	Arabic SAL Paper 1	M^2	A	A	A	M^1	A	A	L^2	A	A	2
10.	Arabic SAL Paper 2	A	M^1	A	A	M^1	A	A	A	A	A	2
11.	Business Studies	M^1	M^1	A	A	M^4	M^1	A	A	M^3	M^2	2
12.	Computer Applications Technology Paper 1	M^2	M^1	A	A	M^3	M^2	A	A	M^1	A	3
13.	Computer Applications Technology Paper 2	M^1	A	A	A	M^5	L^3	A	M^1	M^1	A	3
14.	Consumer Studies	M^3	M1	M^2	M^1	M^8	M^3	A	M^3	M^3	M^1	1
15.	Dance Studies	M^1	A	M^2	M^1	M^2	A	L^2	L^2	M^3	M^2	2
16.	Design	M^2	A	A	M^1	M^1	A	A	M^1	M^2	A	1
17.	Dramatic Arts	A	A	A	A	A	M^2	A	A	A	A	1
18.	Economics	A	A	A	M^2	M^3	A	A	M^1	M^1	M^2	2
19.	Electrical Technology – Electronics	A	A	A	A	M^3	A	A	A	M^1	A	1
20.	Electrical Technology – Digital Systems	A	A	M1	A	M^2	A	A	A	M^1	A	1
21.	Engineering Graphics and Design Paper 1	M^2	A	A	A	M^1	A	A	A	A	A	1
22.	Engineering Graphics and Design Paper 2	M^2	A	A	A	M^1	M^1	M^1	M^1	A	A	1
23.	English FAL Paper 1	A	A	A	A	M^4	M^2	A	A	M^1	M^1	1
24.	English FAL Paper 2	M^1	A	A	A	M^1	A	A	A	A	A	2
25.	English HL Paper 1	A	A	A	M^1	M^4	M^1	A	M^1	M^4	L^5	2
26.	English HL Paper 2	M^1	A	A	M^1	M^1	A	A	A	M^1	M^3	2
27.	French SAL Paper 1	A	A	A	A	A	M^1	A	M^1	M^2	A	1
28.	French SAL Paper 2	A	A	A	A	A	M^1	A	A	A	A	1

No	Subject (question paper)	TD	IM	CC	CS	TS	L&B	Pre	Con	ARM	OI	Approval level
29	Geography Paper 1	M¹	A	A	M¹	M¹	A	A	A	A	A	2
30	Geography Paper 2	M¹	A	A	M¹	A	M¹	A	A	M¹	A	2
31	German HL Paper 1	A	A	A	A	A	A	A	A	A	A	1
32	German HL Paper 2	A	A	A	A	A	A	A	A	A	A	1
33	German SAL Paper 1	A	A	A	A	A	A	A	A	A	A	1
34	German SAL Paper 2	A	A	A	A	A	A	A	A	A	A	1
35	History Paper 1	A	A	A	A	A	A	A	A	M¹	A	1
36	History Paper 2	A	A	A	A	A	A	A	A	A	A	1
37	Hospitality Studies	M¹	A	M²	A	M¹	A	A	A	A	A	1
38	Information Technology Paper 1	M¹	A	A	A	A	M¹	A	M¹	A	A	1
39	Information Technology Paper 2	A	A	A	A	A	M¹	A	A	A	A	1
40	IsiXhosa FAL Paper 1	A	A	A	A	A	A	A	A	A	A	1
41	IsiXhosa FAL Paper 2	A	A	A	A	A	A	A	A	A	A	1
42	IsiZulu FAL Paper 1	A	A	A	A	A	M¹	A	A	A	A	1
43	IsiZulu FAL Paper 2	M¹	A	A	A	M¹	M¹	A	A	A	A	2
44	IsiZulu HL Paper 1	A	A	M²	A	M⁴	A	A	M¹	M³	L⁸	4
45	IsiZulu HL Paper 2	A	A	A	M¹	M²	A	A	A	M¹	M⁴	3
46	Life Sciences Paper 1	M¹	A	A	A	M³	M¹	A	A	M³	M¹	3
47	Life Sciences Paper 2	M¹	A	A	A	A	M¹	A	A	A	A	1
48	Life Sciences Paper 3	A	A	A	A	M¹	M¹	A	A	M⁴	M¹	2
49	Mathematical Literacy Paper 1	A	M¹	M¹	M²	M⁴	M²	M²	A	M³	L⁶	3
50	Mathematical Literacy Paper 2	M³	M¹	M²	M²	M³	M3	M¹	A	M²	M⁵	2
51	Mathematics Paper 1	M¹	A	M¹	M²	A	A	A	A	M³	M¹	2
52	Mathematics Paper 2	A	A	L²	M¹	M¹	A	A	A	M⁴	M³	2
53	Mechanical Technology – Welding and Metalwork	A	A	A	A	M²	A	A	A	M²	A	1
54	Music Paper 1	M¹	A	A	M²	A	A	A	A	M¹	M¹	2
55	Music Paper 2	A	A	A	M¹	A	A	A	A	M²	M³	2
56	Physical Sciences Paper 1	A	A	M¹	A	M¹	A	A	A	M¹	M³	2
57	Physical Sciences Paper 2	M¹	A	A	M¹	M⁴	M¹	A	M¹	A	A	3
58	Sepedi FAL Paper 1	M¹	A	A	A	M²	A	M¹	A	M²	M²	2
59	Sepedi FAL Paper 2	A	A	A	A	A	M²	A	M¹	M²	M²	2
60	Sepedi HL Paper 1	M²	A	M¹	M¹	M⁴	M¹	L³	M²	M³	M⁶	4

No	Subject (question paper)	TD	IM	CC	CS	TS	L&B	Pre	Con	ARM	OI	Approval level
61	Sepedi HL Paper 2	M^3	M^2	A	M^1	M^2	A	A	M^1	M^1	M^2	4
62	Sesotho FAL Paper 1	A	L^3	A	A	M^2	M^1	A	M^1	M^5	M^2	2
63	Sesotho FAL Paper 2	A	M^2	L^4	M^2	L^4	A	A	A	M^5	L^5	3
64	Sesotho HL Paper 1	A	A	M^1	M^1	M^1	A	A	A	A	L^8	2
65	Sesotho HL Paper 2	M^1	M^1	L^3	M^1	M^2	A	A	A	M^1	L^8	2
66	Setswana FAL Paper 1	A	A	M^1	A	A	A	L^2	M^1	L^2	M^1	3
67	Setswana FAL Paper 2	A	A	A	A	A	A	M^1	A	M^1	M^1	2
68	SiSwati FAL Paper 1	A	A	A	A	M^6	A	M^1	A	M^1	M^4	2
69	SiSwati FAL Paper 2	A	A	A	A	A	A	A	A	A	A	1
70	SiSwati HL Paper 1	A	A	A	A	M^5	A	M^2	A	M^1	M^4	2
71	SiSwati HL Paper 2	A	A	A	A	A	A	A	A	A	A	1
72	Spanish SAL Paper 1	A	A	A	A	A	A	A	A	M^2	A	1
73	Spanish SAL Paper 2	A	A	A	A	A	A	A	A	A	A	1
74	Technical Mathematics Paper 1	M^2	M^1	L^4	M^1	M^2	M^1	A	M^1	M^2	L^8	4
75	Technical Mathematics Paper 2	M^3	M^1	M^3	M^1	M^2	M^1	M^1	A	M^3	L^8	3
76	Technical Sciences Paper 1	M^1	A	A	M^1	A	A	A	A	M^2	L^3	2
77	Technical Sciences Paper 2	M^2	A	A	A	A	A	A	A	M^2	A	1
78	Tourism	M^1	A	A	A	M^1	M^1	A	M^1	M^4	A	1
79	Visual Arts Paper 1	M^1	A	M^1	M^1	M^3	M^1	A	A	A	M^1	2
80	Visual Arts Paper 2	M^2	A	A	M^1	M^4	A	A	A	A	A	1
81	Xitsonga FAL Paper 1	A	A	A	A	A	A	A	A	A	A	1
82	Xitsonga FAL Paper 2	M^1	A	A	A	M^2	A	A	A	M^1	M^4	2

KEY:

TD = Technical Details; IM = Internal Moderation; CC = Content Coverage; CS = Cognitive Skills; TS = Text Selection, Types and Quality of Questions; L&B = Language and Bias; Pre = Predictability; Con = Conformity with Question Paper; ARM = Accuracy and Reliability of Marking Guideline; OI = Overall Impression

A = compliance in all respects; M = compliance in MOST respects; L = LIMITED compliance

M^x, L^x: x = number of quality indicators not complied with

Annexure 2A: Subjects and schools/centres sampled for SBA moderation

Subject	Centre/school
Accounting	Christ Church Preparatory School and College
	Cornwall Hill College
	Crawford La Lucia
	Curro Bankenveld
	Curro Klerksdorp
	Dainfern College
Dramatic Arts	Dominican Convent School
	King David Victory Park
	Kingsmead College
	Mitchell House College
	Redhill School
	St Henry's Marist College
Engineering Graphics and Design	Lebone II College
	Mitchell House College
	Tyger Valley College
Geography	Ashton Ballito
	Crawford College
Life Sciences	Calvary Christian College
	Curro Langebaan Private School
	Education Incorporated Fourways
	Epworth High School for Girls
	Kingswood College
	Woodlands International College
Mathematics	Curro Serengeti
	Hirsch Lyons
	Maris Stella
	Marist Brothers Linmeyer
	Oprah Winfrey Leadership Academy for Girls (OWLAG)
	Reddam House Atlantic Seaboard
	Rand Preparatory and College
Physical Sciences	Hirsch Lyons
	Silvermine Academy
	St Andrews School
	St Benedict School
	St Cyprian's School
	Curro Sitari
	Woodridge School
Visual Arts	Harriston School
	St Dominic's College
	St Mary's Kloof
	Wykeham Collegiate
Computer Applications Technology	Waterberg Academy
Engineering Graphics and Design	Curro Hillcrest High School
	St Monica's Diocesan School
	Thomas More College

Annexure 4A: Subjects sampled for the audit of appointed of markers

No.	Subjects	Question paper
1.	Business Studies	
2.	Consumer Studies	
3.	English Home Language	Paper 1 and Paper 2
4.	Engineering Graphics and Design	Paper 1 and Paper 2
5.	Hospitality Studies	
6.	Mathematics	Paper 1 and Paper 2
7.	Mathematical Literacy	Paper 1 and Paper 2
8.	Physical Sciences	Paper 1 and Paper 2
9.	Tourism	
10.	Visual Arts	

Annexure 5A: Examination centres visited during the writing phase of the examination

No.	Province	Examination centre	Date	Subject written
1	Eastern Cape	Harvest Christian School	26 October 2021	Mathematical Literacy Paper 1 Physical Sciences Paper 1
2		Brainline Learning World (Emmanuel Church)	19 November 2021	Geography Paper 2
3		Woodridge College	20 October 2021	Computer Applications Technology Paper 1
4	Free State	Caritas College	12 November 2021	
5		CVO Skool Dankbaar	29 October 2021	English First Additional Language (FAL) Paper 1
6	Gauteng	Besa Leadership Academy	09 November 2021	Afrikaans Home Language (HL) Paper 2
7		Brainline Learning World	8 November 2021	Mathematics Paper 1
8		Brainline Learning World (Montana)	22 November 2021	Mathematical Literacy Paper 2 Physical Sciences Paper 2
9		Brainline Learning World (Woodmead)	24 November 2021	Afrikaans FAL Paper 2 Afrikaans HL Paper 2
10		Christ Church Preparatory College	19 November 2021	Geography Paper 1
11		Pinnacle College Founders Hill	15 November 2021	Life Sciences Paper 2
12		Future Nation Schools: Fleurhof Campus	12 November 2021	Mathematics Paper 2
13		Hatfield Christian School	19 November 2021	Geography Paper 1
14		Heronbridge College	20 October 2021	Computer Applications Technology Paper 1
15		Maranatha Christian School	27 October 2021	Economics
16		Master Maths (East Rand)	12 November 2021	Mathematics Paper 2
17		Master Maths (Edenvale)	12 November 2021	Mathematics Paper 2
18		Master Maths (Fourways)	12 November 2021	Mathematics Paper 2
19		Master Maths (Garsfontein)	12 November 2021	Mathematics Paper 2
20		Master Maths (Glenanda)	22 November 2021	Physical Sciences Paper 2
21		Master Maths (Pretoria North)	12 November 2021	Mathematics Paper 2
22		Master Maths (Equestria)	22 November 2021	Physical Sciences Paper 2
23		Pinnacle College (Rynfield)	09 November 2021	Afrikaans FAL Paper 1
24		Reunert College (Alrode)	08 November 2021	Mathematics Paper 1

No.	Province	Examination centre	Date	Subject written
25		Reunert College (Boksburg)	10 November 2021	Accounting Paper 1
26		Master Maths (Randpark Ridge)	22 November 2021	Physical Sciences Paper 2
27		St Declan's School for Boys	08 November 2021	Mathematics Paper 1
28		Steyn City School	02 November 2021	Life Sciences Paper 1
29		Torah Academy	29 October 2021	English FAL Paper 1
30		English HL Paper 1		
31		Trinity House High School	19 October 2021	Information Technology Paper 1
32	KwaZulu-Natal	Ashton International College	10 November 2021	Accounting Paper 2
33		Brainline Learning World (Umhlanga)	09 November 2021	Afrikaans FAL Paper 1
34		Curro Mount Richmore Ballito	11 November 2021	Engineering Graphics and Design Paper 1
35		Master Maths (Durban)	02 November 2021	Mathematics Paper 2
36		Master Maths Durban North	22 November 2021	Physical Sciences Paper 2
37		Grace College	23 November 2021	History Paper 2
38		Hilton College	19 October 2021	Information Technology Paper 1
39	Limpopo	Maseala Progressive	10-12-2020	Engineering Graphics and Design Paper 2
40		Secondary School	20 October 2021	Computer Application Technology Paper 2
41		Brainline Learning World (Hoedspruit)	16 November 2021	English FAL Paper 2/ English HL Paper 2
42		Mitchell House School	02 November 2021	Life Sciences Paper 1
43	Mpumalanga	Curro Private School	26 October 2021	Mathematical Literacy Paper 1 Physical Sciences Paper 1
44		Penryn College	05 November 2021	Business Studies
45		St Thomas Aquinas School	26 October 2021	Physical Sciences Paper 1
46	Northern Cape	Orania CVO Skool	15 November 2021	Life Sciences Paper 2
47	North West	Pecanwood College	16 November 2021	English FAL Paper 2
48		English HL Paper 2	10-11-2020	South African Sign Language Home Language Paper 1
49		Xanadu Private School	12 November 2021	Mathematics Paper 2
50		Selly Park Secondary School	16 November 2021	English FAL Paper 2
51	WEstern Cape	Ambleside School Hout Bay	24 November 2021	Afrikaans FAL Paper 2
52		Brainline Learning World (Stellenbosch)	24 November 2021	Afrikaans FAL Paper 2 Afrikaans HL Paper 2
53		Bridge House School	09 November 2021	Afrikaans FAL Paper 1
54		Cedar House	22 November 2021	Mathematical Literacy Paper 2 Physical Sciences Paper 2
55		Curro Langebaan Independent School	19 October 2021	Information Technology Paper 1
56		Generation School	15 November 2021	Life Sciences Paper 2
57		Master Maths (Durbanville)	08 November 2021	Mathematics Paper 1
58		Master Maths (Somerset West)	22 November 2021	Physical Sciences Paper 2
59		Master Maths (Tokai)	08 November 2021	Physical Sciences Paper 2
60		Elkanah House	19 October 2021	Information Technology Paper 1

Annexure 5B: List of examination centres implicated in areas of non-compliance

Criteria	Nature of non-compliance	Province	Centre implicated
Invigilators and their training	Invigilators not appointed in writing	Eastern Cape Gauteng Mpumalanga	Woodridge College Master Maths (Pretoria North) Penryn College
	No evidence of invigilator training	Gauteng Mpumalanga	Master Maths (Pretoria North) Curro Private School
Preparations for the writing	Verification of admission letters/ identity documents of candidates not done	Eastern Cape Gauteng Gauteng Mpumalanga North West Western Cape Western Cape	Woodridge College Future Nations School (Fleurhof) Trinity House High School St Thomas Aquinas School Xanadu Private School Bridge House School Generation School
Time management of activities during the examination	Question papers not checked for technical accuracy	Eastern Cape Eastern Cape Gauteng Mpumalanga Northern Cape North West Western Cape Western Cape Western Cape Western Cape Western Cape	Harvest Christian School Woodridge College Master Maths (Fourways) St Thomas Aquinas School Orania CVO Skool Xanadu Private School Ambleside School (Hout Bay) Bridge House School Elkanah House School Generations School Master Maths (Somerset West)
	Examination rules not read	Gauteng Mpumalanga Northern Cape North West Western Cape	Master Maths (Equestria) Curro Private School Orania CVO Skool Selly Park Secondary School Bridge House School
Activities during the writing phase	Conduciveness for writing of examinations	Gauteng Mpumalanga	Torah Academy St Thomas Aquinas School
Irregularity reported by Monitor	Irregularities reported: A Mathematics educator was found invigilating during the writing of Mathematics Paper 2	Gauteng	Master Maths (Edenvale)

UMALUSI

Quality Council for General and Further Education and Training

9 781928 445388