



REPORT ON THE  
QUALITY ASSURANCE  
OF THE NOVEMBER  
2022 TECHNICAL  
AND VOCATIONAL  
EDUCATION  
AND TRAINING  
EXAMINATIONS AND  
ASSESSMENT



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# REPORT ON THE QUALITY ASSURANCE OF THE NOVEMBER 2022 TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING EXAMINATIONS AND ASSESSMENT

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**UMALUSI**



Quality Council for General and Further  
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# Table of Contents

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|  |             |
|--|-------------|
| <b>FOREWORD BY THE CHIEF EXECUTIVE OFFICER OF UMALUSI</b>  | <b>vii</b>  |
| <b>EXECUTIVE SUMMARY</b>   | <b>viii</b> |
| <b>ACRONYMS AND ABBREVIATIONS</b>  | <b>xi</b>   |
| <b>LIST OF TABLES AND FIGURES</b>  | <b>ix</b>   |
| <br>   |             |
| <b>CHAPTER 1 MODERATION OF QUESTION PAPERS</b>   | <b>1</b>    |
| PART A; NATIONAL CERTIFICATE (VOCATIONAL)  | 1           |
| 1.1 Introduction   | 2           |
| 1.2 Scope and Approach   | 7           |
| 1.3 Summary of Findings  | 7           |
| 1.4 Areas of Improvement   | 28          |
| 1.5 Areas of Non-Compliance  | 29          |
| 1.6 Directives for Compliance and Improvement  | 30          |
| 1.7 Conclusion   | 30          |
| <br>   |             |
| <b>CHAPTER 2 MODERATION OF INTERNAL CONTINUOUS ASSESSMENT</b>  | <b>31</b>   |
| 2.1 Introduction   | 31          |
| 2.2 Scope and Approach   | 31          |
| 2.3 Summary of Findings  | 50          |
| 2.4 Areas of Improvement   | 54          |
| 2.5 Areas of Non-Compliance  | 54          |
| 2.6 Directives for Compliance and Improvement  | 57          |
| 2.7 Conclusion   | 57          |
| <br>   |             |
| <b>CHAPTER 3 MODERATION OF THE CONDUCT OF THE INTEGRATED SUMMATIVE ASSESSMENT TASKS AND PRACTICAL ASSESSMENT TASKS</b> | <b>59</b>   |
| 3.1 Introduction   | 59          |
| 3.2 Scope and Approach   | 59          |
| 3.3 Summary of Findings  | 60          |
| 3.4 Areas of Improvement   | 71          |
| 3.5 Areas of Non-Compliance  | 72          |
| 3.6 Directives for Compliance and Improvement  | 73          |
| 3.7 Conclusion   | 73          |
| <br>   |             |
| <b>CHAPTER 4 STANDARDISATION OF MARKING GUIDELINES</b>   | <b>74</b>   |
| 4.1 Introduction   | 74          |
| 4.2 Scope and Approach   | 74          |
| 4.2.1 NC(V) Levels 2 and 3   | 75          |
| 4.2.2 NC(V) Level 4  | 76          |
| 4.3 Summary of Findings  | 76          |
| 4.3.1 Summary of Findings for NC(V) Level 2 and Level 3  | 77          |
| 4.3.2 Summary of Findings for NC(V) Level 4  | 83          |
| 4.4 Areas of Improvement   | 83          |
| 4.5 Areas of Non-Compliance  | 84          |
| 4.6 Directives for Compliance and Improvement  | 84          |
| 4.7 Conclusion   | 84          |

|  |            |
|--|------------|
| <b>CHAPTER 5 VERIFICATION OF MARKING</b>                                     | <b>85</b>  |
| 5.1 Introduction   | 85         |
| 5.2 Scope and Approach   | 85         |
| 5.3 Findings   | 88         |
| 5.4 Areas of Improvement   | 88         |
| 5.5 Areas of Non-Compliance  | 110        |
| 5.6 Directives for Compliance and Improvement                                | 111        |
| 5.7 Conclusion   | 111        |
| <br>   |            |
| <b>CHAPTER 6 STANDARDISATION AND VERIFICATION OF RESULTS</b>                 | <b>112</b> |
| 6.1 Introduction   | 112        |
| 6.2 Scope and Approach   | 113        |
| 6.3 Summary of Findings  | 113        |
| 6.4 Areas of Good Practice   | 113        |
| 6.5 Areas of Non-Compliance  | 113        |
| 6.6 Directives for Compliance and Improvement                                | 113        |
| 6.7 Conclusion   | 113        |
| <br>   |            |
| <b>CHAPTER 7 CERTIFICATION</b>   | <b>115</b> |
| 7.1 Introduction   | 115        |
| 7.2 Scope and Approach   | 115        |
| 7.3 Findings   | 116        |
| 7.4 Areas of Improvement (Including Innovations)                             | 116        |
| 7.5 Areas of Non-Compliance  | 118        |
| 7.6 Directives for Compliance and Improvement                                | 119        |
| 7.7 Conclusion   | 119        |
| <br>   |            |
| PART B: NATED REPORT 190/191 ENGINEERING STUDIES N2-N3                       | 120        |
| <b>CHAPTER 8 MODERATION OF QUESTION PAPERS</b>                               | <b>121</b> |
| 8.1 Introduction   | 121        |
| 8.2 Scope and Approach   | 127        |
| 8.3 Summary of Findings  | 127        |
| 8.4 Areas of Improvement   | 127        |
| 8.5 Areas of Non-Compliance  | 127        |
| 8.6 Directives for Compliance and Improvement                                | 127        |
| 8.7 Conclusion   | 130        |
| <br>   |            |
| <b>CHAPTER 9 MODERATION OF THE CONDUCT OF INTERNAL CONTINUOUS ASSESSMENT</b> | <b>131</b> |
| 9.1 Introduction   | 131        |
| 9.2 Scope and Approach   | 131        |
| 9.3 Findings   | 131        |
| 9.4 Areas of Improvement   | 161        |
| 9.5 Areas of Non-Compliance  | 162        |
| 9.6 Directives for Compliance and Improvement                                | 162        |
| 9.7 Conclusion   | 162        |

|   |     |
|---|-----|
| <b>CHAPTER 10 STANDARDISATION OF MARKING GUIDELINES</b>                     | 163 |
| 10.1 Introduction   | 163 |
| 10.2 Scope and Approach   | 165 |
| 10.3 Summary of Findings  | 165 |
| 10.4 Areas of Improvement   | 165 |
| 10.5 Areas of Non-Compliance  | 173 |
| 10.6 Directives for Compliance and Improvement                              | 173 |
| 10.7 Conclusion   | 173 |
| <b>CHAPTER 11 VERIFICATION OF MARKING</b>                                   | 174 |
| 11.1 Introduction   | 174 |
| 11.2 Scope and Approach   | 174 |
| 11.3 Summary of Findings  | 174 |
| 11.4 Areas of Improvement   | 174 |
| 11.5 Areas of Non-Compliance  | 195 |
| 11.6 Directives for Improvement and Compliance                              | 195 |
| 11.7 Conclusion   | 195 |
| <b>CHAPTER 12 STANDARDISATION AND VERIFICATION OF RESULTS</b>               | 196 |
| 12.1 Introduction   | 196 |
| 12.2 Scope and Approach   | 196 |
| 12.3 Summary of Findings  | 205 |
| 12.4 Areas of Compliance  | 197 |
| 12.5 Areas of Non-Compliance  | 197 |
| 12.6 Directives for Improvement and Compliance                              | 198 |
| 12.7 Conclusion   | 198 |
| <b>CHAPTER 13 CERTIFICATION</b>   | 199 |
| 13.1. Introduction  | 199 |
| 13.2 Scope and Approach   | 199 |
| 13.3 Summary of Findings  | 200 |
| 13.4 Areas of Improvement   | 201 |
| 13.5 Areas of Non-Compliance  | 201 |
| 13.6 Directives for Compliance and Improvement                              | 202 |
| 13.7 Conclusion   | 202 |
| <b>CHAPTER 14 MONITORING THE STATE OF READINESS TO CONDUCT EXAMINATIONS</b> | 203 |
| 14.1 Introduction   | 203 |
| 14.2 Scope and Approach   | 203 |
| 14.3 Summary of Findings  | 209 |
| 14.4. Areas of Improvement  | 209 |
| 14.5 Areas of Non-Compliance  | 209 |
| 14.6 Directives for Compliance and Improvement                              | 209 |
| 14.7 Conclusion   | 209 |

|  |     |
|--|-----|
| <b>CHAPTER 15 MONITORING THE WRITING OF EXAMINATIONS</b> | 220 |
| 15.1 Introduction  | 220 |
| 15.2 Scope and Approach                                  | 220 |
| 15.3 Summary of Findings                                 | 223 |
| 15.4 Areas of Improvement                                | 224 |
| 15.5 Areas of Non-Compliance                             | 224 |
| 15.6 Directives for Compliance and Improvement           | 224 |
| 15.7 Conclusion  | 225 |
| <br>   |     |
| <b>CHAPTER 16 MONITORING OF MARKING CENTRES</b>          | 236 |
| 16.1 Introduction  | 236 |
| 16.2 Scope and Approach                                  | 237 |
| 16.3 Summary of Findings                                 | 240 |
| 16.4 Areas of Improvement                                | 241 |
| 16.5 Areas of Non-Compliance                             | 241 |
| 16.6 Directives for Compliance and Improvement           | 241 |
| 16.7 Conclusion  | 241 |

# FOREWORD BY THE CHIEF EXECUTIVE OFFICER OF UMALUSI

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Over the past years, Umalusi has made great strides in setting, maintaining and improving standards in the quality assurance of the Technical and Vocational Education and Training (TVET) qualifications and programmes.

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

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

- a. Level of adherence to policy in the implementation of examination and assessment processes;
- b. Quality and standard of examination question papers, their corresponding marking guidelines, internal continuous assessment (ICASS) tasks, integrated summative assessment tasks (ISAT) and practical assessment tasks (PAT);
- c. Efficiency and effectiveness of systems, processes and procedures for the monitoring of the conduct, administration and management of examinations and assessment; and
- d. Quality of marking, as well as the quality and standard of quality assurance processes within the assessment body.

Furthermore, Umalusi has established a professional working relationship with the Department of Higher Education and Training (DHET). As a result, there has been an improvement in the conduct, administration and management of the TVET examinations and their assessments. There is ample evidence to confirm that the relevant chief directorates of the DHET, the regional offices, public and private colleges, as well as the examination and marking centres, continue to strive to improve systems and processes relating to the TVET examinations and assessment. However, despite numerous improvements there remain critical aspects, such as the implementation and management of ICASS; thorough internal moderation of question papers and ICASS; and the repeated occurrence of irregularities (especially in private colleges), that require attention in the forthcoming examination cycle.

The Assessment Standards Committee (ASC), which is a committee of Umalusi Council, and the Executive Committee of Umalusi Council (EXCO) met in January 2023 to scrutinise evidence presented on the conduct of the November 2022 National Certificate (Vocational) Level 2–4 [NC(V)] and NATED Report 190/191 Engineering Studies N2–N3 examinations administered by the DHET.

Having studied all the evidence presented, the EXCO concluded that the examinations were administered largely in accordance with the National Policy Pertaining to the Conduct, Administration and Management of the Examinations of Colleges, Established, Declared or Registered in Terms of the Continuing Education and Training Act. The irregularities identified during the writing and marking of the examination were not systemic and, therefore, did not compromise the overall credibility and integrity of the November 2022 NC(V) L2–L4 and NATED N2–N3 examinations administered by the DHET.

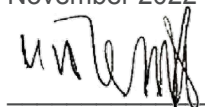
The EXCO approved the release of the DHET results of the November 2022 TVET examinations. However the DHET was required to:

- a. Address the directives for compliance and improvement highlighted in the Quality Assurance of Assessment report and submit the improvement plan by 15 March 2023; and
- b. Block the results of all candidates implicated in irregularities, including the candidates who are implicated in alleged acts of dishonesty, pending the outcome of further DHET investigations and verification by Umalusi.

The EXCO commended the DHET for conducting successful examinations.

Umalusi will continue to ensure that the quality, integrity and credibility of the TVET 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 2022 TVET examinations.



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**Dr Mafu S Rakometsi**  
CHIEF EXECUTIVE OFFICER



# EXECUTIVE SUMMARY

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The National Qualifications Framework (NQF) Act (No. 67 of 2008, as amended), 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 (No. 58 of 2001, as amended in 2008), to develop and manage its sub-framework of qualifications, to quality assure assessment at exit-points, approve the release of examination results and to certify candidate achievements.

The Act, in terms of these responsibilities, stipulates that Umalusi, as the Quality Council for General and Further Education and Training:

- a. Must perform the external moderation of assessment of the different assessment bodies and education institutions;
- b. May adjust raw marks during the standardisation process; and
- c. Must, with the concurrence of the Director-General and after consultation with the relevant assessment body or education institution, approve the publication of the results of candidates if the Council is satisfied that the assessment body or education institution has:
  - (i) Conducted the assessment free from any irregularity that may jeopardise the integrity of the assessment or its outcomes;
  - (ii) Complied with the requirements prescribed by the Council for conducting assessment;
  - (iii) Applied the standards prescribed by the Council with which a candidate is required to comply to obtain a certificate; and
  - (iv) Complied with every other condition determined by the Council.

The purpose of this report is to provide feedback on the processes followed by Umalusi in quality assuring the November 2022 Technical and Vocational Education and Training (TVET) examinations. The report also reflects on the findings: areas of improvement and areas of non-compliance; and provides directives for compliance and improvement in the management, conduct and administration of the examination and assessment. The findings are based on information obtained from Umalusi moderation, monitoring, verification and standardisation processes, as well as from reports received from the Department of Higher Education and Training (DHET). Where applicable, comparisons are made with the November 2021 and November 2020 examinations.

Umalusi undertakes the quality assurance of the national qualifications through a rigorous process of reporting on each of the assessment processes and procedures. The quality assurance of the standard of assessment is based on the assessment body's ability to adhere to policies and regulations designed to deal with critical aspects of administering credible national assessment and examinations.

In the TVET sector Umalusi quality assures the assessment and examinations for the National Certificate (Vocational) [NC(V)] qualifications and National Accredited Technical Education Diploma (NATED) Report 190/191 Engineering Studies N2–N3 programmes.

The NC(V) qualifications and NATED Report 190/191 Engineering Studies N2–N3 programmes are offered at public TVET colleges, private Further Education and Training (FET) colleges, Correctional Services centres and a few schools. The quality assurance processes of Umalusi make provision for a sample from each type of centre/site.

The DHET conducted the November 2022 NC(V) examination in 261 subjects; and in 56 instructional offerings for the November 2022 NATED Report 190/191: Engineering Studies N2–N3 examinations.

This report covers the following quality assurance of assessment processes conducted by Umalusi, for which a brief outline is given below:

- a. Moderation of NC(V) question papers (Chapter 1);
- b. Moderation of NC(V) internal continuous assessment (ICASS) (Chapter 2);
- c. Moderation of the conduct of NC(V) integrated summative assessment tasks (ISAT) and practical assessment tasks (PAT) (Chapter 3);
- d. Standardisation of NC(V) marking guidelines (Chapter 4);
- e. Verification of NC(V) marking (Chapter 5);
- f. Standardisation and verification of NC(V) results (Chapter 6);
- g. NC(V) certification (Chapter 7);
- h. Moderation of NATED Report 190/191 question papers (Chapter 8);
- i. Moderation of the conduct of NATED Report 190/191 ICASS (Chapter 9);
- j. Standardisation of NATED Report 190/191 marking guidelines (Chapter 10);
- k. Verification of NATED Report 190/191 marking (Chapter 11);
- l. Standardisation of NATED Report 190/191 results (Chapter 12);
- m. NATED Report 190/191 certification (Chapter 13);
- n. Monitoring the state of readiness to conduct examinations (Chapter 14);
- o. Monitoring of writing (Chapter 15); and
- p. Monitoring of marking centres (Chapter 16).

The findings from the above quality assurance of assessment processes enabled the Executive Committee of Umalusi Council (EXCO) to decide whether to approve the release of the November 2022 NC(V) and NATED Report 190/191 Engineering Studies N2–N3 examinations or not.

The role and responsibilities of the DHET are to:

- a. Develop and internally moderate examination question papers and their accompanying marking guidelines and submit them to Umalusi for external moderation and approval;
- b. Develop and internally moderate ISAT/PAT and their accompanying marking tools and submit them to Umalusi for external moderation and approval;
- c. Manage the implementation and internal moderation of internal assessment;
- d. Conduct, administer and manage the writing of examinations in all examination centres;
- e. Conduct the marking of examinations and submit results to Umalusi for the standardisation process;
- f. Manage irregularities;
- g. Report to Umalusi on the conduct, administration and management of examinations;
- h. Have an IT system that complies with the policies and regulations, to be able to submit all candidate records according to the certification directives; and
- i. Process and submit records of candidate achievements to Umalusi for certification.

Umalusi conducts external moderation of examination question papers and accompanying marking guidelines to ensure that quality standards for the NC(V) and NATED Report 190/191 Engineering Studies N2–N3 examinations are maintained. This is a critical quality assurance process to ensure that the examination question papers are valid and reliable. This moderation process also ensures that the question papers are of the appropriate format and are of high technical quality.

The findings of the external moderation process after initial moderation indicated that there was an improvement in the number of NC(V) question papers that were print ready, from 21% in 2021 to 24% in 2022. Twenty-eight percent of the NATED Report 190/191 Engineering Studies N2–N3 question papers were print ready after initial moderation in November 2022, compared to 32% in the 2021 examinations.

The NC(V) qualifications and NATED Report 190/191 programmes require ICASS to be conducted by sites of teaching and learning. Umalusi is responsible for determining the quality and appropriateness of the standard and implementation of the ICASS tasks.

The main objectives of the external moderation of ICASS portfolios are to:

- a. Verify that the lecturer portfolio (portfolio of assessment (PoA)) and the students' portfolios of evidence (PoE) adhere to the ICASS guidelines, that sufficient tasks of different types have been administered and that the quality assurance of the internal assessment component has been effectively managed;
- b. Ascertain the appropriateness and standard of the assessment task;
- c. Determine whether ICASS allowed for assessment to take place at the time of learning and, more importantly, that it was integrated with teaching;
- d. Determine the extent to which the standardised PAT for Levels 3 and 4 have been implemented and require review; and
- e. Ensure that assessment across different sites of delivery is consistent and that standards are being maintained.

All candidates registered to write examinations in the NC(V) qualifications and NATED Report 190/191 programmes through the DHET are required to complete ICASS tasks. The compliance levels with most criteria showed improvement, with 44% of the NC(V) sites presenting PoA that were 100% compliant with all the criteria, compared to 52% of the sites in 2021. For NATED, 45% of the sites presented PoA that were fully compliant, compared to 84% of the sites in 2021. There remains much to be done by the DHET to improve the quality of internal moderation.

The purpose of verifying the state of readiness of the DHET to conduct the November 2022 NC(V) and NATED Report 190/191 Engineering Studies N2–N3 examinations was, largely, to:

- a. Evaluate the level of preparedness of the DHET to conduct the November 2022 NC(V) and NATED examinations;
- b. Track the progress made in addressing the directives for compliance and improvement issued after the November 2021 examinations;
- c. Verify that the DHET had systems in place to ensure the integrity of the November 2022 NC(V) and NATED examinations; and
- d. Report on any shortcomings identified during the evaluation and verification of the DHET systems.

The audit of the state of readiness confirmed the readiness of the DHET to administer the November 2022 NC(V) and NATED Report 190/191 Engineering Studies N2–N3 examinations. Umalusi noted that the dedicated DHET team responsible for the examinations had made significant improvements in their preparations to administer these examinations.

Umalusi staff and monitors were deployed to monitor the writing of the examinations to verify if the examination centres complied with the policy applicable to the conduct, administration and management of examinations. This monitoring was also important to identify any irregularities that might have occurred during the writing of the examinations. It was evident that the DHET had verified the state of readiness and availability of facilities at 51 (85%) of the examination centres visited. This was a 6% decrease compared to 91% in 2021.

Umalusi participated in the process of the standardisation of the marking guidelines of the question papers to ensure that justice was done and that the finalised marking guidelines would ensure fair, accurate and consistent marking. The standardisation process improved the quality of the marking guidelines and ensured that all possible responses to questions were accommodated. Amendments made to the marking guidelines enhanced the clarity of instructions to markers and did not compromise the examination or marking process.

Umalusi monitored the level of preparedness of marking centres to conduct the process of marking examination scripts. The marking of examination scripts for the November 2022 NC(V) qualifications and NATED Report 190/191 programmes was managed by the DHET. Umalusi monitored the marking centres to ensure that marking was properly planned and managed, which would ensure the credibility of the process and its outcomes.

The purpose of monitoring was to verify if there were proper management in the critical areas at all the centres monitored:

- a. Planning prior to the conducting of the marking process;
- b. The adequacy of resources at the marking centre;
- c. Security provided at the marking centre; and
- d. The management of irregularities identified during the marking process.

External verification of marking by Umalusi served to ensure that marking was conducted according to agreed and established practices and standards. The verification of marking process revealed that the quality of marking and internal moderation in most subjects and instructional offerings had improved at the marking centres monitored. These centres mostly complied with marking and moderation requirements.

Standardisation is a process that is informed by evidence presented in the form of qualitative and quantitative reports. Its primary aim is to achieve an optimum degree of uniformity, in a given context, by considering possible sources of variability other than candidates' ability and knowledge.

The purpose of standardisation and statistical moderation of results is to mitigate the effects of factors other than candidates' ability and knowledge on performance; and to reduce the variability of marks from examination to examination. The standardisation process was conducted in a systematic, objective and transparent manner. The decisions taken on whether to accept the raw marks or to perform upward or downward adjustments were based on sound educational, qualitative and statistical reasoning.

The DHET, as the assessment body, was compliant and generally executed the directives for certification. The majority of candidates for both NC(V) and NATED Report 190/191 were resulted and certified without any difficulties. However, achieving a certification rate of 100% and a problem-free certification process remains a challenge. But, taking the scope of the examination and the complexity of the system into account, the status of the system can be viewed as acceptable, albeit with the proviso that there is room for improvement.

Based on the findings of the reports on the quality assurance processes undertaken during the November 2022 examinations, the EXCO concluded that the November 2022 NC(V) and NATED Report 190/191 Engineering Studies N2–N3 examinations were conducted in line with the policies that govern the conduct, administration and management of examinations and assessment. Generally, examinations and assessments were conducted in a professional, fair and reliable manner. There were no systemic irregularities that could jeopardise the overall integrity of examinations and the results could, therefore, be regarded as credible. The EXCO approved the release of the results and commended the DHET for the maturing system.

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

Umalusi will continue, through bilateral meetings, to collaborate with all stakeholders to raise standards in NC(V) qualifications and NATED Report 190/191 N2–N3 programmes in South Africa.

# ACRONYMS AND ABBREVIATIONS

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|          |   |
|----------|---|
| ASC      | Assessment Standards Committee  |
| CBD      | Central Business District   |
| CEO      | Chief Executive Officer   |
| CM       | Chief Marker  |
| COVID-19 | Corona Virus Disease 2019   |
| DHET     | Department of Higher Education and Training                                 |
| EA       | Examination Assistant   |
| EC       | Eastern Cape  |
| EXCO     | Executive Committee of Umalusi Council                                      |
| FAL      | First Additional Language   |
| FET      | Further Education and Training  |
| FS       | Free State  |
| GP       | Gauteng Province  |
| GPW      | Government Printing Works   |
| GFETQSF  | General and Further Education and Training Qualifications Sub-framework     |
| GENFETQA | General and Further Education and Training Quality Assurance                |
| ICASS    | Internal Continuous Assessment  |
| ICT      | Information and Communication Technology                                    |
| ID       | Identity Document   |
| IM       | Internal Moderator  |
| ISAT     | Integrated Summative Assessment Task  |
| IRR      | Irregularity  |
| KZN      | KwaZulu-Natal   |
| LP       | Limpopo Province  |
| L2       | Level 2   |
| L3       | Level 3   |
| L4       | Level 4   |
| MP       | Mpumalanga Province   |
| NATED    | National Technical Education  |
| NC(V)    | National Certificate (Vocational)   |
| NEAIC    | National Examination and Assessment Irregularities Committee                |
| NQF      | National Qualifications Framework   |
| NW       | North-West Province   |
| OHS      | Occupational Health and Safety  |
| PAT      | Practical Assessment Task   |
| PoA      | Portfolio of Assessment (lecturer portfolio)                                |
| PoE      | Portfolio of Evidence (learner portfolio)                                   |
| SA       | South Africa  |
| SACE     | South African Council for Educators   |
| SAG      | Subject Assessment Guideline  |
| SLA      | Service Level Agreement   |
| SOP      | Standard Operation Procedure  |
| TVET     | Technical and Vocational Education and Training                             |
| Umalusi  | Council for Quality Assurance in General and Further Education and Training |

# LIST OF TABLES AND FIGURES

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|                   |  |
|-------------------|--|
| <b>Table 1A:</b>  | Subjects included in the moderated sample of NC(V) question papers.  |
| <b>Table 1B:</b>  | Approval status of NC(V) question papers after initial moderation  |
| <b>Figure 1A:</b> | Approval status of NC(V) question papers after initial moderation  |
| <b>Table 1C:</b>  | Summary of findings of the initial moderation of NC(V) question papers   |
| <b>Table 2A:</b>  | Subjects moderated at Level 2,3 and 4  |
| <b>Table 2B:</b>  | Moderation of ICASS portfolios – October 2022  |
| <b>Table 2C:</b>  | Portfolios that had documents missing or were disorganised   |
| <b>Table 2D:</b>  | Stipulated number of ICASS tasks not included in PoA   |
| <b>Table 2E:</b>  | Sites where analysis grids for all tasks were not included in PoA  |
| <b>Table 2F:</b>  | Sites and subjects that did not include mark sheets in PoA   |
| <b>Table 2G:</b>  | Moderation done only once prior to Umalusi moderation  |
| <b>Table 2H:</b>  | No evidence of college or campus moderation  |
| <b>Table 2I:</b>  | College sites that met none, or only some, of the quality indicators for content coverage of tasks   |
| <b>Table 2J:</b>  | College sites that did not meet all quality indicators for cognitive demand of tasks   |
| <b>Table 2K:</b>  | College sites that met 50% or less of the technical aspects of tasks   |
| <b>Table 2L:</b>  | College sites that produced and/or used quality tasks  |
| <b>Table 2M:</b>  | Sites that did not submit assessment tools with tasks  |
| <b>Table 2N:</b>  | Quality internal moderation in subjects at sites   |
| <b>Table 2O:</b>  | Main challenges encountered with implementation of PAT   |
| <b>Table 2P:</b>  | Colleges and sites that did not meet all the requirements for student PoE  |
| <b>Table 2Q:</b>  | Both PoA and PoE of a high standard  |
| <b>Table 2R:</b>  | Colleges needing intervention  |
| <b>Table 3A:</b>  | Subjects and sites included in the moderation of the conduct of L2, L3 and L4 ISAT/PAT, where actual demonstrations of competency of selected students were undertaken |
| <b>Table 3B:</b>  | Planning challenges in sampled subjects  |
| <b>Table 3C:</b>  | Incomplete ISAT at the time of Umalusi’s visit   |
| <b>Table 3D:</b>  | Subjects in which the ISAT was completed according to specification  |
| <b>Table 3E:</b>  | Implementation of PAT/ISAT   |
| <b>Table 3F:</b>  | ISAT/PAT which necessitated interventions by Umalusi   |
| <b>Table 3G:</b>  | Subjects in which difficulties were experienced with the marking/scoring tools   |
| <b>Table 3H:</b>  | Subjects in which the marking/scoring was inappropriate  |
| <b>Table 3I:</b>  | Subjects and sites where no moderation had taken place, or evidence of internal moderation of ISAT was not available, at the time of the Umalusi visit                 |
| <b>Table 3J:</b>  | Subjects and types of internal moderation conducted  |
| <b>Table 4A:</b>  | NC(V) Level 2 and Level 3 marking guideline meetings attended by Umalusi   |
| <b>Table 4B:</b>  | NC(V) Level 4 question papers in the sample of marking guideline standardisation meetings attended by Umalusi  |
| <b>Table 4C:</b>  | NC(V) L3 summary of findings   |
| <b>Table 4D:</b>  | NC(V) L4 summary of findings   |
| <b>Table 5A:</b>  | Table 5A: Level 2 question papers included   |
| <b>Table 5B:</b>  | Level 3 question papers included in the verification of marking  |
| <b>Table 5C:</b>  | Level 4 question papers included in the verification of marking  |
| <b>Table 5D:</b>  | NC(V) verification of marking Level 2: question papers, number of provinces and number of centres  |
| <b>Table 5E:</b>  | NC(V) verification of marking Level 3: question papers, number of provinces and number of centres  |
| <b>Table 5F:</b>  | NC(V) verification of marking Level 4: question papers, number of provinces and number of centres  |
| <b>Table 5G:</b>  | NC(V) findings: Level 2 and Level 3  |
| <b>Table 5H:</b>  | NC(V) Level 4 findings of verification of marking  |
| <b>Table 6A:</b>  | Standardisation decisions for the November 2022 NC(V) Levels 2–4   |
| <b>Figure 7A:</b> | Certificates issued during the period 01 December 2021 to 30 November 2022   |
| <b>Table 7A:</b>  | Number of datasets and transactions received during the period 01 December 2021 to 30 November 2022  |
| <b>Table 8A:</b>  | Instructional offerings included in the moderated sample of question papers  |



|             |  |
|-------------|--|
| Table 8B:   | Instructional offerings included in the sample of question papers  |
| Table 8C:   | Approval status of question papers and marking guidelines after preliminary moderation   |
| Figure 8A:  | Approval status of the NATED Report 190/191: Engineering Studies question papers and marking guidelines after first moderation |
| Table 8D:   | Summary of findings of the first moderation of question papers   |
| Figure 9A:  | Moderation of Report 190/191 ICASS   |
| Figure 9B:  | Findings observed in the ICASS moderation of November 2022   |
| Table 9C:   | Additional instructional offerings moderated, including DHET enrolment numbers   |
| Table 9D:   | Evidence of one or both tests accompanied by the mark sheet  |
| Table 9E:   | Sites that experienced challenges in ICASS compliance  |
| Table 10A:  | Evaluation criteria and quality indicators for marking guideline discussions   |
| Table 10B:  | N2 marking guideline discussion meetings conducted   |
| Table 10C:  | N3 marking guideline discussion meetings conducted   |
| Table 10D:  | Findings from the standardisation of marking guidelines of NATED N2 instructional offerings                                    |
| Table 10E:  | Findings from the standardisation of marking guidelines of NATED N3 instructional offerings                                    |
| Table 11A:  | Distribution of instructional offerings across marking centres   |
| Table 11B:  | N2 Verification of marking samples   |
| Table 11C:  | N3 Verification of marking samples   |
| Table 11D:  | Evaluation criteria and quality indicators for verification of marking   |
| Table 11E:  | Verification of marking N2 and N3: instructional offerings, number of provinces and examination centres, per province          |
| Table 11F:  | Findings from the verification of marking of N2 instructional offerings  |
| Table 11G:  | Findings from the verification of marking of N3 instructional offerings  |
| Table 12A:  | Instructional offerings with outliers  |
| Table 12B:  | Standardisation decisions – NATED Report 190/191: Engineering Studies N2 and N3  |
| Figure 13A: | Certificates issued during the period 01 December 2021 to 30 November 2022   |
| Table 13A:  | Certificates issued for the exam periods November 2021 and August 2022   |
| Table 13B:  | Number of datasets and transactions received during the period 01 December 2021 to 30 November 2022                            |
| Table 14A:  | DHET ICASS monitoring and moderation management plan 2022 for NATED Engineering Studies  |
| Table 14B:  | DHET ICASS Monitoring and Moderation Management Plan 2022 For National Certificate (Vocational) L2-L4                          |
| Table 14C:  | DHET Plan on the management of irregularities; awareness strategy  |
| Table 14D:  | List of colleges with recurring irregularities (N1–N3)   |
| Table 15A:  | Examination centres monitored by Umalusi   |
| Table 15B:  | Detailed findings at monitored examination centres   |
| Table 16A:  | Marking centres monitored by Umalusi staff members   |
| Table 16B:  | Marking centres monitored by Umalusi monitors  |
| Table 16C:  | Findings at marking centres monitored by Umalusi staff and monitors  |

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**PART A:**

**QUALITY ASSURANCE OF  
NATIONAL**

**CERTIFICATE (VOCATIONAL) ASSESSMENT**

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# CHAPTER 1 MODERATION OF QUESTION PAPERS

## 1.1 Introduction

Umalusi conducts external moderation of the National Certificate (Vocational) [NC(V)] examination question papers and marking guidelines to ensure that the required quality and standard are maintained across examination cycles.

The Department of Higher Education and Training (DHET) is responsible for the conduct, administration and management of the NC(V) level 2-4 examinations. While the DHET sets and internally moderates the question papers for the NC(V) examinations, Umalusi moderates a sample of question papers externally.

The purpose of the external moderation of question papers is to:

- a. Ensure that question papers of the required standard are presented;
- b. Ascertain that question papers cover a substantial amount of the curriculum;
- c. Produce question papers that are fair and reliable;
- d. Ensure that question papers are representative of relevant conceptual domains; and
- e. Ensure that question papers are representative of relevant levels of cognitive demand.

## 1.2 Scope and Approach

Umalusi moderated a total of 160 question papers across NC(V) levels 2, 3 and 4 (L2, L3, L4) for the November 2022 examination. Most of these question papers were from level 4 (62%), while levels 2 and 3 papers comprised 19% each of the sample. Table 1A below provides a list of the subjects (indicating where a subject has two question papers) and levels moderated by Umalusi.

**Table 1A: Subjects included in the moderated sample of NC(V) question papers**

| No. | NC(V) Subjects moderated                          | November 2022 |         |         |
|-----|---|---------------|---------|---------|
|     |   | Level 2       | Level 3 | Level 4 |
| 1.  | Advanced Plant Production                         |               |         | x       |
| 2.  | Advertising and Promotions                        |               |         | x       |
| 3.  | Afrikaans First Additional Language (FAL) Paper 1 |               |         | x       |
| 4.  | Afrikaans FAL Paper 2                             |               |         | x       |
| 5.  | Agribusiness                                      | x             |         | x       |
| 6.  | Animal Production                                 |               |         | x       |
| 7.  | Applied Accounting Paper 1                        |               |         | x       |
| 8.  | Applied Accounting Paper 2                        |               |         | x       |
| 9.  | Applied Engineering Technology                    |               |         | x       |
| 10. | Applied Policing                                  |               |         | x       |
| 11. | Architectural Graphics and Technology Paper 1     |               |         | x       |
| 12. | Architectural Graphics and Technology Paper 2     |               |         | x       |
| 13. | Art and Science of Teaching                       |               | x       | x       |
| 14. | Automotive Repair and Maintenance                 |               |         | x       |
| 15. | Business Practice                                 |               | x       | x       |
| 16. | Carpentry and Roof Work                           |               | x       | x       |

|     |   |   |   |   |
|-----|---|---|---|---|
| 17. | Civil and Structural Steel Work Detailing Paper 1 |   |   | x |
| 18. | Civil and Structural Steel Work Detailing Paper 2 |   |   | x |
| 19. | Client Services and Human Relations               |   |   | x |
| 20. | Community Oriented Primary Care                   |   | x | x |
| 21. | Computer Hardware and Software                    |   | x |   |
| 22. | Computer Integrated Manufacturing                 |   |   | x |
| 23. | Computer Programming Paper 1                      |   |   | x |
| 24. | Computer Programming Paper 2                      |   |   | x |
| 25. | Concrete Structures                               |   |   | x |
| 26. | Construction Planning                             | x |   | x |
| 27. | Construction Supervision                          |   |   | x |
| 28. | Consumer Behaviour                                | x |   | x |
| 29. | Contact Centre Operations                         | x |   | x |
| 30. | Criminal Justice Process                          |   |   | x |
| 31. | Criminal Law                                      |   | x |   |
| 32. | Criminology                                       |   | x | x |
| 33. | Data Communication and Networking                 |   |   | x |
| 34. | Drawing Office Procedures and Techniques Paper 1  |   |   | x |
| 35. | Drawing Office Procedures and Techniques Paper 2  |   |   | x |
| 36. | Early Childhood Development                       | x |   | x |
| 37. | Economic Environment                              | x |   | x |
| 38. | Electrical Principles and Practice                | x |   | x |
| 39. | Electrical Systems and Construction               |   |   | x |
| 40. | Electrical Workmanship                            |   |   | x |
| 41. | Electronic Control and Digital Electronics        |   |   | x |
| 42. | Electrotechnology                                 |   |   | x |
| 43. | Engineering Fabrication Boiler Making             |   |   | x |
| 44. | Engineering Fabrication Sheet Metal Work          |   |   | x |
| 45. | Engineering Practice and Maintenance              |   | x |   |
| 46. | Engineering Processes                             |   |   | x |
| 47. | Engineering Systems                               | x |   |   |
| 48. | English FAL Paper 1                               | x | x | x |
| 49. | English FAL Paper 2                               | x | x | x |
| 50. | Entrepreneurship                                  | x |   |   |
| 51. | Farm Planning and Mechanisation                   |   |   | x |
| 52. | Financial Management                              |   | x | x |
| 53. | Fitting and Turning                               |   |   | x |
| 54. | Food Preparation                                  | x |   | x |
| 55. | Freight Logistics                                 | x |   | x |

|     |  |   |   |   |
|-----|--|---|---|---|
| 56. | Governance                                   |   |   | x |
| 57. | Hospitality Generics                         | x |   | x |
| 58. | Hospitality Services                         |   |   | x |
| 59. | Human and Social Development                 |   |   | x |
| 60. | Law Procedures and Evidence                  |   |   | x |
| 61. | Learning Psychology                          |   | x | x |
| 62. | Life Skills and Computer Literacy Paper 1    | x | x | x |
| 63. | Life Skills and Computer Literacy Paper 2    | x | x | x |
| 64. | Management Practice                          |   |   | x |
| 65. | Manual Manufacturing                         | x |   |   |
| 66. | Marketing                                    |   |   | x |
| 67. | Marketing Communication                      |   | x | x |
| 68. | Masonry                                      |   |   | x |
| 69. | Material Technology                          |   | x |   |
| 70. | Materials                                    |   |   | x |
| 71. | Mathematical Literacy Paper 1                | x | x | x |
| 72. | Mathematical Literacy Paper 2                | x | x | x |
| 73. | Mathematics Paper 1                          | x | x | x |
| 74. | Mathematics Paper 2                          | x | x | x |
| 75. | Mechanical Draughting and Technology Paper 1 |   |   | x |
| 76. | Mechanical Draughting and Technology Paper 2 |   |   | x |
| 77. | Mechatronic Systems                          |   |   | x |
| 78. | Multimedia Service                           |   |   | x |
| 79. | New Venture Creation                         |   |   | x |
| 80. | Office Data Processing                       | x |   | x |
| 81. | Office Practice                              |   |   | x |
| 82. | Operations Management                        | x |   | x |
| 83. | Personal Assistance                          |   |   | x |
| 84. | Physical Science Paper 1                     | x | x | x |
| 85. | Physical Science Paper 2                     | x | x | x |
| 86. | Plumbing                                     |   | x | x |
| 87. | Process Chemistry                            |   |   | x |
| 88. | Process Control                              |   | x | x |
| 89. | Process Technology                           | x |   | x |
| 90. | Professional Engineering Practice            |   |   | x |
| 91. | Project Management                           |   |   | x |
| 92. | Public Health                                |   | x | x |
| 93. | Pulp and Papermaking Technology              |   |   | x |
| 94. | Refrigeration and Air Conditioning Processes |   |   | x |
| 95. | Renewable Energy Technologies                |   | x | x |

|      |   |           |           |            |
|------|---|-----------|-----------|------------|
| 96.  | Roads   |           |           | x          |
| 97.  | Science of Tourism  |           |           | x          |
| 98.  | Soil Science  |           | x         |            |
| 99.  | Stored Programme Systems  |           |           | x          |
| 100. | Sustainable Tourism in South Africa (SA) and International Travel |           |           | x          |
| 101. | Sustainable Tourism in South Africa (SA) and Regional Travel      |           | x         |            |
| 102. | Systems Analysis and Design                                       |           | x         | x          |
| 103. | The Human Body and Mind   | x         |           | x          |
| 104. | The South African Health Care System                              |           |           | x          |
| 105. | Tourism Operations  | x         |           | x          |
| 106. | Transport Economics   |           |           | x          |
| 107. | Transport Operations  | x         |           | x          |
| 108. | Welding   | x         |           | x          |
| 109. | Wholesale and Retail  |           | x         | x          |
|      | <b>Total</b>  | <b>30</b> | <b>30</b> | <b>100</b> |

Umalusi employed external moderators who quality assured a sample of question papers and marking guidelines. The moderators measured against set criteria to ensure that approved question papers met the required standards. The external moderators are subject experts from higher education institutions, Technical and Vocational Education and Training (TVET) colleges, provincial and regional education departments and industry. Umalusi received the question papers, accompanying marking guidelines and internal moderator reports (including the assessment grids) from the DHET. These documents, together with the moderation instruments, were sent by Umalusi to the external moderators. The external moderators used the set criteria from the Instrument for the Moderation of Question Papers to quality assure the question papers and marking guidelines. The question papers and marking guidelines were evaluated together but were approved independently of each other. An off-site moderation approach was followed for all the question papers.

Umalusi externally moderated 96% of the NC(V) L4 question papers, 32% of the NC(V) L2 and 31% of the NC(V) L3 question papers. All the fundamental subjects, namely English FAL, Life Skills and Computer Literacy, Mathematical Literacy and Mathematics, were externally moderated on every level for each examination. Afrikaans FAL was externally moderated on level 4. The vocational subjects for levels 2 and 3 are rotated annually, with the aim to cover all subjects over a period of time. However, if challenges were experienced in the subjects on levels 2 and 3 in previous examinations or the curriculum of a specific subject is being reviewed, such subjects are included in the list of subjects for external moderation. Other factors, such as enrolments, are also considered when decisions are taken on the inclusion of subjects in the moderation sample.

Umalusi uses a set of criteria to determine the standard of the question papers and their compliance with the subject and assessment guidelines (SAG).

The criteria according to which the question papers were moderated covered the following:

- Technical details that relate to the presentation of the question papers and marking guidelines;
- Internal moderation and its value in assuring quality;
- Adherence to the relevant SAG in weighting, cognitive levels and question types;
- Consistency and appropriateness of mark distribution and allocation according to cognitive levels and question types;
- Relevance and accuracy of the marking guidelines and their facilitation of consistent marking;
- The use of language and its appropriateness to the language level of the candidates;

- g. Adherence of the question papers to language rules and the use of unbiased content;
- h. Predictability and/or the degree of innovation in questions;
- i. Progression between subject levels and parity between the standard of the November 2022 examination question papers and those of previous years; and
- j. An overall evaluation of the papers by external moderators in their validity, reliability, fairness and suitability to the level being assessed.

Depending on the extent to which the question papers and marking guidelines fulfilled the criteria, the external moderators approved, conditionally approved or rejected the question papers and marking guidelines. If a question paper was approved after the initial moderation, no conceptual changes were necessary. If the question paper was conditionally approved, question(s) needed to be replaced/rephrased/restructured. The internal and external moderator would engage in discussions to improve and finalise the paper. When any question in the question paper was outside the scope of the SAG, or the question paper had substantial conceptual problems/flaws, the question paper was rejected and returned to the DHET for resetting.

Where changes were required the external moderators crafted proposed changes to improve the question papers. Discussions ensued between the external moderators from Umalusi and the internal moderators from the DHET to improve the quality of the question papers and marking guidelines. After agreement was reached and changes implemented, the question papers and marking guidelines were returned to the DHET for formatting.

When returned from the DHET after formatting and typesetting, the print ready question papers and marking guidelines are forwarded to the external moderators and signed off. In those cases where a question paper is rejected, the question paper, marking guideline and report, with initial findings by the external moderator, are sent to the DHET. The internal moderator is responsible for adjusting the question paper and marking guidelines. The question paper and marking guideline are then returned to the external moderator for external moderation. The question paper and marking guideline are returned to the DHET for formatting. When returned from the DHET after formatting and typesetting, the print ready question paper and marking guideline are forwarded to the external moderator and signed off.

Table 1B and Figure 1A indicate the approval status of the NC(V) question papers after initial moderation for the November 2022 NC(V) L2-4 examinations.

**Table 1B: Approval status of NC(V) L2-4 question papers after initial moderation**

| November 2022 examination |  |                                    |  |                                    |
|---------------------------|--|------------------------------------|--|------------------------------------|
| NC(V) Level               | Number of question papers moderated by Umalusi | Number of question papers approved | Number of question papers conditionally approved | Number of question papers rejected |
| Level 2                   | 30   | 5                                  | 24   | 1                                  |
| Level 3                   | 30   | 7                                  | 23   | 0                                  |
| Level 4                   | 100  | 26                                 | 71   | 3                                  |
| <b>Total</b>              | <b>160</b>                                     | <b>38</b>                          | <b>118</b>                                       | <b>4</b>                           |

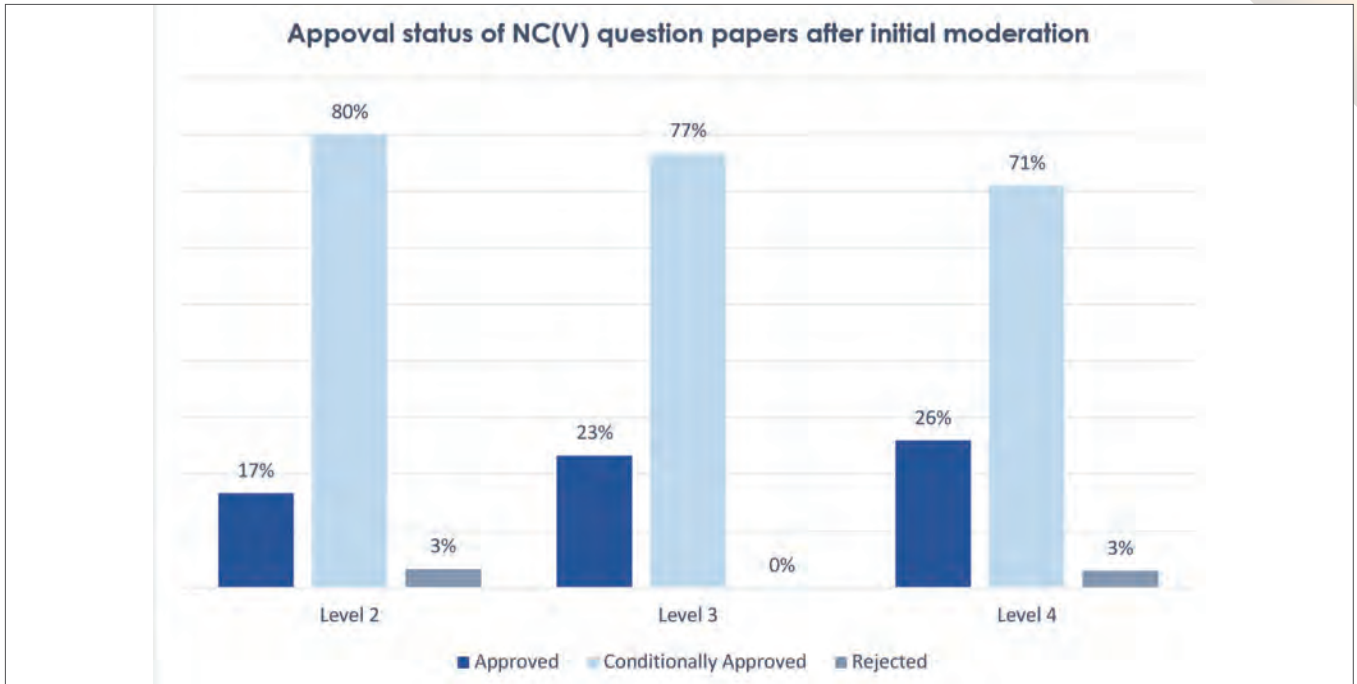


Figure 1A: Approval status of NC(V) question papers after initial moderation

### 1.3 Summary of Findings

Table 1C summarises the findings of the initial moderation and notes the subjects that had challenges meeting the moderation criteria. It also reflects comparisons with previous examinations.

Table 1C summarises the findings of the initial moderation and notes the subjects that had challenges meeting the moderation criteria. It also reflects comparisons with previous examinations.

| Criteria                              | Findings and challenges  | Subjects implicated  |
|---------------------------------------|--|--|
| <b>Criterion 1: Technical quality</b> |  |  |
| General compliance                    | <p>a. Sixty-four percent of question papers and marking guidelines, as listed, met all the technical requirements. This was an improvement of 1% from the November 2021 examination and 14% from the November 2020 examination;</p> <p>b. The following technical aspects were considered:</p> <p>i. Submission of relevant supporting documents;</p> <p>ii. Completeness and accuracy of information on the cover pages;</p> <p>iii. Clarity of instructions to candidates;</p> | <p>Advanced Plant Production L4<br/>           Advertising and Promotions L4<br/>           Afrikaans FAL L4 Paper 1<br/>           Agribusiness L2<br/>           Applied Accounting L4 Paper 1 and Paper 2<br/>           Applied Policing L4<br/>           Architectural Graphics and Technology L4 Paper 1 and Paper 2<br/>           Art and Science of Teaching L3 and L4<br/>           Automotive Repair and Maintenance L4<br/>           Civil and Structural Steel Work Detailing L4 Paper 1 and Paper 2<br/>           Community Oriented Primary Care L3<br/>           Computer Hardware and Software L3<br/>           Computer Integrated Manufacturing L4<br/>           Computer Programming L4 Paper 1 and Paper 2<br/>           Concrete Structures L4<br/>           Construction Planning L2<br/>           Construction Supervision L4<br/>           Consumer Behaviour L2<br/>           Contact Centre Operations L4<br/>           Criminal Justice Process L4<br/>           Criminal Law L3</p> |

| Criteria                              | Findings and challenges  | Subjects implicated  |
|---------------------------------------|--|--|
| <b>Criterion 1: Technical quality</b> |  |  |
|                                       | <ul style="list-style-type: none"> <li>iv. Appropriate layout of question papers;</li> <li>v. Clear mark allocation and correspondence of mark allocation between question papers and marking guidelines;</li> <li>vi. Appropriate visuals of print-ready quality; and</li> <li>vii. Adherence to format requirements of the SAG;</li> <li>c. The remaining question papers and accompanying marking guidelines (36%) did not meet one or more of the technical requirements.</li> </ul> | <p>Criminology L3 and L4<br/> Data Communication and Networking L4<br/> Drawing Office Procedures and Techniques L4 Paper 1<br/> Early Childhood Development L4<br/> Economic Environment L2<br/> Electrical Principles and Practice L2 and L4<br/> Electrical Systems and Construction L4<br/> Electrical Workmanship L4<br/> Electronic Control and Digital Electronics L4<br/> Electrotechnology L4<br/> Engineering Fabrication Boiler Making L4<br/> Engineering Fabrication Sheet Metal Work L4<br/> Engineering Processes L4<br/> Engineering Systems L2<br/> English FAL L3 Paper 1 and Paper 2<br/> Entrepreneurship L2<br/> Farm Planning and Mechanisation L4<br/> Financial Management L3 and L4<br/> Fitting and Turning L4<br/> Food Preparation L2 and L4<br/> Freight Logistics L2 and L4<br/> Governance L4<br/> Hospitality Services L4<br/> Human and Social Development L4<br/> Law Procedures and Evidence L4<br/> Learning Psychology L3 and L4<br/> Life Skills and Computer Literacy L4 Paper 1<br/> Management Practice L4<br/> Manual Manufacturing L2<br/> Marketing L4<br/> Masonry L4<br/> Material Technology L3<br/> Materials L4<br/> Mathematical Literacy L2 Paper 1<br/> Mathematical Literacy L3 Paper 1 and Paper 2<br/> Mathematics L3 Paper 1 and Paper 2<br/> Mathematics L4 Paper 1<br/> Mechanical Draughting and Technology L4 Paper 1 and Paper 2<br/> Mechatronic Systems L4<br/> Multimedia Service L4<br/> New Venture Creation L4<br/> Office Data Processing L4<br/> Office Practice L2<br/> Operations Management L4</p> |

| Criteria                              | Findings and challenges  | Subjects implicated   |
|---------------------------------------|--|---|
| <b>Criterion 1: Technical quality</b> |  |   |
|                                       |  | Personal Assistance L4<br>Plumbing L3 and L4<br>Process Chemistry L4<br>Process Technology L2 and L4<br>Project Management L4<br>Public Health L4<br>Renewable Energy Technologies L3<br>Roads L4<br>Soil Science L3<br>Stored Programme Systems L4<br>Sustainable Tourism in SA and Regional Travel L3<br>Systems Analysis and Design L4<br>The Human Body and Mind L2 and L4<br>The South African Health Care System L4<br>Tourism Operations L2<br>Transport Economics L4<br>Transport Operations L4<br>Welding L2 and L4<br>Wholesale and Retail L4 |
| Information on the cover page         | Six percent of the cover pages contained incorrect details. This was 5% more than the 1% of the November 2021 examination.   |   |
|                                       | a. Irrelevant text was deleted from the cover page;  | Afrikaans FAL L4 Paper 2  |
|                                       | b. The old design for cover pages was used; this had to be replaced with the new design prescribed by the DHET;  | Animal Production L4  |
|                                       | c. The duration of the question papers was not in accordance with the SAG (two question papers);   | Life Skills and Computer Literacy L2 Paper 1<br>Public Health L3  |
|                                       | d. The following errors were identified on the cover page:<br>i. Spelling error; and<br>ii. Incorrect name of subject – Paper 2 should read 'computer literacy component' and not 'ICT component'; | Life Skills and Computer Literacy L4 Paper 2  |
|                                       | e. The number of pages in the marking guidelines required rectification as the addendum had been removed;  | Marketing Communication L4  |
|                                       | f. The cover page should have indicated that the question paper had two addenda attached to it;  | Office Practice L4  |



| Criteria                              | Findings and challenges  | Subjects implicated   |
|---------------------------------------|--|---|
| <b>Criterion 1: Technical quality</b> |  |   |
|                                       | <ul style="list-style-type: none"> <li>g. The following errors were identified on the cover page:</li> <li>i. Irrelevant text on the question paper and marking guidelines had to be removed; and</li> <li>ii. Incorrect spelling of 'Physical', which required correction;</li> </ul>   | Physical Science L3 Paper 1   |
|                                       | <ul style="list-style-type: none"> <li>h. The date of the examination was not indicated on the cover page.</li> </ul>  | Wholesale and Retail L3   |
| Instructions to candidates            | <ul style="list-style-type: none"> <li>a. The instructions to candidates were not in accordance with the DHET guidelines;</li> </ul>   | Carpentry and Roof Work L3 and L4<br>Mathematical Literacy L4 Paper 1 |
|                                       | <ul style="list-style-type: none"> <li>b. The following instructions in the question paper were revised:               <ul style="list-style-type: none"> <li>i. Instruction 1 – “Answer all the questions. Read all questions carefully.”</li> <li>ii. Instruction 3 – “The question paper consists of FIVE questions. Use appropriate application programs for EACH question and include all printouts in your EXAMINATION FOLDER.”<br/>(One question paper.)</li> </ul> </li> </ul> | Life Skills and Computer Literacy L2 Paper 2                          |
|                                       | <ul style="list-style-type: none"> <li>c. The following instructions in the question paper were revised:               <ul style="list-style-type: none"> <li>i. Instruction 6: “No duplicate printouts maybe be handed in”.</li> <li>ii. Instruction 16 – “Write neatly and legibly where applicable”;</li> </ul> </li> </ul>   | Life Skills and Computer Literacy L4 Paper 2                          |
|                                       | <ul style="list-style-type: none"> <li>d. The following additional instructions were included on the cover page of the question paper:               <ul style="list-style-type: none"> <li>i. Show all calculations, formula and substitutions; and</li> <li>ii. Approximate all final answers to TWO decimal places;</li> </ul> </li> </ul>  | Physical Science L2 Paper 2   |
|                                       | <ul style="list-style-type: none"> <li>i. The instructions to candidates were not according to the DHET guidelines; and</li> <li>ii. An additional instruction was included on the cover page: “A non-programmable calculator may be used.”</li> </ul>   | Physical Science L4 Paper 1 and Paper 2                               |

| Criteria                 | Findings and challenges  | Subjects implicated  |
|--------------------------|--|--|
| Layout of question paper | a. Some of the pages in three (2%) question papers were not correctly numbered. This was 2% less than the 4% of the November 2021 examination;   | Applied Engineering Technology L4<br>Tourism Operations L4<br>Life Skills and Computer Literacy L3 Paper 2   |
|                          | b. In five (3%) question papers not all questions were correctly numbered. This was the same as in the November 2021 examination.  | Business Practice L4<br>Life Skills and Computer Literacy L2 Paper 2<br>Office Practice L4<br>Physical Science L4 Paper 2<br>Tourism Operations L4   |
| Headers and footers      | a. The headers and footers in 3% of the question papers showed one or more of the following lapses:<br>i. Were inconsistent; and<br>ii. Included the footer 'please turn over' on the last page of the question paper, where it was redundant.<br><br>This was half the number of the November 2021 examination. | Life Skills and Computer Literacy L3 Paper 2<br>Marketing Communication L3 and L4<br>Process Control L3  |
| Mark and time allocation | a. The mark allocation was not clearly indicated in 4% of the question papers, a decrease of 6% from the 10% of the November 2021 examination;   | Consumer Behaviour L4<br>Hospitality Generics L4<br>Life Skills and Computer Literacy L2 Paper 1<br>Science of Tourism L4<br>Transport Operations L2<br>Wholesale and Retail L3  |
|                          | b. The mark allocation on the question paper did not correspond with that on the marking guidelines in 6% of the question papers. This was double that of the November 2021 examination;   | Agribusiness L4<br>Business Practice L3<br>Consumer Behaviour L4<br>Economic Environment L4<br>Engineering Practice and Maintenance L3<br>English FAL L2 and L4 Paper 2<br>Life Skills and Computer Literacy L2 and L3 Paper 1<br>Renewable Energy Technologies L4 |

| Criteria   | Findings and challenges   | Subjects implicated   |
|--|---|---|
| Quality of graphics and illustrations              | <p>a. In 22 (14%) question papers, the quality of illustrations, graphs, tables and visuals was poor and/or not print ready, a decrease of 1% from the 15% of the November 2021 examination;</p> <p>b. Aspects of graphics and illustrations that were not print ready included:</p> <p>i. Displacement of labels from diagrams/illustrations;</p> <p>ii. Drawings/images with irrelevant markings;</p> <p>iii. Illustrations and diagrams obscured by text or text boxes;</p> <p>iv. Inappropriate font size of labels / information in relation to graphs;</p> <p>v. Unclear or distorted visuals/symbols; and</p> <p>vi. Visuals that were not reprography friendly – containing too much information or too dark in colour.</p> | <p>Construction Planning L4</p> <p>Drawing Office Procedures and Techniques L4 Paper 2</p> <p>Early Childhood Development L2</p> <p>English FAL L2 and L4 Paper 1</p> <p>Hospitality Generics L4</p> <p>Life Skills and Computer Literacy L2 Paper 2</p> <p>Marketing Communication L3 and L4</p> <p>Mathematical Literacy L2 Paper 2</p> <p>Mathematical Literacy L4 Paper 1 and Paper 2</p> <p>Mathematics L2 Paper 1</p> <p>Mathematics L4 Paper 2</p> <p>Physical Science L2 and L4 Paper 1</p> <p>Physical Science L3 Paper 2</p> <p>Process Control L4</p> <p>Pulp and Papermaking Technology L4</p> <p>Renewable Energy Technologies L4</p> <p>Sustainable Tourism in SA and International Travel L4</p> <p>Systems Analysis and Design L3</p> |
| Format requirements of the SAG                     | <p>Eleven (7%) question papers did not adhere to the format requirements of the SAG, a decrease of 2% from the November 2021 examination.</p>   | <p>Applied Engineering Technology L4</p> <p>Community Oriented Primary Care L4</p> <p>English FAL L2 and L4 Paper 2</p> <p>Hospitality Generics L2</p> <p>Life Skills and Computer Literacy L2 Paper 2</p> <p>Mathematical Literacy L4 Paper 1</p> <p>Mathematics L4 Paper 2</p> <p>Professional Engineering Practice L4</p> <p>Renewable Energy Technologies L4</p> <p>Wholesale and Retail L3</p>   |
| Criteria 2: Internal moderation                    |   |   |
| Quality and standard of internal moderator reports | <p>a. Overall, 76% of internal moderators' reports were considered to be of an appropriate standard. This was 1% less than the November 2021 examination; and</p> <p>b. The quality and relevance of internal moderators' reports improved by 3% and 5%, respectively. However, the overall standard of reports showed a decline of 1% from the November 2021 examination;</p>  |   |

| Criteria                               | Findings and challenges   | Subjects implicated  |
|--|---|--|
| <b>Criteria 2: Internal moderation</b> |   |  |
|  | <p>c. The information in the internal moderators' report did not correspond with the question papers for 16 (10%) of the question papers. This was double that of the November 2021 examination.</p>  | <p>Advanced Plant Production L4<br/>           Animal Production L4<br/>           Architectural Graphics and Technology L4 Paper 2<br/>           Carpentry and Roof Work L3<br/>           Community Oriented Primary Care L3<br/>           Consumer Behaviour L4<br/>           Drawing Office Procedures and Techniques L4 Paper 1<br/>           Engineering Fabrication Boiler Making L4<br/>           Learning Psychology L3 and L4<br/>           Life Skills and Computer Literacy L3 Paper 1<br/>           Life Skills and Computer Literacy L4 Paper 2<br/>           Multimedia Service L4<br/>           Pulp and Papermaking Technology L4<br/>           Roads L4<br/>           Tourism Operations L2</p> |
| Incomplete moderator reports           | <p>a. In 16 (10%) question papers the internal moderators' reports were not adequately completed. This was a decrease of 3% from the 13% of the November 2021 examination; and, similarly, a decrease of 7% from the 17% of the November 2020 examination;</p> <p>b. Incomplete reports included those that did not provide:</p> <p>i. Examiner's name and/or contact details;</p> <p>ii. The analysis grid; and</p> <p>iii. An evaluation of the question papers in terms of specified criteria.</p> | <p>Advanced Plant Production L4<br/>           Computer Programming L4 Paper 1<br/>           Concrete Structures L4<br/>           Consumer Behaviour L2<br/>           Electronic Control and Digital Electronics L4<br/>           Freight Logistics L4<br/>           Hospitality Generics L2<br/>           Mathematical Literacy L2 Paper 1<br/>           Physical Science L3 Paper 1 and Paper 2<br/>           Process Control L3<br/>           Professional Engineering Practice L4<br/>           Pulp and Papermaking Technology L4<br/>           Roads L4<br/>           Tourism Operations L4<br/>           Transport Operations L2</p>   |

| Criteria                               | Findings and challenges   | Subjects implicated  |
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| <b>Criteria 2: Internal moderation</b> |   |  |
| Standard of internal moderator reports | <p>a. Thirty-nine (24%) of the internal moderators' reports were not of appropriate standard, an increase of 1% from the November 2021 examination;</p> <p>b. Internal moderators' reports of inappropriate standard included those that:</p> <p>i. Did not describe inadequacies in the question paper;</p> <p>ii. Did not provide recommendations for improvement; and</p> <p>iii. Contained vague, meaningless and unjustified comments;</p> <p>c. Reports of this nature added no value to improving the quality and standard of the question paper, other than fulfilling a requirement.</p> | <p>Advanced Plant Production L4<br/>           Animal Production L4<br/>           Architectural Graphics and Technology L4 Paper 1 and Paper 2<br/>           Business Practice L3<br/>           Carpentry and Roof Work L3 and L4<br/>           Concrete Structures L4<br/>           Construction Planning L2 and L4<br/>           Construction Supervision L4<br/>           Consumer Behaviour L4<br/>           Drawing Office Procedures and Techniques L4 Paper 1 and Paper 2<br/>           Early Childhood Development L2<br/>           Electrotechnology L4<br/>           English FAL L2 Paper 2<br/>           English FAL L4 Paper 1 and Paper 2<br/>           Financial Management L4<br/>           Hospitality Generics L2 and L4<br/>           Life Skills and Computer Literacy L2, L3 and L4 Paper 2<br/>           Material Technology L3<br/>           Mathematics L4 Paper 2<br/>           Multimedia Service L4<br/>           Office Practice L4<br/>           Professional Engineering Practice L4<br/>           Renewable Energy Technologies L3 and L4<br/>           Science of Tourism L4<br/>           Sustainable Tourism in SA and Regional Travel L3<br/>           Systems Analysis and Design L3<br/>           Transport Operations L4<br/>           Welding L2<br/>           Wholesale and Retail L3 and L4</p> |

| Criteria                                | Findings and challenges   | Subjects implicated  |
|---|---|--|
| <b>Criteria 2: Internal moderation</b>  |   |  |
| Relevance of internal moderator reports | <p>a. In 28 (18%) of the internal moderators' reports the assessment grid accompanying the internal moderator's report did not correspond with the question paper, was not provided at all or an incomplete assessment grid was provided. This was a decrease of 5% from the 23% of the November 2021 examination;</p> <p>b. In some question papers where the assessment grid did not correspond with the question paper, the following were found:</p> <p>I. The assessment grid, in its entirety, did not correspond with the question paper; or</p> <p>II. Sections of the assessment grid did not correspond with the question paper; or</p> <p>III. The question numbers in the assessment grid did not match the question numbers in the question paper.</p> | <p>Advanced Plant Production L4<br/> Afrikaans FAL L4 Paper 1 and Paper 2<br/> Animal Production L4<br/> Architectural Graphics and Technology L4 Paper 2<br/> Business Practice L3<br/> Carpentry and Roof Work L3<br/> Community Oriented Primary Care L4<br/> Computer Programming L4 Paper 1<br/> Drawing Office Procedures and Techniques L4 Paper 2<br/> Engineering Fabrication Boiler Making L4<br/> Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br/> Life Skills and Computer Literacy L3 Paper 1<br/> Life Skills and Computer Literacy L4 Paper 2<br/> Marketing L4<br/> Multimedia Service L4<br/> Office Practice L4<br/> Operations Management L4<br/> Physical Science L3 Paper 2<br/> Process Control L3<br/> Pulp and Papermaking Technology L4<br/> Renewable Energy Technologies L3<br/> Roads L4<br/> Systems Analysis and Design L4<br/> Tourism Operations L2 and L4<br/> Wholesale and Retail L3</p> |

### Criteria 3: Content coverage

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| <p>Coverage of learning outcomes and assessment standards</p> | <p>a. In 28% of the question papers the learning outcomes and assessment standards were not covered as stipulated in the policy and guideline documents, an increase of 4% from the previous year;</p> <p>b. Content coverage should include the following aspects:</p> <p>I. Adequate coverage of the subject and learning outcomes;</p> <p>II. Adherence to the prescribed weighting of topics;</p> <p>III. Appropriate spread of subject and learning outcomes throughout the question paper; and</p> <p>IV. Questions and answers must remain within the broad scope of the SAG.</p> | <p>Advanced Plant Production L4<br/>           Animal Production L4<br/>           Applied Engineering Technology L4<br/>           Applied Policing L4<br/>           Business Practice L3<br/>           Carpentry and Roof Work L3<br/>           Client Services and Human Relations L4<br/>           Community Oriented Primary Care L4<br/>           Computer Hardware and Software L3<br/>           Consumer Behaviour L2<br/>           Contact Centre Operations L4<br/>           Criminology L3<br/>           Data Communication and Networking L4<br/>           Early Childhood Development L2<br/>           Economic Environment L2<br/>           Entrepreneurship L2<br/>           Hospitality Generics L2<br/>           Human and Social Development L4<br/>           Learning Psychology L4<br/>           Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br/>           Life Skills and Computer Literacy L3 Paper 1<br/>           Life Skills and Computer Literacy L4 Paper 2<br/>           Management Practice L4<br/>           Mathematics L2 Paper 2<br/>           Mathematics L3 Paper 1 and Paper 2<br/>           Office Practice L2<br/>           Personal Assistance L4<br/>           Physical Science L2 Paper 1 and Paper 2<br/>           Process Control L3 and L4<br/>           Professional Engineering Practice L4<br/>           Project Management L4<br/>           Renewable Energy Technologies L3 and L4<br/>           Roads L4<br/>           Sustainable Tourism in SA and International Travel L4<br/>           Systems Analysis and Design L4<br/>           Tourism Operations L2 and L4<br/>           Wholesale and Retail L3 and L4</p> |
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#### Criteria 4: Text selection, types and quality of questions

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| Types of questions                                       | Seven percent of question papers did not show a wide variety of question types, an increase of 3% from the November 2021 examination.  | Business Practice L3<br>Carpentry and Roof Work L3 and L4<br>Electrical Principles and Practice L2 and L4<br>Hospitality Services L4<br>Life Skills and Computer Literacy L2 and L3 Paper 1<br>Management Practice L4<br>Process Chemistry L4<br>Roads L4   |
| Correlation between difficulty level and mark allocation | There was no correlation between mark allocation, level of difficulty and time allocation for some of the questions in 13 (8%) question papers. This was a decrease of 10% from the 18% of the November 2021 examination.  | Animal Production L4<br>Business Practice L3 and L4<br>Drawing Office Procedures and Techniques L4 Paper 1<br>Hospitality Generics L2 and L4<br>Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br>Life Skills and Computer Literacy L3 Paper 1<br>Life Skills and Computer Literacy L4 Paper 2<br>Office Practice L4<br>Transport Operations L4<br>Welding L2   |
|  | Some of the questions in the question paper were pitched lower than the required level (one question paper).   | Hospitality Generics L2   |
| Source material  | <p>a. The source material used in 18% of the question papers was inappropriate. This was 5% more than the 13% of the November 2021 examination;</p> <p>b. Source material (i.e., prose text, visual drawing, illustration, example, table, graph, figures, charts) that were considered unsuitable consisted of those that were:</p> <ol style="list-style-type: none"> <li>Not subject specific;</li> <li>Not of the required length;</li> <li>Not functional or relevant to the question/s;</li> <li>Had complex language that was not appropriate for the level of the candidate;</li> <li>Did not allow for the testing of skills (if applicable); and</li> <li>Did not generate questions across the cognitive levels.</li> </ol> | <p>Afrikaans FAL L4 Paper 2<br/>Agribusiness L4<br/>Animal Production L4<br/>Applied Policing L4<br/>Art and Science of Teaching L3<br/>Business Practice L3 and L4<br/>Drawing Office Procedures and Techniques L4 Paper 1<br/>Early Childhood Development L2<br/>Electrical Principles and Practice L2 and L4<br/>English FAL L2, L3 and L4 Paper 1<br/>Financial Management L4<br/>Hospitality Generics L2 and L4<br/>Hospitality Services L4<br/>Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br/>Life Skills and Computer Literacy L3 Paper 1<br/>Multimedia Service L4<br/>Office Practice L4<br/>Roads L4<br/>Systems Analysis and Design L3<br/>The Human Body and Mind L2<br/>Transport Operations L4<br/>Wholesale and Retail L3 and L4</p> |



#### Criteria 4: Text selection, types and quality of questions

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| Relevance and clarity of questions | In 2% of question papers the questions did not relate to what was pertinent in the subject. This was half the number of the November 2021 examination.                   | Carpentry and Roof Work L3 and L4<br>Life Skills and Computer Literacy L2 Paper 1  |
|                                    | In 17% of the question papers some of the questions did not provide clear instructional key words/verbs. This was 4% more than the 13% of the November 2021 examination. | Advertising and Promotions L4<br>Art and Science of Teaching L3<br>Automotive Repair and Maintenance L4<br>Carpentry and Roof Work L4<br>Community Oriented Primary Care L4<br>Drawing Office Procedures and Techniques L4 Paper 1<br>Early Childhood Development L2 and L4<br>Electrical Workmanship L4<br>Electrotechnology L4<br>Financial Management L4<br>Fitting and Turning L4<br>Freight Logistics L2<br>Hospitality Services L4<br>Human and Social Development L4<br>Learning Psychology L3 and L4<br>Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br>Life Skills and Computer Literacy L4 Paper 1<br>Material Technology L3<br>Office Data Processing L2<br>Physical Science L2 Paper 2<br>Roads L4<br>Systems Analysis and Design L3<br>The Human Body and Mind L2<br>Transport Economics L4 |

#### Criteria 4: Text selection, types and quality of questions

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| <p>In 21% of the question papers some questions did not contain sufficient information to elicit an appropriate response. This was an increase of 4% from the 17% of the previous examination period.</p> | <p>Advertising and Promotions L4<br/>         Afrikaans FAL L4 Paper 2<br/>         Applied Policing L4<br/>         Automotive Repair and Maintenance L4<br/>         Carpentry and Roof Work L3 and L4<br/>         Computer Programming L4 Paper 1 and Paper 2<br/>         Data Communication and Networking L4<br/>         Drawing Office Procedures and Techniques L4 Paper 1<br/>         English FAL L4 Paper 1 and Paper 2<br/>         Financial Management L4<br/>         Fitting and Turning L4<br/>         Hospitality Generics L4<br/>         Hospitality Services L4<br/>         Learning Psychology L3<br/>         Life Skills and Computer Literacy L2 and L3 Paper 1<br/>         Life Skills and Computer Literacy L4 Paper 2<br/>         New Venture Creation L4<br/>         Office Practice L4<br/>         Physical Science L2 Paper 2<br/>         Refrigeration and Air Conditioning Processes L4<br/>         Roads L4<br/>         Systems Analysis and Design L3 and L4<br/>         The Human Body and Mind L2<br/>         Tourism Operations L2<br/>         Transport Economics L4<br/>         Transport Operations L2 and L4<br/>         Welding L2 and L4</p> |
| <p>Thirty (19%) question papers contained factual errors or misleading information, an increase of 3% from the November 2021 examination.</p>   | <p>Advertising and Promotions L4<br/>         Afrikaans FAL L4 Paper 1<br/>         Applied Policing L4<br/>         Carpentry and Roof Work L4<br/>         Computer Hardware and Software L3<br/>         Computer Programming L4 Paper 1 and Paper 2<br/>         Construction Planning L4<br/>         Construction Supervision L4<br/>         Consumer Behaviour L4<br/>         Criminology L3 and L4<br/>         Data Communication and Networking L4<br/>         Drawing Office Procedures and Techniques L4 Paper 1<br/>         Early Childhood Development L2<br/>         English FAL L2 Paper 1 and Paper 2<br/>         Financial Management L3 and L4<br/>         Hospitality Generics L4<br/>         Human and Social Development L4<br/>         Life Skills and Computer Literacy L4 Paper 2<br/>         Material Technology L3<br/>         Mathematics L2 Paper 1 and Paper 2<br/>         Office Practice L4<br/>         Process Chemistry L4<br/>         Science of Tourism L4<br/>         The Human Body and Mind L2<br/>         Welding L2</p>   |

| Criteria | Findings and challenges  | Subjects implicated  |
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|          | <p>The multiple-choice questions in 21 (13%) question papers were poorly formulated. This concurred with the November 2021 examination and was 4% more than that of the November 2020 examination.</p> <p>a. The options had one or more of the following flaws:</p> <p>i. Did not follow grammatically from the stem;</p> <p>ii. Were not free of clues that made one of the options an obvious choice;</p> <p>iii. Were not approximately the same length. The answers in some instances were longer, more specific or more complete than other options;</p> <p>iv. Used generalised terms such as "All of the above" or "None of the above"; and</p> <p>v. Had more than one option as the most appropriate answer;</p> <p>b. Questions were posed in negative form, with the word 'not' being used; and</p> <p>c. The stem was not clearly stated in conjunction with the distractors / options.</p> | <p>Animal Production L4<br/> Applied Policing L4<br/> Art and Science of Teaching L4<br/> Client Services and Human Relations L4<br/> Criminology L3<br/> Early Childhood Development L4<br/> Engineering Systems L2<br/> English FAL L3 Paper 1<br/> Financial Management L4<br/> Hospitality Generics L4<br/> Life Skills and Computer Literacy L2 and L4 Paper 1<br/> Management Practice L4<br/> Material Technology L3<br/> Office Practice L2 and L4<br/> Physical Science L2 Paper 1 and Paper 2<br/> Sustainable Tourism in SA and International Travel L4<br/> Tourism Operations L2<br/> Transport Operations L2</p> |

## Criteria 5: Cognitive skills

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| <p><b>Distribution of cognitive levels</b></p>           | <p>Nineteen percent of the question papers showed an inappropriate distribution of marks across cognitive levels. This was 3% more than the 16% of the November 2021 examination.</p>  | <p>Applied Policing L4<br/>           Business Practice L3 and L4<br/>           Carpentry and Roof Work L3 and L4<br/>           Construction Planning L2 and L4<br/>           Electrotechnology L4<br/>           English FAL L2 and L4 Paper 1<br/>           Hospitality Generics L2 and L4<br/>           Human and Social Development L4<br/>           Learning Psychology L4<br/>           Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br/>           Life Skills and Computer Literacy L3 Paper 1<br/>           Life Skills and Computer Literacy L4 Paper 2<br/>           Manual Manufacturing L2<br/>           Mathematics L4 Paper 2<br/>           Multimedia Service L4<br/>           Office Practice L4<br/>           Process Control L4<br/>           Roads L4<br/>           Science of Tourism L4<br/>           Systems Analysis and Design L3 and L4<br/>           Transport Operations L4<br/>           Wholesale and Retail L3 and L4</p> |
|  | <p>In 20 (13%) question papers some of the questions did not match the cognitive level instruction, e.g., if it stated analyse, the answer in fact showed analysis. This was an increase of 1% from the November 2021 examination.</p> | <p>Advertising and Promotions L4<br/>           Animal Production L4<br/>           Applied Policing L4<br/>           Business Practice L3<br/>           Carpentry and Roof Work L3<br/>           Criminology L4<br/>           Drawing Office Procedures and Techniques L4 Paper 1<br/>           English FAL L4 Paper 1<br/>           Hospitality Generics L2 and L4<br/>           Hospitality Services L4<br/>           Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br/>           Life Skills and Computer Literacy L3 Paper 1<br/>           Life Skills and Computer Literacy L4 Paper 2<br/>           Manual Manufacturing L2<br/>           Office Practice L4<br/>           Roads L4<br/>           Wholesale and Retail L3 and L4</p>   |
| <p><b>Assessment of latest developments in field</b></p> | <p>In 8% of the papers some questions were not representative of the latest developments in the teaching of the knowledge field. This was a decrease of 4% from the 12% of the November 2021 examination.</p>                          | <p>Advanced Plant Production L4<br/>           Agribusiness L4<br/>           Applied Accounting L4 Paper 1 and Paper 2<br/>           Business Practice L3<br/>           Carpentry and Roof Work L3 and L4<br/>           Computer Programming L4 Paper 1 and Paper 2<br/>           English FAL L2 Paper 2<br/>           Life Skills and Computer Literacy L2 Paper 1<br/>           Process Chemistry L4<br/>           The Human Body and Mind L4</p>  |

## Criteria 6: Marking guidelines

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| <p><b>Accuracy of marking guidelines</b></p> | <p>a. Some of the answers in 70 (44%) of the marking guidelines were:</p> <ol style="list-style-type: none"> <li>I. Incomplete;</li> <li>II. Inaccurate; and</li> <li>III. Contained grammatical errors.</li> </ol> <p>This was 1% less than in the November 2021 examination.</p> | <p>Advanced Plant Production L4<br/>         Afrikaans FAL L4 Paper 1 and Paper 2<br/>         Agribusiness L2 and L4<br/>         Applied Engineering Technology L4<br/>         Applied Policing L4<br/>         Architectural Graphics and Technology L4 Paper 2<br/>         Business Practice L4<br/>         Carpentry and Roof Work L4<br/>         Community Oriented Primary Care L4<br/>         Computer Hardware and Software L3<br/>         Computer Integrated Manufacturing L4<br/>         Computer Programming L4 Paper 1 and Paper 2<br/>         Concrete Structures L4<br/>         Construction Planning L2 and L4<br/>         Consumer Behaviour L2<br/>         Criminology L4<br/>         Data Communication and Networking L4<br/>         Drawing Office Procedures and Techniques L4 Paper 1<br/>         Early Childhood Development L2<br/>         Electronic Control and Digital Electronics L4<br/>         Engineering Practice and Maintenance L3<br/>         Engineering Processes L4<br/>         Engineering Systems L2<br/>         English FAL L2 and L4 Paper 1 and Paper 2<br/>         English FAL L3 Paper 2<br/>         Financial Management L3 and L4<br/>         Hospitality Generics L2 and L4<br/>         Hospitality Services L4<br/>         Human and Social Development L4<br/>         Learning Psychology L4<br/>         Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br/>         Life Skills and Computer Literacy L3 Paper 1<br/>         Life Skills and Computer Literacy L4 Paper 2<br/>         Marketing L4<br/>         Material Technology L3<br/>         Mathematical Literacy L2 Paper 2<br/>         Mathematical Literacy L4 Paper 1 and Paper 2<br/>         Mathematics L2 Paper 2<br/>         Multimedia Service L4<br/>         New Venture Creation L4<br/>         Office Practice L4<br/>         Operations Management L4<br/>         Physical Science L2 Paper 1 and Paper 2</p> |
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|---|--|--|
|   |  | Process Control L3<br>Pulp and Papermaking Technology L4<br>Refrigeration and Air Conditioning Processes L4<br>Roads L4<br>Science of Tourism L4<br>Sustainable Tourism in SA and International Travel L4<br>Systems Analysis and Design L3 and L4<br>The Human Body and Mind L2<br>Transport Economics L4<br>Transport Operations L2<br>Welding L2 and L4<br>Wholesale and Retail L3 and L4   |
| <b>Mark allocations on marking guidelines</b> | In 20 (13%) marking guidelines there were errors in mark allocations and/or the mark allocations were incomplete and/or did not indicate how method marks were to be allocated (where applicable). This corresponded with the November 2021 examination. | Business Practice L3<br>Consumer Behaviour L4<br>Criminology L3<br>Economic Environment L4<br>English FAL L3 Paper 2<br>Entrepreneurship L2<br>Hospitality Generics L2 and L4<br>Learning Psychology L4<br>Life Skills and Computer Literacy L2 and L4 Paper 2<br>Life Skills and Computer Literacy L3 Paper 1<br>Marketing Communication L3 and L4<br>Material Technology L3<br>Mathematics L4 Paper 1 and Paper 2<br>Renewable Energy Technologies L4<br>Science of Tourism L4<br>Welding L2 |
| <b>Criteria 7: Language and bias</b>          |  |  |
| <b>Language register</b>                      | a. In 94% of question papers the language was pitched at the appropriate level, the exceptions being the listed subjects, or 6%; a decrease of 2% from the 8% of the November 2021 examination.  | Art and Science of Teaching L3<br>Early Childhood Development L2<br>English FAL L3 Paper 1<br>Financial Management L4<br>Hospitality Generics L2<br>Hospitality Services L4<br>Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br>The Human Body and Mind L2<br>Transport Operations L2   |
| <b>Subject terminology</b>                    | Subject terminology or data were not always used correctly in 8% of the question papers. This was 1% less than the November 2021 examination.  | Agribusiness L4<br>Architectural Graphics and Technology L4 Paper 1<br>Computer Programming L4 Paper 1 and Paper 2<br>Criminology L4<br>Data Communication and Networking L4<br>Financial Management L3 and L4<br>Life Skills and Computer Literacy L2 Paper 1<br>Material Technology L3<br>Office Practice L4<br>The Human Body and Mind L2   |

| Criteria                  | Findings and challenges  | Subjects implicated  |
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| <b>Sentence structure</b> | In 31% of question papers some questions contained complicated sentence structures and/or words/terms that may have presented difficulty / confused candidates in eliciting the desired response. This was 5% more than the November 2021 examination. | Art and Science of Teaching L3 and L4<br>Automotive Repair and Maintenance L4<br>Carpentry and Roof Work L3<br>Client Services and Human Relations L4<br>Community Oriented Primary Care L4<br>Computer Hardware and Software L3<br>Computer Programming L4 Paper 1 and Paper 2<br>Construction Planning L2 and L4<br>Construction Supervision L4<br>Consumer Behaviour L2<br>Criminology L3 and L4<br>Data Communication and Networking L4<br>Drawing Office Procedures and Techniques L4 Paper 1<br>Early Childhood Development L2 and L4<br>Engineering Processes L4<br>English FAL L2 Paper 2<br>English FAL L3 Paper 1<br>English FAL L4 Paper 1 and Paper 2<br>Financial Management L3 and L4<br>Hospitality Generics L2<br>Human and Social Development L4<br>Learning Psychology L3 and L4<br>Life Skills and Computer Literacy L2 and L4 Paper 1 and Paper 2<br>Life Skills and Computer Literacy L3 Paper 1<br>Material Technology L3<br>Mathematical Literacy L4 Paper 1 and Paper 2<br>Office Data Processing L2 and L4<br>Physical Science L2 Paper 2<br>Roads L4<br>Science of Tourism L4<br>Sustainable Tourism in SA and Regional Travel L3<br>Systems Analysis and Design L3 and L4<br>The Human Body and Mind L2<br>Tourism Operations L2<br>Transport Operations L4 |

| Criteria       | Findings and challenges   | Subjects implicated  |
|----------------|---|--|
| <b>Grammar</b> | There were grammatical errors in 27% of the question papers, a decrease of 2% from the November 2021 examination.                                     | Art and Science of Teaching L3 and L4<br>Community Oriented Primary Care L4<br>Computer Hardware and Software L3<br>Computer Integrated Manufacturing L4<br>Computer Programming L4 Paper 1 and Paper 2<br>Construction Planning L2<br>Criminology L3 and L4<br>Data Communication and Networking L4<br>Drawing Office Procedures and Techniques L4 Paper 1<br>Early Childhood Development L2 and L4<br>Electrotechnology L4<br>Engineering Processes L4<br>Engineering Systems L2<br>English FAL L2 Paper 2<br>English FAL L4 Paper 1 and Paper 2<br>Financial Management L3 and L4<br>Hospitality Services L4<br>Learning Psychology L3 and L4<br>Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br>Life Skills and Computer Literacy L3 and L4 Paper 1<br>Manual Manufacturing L2<br>Marketing Communication L3 and L4<br>Masonry L4<br>Material Technology L3<br>Mathematics L4 Paper 2<br>Multimedia Service L4<br>Office Data Processing L2 and L4<br>Process Control L4<br>Stored Programme Systems L4<br>Systems Analysis and Design L3 and L4<br>The Human Body and Mind L2 |
|                | The language in the marking guidelines contained grammatical errors in 15% of the question papers, an increase of 2% from those of the previous year. | Art and Science of Teaching L3<br>Community Oriented Primary Care L4<br>Computer Hardware and Software L3<br>Criminology L4<br>Data Communication and Networking L4<br>Drawing Office Procedures and Techniques L4 Paper 1<br>Early Childhood Development L2<br>Engineering Systems L2<br>English FAL L2 and L4 Paper 1 and Paper 2<br>Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br>Life Skills and Computer Literacy L3 Paper 1<br>Life Skills and Computer Literacy L4 Paper 2<br>Marketing Communication L3 and L4<br>Masonry L4<br>Mathematical Literacy L2 Paper 2<br>Office Data Processing L2<br>Process Control L4<br>Stored Programme Systems L4<br>The Human Body and Mind L2   |



| Criteria  | Findings and challenges   | Subjects implicated  |
|---|---|--|
| <b>Bias</b>   | In 4% of question papers there was evidence of bias, an increase of 1% from the November 2021 examination.  |  |
|   | Bias in terms of the following issues was observed in the listed question papers:   |  |
|   | a. Diverse backgrounds of students were not taken into consideration;   | Afrikaans FAL L4 Paper 2   |
|   | b. Provincial, regional, gender and race bias were evident;   | Animal Production L4   |
|   | c. Culture;   | Early Childhood Development L2   |
|   | d. Language;  | Financial Management L3<br>Life Skills and Computer Literacy L2 Paper 2  |
|   | e. Race and stereotyping;   | Marketing Communication L4   |
|   | It was assumed that students were familiar with information (criteria) from a specific text book. Students who used the text book on campus would have had an unfair advantage over those who did not.  | Sustainable Tourism in SA and International Travel L4  |
| <b>Criteria 8: Predictability</b>                     |   |  |
| Repetition of questions from previous question papers | a. Eighty-seven percent of question papers did not contain questions similar to those asked in the recent past. This was 4% less than the 91% of the November 2021 examination; and<br>b. Questions that could be easily spotted/predicted or those that were taken verbatim from past question papers were replaced. |  |
|   | Nine percent of question papers contained questions that could be easily spotted or predicted, an increase of 1% from the November 2021 examination.  | Animal Production L4<br>Criminology L3<br>Electrical Principles and Practice L2<br>English FAL L2 and L4 Paper 2<br>Hospitality Generics L2 and L4<br>Hospitality Services L4<br>Life Skills and Computer Literacy L2 and L3 Paper 1<br>Marketing Communication L3<br>New Venture Creation L4<br>Roads L4<br>Tourism Operations L2 |

| Criteria                       | Findings and challenges  | Subjects implicated  |
|--------------------------------|--|--|
|                                | <p>Nine percent of the question papers contained a question or questions taken verbatim from a past question paper. This was 6% more than the 3% of the November 2021 examination.</p>   | <p>Concrete Structures L4<br/>           Construction Planning L2 and L4<br/>           Drawing Office Procedures and Techniques L4 Paper 1<br/>           Electrical Principles and Practice L2<br/>           Engineering Processes L4<br/>           English FAL L2 and L4 Paper 2<br/>           Hospitality Generics L2<br/>           Hospitality Services L4<br/>           Marketing L4<br/>           Masonry L4<br/>           New Venture Creation L4<br/>           Roads L4</p>   |
| Degree of originality          | <p>a. Eleven (7%) question papers did not contain an appropriate degree of originality, an increase of 1% from the November 2021 examination;</p> <p>b. Question papers that demonstrated a degree of originality:</p> <p>i. Had new questions/ scenarios;</p> <p>ii. Included a variety of question types;</p> <p>iii. Changed the style/pattern from that of previous years' question papers;</p> <p>iv. Made use of different resources, other than the prescribed textbook/s; and</p> <p>v. Kept up to date with new teaching methods and developments in the subject.</p> | <p>Business Practice L3 and L4<br/>           Computer Programming L4 Paper 1 and Paper 2<br/>           Electrical Principles and Practice L2 and L4<br/>           English FAL L2 Paper 2<br/>           Hospitality Generics L2<br/>           Life Skills and Computer Literacy L2 Paper 1<br/>           Mathematics L2 Paper 2<br/>           Office Practice L4</p>   |
| Criteria 9: Overall impression |  |  |
| Standard of question papers    | <p>Overall, 84% of the question papers moderated by Umalusi were considered to be of an acceptable standard. This was 3% less than the November 2021 examination.</p> <p>Sixteen percent of the question papers, as listed, did not meet the required standard.</p>  | <p>Animal Production L4<br/>           Applied Policing L4<br/>           Business Practice L3<br/>           Carpentry and Roof Work L3 and L4<br/>           Criminology L4<br/>           Drawing Office Procedures and Techniques L4 Paper 1<br/>           Early Childhood Development L2<br/>           English FAL L2 and L4 Paper 1 and Paper 2<br/>           Hospitality Generics L2 and L4<br/>           Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br/>           Life Skills and Computer Literacy L3 Paper 1<br/>           Life Skills and Computer Literacy L4 Paper 2<br/>           Office Practice L4<br/>           Physical Science L2 Paper 1 and Paper 2<br/>           Renewable Energy Technologies L3 and L4<br/>           Transport Operations L4<br/>           Wholesale and Retail L3 and L4</p> |

| Criteria | Findings and challenges  | Subjects implicated   |
|----------|--|---|
|          | <p>Seventeen percent of the question papers did not satisfy requirements of the current policy/guideline documents, an increase of 4% from the 13% of the November 2021 examination.</p> | <p>Advanced Plant Production L4<br/>           Agribusiness L4<br/>           Animal Production L4<br/>           Business Practice L3<br/>           Carpentry and Roof Work L3 and L4<br/>           Computer Hardware and Software L3<br/>           Construction Planning L4<br/>           Criminology L3<br/>           Early Childhood Development L2<br/>           English FAL L2 and L4 Paper 2<br/>           Hospitality Generics L2 and L4<br/>           Human and Social Development L4<br/>           Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br/>           Life Skills and Computer Literacy L3 Paper 1<br/>           Life Skills and Computer Literacy L4 Paper 2<br/>           Mathematical Literacy L4 Paper 1<br/>           Physical Science L2 Paper 2<br/>           Roads L4<br/>           Sustainable Tourism in SA and International Travel L4<br/>           Systems Analysis and Design L3 and L4<br/>           Transport Operations L2 and L4</p> |
|          | <p>In 5% of the cases, question papers, as a whole, did not adequately assess the outcomes of the curriculum /syllabus. This was 1% more than the previous year.</p>                     | <p>Agribusiness L4<br/>           Carpentry and Roof Work L3<br/>           Early Childhood Development L2<br/>           Hospitality Generics L2<br/>           Life Skills and Computer Literacy L2 Paper 1<br/>           Renewable Energy Technologies L3 and L4<br/>           Roads L4</p>  |
|          | <p>The assessment of skills, knowledge, attitudes, values and reasoning was not balanced in 13% of papers. This was 1% less than in the November 2021 examination.</p>                   | <p>Animal Production L4<br/>           Business Practice L3<br/>           Carpentry and Roof Work L3 and L4<br/>           Construction Planning L2 and L4<br/>           Drawing Office Procedures and Techniques L4 Paper 1<br/>           Early Childhood Development L2<br/>           Electrical Principles and Practice L2<br/>           Hospitality Generics L2 and L4<br/>           Hospitality Services L4<br/>           Life Skills and Computer Literacy L2 Paper 1 and Paper 2<br/>           Life Skills and Computer Literacy L3 Paper 1<br/>           Office Practice L4<br/>           Transport Operations L2 and L4<br/>           Wholesale and Retail L3 and L4</p>  |

## 1.4 Areas of Improvement

The external moderators' reports from the initial moderation of question papers revealed some areas of improvement:

### a. Technical quality

- i. Sixty-four percent of question papers and marking guidelines met all technical requirements, an improvement of 1% from the November 2021 examination and 14% from the November 2020 examination;
- ii. The headers and footers in 97% of the question papers were completed as per the requirement, an improvement of 3% from the November 2021 examination;
- iii. Fonts were used correctly in 99% of the question papers, an improvement of 2% from the November 2021 examination;
- iv. The mark allocation was clearly indicated in 96% of the question papers, having improved by 6% from the November 2021 examination;
- v. In 86% of question papers, the quality of illustrations, graphs, tables and visuals was of print-ready quality. This was an improvement of 1% from the November 2021 examination;
- vi. Ninety-three percent of question papers adhered to the format requirements in the SAG. This was 2% more than those of the November 2021 examination.

### b. Internal moderation

- i. Ninety percent of internal moderators' reports were adequately completed and 82% had relevance to the question papers. This was an improvement of 3% and 5% respectively, from the November 2021 examination.

### c. Cognitive skills

- i. Ninety-two percent of question papers provided questions representative of the latest developments in the subject, an improvement of 4% from the 88% of the November 2021 examination.

### d. Text selection, types and quality of questions

- i. In 92% of papers the correlation between mark allocation, level of difficulty and time allocation was appropriate for most of the questions, a significant improvement of 10% from the 82% of the November 2021 examination.

### e. Marking guidelines

- i. Fifty-six percent of marking guidelines were of appropriate quality. This was an improvement of 1% from the November 2021 examination.

### f. Language and bias

- i. In 94% of question papers the language was pitched at the appropriate level and in 92% of question papers subject terminology or data were used correctly. This was an improvement of 2% and 1% respectively, from the November 2021 examination; and
- ii. Seventy-three percent of question papers were free of grammatical errors, an improvement of 2% from the November 2021 examination.

### g. Overall impression

- i. In 95% of question papers, the outcomes of the curriculum/syllabus were adequately assessed. This was 1% less than the previous year, However,
- ii. The assessment of skills, knowledge, attitudes, values and reasoning was balanced in 87% of papers, an improvement of 1% from the November 2021 examination.

## 1.5 Areas of Non-Compliance

While some aspects in the moderation of question papers showed improvement, a certain proportion remained static or showed a decline. These areas of non-compliance adversely affected the quality and standard of question papers:

### 1.5.1 Question Papers with Gross Non-Compliance

These included:

- a. Those that did not adhere to the requirements of the SAG and/or had substantial conceptual flaws. These, requiring resetting, made up 3% of the question papers moderated by Umalusi; and
- b. Those that were conditionally approved but required significant reworking to bring them to an acceptable standard.

### 1.5.2 Additional Areas of Non-Compliance

The following were identified:

#### a. Technical aspects

- i. Thirty-six percent of question papers and accompanying marking guidelines did not meet one or more of the technical requirements; and
- ii. As compared to the November 2021 examination, there had been a rise in non-compliance with cover page criteria.

#### b. Internal moderation

- i. Twenty-four percent of the internal moderators' reports were not of appropriate standard;
- ii. In 10% of the question papers information in the internal moderators' reports did not correspond with the question papers: double the number of the November 2021 examination; and
- iii. In 18% of the internal moderators' reports the assessment grids that accompanied the reports did not correspond with the question papers; were not provided; or were incomplete.

#### c. Content coverage and cognitive skills

- i. In 28% of the question papers learning outcomes and assessment standards were not covered as stipulated in the policy and guideline documents, an increase of 4% from the previous year;
- ii. Nineteen percent of the question papers showed an inappropriate distribution of marks across cognitive levels. This was 3% more than the 16% of the November 2021 examination;
- iii. In 13% of question papers some questions did not match the cognitive level instruction. This was 1% more than in the November 2021 examination; and
- iv. In 8% of the question papers some questions were not representative of the latest developments in the teaching of the knowledge field; and in 13% of question papers the assessment of skills, knowledge, attitudes, values and reasoning was not balanced.

#### d. Quality of questions

- i. Seven percent of question papers did not show a wide variety of question types, an increase of 3% from the November 2021 examination;
- ii. There was no correlation between mark allocation, level of difficulty and time allocation for some of the questions in 8% of the question papers;
- iii. The source material used in 18% of the question papers was inappropriate. This was 5% more than the 13% of the November 2021 examination;
- iv. In 17% of the question papers some questions did not provide clear instructional key words/verbs. This was 4% more than the 13% of the November 2021 examination;

- v. In 21% of the question papers some questions did not contain sufficient information to elicit an appropriate response. This was an increase of 4% from the 17% of the previous examination period;
- vi. Nineteen percent of question papers contained factual errors or misleading information, an increase of 3% from the November 2021 examination; and
- vii. The multiple-choice questions in 13% of question papers were poorly formulated. This concurred with the November 2021 examination.

#### **e. Marking guidelines**

- i. Some of the answers in 44% of the marking guidelines were incomplete, inaccurate and/or contained grammatical errors; and
- ii. In 13% of marking guidelines there were errors in mark allocations and/or the mark allocations were incomplete and/or did not indicate how method marks were to be allocated (where applicable). This concurred with the November 2021 examination.

#### **f. Language and bias**

- i. Subject terminology or data were not always used correctly in 8% of the question papers;
- ii. In 31% of question papers some of the questions contained complicated sentence structures and/or words/terms that may present difficulty for, or confuse, candidates and impede elicitation of the desired responses. This was an increase of 5% from the November 2021 examination;
- iii. There were grammatical errors in 27% of question papers and 15% of marking guidelines, an increase of 2% from the 13% of the November 2021 examination; and
- iv. In 4% of question papers there was evidence of bias, an increase of 1% from the November 2021 examination.

#### **g. Predictability**

- i. Thirteen percent of question papers contained questions that could be easily spotted/predicted and/or had been taken verbatim from past papers; and
- ii. Seven percent of question papers did not contain an appropriate degree of originality, an increase of 1% from the November 2021 examination.

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

To improve the quality and standard of question papers, the DHET must ensure that:

- a. The examiners and internal moderators are trained to develop question papers and marking guidelines that adhere to the SAG requirements and relevant guidelines;
- b. The question papers and marking guidelines are of appropriate standard; and
- c. The reports that accompany the question papers and marking guidelines to Umalusi are comprehensive and correct.

### **1.7. Conclusion**

In the 2022 NC(V) L2-L4 examination 84% of question papers moderated by Umalusi were considered to be of an acceptable standard. In comparison to the November 2021 examination, there was a decline of 3%.

Similar to previous examinations, the majority of question papers were conditionally approved, a negligible number of question papers required resetting and approximately 24% gained immediate approval. There was an improvement of at least 4% in question papers gaining immediate approval. This augurs well for future examinations and it was envisaged that, with training and support from the DHET, the examiners and internal moderators can develop question papers and marking guidelines of a high standard.

The external moderation of the sampled question papers for the NC(V) L2-L4 November 2022 examination was concluded successfully, despite some challenges.

# CHAPTER 2 MODERATION OF INTERNAL CONTINUOUS ASSESSMENT

## 2.1 Introduction

Internal continuous assessment (ICASS) is assessment conducted at the site of teaching and learning. Ideally, ICASS allows for assessment to take place at the time of teaching and learning. Proof of the candidates' ICASS is contained in a portfolio of evidence (PoE). The portfolios must conform to the requirements specified in the subject assessment guidelines (SAG) and ICASS guidelines for the National Certificate (Vocational) (NC[V]) qualifications (hereafter ICASS guidelines).

The ICASS is a compulsory component that forms part of the final subject promotion mark for all students registered for the NC(V) qualifications. The ICASS has a weighting of 25% for the fundamental subjects and 50% for the vocational subjects. The ICASS of the NC(V) qualifications is as important as the external assessment component in its contribution to the final mark. Umalusi assures the quality of internal assessment through a rigorous moderation process that is explained below.

Umalusi's quality assurance of internal assessment process usually entails two phases – the initial monitoring of the provision at site level, focusing on the quality of tasks and their compliance with the ICASS guidelines, in May; and the moderation of the lecturers' portfolios of assessment (PoA) and students' PoE from sampled sites during October. This chapter covers only the October 2022 ICASS moderation phase.

Standardised practical assessment tasks (PAT) have been developed and implemented for Level 3 and 4 vocational subjects to address the poor quality of practical tasks and the failure by colleges to implement them in the past. All the assessment tasks for Level 2 and the fundamental subjects (which include the Languages, Mathematical Literacy, Mathematics and two components of Life Orientation) were developed at the sites of learning, college or provincial level.

The main objectives of moderating the internal assessment portfolios are to:

- a. Verify that the lecturers' and students' portfolios adhere to the ICASS guidelines; sufficient tasks of quality and different types are administered; and the quality assurance of the internal assessment component of the NC(V) is effectively managed;
- b. Ascertain the appropriateness and standard of the assessment tasks, in the case of vocational subjects, without standardised tasks; and the fundamental subjects;
- c. Determine whether ICASS allows for assessment to take place at the time of learning and, more importantly, that it is integrated with teaching and that some of it includes assessments of practical skills;
- d. Determine the extent to which the standardised PAT for Levels 3 and 4 are implemented and require review; and
- e. Ensure that assessment across different sites of delivery is consistent, fair and reliable and that standards have been maintained.

The purpose of external moderation is to ensure that a common standard in the quality of SBA tasks is maintained. All candidates registered to write the GETC: ABET examinations are required to complete common SBA tasks.

## 2.2 Scope and Approach

The October 2022 external moderation took place at centralised venues in six provinces over a period of four days, from 28 to 31 October 2022. The purpose was to moderate Levels 2, 3 and 4 PoE and PoA from a sample of NC(V) subjects.

In the main, 25 subjects were moderated at Level 4, five at Level 3 and two at Level 2. Table 2A illustrates the breakdown of subjects moderated at Levels 2, 3 and 4.



**Table 2A: Subjects moderated at Level 2, 3 and 4**

| Level                      | Subjects  |
|----------------------------|---|
| Moderated at Level 2 only  | Entrepreneurship  |
| Moderated at Level 3 only  | Food Preparation  |
| Moderated at Level 2 and 4 | English First Additional Language (FAL)   |
| Moderated at Level 3 and 4 | Client Services and Human Relations<br>Mathematical Literacy<br>Mathematics<br>Graphic Design   |
| Moderated at Level 4 only  | Life Orientation (Life Skills)<br>Life Orientation (Computer Literacy)<br>Financial Management<br>Advertising and Promotions<br>Management Practice<br>Marketing Communication<br>Contact Centre Operations<br>Operations Management<br>Transport Economics<br>Transport Operations<br>Tourism Operations<br>Science of Tourism<br>Sustainable Tourism in SA and International Travel<br>Electrical Systems and Construction<br>Professional Engineering Practice<br>Construction Supervision<br>Plumbing<br>Governance<br>Law of Procedures and Evidence<br>Human and Social Development |

Twenty-seven subjects (Life Orientation has two components, namely Life Skills and Computer Literacy, and has thus been counted as two subjects) were sampled for moderation, compared with 42 in 2021 and 71 in 2020. Eight subjects were sampled to be moderated in Northern Cape, three in Free State, two in North West, four in Mpumalanga, three in Eastern Cape and 16 in Gauteng. Sixteen subjects were moderated in one province only and nine subjects were moderated in two provinces.

The provinces that were requested to submit their portfolios for moderation in the 27 subjects are indicated in Table 2B. This table also reflects the levels from which portfolios were included, as well as the number of campuses or sites in the process, in brackets. There were 120 sites sampled for 2022, compared with 231 in 2021 and 470 in 2020.



| Subject  | Eastern Cape | Free State | Gauteng          | Mpumalanga | North West | Northern Cape    |
|--|--------------|------------|------------------|------------|------------|------------------|
| Advertising and Promotions                         |              |            | L4 (4)           |            |            |                  |
| Client Services and Human Relations                |              |            |                  |            |            | L3 (2)<br>L4 (2) |
| Construction Supervision                           |              |            |                  | L4 (4)     |            |                  |
| Contact Centre Operations                          |              |            | L4 (3)           |            | L4 (1)     |                  |
| Electrical Systems and Construction                |              |            |                  | L4 (4)     |            |                  |
| English FAL  |              | L4 (4)     |                  |            |            | L2 (4)           |
| Entrepreneurship                                   |              |            | L2 (4)           |            |            |                  |
| Financial Management                               |              |            |                  | L4 (4)     |            |                  |
| Food Preparation                                   |              | L3 (2)     |                  |            |            | L3 (2)           |
| Governance   |              |            | L4 (4)           |            |            |                  |
| Graphic Design                                     |              |            | L3 (2)<br>L4 (2) |            |            |                  |
| Human and Social Development                       |              |            |                  |            |            |                  |
| Law of Procedures and Evidence                     |              | L4 (3)     |                  |            |            |                  |
| Life Orientation (Computer Literacy)               |              |            | L4 (4)           |            |            | L4 (4)           |
| Life Orientation (Life Skills)                     |              |            | L4 (4)           |            |            | L4 (4)           |
| Management Practice                                |              |            | L4 (4)           |            |            |                  |
| Marketing Communication                            |              |            | L4 (4)           |            |            |                  |
| Mathematical Literacy                              |              |            | L4 (4)           |            |            | L3 (4)           |
| Mathematics  |              |            | L3 (4)<br>L4 (4) |            |            |                  |
| Operations Management                              |              |            | L4 (4)           |            |            |                  |
| Plumbing   |              |            |                  | L4 (3)     |            |                  |
| Professional Engineering Practice                  |              |            | L4 (4)           |            |            |                  |
| Science of Tourism                                 | L4 (4)       |            |                  |            |            |                  |
| Sustainable Tourism in SA and International Travel | L4 (4)       |            |                  |            |            |                  |
| Tourism Operations                                 | L4 (4)       |            |                  |            |            |                  |
| Transport Economics                                |              |            | L4 (3)           |            |            | L4 (1)           |
| Transport Operations                               |              |            | L4 (3)           |            |            |                  |

Provincial departments of education, colleges and campuses/sites were informed, in writing, in advance of this moderation process. Sampled sites, including public and private colleges and correctional services centres, were requested to submit six PoE each for moderation, together with the relevant PoA. Moderators were tasked to moderate a minimum of three PoE per site during the time allocated for ICASS moderation. Staff from centralised venues at technical and vocational education and training (TVET) colleges coordinated the planning of this moderation process.

Umalusi instructed the external moderators to check compliance with the stipulations of the ICASS guidelines.

## 2.3 Summary of Findings

### PART A: PORTFOLIOS OF ASSESSMENT

Colleges and sites were requested to submit six PoE and one PoA per selected subject, with marks that ranged from good to average to poor.

#### 2.3.1 Contents

Umalusi expects lecturers to ensure that their PoA contain all the relevant documents and information, namely:

- a. Table of contents;
- b. Lecturer information on the appointment and duties (name, qualifications, South African Council of Educators (SACE) registration, teaching/lecturing experience, work experience);
- c. Latest version of the assessment guidelines as well as ICASS guidelines;
- d. Subject assessment schedule;
- e. All ICASS tasks and their accompanying marking guidelines;
- f. A complete pre-moderation checklist for each of the ICASS tasks and their accompanying assessment tools;
- g. A post-moderation checklist, completed once the task has been administered and assessed;
- h. Subject record sheet per level reflecting the marks achieved by students for their ICASS tasks;
- i. Electronically captured marks; and
- j. Evidence of the review of tasks.

Since the format of the PoA has been nationally standardised, the general finding was that the contents and appearance of the PoA had improved. In 2022, 34 of the 120 sites that were sampled had assembled all the required documents and evidence in their PoA for all the subjects submitted. It needs to be pointed out that the total number of fully compliant sites in 2022 represented only 44% of the sample (which is less than half the number of sites moderated).

A further 30 sites, or 38%, were identified as having a PoA which had been well organised, neatly presented and well maintained, even though, in some instances, some documents were not available.

Fifteen PoA had three or more documents missing or were disorganised and untidy, which made it difficult to locate the necessary information.

**Table 2C: Portfolios that had documents missing or were disorganised**

| TVET college             | Campus       | Subject                              |
|--------------------------|--------------|--------------------------------------|
| Western                  | Randfontein  | Graphic Design L4                    |
| DRU-A                    | Kimberley    | English FAL L4                       |
| South West Gauteng       | Dobsonville  | Graphic Design L4                    |
|                          | George Tabor | Transport Operations L4              |
|                          | Molapo       | Life Skills and Computer Literacy L4 |
| Northern Cape Rural      | Kathu        | Food Preparation L3                  |
|                          | Upington     | Food Preparation L3                  |
| Ehlanzeni                | Mapulaneng   | Plumbing L4                          |
|                          | Kanyamazane  | Professional Engineering L4          |
| Rostec Technical College | Johannesburg | Life Skills and Computer Literacy L4 |
|                          | Pretoria     | Life Skills and Computer Literacy L4 |
| Ekurhuleni West          | Roodepoort   | Human and Social Development L4      |
| Goldfields               | Welkom       | Food Preparation L3                  |
| Ekurhuleni East          | Springs      | Contact Centre Operations L4         |
| Motheo                   | Bloemfontein | Food Preparation L3                  |

Among reasons that some PoA were difficult to quality assure was that the templates prescribed by the Department of Higher Education (DHET) in the ICASS documents were not used and the content requirements were not adhered to.

The required content most frequently not found in the PoA included:

- a. The year-plan, or a year-plan with no date or signature;
- b. Assessment schedule for the year (can be indicated on the year-plan);
- c. The lecturers' qualifications and evidence of a SACE certificate (a reason for this could be that colleges also appoint lecturers who are not South African citizens);
- d. All ICASS tasks with relevant pre- and post-moderation templates;
- e. Analysis grids for ICASS tasks;
- f. Marking guidelines for assessment tasks; and
- g. PAT documents (lecturer and student versions with checklists).

Outdated documents found in the PoA included:

- i. SAG guidelines from 2007, which could have led to the use of tasks that were based on incorrect guidelines; and
- ii. Outdated versions of the ICASS guidelines.

According to the latest NC(V) ICASS guideline document of January 2022, ICASS tasks form part of a year-long assessment programme in each level and subject and each student must complete the stipulated number of assessment tasks for each subject in an academic year.

**Table 2D: Stipulated number of ICASS tasks not included in PoA**

| TVET college    | Campus        | Subject                                    |
|-----------------|---------------|--|
| DRU-A           | Kimberley     | English First Additional Language (FAL) L4 |
| Ehlanzeni       | Kanyamazane   | Professional Engineering L4                |
| Vuselela        | Klerksdorp    | Human and Social Development L4            |
|                 | Potchefstroom | Human and Social Development L4            |
| Correctional    | Pretoria      | Operations Management L4                   |
| Orbit           | Mankwe        | Transport Economics L4                     |
| Ekurhuleni East | Daveyton      | Mathematics L4                             |

An analysis grid should be compiled for each assessment task to analyse the task with respect to the topics, learning outcomes and assessment standards covered; the time and mark allocation; and the cognitive level attached to each question or instruction of the task.

Where analysis grids were available, most of these were incorrect or incomplete. In some instances the analysis grids were not always used correctly to ensure that the questions in the tasks were pitched at the appropriate cognitive level. Questions were thus often too easy and concentrated mainly on first-level knowledge and comprehension questions, with few or no questions aimed at higher levels of cognition that require application or analysis. Such questions would not prepare the student adequately for the examination or for the world of work, where the student would be expected to solve problems and think critically.

The general conclusion was that few lecturers understood the different cognitive levels and how to use them in assessment tasks. Most tests and internal examination questions tested knowledge only.

**Table 2E: Sites where analysis grids for all tasks were not included in PoA**

| TVET college           | Campus        | Subject                              |
|------------------------|---------------|--------------------------------------|
| Ehlanzeni              | Kanyamazane   | Professional Engineering L4          |
| Ekurhuleni West        | Roodepoort    | Human and Social Development L4      |
| Ekurhuleni East        | Springs       | Contact Centre Operations            |
| Vuselela               | Potchefstroom | Human and Social Development L4      |
| Motheo                 | Bloemfontein  | Food Preparation L3                  |
| Goldfields             | Welkom        | Food Preparation L3                  |
| Northern Cape Rural    | Kathu         | Food Preparation L3                  |
|                        | Upington      | Food Preparation L3                  |
| Western College        | Randfontein   | Graphic Design L4                    |
|                        |               | Graphic Design L3                    |
| King Sabata Dalindyebo | Mapuzi        | Sustainable Tourism L 4              |
|                        |               | Tourism Operations L4                |
| King Hintsa            | Centane       | Science of Tourism L4                |
| Taletso                | Lehurutshe    | Contact Centre Operations L4         |
| Ikhala                 | Aliwal North  | Science of Tourism L4                |
| Rhodes Technical       | Johannesburg  | Life Skills and Computer Literacy L4 |

| TVET college       | Campus                               | Subject                      |
|--------------------|--------------------------------------|------------------------------|
| South West Gauteng | Roodepoort                           | Operations Management L4     |
|                    | Dobsonville                          | Graphic Design L4            |
|                    | Johannesburg                         | Transport Economics L4       |
|                    | George Tabor                         | Transport Operations L4      |
|                    |                                      | Governance L4                |
| Molapo             | Life Skills and Computer Literacy L4 |                              |
| Tshwane North      | Mamelodi                             | Contact Centre Operations L4 |
| Tshwane South      | Pretoria West                        | Contact Centre Operations L4 |

Ninety-five percent of the sites had completed mark sheets filed in the PoA, compared with 94% in 2021 and 89% in 2020. A major concern was that marks were not consistently verified and thus various errors occurred while marks were being recorded, adjusted or converted. The danger was that the correct ICASS marks were not submitted to the DHET.

The sites that had no mark sheets in the PoA are listed in Table 2F.

**Table 2F: Sites and subjects that did not include mark sheets in PoA**

| TVET college    | Campus      | Subject                         |
|-----------------|-------------|---------------------------------|
| Ehlanzeni       | Mapulaneng  | Construction Supervision L4     |
| Nkangala        | CN Mahlangu | Construction Supervision L4     |
| Gert Sibande    | Balfour     | Construction Supervision L4     |
| Ekurhuleni West | Roodepoort  | Human and Social Development L4 |

### 2.3.2 Monitoring and Auditing of Portfolios

Monitoring and auditing visits by college or campus management to check whether the files were in order had taken place at 69% (78% in 2021 and 79% in 2020) of the sites chosen for moderation. The frequency of these visits ranged from once a year to a maximum of seven times a year.

Umalusi found that even though monitoring visits had taken place, non-compliance issues were often ignored. It was difficult to determine when these visits had taken place, as the reports were not always dated and it was sometimes unclear whether the visits were conducted by college or campus management. The monitoring of many campuses appeared to be merely a case of rubber stamping a report without checking for compliance. In some instances, only one monitoring visit had taken place very early in the year, which would not be helpful if there had been real problems at that site which had been allowed to continue undetected.

Monitoring and moderation of portfolios took place just before files were to be submitted for external moderation by Umalusi. This suggested that moderation was not used to enhance teaching and learning but was merely a case of window-dressing to comply with the regulations. Table 2G shows the colleges that conducted moderation before the Umalusi visit.

**Table 2G: Moderation done only once prior to Umalusi moderation**

| TVET college        | Campus              | Subject                                |
|---------------------|---------------------|--|
| Ehlanzeni           | Mapulaneng          | Construction Supervision L4            |
|                     |                     | Plumbing L4                            |
|                     | Nelspruit           | Electrical Systems and Construction L4 |
| Rostec              | Vereeniging         | Mathematical Literacy L4               |
|                     |                     | Governance L4                          |
| Goldfields          | Welkom              | Food Preparation L3                    |
| Eastcape Midlands   | High Street         | Tourism Operations L4                  |
| Vuselela            | Klerksdorp          | Marketing Communication L4             |
| Northern Cape Rural | Kuruman             | English FAL L2                         |
|                     | Upington            | Client Services and Human Relations L3 |
|                     |                     | Client Services and Human Relations L4 |
|                     |                     | Food Preparation L3                    |
| Kathu               | Food Preparation L3 |  |
| Northern Cape Urban | Moremogolo          | Life Skills and Computer Literacy L4   |
|                     | City Campus         | Client Services and Human Relations L4 |
| Tshwane North       | Soshanguve          | Transport Operations L4                |
| South West Gauteng  | George Tabor        | Governance L4                          |
| Ikhala              | Aliwal North        | Science of Tourism L4                  |
| Ekurhuleni West     | Kempton             | Transport Operations L4                |

At some sites and for some subjects there was no evidence of internal moderation found. The list of these colleges is indicated in Table 2H.

**Table 2H: No evidence of college or campus moderation**

| TVET college                         | Campus       | Subject                                |
|--------------------------------------|--------------|--|
| Rhodes Technical                     | Johannesburg | Mathematical Literacy L4               |
| Life Skills and Computer Literacy L4 | Roodepoort   | Human and Social Development L4        |
| South West Gauteng                   | George Tabor | Transport Economics L4                 |
|                                      |              | Transport Operations L4                |
| Bolton                               | Bloemfontein | Law of Procedures and Evidence L4      |
| Tshwane South                        | Odi          | Mathematics L4                         |
| Ehlanzeni                            | Kanyamazane  | Professional Engineering L4            |
| Ekurhuleni West                      | Kempton      | Transport Economics L4                 |
| Central Johannesburg                 | Langlaagte   | Management Practice L4                 |
|                                      | Parktown     | Entrepreneurship L2                    |
| Ekurhuleni East                      | Springs      | Entrepreneurship L2                    |
| Rostec                               | Pretoria     | Governance L4                          |
|                                      |              | Mathematical Literacy L4               |
|                                      | Johannesburg | Governance L4                          |
|                                      |              | Life Skills and Computer Literacy L4   |
| Goldfields                           | Tosa         | English FAL L4                         |
| Eastcape Midlands                    | Uitenhage    | Sustainable Tourism L4                 |
| Northern Cape Rural                  | Kuruman      | Mathematical Literacy L3               |
|                                      | Namaqualand  | Mathematical Literacy L3               |
| Northern Cape Urban                  | City Campus  | Client Services and Human Relations L3 |
| Buffalo City                         | East London  | Sustainable Tourism L4                 |

At sites where college or campus visits had taken place, 69% provided auditing reports. Although a monitoring visit had taken place, non-compliance issues were ignored and, in some instances, consisted of an undated college stamp. It was therefore difficult to determine when these visits took place. In some instances, it was unclear whether these visits had been conducted by college or campus management. The monitoring of many campuses was merely done for compliance, without the quality of internal assessment and its impact on learning being checked.

The general lack of continuous quality assurance of teaching, learning and assessment at management level is a contributing factor to the level of non-compliance in the TVET sector. As in 2021 and 2020, it appears that the responsibility for quality assurance still rests mostly with Umalusi.

### 2.3.3 Assessment Tasks

Umalusi's focus was on only one practical assessment task. In the absence of these tasks, external moderators were obliged to consider the available assessments.

The content coverage of 55% of the sites had assessment tasks (for all the subjects chosen for moderation) that were appropriate for the outcomes assessed, as well as the weighting and spread of the learning outcomes of the topics. The tasks also covered substantial amounts of content.

Table 2I reflects colleges that did not meet any, or only some, of the quality indicators for content coverage.

**Table 2I: College sites that met none, or only some, of the quality indicators for content coverage of tasks**

| TVET college          | Campus        | Subject                              | Quality indicators |                    |  |
|-----------------------|---------------|--------------------------------------|--------------------|--------------------|--|
|                       |               |                                      | Appropriate task   | Substantial amount | Weighting and spread of learning outcomes and topics |
| Ekurhuleni West       | Boksburg      | Mathematics L3                       | X                  |                    |  |
|                       | Roodepoort    | Human and Social Development L4      | X                  |                    |  |
| Motheo                | Bloemfontein  | Food Preparation L3                  | X                  | X                  |  |
|                       | Hillside View | English FAL L4                       | X                  |                    |  |
| Ekurhuleni East       | Daveyton      | Mathematics L4                       | X                  |                    |  |
| Buffalo City          | East London   | Sustainable Tourism L4               |                    |                    | X  |
| Science of Tourism L4 | Kempton       | Transport Economics L4               |                    |                    | X  |
| Rostec                | Vereeniging   | Mathematical Literacy L4             | X                  | X                  |  |
|                       | Pretoria      | Mathematical Literacy L4             | X                  |                    |  |
|                       |               | Life Skills and Computer Literacy L4 |                    | X                  | X  |
|                       | Johannesburg  | Governance L4                        | X                  |                    | X  |
| Goldfields            | Welkom        | Food Preparation L3                  | X                  | X                  |  |
| Western               | Krugersdorp   | Mathematics L3                       | X                  |                    |  |
|                       |               | Mathematical Literacy 4              | X                  | X                  |  |
|                       | Randfontein   | Graphic Design L4                    | X                  | X                  | X  |
|                       |               | Graphic Design L3                    | X                  | X                  | X  |
|                       |               | Advertising and Promotions L4        |                    | X                  | X  |
| Northern Cape Rural   | De Aar        | Mathematical Literacy L3             |                    |                    | X  |
|                       | Kuruman       | Mathematical Literacy L3             |                    |                    | X  |
|                       | Namaqualand   | Mathematical Literacy L3             |                    |                    | X  |
|                       | Upington      | Food Preparation L3                  | X                  | X                  |  |
|                       | Kathu         | Food Preparation L3                  | X                  | X                  |  |



|                        |              |                                 |   |   |   |
|------------------------|--------------|---------------------------------|---|---|---|
| Northern Cape Urban    | Moremogolo   | Mathematical Literacy L3        |   |   | X |
| Tshwane South          | Odi          | Mathematics L4                  | X |   |   |
| Tshwane North          | Temba        | Mathematics L4                  | X |   |   |
| Sedibeng               | Heidelberg   | Mathematics L3                  | X |   |   |
| Nkangala               | Middelburg   | Financial Management L4         |   | X | X |
| Ehlanzeni              | Mapulaneng   | Construction Supervision L4     |   |   | X |
| Central Johannesburg   | Alexandra    | Mathematics L4                  | X |   |   |
| DRU-A                  | Kimberley    | English FAL                     |   |   | X |
| Rhodes Technical       | Johannesburg | Mathematics L4                  | X |   |   |
| South West Gauteng     | Germiston    | Human and Social Development L4 | X |   | X |
|                        | Dobsonville  | Graphic Design L3               | X | X |   |
|                        |              | Graphic Design L4               | X | X |   |
|                        | George Tabor | Transport Operations L4         |   | X |   |
| Correctional           | Pretoria     | Operations Management L4        | X |   | X |
| King Sabata Dalindyebo | Mapuzi       | Sustainable Tourism L 4         |   |   | X |
|                        |              | Tourism Operations L4           | X | X |   |
| King Hintsa            | Centane      | Science of Tourism L4           |   |   | X |
| Taletso                | Lehurutshe   | Contact Centre Operations L4    |   | X | X |
| Ikhala                 | Aliwal North | Science of Tourism L4           |   |   | X |
| Port Elizabeth         | Russell Road | Science of Tourism L4           |   |   | X |

In terms of cognitive demand and difficulty level of tasks, 55% of the sites had assessment tasks (for all the subjects chosen for moderation) that were pitched at the appropriate cognitive levels, allowed for creative responses, included practical application of skills and represented the latest developments in the teaching, learning and assessment of the subject.

**Table 2J: College sites that did not meet all quality indicators for cognitive demand of tasks**

| TVET college        | Campus        | Subject                              | Quality indicators                     |                           |                               | Presents latest developments |
|---------------------|---------------|--------------------------------------|--|---------------------------|-------------------------------|------------------------------|
|                     |               |                                      | Pitched at appropriate cognitive level | Allows creative responses | Practical skills' application |                              |
| Ekurhuleni West     | Boksburg      | Mathematics L3                       |  |                           |                               |                              |
|                     | Roodepoort    | Human and Social development L4      | X                                      |                           |                               |                              |
| Motheo              | Bloemfontein  | Food Preparation L3                  | X                                      | X                         |                               |                              |
|                     | Hillside View | English FAL L4                       | X                                      |                           |                               |                              |
| Ekurhuleni East     | Daveyton      | Mathematics L4                       | X                                      | X                         | X                             | X                            |
| Buffalo City        | East London   | Sustainable Tourism L4               |  |                           | X                             |                              |
|                     |               | Science of Tourism L4                |  |                           | X                             |                              |
| Rostec              | Vereeniging   | Mathematical Literacy L4             | X                                      | X                         |                               |                              |
|                     | Pretoria      | Mathematical Literacy L4             | X                                      |                           |                               |                              |
|                     |               | Life Skills and Computer Literacy L4 |  | X                         | X                             |                              |
|                     | Johannesburg  | Governance L4                        | X                                      |                           | X                             |                              |
| Goldfields          | Welkom        | Food Preparation L3                  | X                                      | X                         |                               |                              |
| Western             | Krugersdorp   | Mathematics L3                       |  | X                         | X                             | X                            |
|                     |               | Mathematical Literacy 4              | X                                      | X                         |                               |                              |
|                     | Randfontein   | Graphic Design L4                    | X                                      | X                         | X                             |                              |
|                     |               | Graphic Design L3                    | X                                      | X                         | X                             |                              |
|                     |               | Advertising and Promotions L4        |  | X                         | X                             |                              |
| Northern Cape Rural | De Aar        | Mathematical Literacy L3             |  |                           | X                             |                              |

|                       |              |                                 |   |   |   |   |  |
|-----------------------|--------------|---------------------------------|---|---|---|---|--|
|                       | Kuruman      | Mathematical Literacy L3        |   |   | X |   |  |
|                       | Namaqualand  | Mathematical Literacy L3        |   |   | X |   |  |
|                       | Upington     | Food Preparation L3             | X | X |   |   |  |
|                       | Kathu        | Food Preparation L3             | X | X |   |   |  |
| Northern Cape         | Moremogolo   | Mathematical Literacy L3        |   |   | X |   |  |
| Urban                 | Moremogolo   | Mathematical Literacy L3        |   |   | X |   |  |
| Tshwane South         | Odi          | Mathematics L4                  |   | X | X | X |  |
| Tshwane North         | Temba        | Mathematics L4                  |   | X | X | X |  |
| Sedibeng              | Heidelberg   | Mathematics L3                  |   | X | X | X |  |
| Nkangala              | Middelburg   | Financial Management L4         |   | X | X |   |  |
| Ehlanzeni             | Mapulaneng   | Construction Supervision        |   |   | X |   |  |
| Central Gauteng       | Alexandra    | Mathematics L4                  |   | X | X | X |  |
| DRU-A                 | Kimberley    | English FAL                     |   |   | X |   |  |
| South West Gauteng    | Germiston    | Human and Social Development L4 | X |   | X |   |  |
|                       | Dobsonville  | Graphic Design L3               | X | X |   |   |  |
|                       |              | Graphic Design L4               | X | X |   |   |  |
|                       | George Tabor | Transport Operations L4         |   | X |   |   |  |
| Correctional          | Pretoria     | Operations Management L4        | X |   | X |   |  |
| King Sabata           | Mapuzi       | Sustainable Tourism L 4         |   |   | X |   |  |
| Dalindyebo            | Mapuzi       | Sustainable Tourism L4          | X | X |   |   |  |
| Tourism Operations L4 |              | Science of Tourism L4           |   |   |   | X |  |
|                       |              | Contact Centre Operations L4    |   |   | X | X |  |
|                       |              | Science of Tourism L4           |   |   |   | X |  |
|                       |              | Science of Tourism L4           |   |   |   | X |  |

|                |              |                              |  |   |   |  |
|----------------|--------------|------------------------------|--|---|---|--|
| King Hintsa    | Centane      | Science of Tourism L4        |  |   | X |  |
| Taletso        | Lehurutshe   | Contact Centre Operations L4 |  | X | X |  |
| Ikhala         | Aliwal North | Science of Tourism L4        |  |   | X |  |
| Port Elizabeth | Russell Road | Science of Tourism L4        |  |   | X |  |

Some of the reasons for tasks not meeting all the quality indicators for cognitive demand were:

- Most tasks were compiled in a copy-and-paste exercise using previous examination papers;
- It appeared that lecturers were unable to develop practical tasks as no effort was made for creative responses or practical application;
- Lecturers did not use the four cognitive levels in Mathematical Literacy as per the SAG;
- Lecturers did not use the latest/correct SAG documents; and
- Not all lecturers were qualified to teach the subjects they were teaching and were, therefore, not subject matter experts.

To improve the cognitive demands of tasks, Umalusi recommends that colleges:

- Create new, innovative, challenging and authentic real-life related tasks by using current happenings, e.g., from newspapers, internet and other media, for students to extend their thinking/application of the subject and to understand how the subject relates to real life;
- Arrange workshops from which lecturers can learn to develop practical tasks, e.g., having students do research and investigations;
- Train Lecturers in the setting of quality assessment tasks and the correct use of analysis grids;
- Establish focus groups in all provinces so that lecturers can learn from each other and/or subject matter experts; and
- Appoint subject advisors in provinces to support and monitor curriculum delivery and assessment.

There was a general decline in the technical aspects of tasks compared with those of 2021, as can be seen in the following list:

- Seventy-four percent of the tasks were neatly typed and contained all relevant information. This was down 9% from 83% in 2021 and 6% from 80% in 2020;
- The instructions in the questions were clear and unambiguous 81% of the time, compared with 90% in 2021 and 80% in 2020;
- In 86% of the tasks the appropriate language and terminology was used, a slight decrease from the 94% of 2021 and the 91% of 2020;
- The marks in the task mirrored the marks allocated in the marking guideline in only 69% of the tasks (85% in 2021 and 88% in 2020). This was the one example where comparison with the previous two years showed a significant decline;
- The numbering was correct 89% of the time, compared with 91% in 2021 and 88% in 2020; and
- Time allocation was realistic and sufficient for 85% of the tasks, compared with 92% in 2021 and 89% in 2020.

Meeting the technical aspects quality indicator of tasks raised concern, as can be seen in the findings in Table 2K.

**Table 2K: College sites that met 50% or less of the technical aspects of tasks**

| TVET college        | Campus        | Subject                              |
|---------------------|---------------|--------------------------------------|
| Ekurhuleni East     | Springs       | Contact Centre Operations L4         |
| Eastcape Midlands   | Grahamstown   | Tourism Operations L4                |
|                     | High Street   | Tourism Operations L4                |
| Rostec              | Pretoria      | Life Skills and Computer Literacy L4 |
|                     | Johannesburg  | Life Skills and Computer Literacy L4 |
| Goldfields          | Welkom        | Food Preparation L3                  |
| Western             | Randfontein   | Graphic Design L4                    |
| Northern Cape Rural | Upington      | Food Preparation L3                  |
|                     | Kathu         | Food Preparation L3                  |
| Tshwane North       | Mamelodi      | Contact Centre Operations L4         |
| Nkangala            | Mpondozankomo | Professional Engineering L4          |
| South West Gauteng  | Dobsonville   | Graphic Design L3                    |
|                     |               | Graphic Design L4                    |
|                     | George Tabor  | Transport Operations L4              |
|                     |               | Transport Economics L4               |
| Taletso             | Lehurutshe    | Contact Centre Operations L4         |
| South West Gauteng  | George Tabor  | Governance L4                        |
| Ikhala              | Aliwal North  | Science of Tourism L4                |
| Ekurhuleni West     | Kempton       | Transport Operations L4              |

The quality indicator that proved to be the most difficult to meet was that of mark allocations, which did not correlate with those on the marking tool at 31% of the sites.

**Table 2L: College sites that produced and/or used quality tasks**

| TVET college        | Campus        | Subject                                |
|---------------------|---------------|--|
| Ekurhuleni West     | Alberton      | Management Practice L4                 |
|                     | Tembisa       | Operations Management L4               |
| Ekurhuleni East     | Benoni        | Management Practice L4                 |
|                     | Springs       | Marketing Communication L4             |
| Northern Cape Rural | Kuruman       | Life Skills and Computer Literacy L4   |
| Northern Cape Urban | Moremogolo    | English FAL L2                         |
|                     | City Campus   | Law of Procedures and Evidence L4      |
|                     |               | Client services and Human Relations L3 |
| Tshwane South       | Pretoria West | Entrepreneurship L2                    |
| Tshwane North       | Pretoria      | Operations Management L4               |
|                     | Soshanguve    | Transport Economics L4                 |
| Gert Sibande        | Evander       | Electrical Systems and Construction L4 |
|                     | Ermelo        | Financial Management L4                |
| Nkangala            | Witbank       | Electrical Systems and Construction L4 |
| Ehlanzeni           | Nelspruit     | Financial Management L4                |
|                     |               | Electrical Systems and Construction L4 |
|                     | Mlumati       | Financial Management L4                |
| South West Gauteng  | Roodepoort    | Operations Management L4               |
| Ekurhuleni West     | Kempton       | Transport Operations L4                |

Some of the challenges with the quality of the tasks included:

- No or incomplete cover pages (no details such as time allocation etc.);
- Tasks did not meet ICASS requirements or not all topics were covered;
- Tasks were not done in the right sequence and were weighted incorrectly;
- Inflated marks and/or incorrect mark allocations (e.g., two or more marks for single answers, true/false questions etc.);
- Tasks of previous years were repeated or were compiled from previous examination question papers; and
- Incorrect and/or unclear mark allocations.

The quality of the assessment tools, or marking guidelines, are discussed in the next section.

### 2.3.4 Assessment Tools and Marking Guidelines

There was a substantial decrease in the quality of the assessment tools in 2022. The following were the findings with regard to the design of assessment tools:

- The marking tools were relevant and appropriate at 68% of the sites, compared with 87% in 2021 and 85% in 2020;
- At 67% of the selected sites the marking guides used were clear and neatly typed, in comparison with 87% in 2021 and 77% in 2020;
- A clear indication of mark allocation within questions was evident at only 59% of sites, compared with 81% in 2021 and 74% in 2020; and
- The marking guidelines were easy to use at only 50% of the sites, which was a sharp decrease from 82% in 2021 and 73% in 2020.

It can be assumed that the sharp decline was due to using adapted tasks employed during the COVID-19 period (2020-2021).

Some of the identified problems with the marking tools were:

- a. No marking tools available;
- b. Incomplete marking tools;
- c. Wrong marking tool used;
- d. No, or poor, correlation between marks for task, marking tool and marked scripts;
- e. No correlation between numbering of task and numbering of marking tool;
- f. No/little correlation between mark allocation of tasks and marking tool;
- g. Incorrect/missing answers;
- h. Marking tool did not facilitate marking, e.g.,
- i. All answers not worded clearly, which made it difficult to mark objectively;
  - i. Alternative correct answers not credited (updated responses that emerged while assessing and have exhaustive possible responses); and
  - ii. Errors in marking tool/wrong answers.
- j. Inappropriate tool used (e.g., where a rubric could have been better or where answers were left to a marker's discretion); and
- k. No mark allocation/wrong mark allocation/wrong total.

Not all sites included assessment tools with their tasks. These are listed in Table 2M.

**Table 2M: Sites that did not submit assessment tools with tasks**

| TVET college           | Campus        | Subject                              |
|------------------------|---------------|--------------------------------------|
| Ekurhuleni East        | Daveyton      | Mathematics L4                       |
| Rostec                 | Pretoria      | Mathematical Literacy L4             |
|                        | Vereeniging   | Mathematical Literacy L4             |
| Goldfields             | Welkom        | Food Preparation L3                  |
| Western                | Randfontein   | Graphic Design L4                    |
|                        |               | Graphic Design L3                    |
| Northern Cape Rural    | De Aar        | Mathematical Literacy L3             |
|                        | Upington      | Food Preparation L3                  |
|                        | Kathu         | Food Preparation L3                  |
| Nkangala               | Mpondozankomo | Professional Engineering Practice L4 |
| South West Gauteng     | Dobsonville   | Graphic Design L4                    |
|                        |               | Graphic Design L3                    |
|                        | George Tabor  | Transport Operations L4              |
| King Sabata Dalindyebo | Mapuzi        | Tourism Operations L4                |
| Ikhala                 | Aliwal North  | Science of Tourism L4                |

Many omissions and mistakes that had been made in the design and implementation of the assessment tasks and tools could have been picked up during qualitative internal moderation. Feedback to assessors during pre- and post-assessment moderation could have improved the quality of tasks and student performance. This remained a weakness in the implementation and management of ICASS, as most sites showed little evidence of such moderation.

### 2.3.5 Internal Moderation

There was a general lack of internal moderation of the assessment tasks and tools; and of student evidence of performance/work.

### a) Pre-moderation (moderation of tasks prior to administration)

Despite an indication that pre-assessment moderation had taken place, often with the evidence of an internal moderator's checklist at 86% of the sites (76% in 2021 and 83% in 2020), this appeared to have been a paper exercise only, with little evidence presented.

There was evidence that relevant, qualitative feedback was given to the lecturers who set the tasks at 33% of the sites, compared with 37% in 2021 and 34% in 2020. The general lack of qualitative internal moderation of tasks at the colleges resulted in the poor assessment practices at the sites as described in the previous sections.

### b) Post-moderation (moderation of marking and student performance)

The required 10% of marked tasks were internally moderated at 73% of the sites, compared with 82% in 2021 and 79% in 2020.

Once again it was noted that when internal moderation of marking took place, it was a paper exercise of shadow marking, with mirroring of the ticks, crosses and mark allocations of the marker.

The internal moderator provided qualitative feedback to the assessor mark in only 28% of cases, compared with 41% in 2021 and 34% in 2020. Post-assessment moderation generally declined in 2022, as it appeared that less than a third of the colleges took internal moderation seriously. This was far from satisfactory.

The sites recorded for their good internal moderation practices are listed in Table 2N.

**Table 2N: Quality internal moderation in subjects at sites**

| TVET college        | Campus       | Subject                           |
|---------------------|--------------|-----------------------------------|
| Ekurhuleni West     | Alberton     | Management Practice L4            |
|                     | Tembisa      | Operations Management L4          |
| South West Gauteng  | Roodepoort   | Operations Management L4          |
|                     | Technisa     | Marketing Communication L4        |
| Rostec              | Vereeniging  | Governance L4                     |
| Western             | Randfontein  | Marketing Communication L4        |
| Ekurhuleni East     | Springs      | Marketing Communication L4        |
| Tshwane North       | Pretoria     | Operations Management L4          |
|                     | Soshanguve   | Transport Economics L4            |
|                     |              | Transport operations L4           |
| Northern Cape Urban | Moremogolo   | Law of Procedures and Evidence L4 |
| Sedibeng            | Sebokeng     | Management Practice L4            |
| Gert Sibande        | Ermelo       | Financial Management L4           |
| Nkangala            | Middelburg   | Financial Management L4           |
| Ehlanzeni           | Nelspruit    | Financial Management L4           |
|                     | Mlumati      | Financial Management L4           |
| Orbit               | Mankwe       | Transport Economics L4            |
| Port Elizabeth      | Russell Road | Tourism Operations L4             |
| Motheo              | Bloemfontein | Law of Procedures and Evidence L4 |



### 2.3.6 Implementation of PAT

The PAT were implemented at Level 3 and 4 in all the core subjects; therefore, not in the fundamentals, namely the Languages, Mathematical Literacy, Mathematics and both components of Life Skills and Computer Literacy.

This was the fifth year that the PAT had been implemented and the results were not encouraging. There was a slight decline in the correct implementation of PAT, as 60% of the selected sites implemented PAT according to the instructions, while in 2021 it was 62% and in 2020 75%.

At 72% of the sites the lecturer had a clear understanding of what was expected, compared with 58% in 2021 and 70% in 2020. The marking tool facilitated accurate marking 88% of the time, compared with 64% in 2021 and 75% in 2020. Internal moderation took place 76% of the time, compared with 58% in 2021 and 60% in 2020. The internal moderation was of an appropriate standard 78% of the time, while in 2021 this was 45% and in 2020 it was 59%.

At 14 (18%) of the sites, lecturers of some of the subjects did not understand the PAT and, therefore, provided no or poor guidance to students.

The main challenges in implementing PAT are described in Table 20.

**Table 20: Main challenges encountered with implementation of PAT**

| TVET college   | Campus                 | Subject                    | Subject                                |
|--|------------------------|----------------------------|--|
| No evidence of PAT being implemented or using the incorrect PAT  | Ehlanzeni              | Kanyamazane                | Professional Engineering Practice L4   |
|  | Nkangala               | Witbank                    | Electrical Systems and Construction L4 |
|  | Correctional           | Pretoria Central           | Operations Management L4               |
|  | King Hintsa            | Centane                    | Science of Tourism L4                  |
| Poor assessments because of lecturers not understanding the work | Ikhala                 | Aliwal North               | Science of Tourism L4                  |
|  | King Sabata Dalindyebo | Marketing Communication L4 | Marketing Communication L4             |
|  | Mapuzi                 | Tourism Operations L4      | Marketing Communication L4             |
|  | Taletso                | Lehurutshe                 | Contact Centre Operations L4           |
|  | Motheo                 | Bloemfontein               | Food Preparation L3                    |
|  | Port Elizabeth         | Russell Road               | Tourism Operations L3                  |
|  | Rostec                 | Johannesburg               | Governance L4                          |
|  | Buffalo City           | East London                | Science of Tourism L4                  |
|  |                        |                            | Sustainable Tourism L4                 |
|  | Eastcape Midlands      | Grahamstown                | Tourism Operations L4                  |
|  | South West Gauteng     | Dobsonville                | Graphic Design L3                      |
| Goldfields   | Welkom                 | Food Preparation L3        |  |

| TVET college                        | Campus       | Subject               | Subject                                |
|-------------------------------------|--------------|-----------------------|--|
| Insufficient/no internal moderation | Ehlanzeni    | Mapulaneng            | Construction Supervision L4            |
|                                     | Gert Sibande | Ermelo                | Financial Management L4                |
|                                     | Gert Sibande | Ermelo                | Financial Management L4                |
|                                     | Nkangala     | Middelburg            | Financial Management L4                |
|                                     | Ehlanzeni    | Mlumati               | Financial Management L4                |
|                                     |              | Nelspruit             | Electrical Systems and Construction L4 |
|                                     | Taletso      | Lehurutshe            | Contact Centre Operations L4           |
| King Sabata Dalindyebo              | Mapuzi       | Tourism Operations L4 |  |

## 2.3 Summary of Findings

### PART B. STUDENTS' PORTFOLIOS OF EVIDENCE

Campuses were each expected to submit five PoE containing specified information. Over the years, the requirements for the PoE have changed, from having to provide all of the following information or only some of it, in separate folders or envelopes.

Colleges have been allowed to choose which of the two options they want to use when submitting the evidence. However, some sites still deviate from the requirements to provide the following information:

- Table of contents;
- Student information;
- Student authenticity (ID and Declaration of Authenticity);
- Assessment schedule;
- Marked scripts or answer sheets for the prescribed number of ICASS tasks;
- Evidence of internal moderation; and
- Appropriate record of marks/results.

Table 2P indicates colleges and sites that did not have evidence of all the information required.

**Table 20: Main challenges encountered with implementation of PAT**

| TVET college        | Campus         | Subject                                |
|---------------------|----------------|--|
| Ekurhuleni West     | Boksburg       | Advertising and Promotions L4          |
|                     | Kempton        | Transport Economics L4                 |
| Motheo              | Bloemfontein   | Food Preparation L3                    |
|                     | Hillside View  | English FAL L4                         |
| Ekurhuleni East     | Benoni         | Management Practice L4                 |
|                     | Springs        | Contact Centre Operations L4           |
| Buffalo City        | East London    | Sustainable Tourism L4                 |
| Rostec              | Pretoria       | Governance L4                          |
|                     | Johannesburg   | Life Skills and Computer Literacy L4   |
|                     |                | Governance L4                          |
| Goldfields          | Welkom         | Food Preparation L3                    |
| Vuselela            | Klerksdorp     | Marketing Communication L4             |
|                     | Potchefstroom  | Human and Social Development L4        |
| Western             | Krugersdorp    | Mathematical Literacy L4               |
|                     | Randfontein    | Graphic Design L3                      |
|                     |                | Graphic Design L4                      |
|                     |                | Advertising and Promotions L4          |
| Correctional        | Pretoria       | Operations Management L4               |
| Northern Cape Rural | De Aar         | Mathematical Literacy L3               |
|                     |                | English FAL L2                         |
|                     | Kuruman        | English FAL L2                         |
|                     |                | Mathematical Literacy L3               |
|                     | Namaqualand    | Mathematical Literacy L3               |
|                     | Upington       | Client Services and Human Relations L4 |
|                     |                | Client Services and Human Relations L3 |
| Food Preparation L3 |                |  |
| Sedibeng            | Vanderbijlpark | Advertising and Promotions L4          |
| Flavius Mareka      | Kroonstad      | English FAL L4                         |
| Gert Sibande        | Sibanesetfu    | Construction Supervision L4            |
|                     | Evander        | Electrical Systems and Construction L4 |
|                     | Ermelo         | Financial Management L4                |
|                     | Balfour        | Construction Supervision L4            |
|                     | Standerton     | Professional Engineering L4            |
| Nkangala            | CN Mahlangu    | Construction Supervision L4            |
|                     | Mpondozankomo  | Engineering Practice L4                |

| TVET college         | Campus       | Subject                                |
|----------------------|--------------|--|
| Ehlanzeni            | Nelspruit    | Electrical Systems and Construction L4 |
|                      | Mapulaneng   | Electrical Systems and Construction L4 |
|                      |              | Construction Supervision L4            |
|                      | Mashishing   | Professional Engineering L4            |
|                      | Kanyamazane  | Professional Engineering L4            |
| Central Johannesburg | Langlaagte   | Management Practice L4                 |
| Rhodes Technical     | Johannesburg | Mathematical Literacy L4               |
|                      |              | Life Skills and Computer Literacy L4   |
| South West Gauteng   | Roodepoort   | Operations Management L4               |
|                      |              | Marketing Communication L4             |
|                      | George Tabor | Transport Economics L4                 |
|                      |              | Transport operations L4                |
|                      |              | Governance L4                          |
|                      | Molapo       | Life Skills and Computer Literacy L4   |
| Orbit                | Mankwe       | Transport Economics L4                 |
| Ikhala               | Aliwal North | Science of Tourism L4                  |
| Port Elizabeth       | Russell Road | Science of Tourism L4                  |
|                      |              | Tourism Operations L4                  |

Table 2Q: Both PoA and PoE of a high standard

| TVET college        | Campus       | Subject                              |
|---------------------|--------------|--------------------------------------|
| Ekurhuleni West     | Boksburg     | Mathematics L3                       |
|                     | Alberton     | Management Practice L4               |
|                     | Tembisa      | Operations Management L4             |
|                     | Kempton      | Transport Operations L4              |
|                     | Germiston    | Entrepreneurship L2                  |
| Motheo              | Bloemfontein | Law of Procedures and Evidence L4    |
| Ekurhuleni East     | Kwa-Thema    | Mathematics L3                       |
|                     | Springs      | Marketing Communication L4           |
| Maluti              | Harrismith   | English FAL L4                       |
| Goldfields          | Tosa         | English FAL L4                       |
| Eastcape Midlands   | Uitenhage    | Sustainable Tourism L4               |
|                     | Makhanda     | Sustainable Tourism L4               |
|                     | High Street  | Tourism Operations L4                |
| Western             | Krugersdorp  | Mathematics L3                       |
| Northern Cape Rural | De Aar       | Life Skills and Computer Literacy L4 |
|                     | Kuruman      | Life Skills and Computer Literacy L4 |

| TVET college         | Campus        | Subject                                |
|----------------------|---------------|--|
| Northern Cape Urban  | Moremogolo    | Mathematical Literacy L3               |
|                      |               | Life Skills and Computer Literacy L4   |
|                      |               | English FAL L2                         |
|                      | City          | Law of Procedures and Evidence L4      |
| Tshwane South        | Odi           | Client Services and Human Relations L4 |
|                      | Pretoria West | Mathematics L4                         |
| Tshwane North        | Pretoria      | Entrepreneurship L2                    |
|                      | Soshanguve    | Operations Management L4               |
|                      | Temba         | Transport Operations L4                |
| Sedibeng             | Heidelberg    | Mathematics L4                         |
|                      | Sebokeng      | Mathematics L3                         |
| Nkangala             | Witbank       | Management Practice L4                 |
|                      | Middelburg    | Electrical Systems and Construction L4 |
| Central Johannesburg | Alexandra     | Financial Management L4                |
|                      | Balfour       | Mathematics L4                         |
|                      | Standerton    | Construction Supervision L4            |
| Nkangala             | CN Mahlangu   | Professional Engineering L4            |
|                      | Mpondozankomo | Construction Supervision L4            |
|                      |               | Engineering Practice L4                |

### 2.3.7 Student Performance

Only 67% of the students, compared with 80% in 2021 and 87% in 2020, appeared to have interpreted and responded well to the assessment tasks; 71% of the marks allocated were a true reflection of student ability (compared with 75% in 2021 and 79% in 2020). Again, the impact of COVID-19 in 2021 and 2020 and the resultant adapted tasks might have played a role in the decline in 2022 (a “back to normal” academic year).

### 2.3.8 Standard of Marking

Marking was consistent with the marking guidelines at only 62% of the sites, compared with 71% in 2021 and 79% in 2020.

The standard of marking was acceptable at 65% of the sites, compared with 69% in 2021 and 78% in 2020, with qualitative and relevant feedback to students having taken place at a low 22% of sites, compared with 42% in 2021 and 28% in 2020. This essential part of the assessment process showed a sharp decline of 20%. With no feedback provided, it would be near impossible for students to realise where they made mistakes and how to improve their marks.

Some practices during the marking of assessments that led to a poor standard of marking were that markers/assessors:

- i. Deviated from the marking guideline;
- ii. Produced inconsistent or inaccurate marking;
- iii. Awarded marks per question; however, there were fewer ticks in the answer than the marks recorded;
- iv. Did not provide sub-totals for ticked answers;
- v. Engaged in negative marking, which is not prescribed by the guidelines;
- vi. Awarded additional marks or marked too leniently;
- vii. Added up marks incorrectly;
- viii. Did no, or incorrect, conversions;

- ix. Marked wrong answers correct and vice versa;
- x. Missed some questions or answers and did not award the marks; and
- xi. Added marks to the mark sheet that did not correlate with the evidence in the PoE.

The poor standard of marking was often as a result of poor marking guidelines or, in some instances, markers ignoring the marking guidelines altogether.

Most non-compliances should have been picked up by an internal moderator, as has been pointed out earlier in this report.

## 2.4. Areas of Improvement

The following areas of improvement were noted:

- a. The Central Johannesburg TVET College, Parktown Campus, made use of an irregularity register for ICASS/integrated summative assessment tasks (ISAT) that was completed after every assessment conducted for Entrepreneurship L2. They also used a Declaration of Verification: ICASS marks signed by both lecturer and subject head as proof on internal moderation;
- b. The Tshwane South TVET College, Pretoria West Campus, developed a case study for one of the assessments that generated opportunities to set diverse questions and challenged learners to be creative/innovative, for Entrepreneurship L2;
- c. The South West Gauteng TVET College, Roodepoort Campus, had evidence of reviews after each assessment that gave a good overall picture of challenges, for Human and Social Development L4;
- d. For the subject, Client Services and Human Relations L3 and L4, the Northern Cape Rural TVET College, Upington Campus, provided good feedback to students after assessments and the quality of internal moderation was good, without shadow marking;
- e. The Northern Cape Rural TVET College, Upington Campus, provided pictures of the practical task for Food Preparation L4;
- f. The Ekurhuleni West TVET College, Alberton Campus, and the Sedibeng TVET College, Sebokeng Campus, had well organised PoA and PoE and complied with ICASS guidelines for Management Practice L4;
- g. The marking guidelines of English FAL L2 at the Northern Cape Rural TVET College, both Kuruman and De Aar campuses, and Northern Cape Urban TVET College, Kimberley Campus, were of a high standard;
- h. The Taletso TVET College, Lehurutshe Campus, included an absenteeism declaration, an assessment schedule for monitoring and year-plan monitoring documents, which were good additions in the files; and
- i. The Eastcape Midlands TVET College campuses all made a concerted effort to standardise assessment tools, moderation processes and record keeping across campuses.

## 2.5 Areas of Non-Compliance

The areas of concern are outlined as follows:

### a. Assessment tasks:

- i. Tested mostly knowledge;
- ii. A lack of English language proficiency among lecturers contributed to poor phrasing of questions and answers;
- iii. No standard format was used for the setting of the assessment task (except when a previous paper was copied);
- iv. Marks on question papers and marking guidelines did not always match;
- v. PAT took the form of theoretical tests, especially for Level 2; and
- vi. Time allocation for tasks was not always appropriate.

### b. Analysis grids were not:

- i. Completed properly and did not show analysis of each sub-question; and
- ii. Were not used at all or were used incorrectly to set tests and tasks, thus failing to cover all cognitive levels, learning and subject outcomes. Few lecturers seemed to understand the three cognitive levels (knowledge, application and analysis) and sometimes used higher-level verbs in questions that generated answers testing only knowledge.

**c. Marking and marking guidelines:**

- i. Markers did not stick to marking guidelines; thus marking was inconsistent;
- ii. Mark allocation was often too lenient or was unclear, with additional marks awarded for single-answer questions;
- iii. Marking tools were not user friendly, followed the numbering of the task and indicated within questions where marks were to be allocated; and
- iv. Marks were not always accurately recorded, converted, weighted or transferred, as very little or no verification took place.

**d. Internal moderation at campus and college:**

- i. Shadow marking was evident, as the same marking mistakes and inconsistencies were made by both marker and moderator;
- ii. Little or no qualitative feedback to lecturer or student was evident at most colleges; and
- iii. The internal moderation process was largely ignored, as quality pre- and post-assessment moderation of tasks was not done effectively, if at all.

**e. PoE of students:**

- i. Documents were not filed/kept in the files/envelopes/boxes according to the ICASS guidelines; and
- ii. Cover pages for tasks were either missing or incomplete.

**f. PoA of lecturers:**

- i. Filed year-plan for college or campus was used, not the subject year-plan;
- ii. The latest version of the SAG was not used;
- iii. The importance of proper planning was generally ignored; the year and assessment plans were not used as working documents with updates as things happened/changed;
- iv. Tests and tasks were not undertaken throughout the year; some tests and the internal examination took place in October or later;
- v. Documents were not filed in the PoA according to the ICASS guidelines; and
- vi. Tasks were labelled inappropriately and filed haphazardly; not in the prescribed order;

**g. PAT:**

- i. Incorrect PAT and ISAT were used in some colleges; and
- ii. Students had more time to complete PAT and ISAT than is prescribed in PAT documents.

**h. Capturing of marks:**

- i. Marks were captured incorrectly, disadvantaging students;
- ii. There were no reassessments for students who were absent with valid reasons;
- iii. Software was not used for drawing or typing mathematical equations or illustrations for technical subjects;
- iv. Graphic Design lecturers did not have access to the computer programs required for assessments and PAT; and
- v. Unqualified lecturers were employed to teach subjects.

The 16 colleges in Table 2R were identified as requiring urgent intervention by the DHET, since one or more sites and/or subjects did not meet most of the criteria of the SAG and/or the ICASS guidelines for the NC(V).

Table 2Q: Both PoA and PoE of a high standard

| TVET college           | Campus        | Subject                                | Assistance needed  |
|------------------------|---------------|--|--|
| Ehlanzeni              | Mapulaneng    | Construction Supervision L4            | Setting of quality tasks<br>Compilation of PoA and PoE<br>Marking processes<br>Quality moderation    |
|                        | Kanyamazane   | Professional Engineering Practice L4   | Compilation of PoA and PoE   |
| Correctional Services  | Pretoria      | Operations Management L4               | Implementation of ICASS post-moderation<br>Compilation Of PoA and PoE                                |
| Western                | Randfontein   | Graphic Design L4                      | Setting of quality tasks   |
|                        |               | Graphic Design L3                      | Setting of quality tasks   |
| Motheo                 | Bloemfontein  | Food Preparation L3                    | Setting of quality tasks   |
|                        | Hillside View | English FAL L4                         | Setting of quality tasks (National Senior Certificate question paper was used)                       |
| Goldfields             | Welkom        | Food Preparation L3                    | Setting of quality tasks<br>Internal moderation<br>Develop analysis grid                             |
|                        | Tosa          | English FAL L4                         | Setting of quality tasks<br>Internal moderation<br>Develop analysis grid                             |
| Ekurhuleni East        | Daveyton      | Mathematics L4                         | Setting of quality tasks<br>Internal moderation<br>Develop analysis grid                             |
| Nkangala               | Mpondozankomo | Professional Engineering L4            | Setting of quality tasks<br>Internal moderation<br>Develop analysis grid                             |
|                        | Witbank       | Electrical Systems and Construction L4 | Wrong PAT used<br>Needs continuous monitoring  |
| King Sabata Dalindyebo | Mapuzi        | Tourism Operations L4                  | Setting of quality tasks<br>Incorrect implementation of PAT<br>Standard of marking<br>record keeping |
| South West Gauteng     | Dobsonville   | Graphic Design L3                      | Setting of quality tasks<br>Internal moderation<br>Develop analysis grid<br>Implementation of PAT    |
|                        |               | Graphic Design L4                      |  |
|                        | George Tabor  | Transport Operations L4                | Setting of quality tasks<br>Internal moderation<br>Develop analysis grid                             |
|                        |               | Transport Economics L4                 | Setting of quality tasks<br>Internal moderation<br>Develop analysis grid                             |



| TVET college        | Campus                            | Subject  | Assistance needed   |
|---------------------|-----------------------------------|--|---|
| Northern Cape Rural | Kathu                             | Food Preparation L3  | Setting of quality tasks<br>Internal moderation<br>Develop analysis grid  |
|                     | Upington                          | Food Preparation L3  | Setting of quality tasks<br>Internal moderation<br>Develop analysis grid  |
| Rhodes Technical    | Johannesburg                      | Mathematical Literacy L4   | Setting of quality tasks  |
| Central Gauteng     | Alexandra                         | Mathematics L4   | Setting of quality tasks  |
| Rostec              | Vereeniging                       | Mathematical Literacy L4   | Setting of quality tasks<br>Develop analysis grid   |
|                     | Pretoria                          | Mathematical Literacy L4   | Setting of quality tasks<br>Develop analysis grid   |
|                     |                                   | Life Skills and Computer Literacy L4                                     | Setting of quality tasks<br>Develop analysis grid   |
|                     | Johannesburg                      | Life Skills and Computer Literacy L4                                     | Setting of quality tasks<br>Develop analysis grid<br>Marking processes  |
|                     |                                   | Governance L4  | Used wrong SAG  |
| Bloemfontein        | Law of Procedures and Evidence L4 | Setting of quality tasks<br>Internal moderation<br>Develop analysis grid |   |
| King Hintsa         | Centane                           | Science of Tourism L4  | Setting of quality tasks<br>Internal moderation<br>Develop analysis grid<br>Marking processes                               |
| Ikhala              | Aliwal North                      | Science of Tourism L4  | Internal moderation<br>Develop analysis grid  |
| DRU-A               | Kimberley                         | English FAL L2   | Compilation of files<br>Developing a year-plan<br>ICASS and SAG<br>documentation<br>Awarding of marks (not true reflection) |

It should be noted that two subjects seem to be especially problematic at sites mentioned in Table 2R, i.e., Food Preparation L3 and Graphic Design L3 and L4. There should be some intervention to assist the lecturers and campuses.

## 2.6 Directives for Compliance and Improvement

Based on the findings described in this report, the following recommendations are made to improve the implementation of ICASS at the colleges:

The DHET is required to:

- a. Review the entire concept of PAT as its quality has declined steadily every year:
  - i. The PAT guidelines should be updated for most subjects;
  - ii. Questions should be at the correct cognitive levels; and
  - iii. More detailed marking tools, including checklists, are necessary.
- b. Add PAT for L2 and fundamental subjects (it is now the fourth year in which PAT are available for L3-L4 vocational subjects only);
- c. Introduce standardised assessment tasks and tools set by subject matter expert teams (from colleges) in all provinces for all TVET colleges, so that lecturers can learn from one another;
- d. Ensure that the managers of colleges monitor their campuses regularly to ensure that proper planning takes place; that the correct and appropriate documentation is filed in the relevant portfolios; that these are updated regularly;

- e. Sites not submitting their files for external moderation or who repeatedly submit files that do not meet the requirements of the SAG should be followed up;
- f. Ensure recommendations to colleges and sites are adhered to and impress on the college management teams that they are required to:
- i. Check that the senior lecturer or head of department of a programme/subject ensures that lecturers, examiners and internal moderators perform their work according to DHET policies, documentation and SAG;
- ii. Monitor the campuses to ensure that proper planning and scheduling of internal moderation takes place. The year-plan for a subject should be the academic and assessment plan that includes dates and content for teaching and learning. This should be a working document that is updated and is also to be used in planning for the following year;
- iii. Ensure that the assessment process is taken seriously and that qualitative internal moderation takes place regularly (preferably after each assessment) at campus and college level; and that reports of these moderations that take place are available;
- iv. Moderation of assessments at script level are taken very seriously and feedback to the examiner (person who set the assessment) is substantive and qualitative;
- v. Ensure that the correct, appropriate and latest versions of documentation are filed in the PoA and PoE and include only the prescribed documents from the DHET in PoA and PoE. Any other documents should be in the lecturer file;
- vi. Ensure that training and capacity building take place to ensure that assessment tasks and assessment tools that are set by lecturers meet all requirements, including the correct cognitive levels as per the SAG for each level;
- vii. Discourage lecturers from using previous examination papers verbatim as internal examination papers;
- viii. Use the analysis grid and complete it in detail when setting assessment tasks;
- ix. Ensure that standardised assessment tasks are instituted across campuses;
- x. Make sure that a system is put in place to verify the recording of marks in PoA, mark sheets etc.;
- xi. Make certain that only suitably qualified lecturers are appointed in all subjects and used as internal moderators. All lecturers who have to teach subjects that they are not familiar with need to be retrained, coached and monitored closely until they can comply with the new subject curriculum and guides;
- xii. Unfortunately in some subjects, the reason for poor assessment practices was that lecturers were not qualified to teach the subject they were appointed to teach, they did not know how to set quality assessments and they did not follow the prescriptions of the SAG as they had little or no experience or knowledge of the subject;
- xiii. Ensure that programmes are properly resourced to enable assessments and PAT, e.g., Graphic Design should have the relevant software programs;
- xiv. Check that the capturing of marks has been done correctly on all three platforms: lecturer mark sheet, students' record of assessment sheet and computer-generated marks, with raw marks, percentages and weighting values.

## 2.7 Conclusion

It remains a concern that the students at vocational and technical colleges do no, or insufficient, practical tasks.

The PAT did not take place as they should have and there remain many challenges in its implementation. These ranged from no PAT taking place at all, to lecturers not understanding what they were expected to do. Not all the problems were the fault of the colleges, as some of the standardised tasks and marking guidelines that they must implement are not of the appropriate standard and require urgent revision by the DHET.

There was a decline in most of the sections that make up of the conduct of ICASS. The assessment practices, namely the setting of the tasks and marking tools, marking practices and quality of internal moderation at campus and college levels, are still not receiving the full attention and dedication these functions deserve. The provision of relevant feedback, both to the lecturers who set the tests and tasks and to the students, is essential yet lacking at most sites. All these elements are critical since they determine students' results.

Although many colleges did make an effort to be compliant, there were too many that did not comply with the basic requirements of the SAG and ICASS. Unfortunately, it seems that these colleges do not care about teaching and learning and see external moderation as a superficial compliance check to be actioned just before external moderation is due to take place.

Fortunately, there were also many examples of good practice by lecturers in subjects and managers at college sites. These individuals and teams are applauded for the good work that they are doing.

# CHAPTER 3 MODERATION OF THE CONDUCT OF THE INTEGRATED SUMMATIVE ASSESSMENT TASKS AND PRACTICAL ASSESSMENT TASKS

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## 3.1 Introduction

Umalusi moderates the conduct of the integrated summative assessment tasks (ISAT) and practical assessment tasks (PAT) at sites where the National Certificate (Vocational) [NC(V)] level 2 (L2) to level 4 (L4) programmes are offered. The ISAT is a compulsory, practical component of the external summative assessment for vocational subjects in the NC(V), while the PAT is a compulsory, practical component of the internal continuous assessment (ICASS). The ISAT tests the skills and practice of cumulative practical learning achieved during the year. It constitutes 15% of the external summative assessment mark in the vocational subjects, while 35% is allocated to the year-end examinations. The NC(V) L2–L4 November 2022 PAT constitutes 25% of the ICASS mark and the remaining 25% is allocated to two internal assessments and one internal examination.

The ISAT and PAT evaluate the practical skills of students through the performance of assessment tasks. These tasks replicate, or simulate, a workplace or real-life process and/or product. The ISAT must be conducted under assessment conditions, which may take place either in phases throughout the year, during a specific period or as a once-off task, depending on the nature of the subject. On the other hand, the PAT constitutes two practical tasks that must be implemented as part of ICASS.

The purpose of the moderation of the conduct of the ISAT/PAT is to:

- a. Evaluate the planning for the conduct of the ISAT/PAT;
- b. Report on the appropriateness and standard of the assessment environment;
- c. Confirm whether proper assessment processes and procedures have been followed in the implementation of ISAT/PAT;
- d. Confirm whether candidates can demonstrate the acquired skills and competencies, and the knowledge underpinning the tasks;
- e. Verify the quality and standard of the assessment;
- f. Report on the consistency of the assessment and the maintenance of standards across different sites of delivery; and
- g. Make general observations on the conduct of the ISAT/PAT.

## 3.2 Scope and Approach

The moderation of the ISAT/PAT in 2022 focused on 16 NC(V) level 4 subjects, the final exit-level of the qualification. In addition, two subjects from NC(V) level 2 and two from NC(V) level 3 were included in the sample. In total, Umalusi moderated the conduct of the ISAT/PAT for 20 subjects at 18 sites across eight provinces. Umalusi selected sites that had not been visited previously, sites that had not been visited in the recent past (in the last three years) and sites that required follow-up visits arising from previous moderation processes where areas of non-compliance had been identified. Umalusi moderators verified students' competence in the ISAT/PAT by observing practical demonstrations and engaging in verbal discussions with a select sample of students at all sites visited.

Table 3A indicates the subjects and sites included in the monitoring and moderation of the conduct of the L2, L3 and L4 ISAT/PAT where the students' competence for the ISAT/PAT was verified through actual demonstrations by a select sample of students from the respective sites.

**Table 3A: Subjects and sites included in the moderation of the conduct of L2, L3 and L4 ISAT/PAT, where actual demonstrations of competency of selected students were undertaken**

| Subject                                       | Province      | College              | Campus/site                    |
|---|---------------|----------------------|--------------------------------|
| (Advanced) Plant Production L4                | Mpumalanga    | Ehlanzeni            | Mthimba                        |
| Animal Production L4                          | Limpopo       | Waterberg            | IT and Computer Science Centre |
| Applied Accounting L4                         | Gauteng       | South West Gauteng   | Dobsonville                    |
| Art and Science of Teaching L4                | Limpopo       | Capricorn            | Seshego                        |
| Business Practice L4                          | Western Cape  | College of Cape Town | Gugulethu                      |
| Civil and Structural Steel Work Detailing L4  | Gauteng       | Central Johannesburg | Ellis Park                     |
| Computer Programming L4                       | Western Cape  | False Bay            | Khayelitsha                    |
| Electrical Principles and Practice L4         | Gauteng       | Central Johannesburg | Ellis Park                     |
| Electrical Workmanship L3                     | Eastern Cape  | Lovedale             | Zwelitsha                      |
| Electronic Control and Digital Electronics L2 | Western Cape  | West Coast           | Atlantis                       |
| Farm Planning and Mechanisation L4            | Mpumalanga    | Ehlanzeni            | Mthimba                        |
| Governance L4                                 | Limpopo       | Rostec               | Polokwane                      |
| Hospitality Generics L4                       | Western Cape  | West Coast           | Malmesbury                     |
| Masonry L4                                    | KwaZulu-Natal | Coastal KZN          | Umlazi – Campus V              |
| Material Technology L3                        | North West    | Vuselela             | Potchefstroom                  |
| Plant and Equipment L2                        | Gauteng       | Tshwane South        | Atteridgeville                 |
| Process Technology L4                         | Gauteng       | Ekurhuleni East      | Kwa-Thema                      |
| Professional Engineering Practice L4          | Free State    | Maluti               | Itemoheleng                    |
| Systems Analysis and Design L4                | Gauteng       | Ekurhuleni West      | Lazarus Nhlapo                 |
| Transport Operations L4                       | North West    | Orbit                | Mankwe                         |

### 3.3 Summary of Findings

The findings of the ISAT/PAT conducted at the various sites are indicated in Tables 3B to 3J, by criteria, as per Umalusi's monitoring instrument for the ISAT/PAT conduct.

#### 3.3.1 Planning for the Conduct of ISAT/PAT

Thorough planning is crucial for the successful implementation of the PAT/ISAT. It is the responsibility of individual colleges to plan and prepare effectively for the conduct of the ISAT/PAT, taking into consideration factors such as availability of resources/facilities, the number of students, staffing requirements, staff competency, procurement procedures and timing of tasks.

Umalusi noted with concern the planning and preparation for PAT/ISAT at some of the visited sites that were hampered by challenges such as inadequate facilities and equipment, defective equipment, shortages of components/livestock/consumables, difficulties with procurement, unsafe conditions, staff incompetence and student unrest. There were sites where staff did not have a clear understanding of the expectations of the PAT/ISAT and were unlikely to plan and prepare advantageously.

The contingency measures undertaken by some colleges to complete the ISAT/PAT on time included:

- Sites improvised by arranging for group work where individual work was required;
- Modifying the specifications of the ISAT/PAT to complete it on time;

- c. Substituting required components/consumables with available resources to complete the ISAT/PAT; and
- d. Having students complete sub-tasks without supervision when some of these should have been done under assessment conditions, per ISAT requirements.

Table 3B indicates planning challenges in the sampled subjects

**Table 3B: Planning challenges in sampled subjects**

| Aspects   |  | ISAT/PAT                                      | Campus/site |
|---|--|---|-------------|
| Receipt and distribution of PAT/ ISAT to colleges | <ul style="list-style-type: none"> <li>• The latest ISAT for all 20 (100%) subjects included in the moderation of the conduct of L2, L3 and L4 ISAT/PAT were available at the respective sites visited and these were used for the 2022 examinations.</li> </ul>   |   |             |
| A clear understanding of the expectations of ISAT | <ul style="list-style-type: none"> <li>• Lecturers had a clear understanding of what was expected from the ISAT in 15 (75%) of the 20 sampled subjects; and</li> <li>• In five (25%) of the listed subjects below, lecturers did not clearly understand the expectations of the ISAT:</li> </ul>   |   |             |
|   | <ul style="list-style-type: none"> <li>• The lecturer was not aware that sub-tasks had to be conducted under examination conditions;</li> <li>• Nevertheless, all other requirements of the ISAT were adhered to, except the instruction regarding assessment conditions.</li> </ul>   | Art and Science of Teaching L4                | Seshego     |
|   | <ul style="list-style-type: none"> <li>• The marking/scoring of the assessment was not done according to the ISAT requirements; and</li> <li>• Students were awarded marks for answers / responses plagiarised from internet sites.</li> </ul>   | Business Practice L4                          | Gugulethu   |
|   | <ul style="list-style-type: none"> <li>• The ISAT Instructions were not strictly adhered to;</li> <li>• All students wrote the same values of measurement taken from the marking guideline; and</li> <li>• In other instances, students wrote down the same answers/responses where individual reasoning and responses were required.</li> </ul>   | Electrical Principles and Practice L4         | Ellis Park  |
|   | <ul style="list-style-type: none"> <li>• The lecturer commenced duty in May 2022, with no previous Technical and Vocational Education and Training (TVET) experience and was familiarising himself/herself with the new environment;</li> <li>• The planning and preparation for the conduct of the ISAT could be much improved if the ISAT was carefully unpacked and the requirements adhered to;</li> <li>• Both lecturer and students were required to read the documents entirely before commencing with the task and this was not done; and</li> <li>• The ISAT should be viewed holistically so the lecturer and students can establish what is required when it is required and how to arrive at the intended result.</li> </ul> | Electronic Control and Digital Electronics L2 | Atlantis    |

| Aspects                                      |  | ISAT/PAT                              | Campus/site                    |
|--|--|---------------------------------------|--------------------------------|
|  | <ul style="list-style-type: none"> <li>The lecturer did not adhere to all the ISAT instructions; and also misinterpreted the quality indicators on the checklist when marking/scoring the assessments of students;</li> <li>The checklist speaks to the link between the three sub-tasks; advertisement, job description and whether the candidate meets the requirements, if not what he/she has to do to qualify for the job;</li> <li>Nonetheless, the lecturer assessed the sub-tasks as independent tasks, with no consideration for the link between the sub-tasks as required by the ISAT/checklist. This practice influenced the marking/scoring of the ISAT.</li> </ul> | Hospitality Generics L4               | Malmesbury                     |
| Inadequate/inappropriate Facilities          | In only one (5%) of the sampled subjects listed below were facilities at the visited site inadequate for the ISAT:   |                                       |                                |
|  | <ul style="list-style-type: none"> <li>Non-availability of a milking parlour on site.</li> </ul>   | Animal Production L4                  | IT and Computer Science Centre |
| Shortage of tools/ livestock/ consumables    | In two (10%) of the sampled subjects tools/livestock/consumables at the visited sites were insufficient for the ISAT:  |                                       |                                |
|  | <ul style="list-style-type: none"> <li>Livestock and consumables were not sufficient for all students in the programme to conduct the tasks individually.</li> </ul>   | Animal Production L4                  | IT and Computer Science Centre |
|  | <ul style="list-style-type: none"> <li>Due to a shortage of tools and consumables, individual tasks were done as group work.</li> </ul>  | Electrical Workmanship L3             | Zwelitsha                      |
| Use of substitutes                           | At one of the visited sites substitute tools were used in one (5%) of the sampled subjects to complete the ISAT:   |                                       |                                |
|  | <ul style="list-style-type: none"> <li>Breadboards were used in place of Veroboards. These did not serve the intended purpose, other than being passed on after use from one student to another. Veroboards have limited use but would have correctly served the requirements of the ISAT.</li> </ul>  | Electrical Principles and Practice L4 | Ellis Park                     |
| Defective equipment                          | In two (10%) of the sampled subjects the equipment required for the ISAT was not in working order at the visited sites:  |                                       |                                |
|  | <ul style="list-style-type: none"> <li>The mobile milking machine at the campus was not in working order.</li> </ul>   | Animal Production L4                  | IT and Computer Science Centre |
|  | <ul style="list-style-type: none"> <li>Multi-meters were not in sound working order as the voltmeter could not measure mil volts. The measurements were not stable; hence it was difficult to get the values, as required by the ISAT</li> </ul>   | Electrical Principles and Practice L4 | Ellis Park                     |
| difficulties with Procurement of consumables | In three (15%) of the sampled subjects, listed below, the procurement of consumables for the ISAT was declined/delayed at the visited sites:   |                                       |                                |
|  | <ul style="list-style-type: none"> <li>The request for laminated copper wire required for the ISAT was declined by the procurement department as it was deemed costly; and</li> <li>Students were given a piece of laminated copper wire that was sufficient to make a single inductor. All 35 students used the same inductor.</li> </ul>   | Electrical Principles and Practice L4 | Ellis Park                     |



| Aspects                                     |  | ISAT/PAT                             | Campus/site       |
|---|--|--------------------------------------|-------------------|
|   | <ul style="list-style-type: none"> <li>The equipment/ consumables for the ISAT arrived late.</li> </ul>  | Masonry L4                           | Umlazi – Campus V |
|   | <ul style="list-style-type: none"> <li>The different types of steel required for the PAT 1 and 2 were not acquired due to high costs.</li> </ul>   | Material Technology L3               | Potchefstroom     |
| Student unrest                              | <ul style="list-style-type: none"> <li>At one site student unrest affected planning and preparation for the ISAT/PAT, causing delays and postponement of the ISAT/PAT.</li> </ul>  | Electrical Workmanship L3            | Zwelitsha         |
| Housekeeping/ health and safety regulations | Conditions at the visited sites were unsafe and not conducive to teaching and learning in two of the sampled subjects, as listed below:  |                                      |                   |
|   | <ul style="list-style-type: none"> <li>The location at which some of the tasks were conducted was left untidy and not conducive to teaching and learning; and</li> <li>Furthermore, it posed a safety hazard to persons in that environment.</li> </ul>  | Plant and Equipment L2               | Atteridgeville    |
|   | <ul style="list-style-type: none"> <li>The workshop was in appalling condition and in urgent need of housekeeping; and</li> <li>Health and safety regulations were grossly violated, as:               <ol style="list-style-type: none"> <li>Materials were lying around;</li> <li>Electrical boxes had no covers and live wires were hanging out; and</li> <li>Gas cylinders were placed inside the workshop. Per health and safety regulations, these should have been placed in a well-ventilated cubicle outside the workshop.</li> </ol> </li> </ul> | Professional Engineering Practice L4 | Itemoheleng       |

### 3.3.2 Implementation of the Conduct of ISAT/PAT

The ISAT was partially completed for one (5%) of the sampled subjects at the time of the Umalusi visit (Table 3C).

**Table 3C: Incomplete ISAT at the time of Umalusi's visit**

| Aspects   | Findings and challenges   | ISAT   | Campus/site |
|---|---|--|-------------|
| Subjects and sites in which the ISAT was incomplete at the time of Umalusi's visit. | <ul style="list-style-type: none"> <li>The ISAT was in progress:               <ol style="list-style-type: none"> <li>Sub-tasks 1 and 2 were completed under examination conditions;</li> <li>Sub-task 3 was in progress; and</li> <li>Sub-task 4 was to follow once sub-task 3 was completed.</li> </ol> </li> </ul> | Civil and Structural Steel Work Detailing L4 | Ellis Park  |

In 80% of subjects the ISAT was completed according to specification, as shown in Table 3D.

**Table 3D: Subjects in which the ISAT was completed according to specification**

| ISAT  | Campus/site       |
|---|-------------------|
| (Advanced) Plant Production L4                | Mthimba           |
| Applied Accounting L4                         | Dobsonville       |
| Business Practice L4                          | Gugulethu         |
| Computer Programming L4                       | Khayelitsha       |
| Electrical Workmanship L3                     | Zwelitsha         |
| Electronic Control and Digital Electronics L2 | Atlantis          |
| Farm Planning and Mechanisation L4            | Mthimba           |
| Governance L4                                 | Polokwane         |
| Hospitality Generics L4                       | Malmesbury        |
| Masonry L4                                    | Umlazi – Campus V |
| Material Technology L3                        | Potchefstroom     |
| Plant and Equipment L2                        | Atteridgeville    |
| Process Technology L4                         | Kwa-Thema         |
| Professional Engineering Practice L4          | Itemoheleng       |
| Systems Analysis and Design L4                | Lazarus Nhlapo    |
| Transport Operations L4                       | Mankwe            |

While 80% of the ISAT were conducted appropriately, others were not; as is evident from the findings and recommendations provided in the ISAT reports, as captured in Table 3E.

**Table 3C: Incomplete ISAT at the time of Umalusi’s visit**

| Aspects                                 |  | ISAT   | Campus/site                    |
|---|--|--|--------------------------------|
| Adherence to specifications of ISAT/PAT | In 80% of sampled subjects the ISAT were conducted in an appropriate manner, in one subject the ISAT was in progress at one of the visited sites and in three (15%) subjects, there were deviations from the requirements of the ISAT:   |  |                                |
|   | <ul style="list-style-type: none"> <li>The ISAT for one subject was in progress at the time of the Umalusi visit.</li> </ul>   | Civil and Structural Steel Work Detailing L4 | Ellis Park                     |
|   | <ul style="list-style-type: none"> <li>Sub-tasks requiring individual work were done in groups;</li> <li>Moreover, it was not possible to conduct sub-tasks under strict examination conditions (where required) because of group work; and</li> <li>Parts of sub-tasks 1 and 2, which entailed practical work, were done as theoretical exercises.</li> </ul> | Animal Production L4                         | IT and Computer Science Centre |
|   | <ul style="list-style-type: none"> <li>Most of the requirements of the ISAT were adhered to, except the instruction regarding assessment conditions. Students worked unsupervised on sub-tasks that should have been done under strict examination conditions.</li> </ul>  | Art and Science of Teaching L4               | Seshego                        |



| Aspects |   | ISAT                                  | Campus/site |
|---------|---|---------------------------------------|-------------|
|         | <ul style="list-style-type: none"> <li>The ISAT required individual work but group work was done;</li> <li>The construction of the inductor was not according to ISAT specifications. Students did not do their measurements but were given values from the Department of Higher Education and Training (DHET) marking guideline;</li> <li>Sub-tasks that required students to write their findings and reasoning were not possible with group work; and</li> <li>Part of the sub-task that required students to solder components was not done.</li> </ul> | Electrical Principles and Practice L4 | Ellis Park  |

During the Umalusi moderation of the conduct of ISAT/PAT, irregularities of a serious nature were identified in five of the sampled subjects at the visited sites.

To address the matter and to ensure that the level of ISAT/PAT was raised to an acceptable standard, Umalusi communicated with the respective sites in this regard.

Formal correspondence, outlining the irregularities/concerns was addressed to the senior management of the respective colleges requesting them to investigate Umalusi's findings, propose resolutions, provide workable strategies to prevent future occurrence of such irregularities and revert to Umalusi with a comprehensive report thereof. The reports from these colleges were received, perused and the matter was resolved.

Table 3F provides a list of subjects and the campuses/sites implicated.

**Table 3F: ISAT/PAT which necessitated interventions by Umalusi**

| Findings and challenges identified by Umalusi  | Resolutions/ actions by campus/college   | ISAT/PAT          | Campus/ site and manager  |
|--|--|-------------------|---|
| <ul style="list-style-type: none"> <li>The practical assessment was conducted as a theoretical assignment, due to a lack of resources and lecturer apathy.</li> <li>The lecturer followed the modified ISAT format, which was used during the pandemic. He/ she should have reverted to the standard ISAT requirements post-pandemic, but this was not the case.</li> <li>Moderation of the conduct of the ISAT was not possible as the assessment was done theoretically.</li> <li>The ISAT was conducted in groups when individual work was required.</li> </ul> | <ul style="list-style-type: none"> <li>The college management took the following actions/ resolutions:               <ol style="list-style-type: none"> <li>Disciplinary action against implicated staff;</li> <li>Proactive planning and preparation for PAT/ISAT by management and lecturers in charge;</li> <li>Collaboration with outside institutions by senior management to facilitate access to their facilities; and</li> <li>Vigilance and commitment on the part of campus management and staff to ensure full compliance regarding future ISAT.</li> </ol> </li> </ul> | Animal Production | IT and Computer Science Centre Deputy Principal Academic Services |

| Findings and challenges identified by Umalusi  | Resolutions/ actions by campus/college  | ISAT/PAT                              | Campus/ site and manager         |
|--|---|---------------------------------------|----------------------------------|
| <ul style="list-style-type: none"> <li>No moderation was done during the conducting of ISAT, due to moderator non-availability. The moderator was conducting practical activities in another workshop at the time of the ISAT.</li> <li>However, six students were selected and requested to re-do the ISAT to verify the given assessment marks, which were then moderated.</li> <li>Group work was done where individual work was required.</li> <li>The ISAT tasks were modified due to a lack of resources.</li> </ul> | <ul style="list-style-type: none"> <li>In the future, campus management will ensure that the two workshops and the lecturers involved are appropriately scheduled;</li> <li>The college will procure sufficient materials/ consumables for the ISAT to ensure group work (where individual work is required) and modification of tasks are prevented in the future;</li> <li>College management recommended that re-marking and moderation would make a difference to the discrepancies in marking; and</li> <li>A detailed plan for re-marking and moderation of the ISAT was provided by college management.</li> </ul> | Electrical Principles and Practice L4 | Ellis Park Acting Campus Manager |
| <ul style="list-style-type: none"> <li>The ISAT was conducted in groups where individual work was required.</li> <li>The rollout plan was not available on site.</li> <li>There was no evidence of moderation of the ISAT on site.</li> <li>Due to strike action by students the ISAT was postponed from April / May to 10–14 October 2022.</li> <li>To complete the ISAT on time 43 students were placed in groups of eight and all three sub-tasks were done in one sitting.</li> </ul>                                  | <ul style="list-style-type: none"> <li>The college intends increasing resources for the subject by purchasing more breadboards;</li> <li>The rollout plan was available in the lecturer's portfolio files, which were submitted to the college for moderation;</li> <li>According to the campus manager, the moderation of the product took place on 19 October 2022 and not on 17 October 2022, as per the roll out plan; and</li> <li>The management pledges that, in future, completed ISAT projects will be captured in video format and preserved for three years as proof of evidence.</li> </ul>                   | Electrical Workmanship L3             | Zwelitsha Campus Manager         |

| Findings and challenges identified by Umalusi   | Resolutions/ actions by campus/college   | ISAT/PAT   | Campus/ site and manager          |
|---|--|------------|-----------------------------------|
| <ul style="list-style-type: none"> <li>• The ISAT was conducted in groups where individual work was required.</li> <li>• Evidence of the conducting of the ISAT and evidence of moderation were not available on site.</li> </ul> | <ul style="list-style-type: none"> <li>• The college management cited the following mitigating factors in respect of irregularities identified by Umalusi:               <ol style="list-style-type: none"> <li>i. The college was placed under the administration of DHET and during this period, delays in procurement were encountered;</li> <li>ii. The available resources were not sufficient for all students undertaking the ISAT; therefore, the ISAT was done as group work; and</li> <li>iii. The college camera was not in working order, therefore photographic evidence of the conducting of the ISAT was not available.</li> </ol> </li> <li>• The following resolutions were undertaken by the college management to address the non- compliance:               <ol style="list-style-type: none"> <li>i. Sub-tasks 1 and 2 were re-done and photographic evidence was forwarded to Umalusi as proof;</li> <li>ii. Moderation of the ISAT conduct was done when the sub-tasks were re-done;</li> <li>iii. A schedule of the sub-tasks to be re-done was provided by college management;</li> <li>iv. The lecturer's portfolio of assessment (POA) and students' portfolio of evidence (POE) were reorganised; and</li> <li>v. In the future, management will ensure that procurement of all resources for the ISAT is timely and that moderation is done.</li> </ol> </li> </ul> | Masonry L4 | Umlazi – V Interim Campus Manager |

| Findings and challenges identified by Umalusi  | Resolutions/ actions by campus/college   | ISAT/PAT                       | Campus/ site and manager                               |
|--|--|--------------------------------|--|
| <ul style="list-style-type: none"> <li>From the ISAT that was externally moderated, it was evident that the majority of the students had copied answers from fellow students.</li> </ul> | <ul style="list-style-type: none"> <li>College management investigations revealed the following:               <ol style="list-style-type: none"> <li>That 29 of the 48 students alleged to have copied;</li> <li>The marking of the assessments by the lecturer was of poor quality and the copied answers /responses were overlooked, giving the students undue advantage; and</li> <li>Shadow moderation by the moderator served no purpose, as the anomalies were rubber-stamped.</li> </ol> </li> <li>To address the irregularities identified by Umalusi; college management took the following actions /resolutions:               <ol style="list-style-type: none"> <li>Appropriate steps (as per DHET guidelines) were taken in handling irregularities;</li> <li>Marks were re-moderated and re-verified and captured on the mark sheet by college staff;</li> <li>College management instituted disciplinary action against personnel involved in the marking, moderation and supervision of the ISAT; and</li> <li>In future, the Academic Division will intensify its monitoring of ISAT conduct and ensure that there is no recurrence of such irregularities.</li> </ol> </li> </ul> | Systems Analysis and Design L4 | Lazarus Nhlapo<br>Acting Deputy Principal<br>Academics |

The assessment tool should provide clarity on what is expected of the candidate and how marks/scores are to be awarded for different levels of competence. Some marking/scoring tools did not allow for fair marking/scoring of the competency of the task. The subjects in which difficulties were experienced with marking/scoring tools are captured in Table 3G.

**Table 3G: Subjects in which difficulties were experienced with the marking/scoring tools**

| Aspects                   | Findings and challenges  | ISAT                           |
|---------------------------|--|--------------------------------|
| Scoring/<br>marking tools | Some of the marking tools were not appropriately designed for assessing the competency of the task.  |                                |
|                           | <ul style="list-style-type: none"> <li>Ten marks were allocated for research; the distribution of which was left to the discretion of the assessor/lecturer.</li> </ul>  | Art and Science of Teaching L4 |
|                           | <ul style="list-style-type: none"> <li>With too many templates being used for the assessment, the instructions became cumbersome;</li> <li>Sixteen marks allocated to the advertisement was not commensurate with the task;</li> <li>Goals 1 to 3 on the personal development plan were repetitive (especially the resources and support persons). The repetition in this sub-task provided bonus marks to students, thus inflating the ISAT marks overall.</li> </ul> | Hospitality Generics L4        |
|                           | <ul style="list-style-type: none"> <li>The structure of the assessment tools allowed for lenient marking.</li> </ul>   | Plant and Equipment L2         |
|                           | <ul style="list-style-type: none"> <li>Too many marks were allocated for the development of slides and the presentation thereof.</li> </ul>  | Transport Operations L4        |

The marking/scoring of the competency of the task in eight (40%) of the 20 sampled subjects was inappropriate. Inappropriate marking/scoring was attributed to, among others, poorly designed marking/scoring tools, failure to adhere to the marking/scoring tools, subjective and inconsistent marking/scoring, lenient marking/scoring, careless marking/scoring and the modification of tasks, which resulted in mismatches with the marking/scoring tools. These findings are reflected in Table 3H.

**Table 3H: Subjects in which the marking/scoring was inappropriate**

| Aspects          | Findings and challenges  | ISAT                           | Campus/<br>site                                  |
|------------------|--|--------------------------------|--|
| Marking/ scoring | The marking/scoring was not appropriate and/or not a true reflection of candidates' competence, skills, understanding or insight in eight (40%) of the 20 subjects, listed below:  | Systems Analysis and Design L4 | Lazarus Nhlapo Acting Deputy Principal Academics |
|                  | <ul style="list-style-type: none"> <li>The marking/scoring was done on a theoretical assignment, as opposed to the practical task required by the ISAT; and</li> <li>The candidates' individual competence was not assessed and all members of the group were awarded the same mark/ score.</li> <li>Plagiarism from internet sites was rife. Information downloaded from the internet was passed off as students' own work. These were marked favourably by the lecturer, leading to unjustified high marks.</li> </ul> | Animal Production L4           | IT and Computer Science Centre                   |

| Aspects | Findings and challenges   | ISAT                                  | Campus/site    |
|---------|---|---------------------------------------|----------------|
|         | <ul style="list-style-type: none"> <li>Unauthorised group work did not facilitate sub-tasks that required individual findings and reasoning;</li> <li>Marking was lenient and students scored overly high marks. There was a <math>\pm 20\%</math> discrepancy between the internal and external moderator's marks;</li> <li>Calculations for 12 marks were flawed, as students were given values of measurement from the marking guideline and not the measured values as required by the ISAT; and</li> <li>The sub-task requiring the soldering of components was not done, but students were awarded marks for sub-tasks on soldering.</li> </ul> | Electrical Principles and Practice L4 | Ellis Park     |
|         | <ul style="list-style-type: none"> <li>The lecturer did not complete the rubric when assessing the students.</li> </ul>   | Governance L4                         | Polokwane      |
|         | <ul style="list-style-type: none"> <li>The lecturer misinterpreted some parts of the ISAT instructions (checklist) and marked the students according to their own understanding; and</li> <li>The misinterpretation led to inflated marks. Students with incorrect responses were not penalised, hence there were discrepancies of up to 7% between the internal and external moderators' marks.</li> </ul>   | Hospitality Generics L4               | Malmesbury     |
|         | <ul style="list-style-type: none"> <li>Lenient marking led to inflated marks; and</li> <li>During the practical assessment the lecturer inadvertently assisted students in attaining the correct answer/s.</li> </ul>   | Plant and Equipment L2                | Atteridgeville |
|         | <ul style="list-style-type: none"> <li>Lenient marking;</li> <li>There was a discrepancy of <math>\pm 16\%</math> between the marks of the internal and the external moderator; and</li> <li>Marks were awarded for generic information (taken from the internet) that was not related to the business/company researched.</li> </ul>   | Transport Operations L4               | Mankwe         |
|         | <ul style="list-style-type: none"> <li>It was evident from the externally moderated ISAT that most students copied answers from fellow students.</li> </ul>   | Systems Analysis and Design L4        | Lazarus Nhlapo |

### 3.3.3 Internal Moderation of ISAT

Internal moderation was conducted in 15 (75%) of the sampled subjects; and most of the internal moderation took place at campus level. In seven (35%) subjects, the moderation of the end product was implemented and in eight (40%) subjects, the moderation of both the conduct and end product. In five (25%) subjects, moderation had not taken place, or evidence of internal moderation of ISAT was not available, at the time of the Umalusi visit (Table 3I).

**Table 3I: Subjects and sites where no moderation had taken place, or evidence of internal moderation of ISAT was not available, at the time of the Umalusi visit**

| ISAT                      | Campus/site                    |
|---------------------------|--------------------------------|
| Animal Production L4      | IT and Computer Science Centre |
| Electrical Workmanship L3 | Zwelitsha                      |
| Hospitality Generics L4   | Malmesbury                     |
| Masonry L4                | Umlazi – Campus V              |
| Plant and Equipment L2    | Atteridgeville                 |

Table 3J indicates the subjects and different methods of internal moderation used at various campuses.

**Table 3J: Subjects and types of internal moderation conducted**

| Types of moderation               | Subject                                       | Campus/site    |
|-----------------------------------|---|----------------|
| Moderation of product             | Applied Accounting L4                         | Dobsonville    |
|                                   | Art and Science of Teaching L4                | Seshego        |
|                                   | Business Practice L4                          | Gugulethu      |
|                                   | Computer Programming L4                       | Khayelitsha    |
|                                   | Electrical Principles and Practice L4         | Ellis Park     |
|                                   | Professional Engineering Practice L4          | Itemoheleng    |
|                                   | Systems Analysis and Design L4                | Lazarus Nhlapo |
| Moderation of conduct and product | (Advanced) Plant Production L4                | Mthimba        |
|                                   | Civil and Structural Steel Work Detailing L4  | Ellis Park     |
|                                   | Electronic Control and Digital Electronics L2 | Atlantis       |
|                                   | Farm Planning and Mechanisation L4            | Mthimba        |
|                                   | Governance L4                                 | Polokwane      |
|                                   | Material Technology L3                        | Potchefstroom  |
|                                   | Process Technology L4                         | Kwa-Thema      |
|                                   | Transport Operations L4                       | Mankwe         |

### 3.4 Areas of Improvement

During the external moderation of the conduct of the ISAT/PAT for the 2022 examination, some areas of improvement were noted:

- In 16 (80%) of the sampled subjects the ISAT was completed according to specifications; and
- The marking/scoring of the competency of the task in 12 (60%) of the 20 sampled subjects was appropriate.

### 3.5 Areas of Non-Compliance

The external moderators' reports from the moderation of the conduct of the ISAT/PAT revealed some challenges and areas of non-compliance.

#### 3.5.1 Planning

The following challenges were experienced in some of the sampled subjects during the planning stages of the ISAT:

- a. Difficulties with procurement, inadequate/inappropriate facilities, defective equipment and shortages of equipment, components, tools, livestock and consumables were evidence of poor planning. These did not facilitate the effective implementation of the PAT/ISAT in five subjects;
- b. Student unrest caused delays in the planning and preparation for the PAT/ISAT in one subject; and
- c. In two subjects, students were performing the PAT/ISAT in unsafe environments (non-compliance with health and safety regulations and poor housekeeping) that could expose self/persons/property to danger or harm.

#### 3.5.2 Implementation of ISAT

In four (20%) of the 20 sampled subjects, tasks and sub-tasks were not completed according to the specifications of the ISAT/PAT. The following were some of the issues that influenced the conduct of the ISAT/PAT at some of the visited sites:

- a. In four subjects sites improvised by arranging for group work where individual work was required;
- b. The specifications of the ISAT/PAT for three subjects were modified at visited sites where resources were lacking;
- c. Lecturer apathy and lack of commitment in one subject at one site impacted negatively on the conducting of the ISAT;
- d. The required components/consumables for the ISAT/PAT in one subject were substituted with available resources;
- e. In two subjects the required components/consumables for the ISAT were not procured due to high costs. The sites implicated improvised by modifying the tasks;
- f. In one subject students worked unsupervised on sub-tasks that should have been done under strict examination conditions;
- g. In tasks where internet research was required some students plagiarised internet sites. This occurred in two subjects; and
- h. Planning and preparation in one subject were disrupted by student-led strike action, which compelled the campus to conduct the entire ISAT in one sitting.

#### 3.5.3 Quality and Standard of Marking and Scoring

The quality and standard of marking/scoring were not appropriate in eight (40%) of the 20 subjects sampled for moderation of the conduct of the ISAT/PAT:

- a. Where modifications were made to the ISAT and where there were deviations from the specifications of the tasks, inconsistent marking/scoring occurred;
- b. The assessment tools did not support accurate marking/scoring of the competency of the task in four (20%) of the moderated ISAT;
- c. Flawed rubrics/marketing tools led to subjective and lenient marking;
- d. Careless marking/scoring and a failure to adhere to the marking/scoring tool were identified in some of the moderated ISAT; and
- e. In two of the moderated ISAT unauthorised group work was done and the candidates' individual competencies were not assessed. All members of the group were awarded the same mark/score.

#### 3.5.4 Quality and Standard of Moderation

Internal moderation was conducted in 15 (75%) of the 20 sampled subjects:

- a. Most of the moderation took place at campus level only;
- b. The quality and standard of internal moderation were not always appropriate;
- c. At some sites supporting documents, such as reports, were not readily available;



- d. Shadow marking by the internal moderator and a lack of feedback to the assessor/student remains a problem; and
- e. Discrepancies between the marks allocated by the external moderators, internal moderators and assessors were identified in three subjects.

### **3.5.5 Irregularities**

Irregularities of a serious nature were identified in five of the sampled subjects during the Umalusi moderation of the conduct of ISAT/PAT.

Umalusi's findings were communicated to the senior management of the respective colleges for further investigation and remedial action. Once the colleges had completed their investigations, they followed up with remediation and provided workable strategies to prevent future occurrences of such irregularities. Subsequently, all remedial measures were verified by the relevant Umalusi moderators, thus rendering all irregularities as resolved.

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

For the DHET to ensure that the ISAT/PAT are conducted to an acceptable standard, some proactive interventions are required:

- a. Marking/scoring tools for some ISAT should be amended and/or additional checklists developed to facilitate reliable and effective marking/scoring within and across sites;
- b. Systems and procedures should be put in place for monitoring and moderation of the conduct of ISAT at college, provincial and national levels; and
- c. Sites that have shown neglect, gross non-compliance and irregularities should be carefully monitored by the DHET.

## **3.7 Conclusion**

The external moderation of the conduct of the ISAT/PAT for the 2022 examination was successfully concluded. While some areas of improvement were noted, some of the sites visited experienced severe challenges. The DHET must prioritise the monitoring of these sites to ensure they address and mitigate all shortcomings during the next examination cycle.

To improve the standard of the ISAT/PAT, the DHET should be more involved in monitoring the planning, preparation and conduct of ISAT/PAT at TVET colleges.

Umalusi will continue to monitor sites that have shown neglect, gross non-compliance and irregularities.

# CHAPTER 4 STANDARDISATION OF MARKING GUIDELINES

## 4.1 Introduction

The credibility and success of the marking processes are dependent on the fairness and consistency of the marking of assessments. It is therefore imperative that role players reach consensus and a common understanding on the marking processes, the expected responses and the allocation of marks, before marking commences. The main purpose of the standardisation of the marking guidelines for national examinations is to ensure fair, consistent and valid marking. This goal can be achieved only if there is open discussion between chief markers, internal moderators and markers.

The Department of Higher Education and Training (DHET) embarked on a process of arranging online meetings involving all the role players, including examiners and internal moderators of the question papers, for the marking guideline standardisation. Some marking guideline standardisation meetings took place on the first day of the blocked marking process at the allocated marking centres.

The marking guideline standardisation meetings for National Certificate (Vocational) [NC(V)] Level 2 and Level 3 were conducted shortly after each question paper was written. The appointed standardising committees met online, using the Microsoft Teams platform, to discuss the marking guidelines and agree on amendments. The online platform simplified the process by allowing the committee members immediate access to each other and amendments to the marking guidelines could be done on the shared screen. On completion of this process, the DHET used Dropbox to share the approved marking guidelines with all colleges and campuses.

The DHET used the same online platform for the marking guideline standardisation meetings of NC(V) Level 4. These meetings were scheduled soon after the question papers were written but before marking commenced, at centralised and decentralised marking centres. All appointed chief markers, internal moderators, markers and, in some subjects, the examiners and the internal moderators (setting), were invited to the meetings. The online meetings allowed more attendees to interact, discuss and reach consensus about amendments before the final signing off of the amended, approved marking guidelines. Umalusi's presence at the meetings was to monitor the quality and standard of such meetings and to ensure that the decisions and amendments made would enhance the fairness, consistency and validity of the marking of the assessments.

The purpose of the standardisation of marking guidelines was to ensure that:

- a. Evaluate the planning for the conduct of the ISAT/PAT;
- b. Report on the appropriateness and standard of the assessment environment;
- c. Confirm whether proper assessment processes and procedures have been followed in the implementation. All amendments to the marking guidelines were agreed upon after deliberations;
- b. All marking personnel had a common interpretation of the marking guidelines;
- c. Umalusi approve the final version of the marking guidelines; and
- d. All possible alternative responses were included in the final marking guidelines so that candidates were not unfairly advantaged or disadvantaged.

## 4.2 Scope and Approach

Umalusi external moderators attended the marking guideline standardisation meetings for a sample of two NC(V) Level 2 and 3 question papers, as listed in Table 4A. In the case of the NC(V) Level 4 question papers, Umalusi deployed 12 external moderators to attend the marking guideline discussion meetings for 11 subjects and 12 question papers, as listed in Table 4B. The meetings for eight question papers (seven subjects) were conducted on the online platform. The meetings for four question papers (four subjects) were conducted using face-to-face discussions.

### 4.2.1 NC(V) Levels 2 and 3

Umalusi officials attended the online marking guideline standardisation meetings, hosted by the DHET on the Microsoft Teams platform between 25 November and 28 November 2022. Members of the standardising committees attended these meetings. Table 4A lists the question papers and dates of the meetings attended by Umalusi.

**Table 4A: NC(V) Level 2 and Level 3 marking guideline meetings attended by Umalusi**

| Question paper                   | Dates      |
|----------------------------------|------------|
| Mathematical Literacy L3 Paper 2 | 2022/11/25 |
| Mathematics L3 Paper 2           | 2022/11/28 |

During online meetings Umalusi moderators used the amended Moderation Instrument for the Standardisation of Marking Guidelines. The instrument requires Umalusi moderators to report on the findings, based on the following criteria:

- i. Attendance of provincial/regional marking committee members;
- ii. Punctuality of attendees;
- iii. Duration of the meeting;
- iv. Chairperson of the meeting;
- v. Preparations for the standardisation of marking guidelines;
- vi. Standardisation of the marking guidelines process;
- vii. Adjustments and justification;
- viii. The participation of members and the success of the online meetings; and
- ix. Umalusi's role.

Umalusi moderators attended the standardisation of marking guideline meetings to monitor the proceedings, give guidance where needed, endorse final decisions and sign off the final marking guideline.

#### 4.2.2 NC(V) Level 4

During the marking guideline standardisation meetings, the DHET used the online platform as well as face-to-face discussions. Umalusi decreased the number of external moderators attending the meetings from 12 in 2022. This was 46 fewer than the 58 deployed in 2021. All the meetings were scheduled between 4 November and 3 December 2022. The marking guideline standardisation meetings for two subjects were conducted on 26 November and 3 December at the Asherville Marking Centre; and two on 19 November 2022 and 3 December 2022, at the Springs Marking Centre. The marking guideline standardisation meetings for the remaining eight question papers were conducted using the online platform.

Table 4B lists all the question papers and dates of the marking guideline standardisation meetings for NC(V) L4 that Umalusi attended.

**Table 4B: NC(V) Level 4 question papers in the sample of marking guideline standardisation meetings attended by Umalusi**

| Question paper                               | Dates      |
|--|------------|
| Applied Policing L4                          | 2022/11/26 |
| Construction Planning L4                     | 2022/11/15 |
| Electrotechnology L4                         | 2022/11/19 |
| Engineering Processes L4                     | 2022/11/17 |
| English First Additional Language L4 Paper 1 | 2022/11/08 |
| Life Skills and Computer Literacy L4 Paper 1 | 2022/11/14 |
| Life Skills and Computer Literacy L4 Paper 2 | 2022/11/04 |
| Mathematical Literacy L4 Paper 1             | 2022/11/07 |
| Mathematics L4 Paper 2                       | 2022/12/01 |
| New Venture Creation L4                      | 2022/11/23 |
| Physical Science L4 Paper 1                  | 2022/11/24 |
| Pulp and Papermaking Technology L4           | 2022/12/03 |

Umalusi moderators used the amended Moderation Instrument for the Standardisation of Marking Guidelines. This instrument, for NC(V) Level 4, required Umalusi moderators to report the findings, based on the following criteria:

- i. Attendance of internal moderators, chief markers and markers;
- ii. Punctuality of attendees;
- iii. Duration of discussions;
- iv. Appointment of marking staff;
- v. Chairperson of the meeting;
- vi. Standardisation of the marking guideline process;
- vii. Participation of role players;
- viii. Adjustments and justification;
- ix. Umalusi's role;
- x. Challenges during the meeting; and
- xi. Approval of the final marking guidelines.

Umalusi moderators attended the marking guideline standardisation meetings to monitor the proceedings, give guidance where needed, endorse final decisions and, subsequently, approve the final marking guidelines to be used during the marking processes.

### 4.3 Summary of Findings

#### 4.3.1 Summary of Findings for NC(V) Level 2 and Level 3

The two external moderators each joined the online marking guideline standardisation meeting of the selected sample of two subjects for Level 3. Umalusi's findings, as captured according to the moderation instrument during the standardisation process, are reflected in Table 4C:

**Table 4C: NC(V) L3 summary of findings**

| Types of moderation                      | Subject  | Campus/site  |
|--|--|--|
| Attendance of marking staff              | The chief marker and markers attended the meeting for 50% of the question papers; the same as in November 2021.                | Mathematical Literacy L3 Paper 2                           |
|  | The designation of the attendees could not be verified in 50% of the question papers.  | Mathematics L3 Paper 2                                     |
| Punctuality                              | The online meeting started on time for 100% of the meetings compared to 94% in November 2021.                                  | Mathematical Literacy L3 Paper 2                           |
| Duration of meeting                      | The meetings took between two and a half hours and two hours and 35 minutes.   | Mathematical Literacy L3 Paper 2<br>Mathematics L3 Paper 2 |
| Chairperson of the meeting               | In 50% of the meetings the standardisation coordinator chaired the meeting.  | Mathematics L3 Paper 2                                     |
|  | In 50% of the meetings the chief marker chaired the meeting.   | Mathematical Literacy L3 Paper 2                           |
| The Umalusi signed-off marking guideline | Umalusi signed off 100% of the marking guidelines. This was a 5% improvement from 95% recorded in November 2021.               | Mathematical Literacy L3 Paper 2<br>Mathematics L3 Paper 2 |
| Adjustments to the marking guideline     | Adjustments to the marking guidelines were justified for both subjects: a 6% improvement compared to the 94% in November 2021. | Mathematical Literacy L3 Paper 2<br>Mathematics L3 Paper 2 |
|  | None of the amendments made to the marking guidelines influenced the cognitive demand of the questions.                        | None of the subjects.                                      |

| Types of moderation  | Subject   | Campus/site  |
|--|---|--|
| Incorrect answers detected on the marking guideline                | The participants identified and corrected answers to five questions.  | Mathematical Literacy L3 Paper 2                           |
| Alternative answers added  | The members added alternative answers to all (100%) questions in the question papers.   | Mathematical Literacy L3 Paper 2<br>Mathematics L3 Paper 2 |
| Changes to mark allocation   | Delegates made changes to the allocation of marks for the steps in a calculation by splitting mark allocation into half marks.<br>There was a typing error in one of the options in the multiple-choice questions.<br>The delegates agreed to allocate one mark for each candidate to avoid disadvantaging any student. However, an application for a marking concession was not lodged with Umalusi. | Mathematics L3 Paper 2                                     |
| Role of Umalusi  | Both external moderators took on the roles of advisor, guide, active participant and final decision maker.  | Mathematical Literacy L3 Paper 2<br>Mathematics L3 Paper 2 |
| Effectiveness of online platform for marking guideline discussions | Umalusi concluded that 100% of the online meetings were professional and well conducted (63% in November 2021)<br>The process ran smoothly and allowed for interactive participation.   | Mathematical Literacy L3 Paper 2<br>Mathematics L3 Paper 2 |
|  | The marking guideline standardisation meeting was held on the same day the paper was written. This did not allow markers to familiarise themselves with the question paper and prepare their own marking guidelines.  | Mathematics L3 Paper 2                                     |

#### 4.3.2 Summary of Findings for NC(V) Level 4

Umalusi attended online marking guideline discussion meetings for 11 subjects (12 question papers) from 4 November to 3 December 2022. The face-to-face marking guideline standardisation meetings for four subjects (four question papers) were conducted on 19 November and 26 November; and for two subjects on 3 December 2022. The findings from the NC(V) Level 4 marking guideline standardisation meetings are summarised in Table 4D. These findings reflect both good practices and challenges.

**Table 4D: NC(V) L4 summary of findings**

| Criteria                          | Findings  | Question papers  |
|-----------------------------------|---|--|
| Attendance                        | The DHET instructed all delegates to add their names and designations to the chat box once they had logged on to the online platform. Umalusi found it difficult to identify all delegates, their designations and provinces they represented in five (42%) of the meetings.                                | English First Additional Language L4 Paper 1<br>Life Skills and Computer Literacy L4 Paper 1 and Paper 2<br>Mathematical Literacy L4 Paper 1<br>Mathematics L4 Paper 2 |
| Attendance of chief markers       | The chief markers of two (17%) of the subjects were appointed during the marking guideline standardisation meetings. This brought the attendance of chief markers to eleven (92%) that could be identified during the meeting. This was an increase of 4% compared to the 88% confirmed attendance in 2021. | Construction Planning L4<br>Electrotechnology L4   |
|                                   | In one (8%) subject only one marker was appointed and he acted as the chief marker.   | Pulp and Papermaking Technology L4   |
|                                   | In one (8%) of the subjects, Umalusi could not verify the designations of any of the delegates.   | Life Skills and Computer Literacy L4 Paper 1   |
| Attendance of internal moderators | Umalusi observed the attendance of internal moderators in nine (75%) of the subjects. This, compared to 2021, was a 16% decrease, from 91%.   |  |
|                                   | In the meetings for English First Additional Language L4 and the two papers of Life Skills and Computer Literacy L4 Umalusi could not validate the attendance due to the large number of attendees and challenges experienced with the attendance register.   | English First Additional Language L4 Paper 1<br>Life Skills and Computer Literacy L4 Paper 1 and Paper 2   |
|                                   | In one subject (8%) the low number of students did not justify the appointment of an internal moderator.  | Pulp and Papermaking Technology L4   |
|                                   | Umalusi indicated that the internal moderator for one more subject was not in the meeting in which delegates logged in and out of the meeting, possibly due to loadshedding.  | Mathematical Literacy L4 Paper 1   |
|                                   | In the meetings for the two papers of one subject Umalusi could not validate the attendance due to the large number of attendees and challenges experienced with the attendance register.   | Life Skills and Computer Literacy L4 Paper 1 and Paper 2   |
|                                   |   |  |
| Attendance of markers             | In subjects where the enrolment numbers were small the chief markers and internal moderators took on the role of markers. Umalusi thus reported a 100% attendance of markers in 2022, a pleasing increase of 19% from 81% in 2021.  | All meetings monitored   |
|                                   | In some subjects the number of markers exceeded ten and went up to 82.  | English First Additional Language L4 Paper 1<br>Life Skills and Computer Literacy L4 Paper 1 and Paper 2<br>Mathematical Literacy L4 Paper 1<br>Mathematics L4 Paper 2 |

| Criteria                     | Findings  | Question papers   |
|------------------------------|---|---|
| Duration of meeting          | The duration of the different meetings ranged from an hour to four hours.   | All meetings monitored.   |
| Duration of meeting          | Five of the meetings (42%) compared to 60% in November 2021, were between one and two hours long, as listed in the question paper column. The length of these meetings was determined by different factors, such as the small number of attendees, where only one to three members attended; or subjects where the marking guideline was approved without any or very few minor adjustments.  | Applied Policing L4<br>Construction Planning L4<br>Electrotechnology L4<br>Life Skills and Computer Literacy L4 Paper 1   |
|                              | In three (25%) of the subjects the duration of the meeting was between two and three hours (the same as in November 2021). Compared to 13% in November 2020 and 2021, three (25%) of the meetings exceeded three hours.   | Engineering Processes L4<br>Mathematical Literacy L4 Paper 1<br>New Venture Creation L4   |
|                              | Compared to 13% in November 2020 and 2021, three (25%) of the meetings exceeded three hours.  | English First Additional Language L4 Paper 1<br>Life Skills and Computer Literacy L4 Paper 1 and Paper 2  |
|                              | In one subject (8%) the low number of students did not justify the appointment of an internal moderator.  | Pulp and Papermaking Technology L4  |
|                              | Compared to 13% in November 2020 and 2021, three (25%) of the meetings exceeded three hours.  | English First Additional Language L4 Paper 1<br>Life Skills and Computer Literacy L4 Paper 2<br>Mathematics L4 Paper 2  |
|                              | Pulp and Papermaking Technology L4 was marked at Asherville Marking Centre for the first time. The DHET appointed a subject matter expert who was inexperienced in national marking as the chief marker and the only marker for the subject. Umalusi used the opportunity to ensure that the marker was well prepared for the marking and included sample script marking as part of the process. The three-hour 50-minute meeting was broken up into discussion, sample script marking by both Umalusi and the chief marker, moderation of the sample marking, reflection on the sample script marking and implementation of amendments to the marking guideline. | Pulp and Papermaking Technology L4  |
| Appointment of marking staff | In seven (58%) of the subjects, marking personnel received their letters of appointment between 29 September and 10 November 2022 via email.  | Applied Policing L4<br>Construction Planning L4<br>English First Additional Language L4 Paper 1<br>Life Skills and Computer Literacy L4 Paper 1<br>Mathematics L4 Paper 2<br>New Venture Creation L4<br>Physical Science L4 Paper 1 |



| Criteria                     | Findings  | Question papers  |
|------------------------------|---|--|
| Appointment of marking staff | Due to the nature of the virtual meeting Umalusi could not verify the exact dates of appointment of marking staff in two (17%) of the question papers.  | Life Skills and Computer Literacy L4 Paper 2<br>Mathematical Literacy L4 Paper 1       |
|                              | The delegates for one (8%) subject indicated that they had not received appointment letters. The DHET told them during October via email to participate in the marking process, because they were part of the marking team in November 2021. They had not yet received appointment letters.   | Engineering Processes L4   |
|                              | There was initially no appointment for one (8%) of the subjects to be marked at Asherville for the first time. The DHET, on the recommendation of the external moderator, requested that the campus manager release the delegate for marking. He reported at the marking centre on the due date but had not yet received an appointment letter.   | Pulp and Papermaking Technology L4   |
|                              | The originally appointed internal moderator and chief marker of one (8%) subject were unavailable and had to be replaced. The meeting was on-site and delayed while two replacements were on their way. The DHET indicated that the newly appointed internal moderator and chief marker would receive their appointment letters before the end of the day (19 November 2022).   | Electrotechnology L4   |
| Recruitment process          | All marking staff in seven (58%) of the subjects responded to a DHET circular sent to the colleges earlier in the year. The DHET confirmed their appointment by email.  |  |
|                              | In three (25%) of the subjects the normal recruitment process was not followed: <ul style="list-style-type: none"> <li>• In Engineering Processes L4 the markers were invited to participate in the November 2022 marking process based on their performance as markers during the November 2021 examination.</li> <li>• The chief marker for Pulp and Papermaking Technology L4 was invited to report for marking on the recommendation of the internal moderator.</li> <li>• On the day of the marking guideline standardisation meeting, the DHET telephonically contacted the replacement chief marker and internal moderator for Electrotechnology L4 to report for duty at the marking centre.</li> </ul> | Electrotechnology L4<br>Engineering Processes L4<br>Pulp and Papermaking Technology L4 |
|                              | Umalusi could not verify the recruitment process for two (17%) subjects.  | Mathematical Literacy L4 Paper 1<br>Life Skills and Computer Literacy L4 Paper 2       |



| Criteria   | Findings   | Question papers  |
|--|--|--|
| Chairperson of the meeting   | The examiners of four (33%) of the question papers chaired the meetings. This was a reduction of 23% compared to November 2021.  | Engineering Processes L4<br>Life Skills and Computer Literacy L4 Paper 1 and Paper 2<br>Mathematics L4 Paper 2   |
|  | In November 2022 four meetings, or 33% (25% in November 2021), were chaired by the chief marker.   | Construction Planning L4<br>English First Additional Language L4 Paper 1<br>New Venture Creation L4<br>Pulp and Papermaking Technology L4  |
|  | In three, or 25% (15% in November 2021) of the question papers, the internal moderator chaired the meetings. In these cases, Umalusi could not verify whether these were the internal moderator of marking or the internal moderator for the setting of the question papers. In Applied Policing L4 the chairmanship was shared by both the internal moderator and chief marker. | Applied Policing L4<br>Electrotechnology L4<br>Physical Science L4 Paper 1   |
|  | In one (8%) of the subjects no one was officially appointed to chair the meeting. When no response for volunteers was received the DHET appointed a chairperson. Umalusi noted that the chair was not well prepared or versed in the use of the virtual platform.  | Mathematical Literacy L4 Paper 1   |
| Amendments/ adjustments to marking guideline   | In only two (17%) subjects the marking guideline was accepted without any adjustments, compared to 7% in November 2021. These were signed off as the final approved marking guidelines.  | Electrotechnology L4<br>Physical Science L4 Paper 1  |
|  | Adjustments were made to the marking guidelines of the remaining question papers (83%).  | Applied Policing L4<br>Construction Planning L4<br>Engineering Processes L4<br>English First Additional Language L4 Paper 1<br>Life Skills and Computer Literacy L4 Paper 1 and Paper 2<br>Mathematical Literacy L4 Paper 1<br>Mathematics L4 Paper 2<br>New Venture Creation L4<br>Pulp and Papermaking Technology L4 |
| Justification for changes to marking guidelines                                      | Umalusi regarded all changes in the marking guideline (100%) as justified. The amendments would enhance the marking process and promote fairness and consistency in marking.   | All meetings monitored.  |
| Effect of changes to the marking guidelines on cognitive level of answers/ responses | In 100% of the subjects the changes to the marking guideline would not affect the cognitive levels of the responses.   | All meetings monitored.  |

| Criteria   | Findings  | Question papers   |
|--|---|---|
| Role of Umalusi moderator in marking guideline discussion meetings | Umalusi assumed different roles depending on the size of the group of participants. In larger groups the role was that of an observer, guide, mediator and final decision maker. In smaller groups the role changed to active participant and/or advisor.   | All meetings monitored.   |
| Sample marking   | In ten (83%) of the subjects sample marking took place just before the onset of the marking process at the marking centres. Apart from Applied Policing L4, the marking guideline meetings of all other subjects were conducted virtually.  | Applied Policing L4<br>Construction Planning L4<br>Engineering Processes L4<br>English First Additional Language L4 Paper 1<br>Life Skills and Computer Literacy L4 Paper 1 and Paper 2<br>Mathematical Literacy L4 Paper 1<br>Mathematics L4 Paper 2<br>New Venture Creation L4<br>Physical Science L4 Paper 1 |
|  | Sample marking was conducted in two (17%) subjects where the marking guideline standardisation meetings took place on-site. In Electrotechnology L4 the team compared and discussed discrepancies in the results. Once they reached consensus on the interpretation of the questions and marking guideline, Umalusi verified and endorsed their decisions. In Pulp and Papermaking Technology L4, both the external moderator and marked sample scripts. Apart from ensuring consistency, validity and fairness in marking, the purpose was to provide the inexperienced marker with the necessary insight into the complete marking process. | Electrotechnology L4<br>Pulp and Papermaking Technology L4  |
| Signing off the marking guidelines                                 | All (100%) marking guidelines were approved and signed off during the marking guideline standardisation meetings. Due to the nature of an online meeting, the signing off procedure was a verbal agreement and not a physical signing off. A physical signing off was done at the marking guideline standardisation meetings that were conducted at the marking centres.  | All meetings monitored  |
| Conduct of marking staff   | All marking staff at eight (67%) meetings displayed professional behaviour and regarded the meeting as an opportunity to uphold the principles of good assessment. Attendees participated with positive contributions and respected the views of others. Appropriate decisions were made.   | Applied Policing L4<br>Construction Planning L4<br>Electrotechnology L4<br>Engineering Processes L4<br>English First Additional Language L4 Paper 1<br>Life Skills and Computer Literacy L4 Paper 2<br>Physical Science L4 Paper 1<br>Pulp and Papermaking Technology L4  |
|  | Unmuted private conversations during the meeting disrupted three (25%) of the meetings.   | Life Skills and Computer Literacy L4 Paper 1<br>Mathematics L4 Paper 2<br>New Venture Creation L4   |
|  | In one (8%) of the subjects, Umalusi detected slight frustration among attendees when the chairperson struggled to effect alternative solutions on the virtual platform and had to be coached on how to make changes.   | Mathematical Literacy L4 Paper 1  |

| Criteria   | Findings   | Question papers         |
|--|--|-------------------------|
| Fairness of the question paper                       | In 100% of the question papers the marking staff felt satisfied that the question paper was fair.  | All meetings monitored. |
| Comments and recommendations from Umalusi moderators | Seventy-five percent of the marking guideline standardisation meetings were conducted virtually. Although not all Umalusi moderators commented about the viability of the virtual platform, there was consensus that the valuable discussions and contributions led to fruitful outcomes.<br>Umalusi praised the professional preparation, presentation, control, and respect displayed by the chairpersons at 77% of the virtual meetings.  |                         |
|  | Owing to the size of the sample moderated, Umalusi could not identify clear trends in challenges experienced.<br>However, punctuality was a major concern, as 58% of the meetings started late. This included both virtual and face-to-face meetings. In the virtual meetings connectivity issues due to technical glitches and loadshedding could have contributed to punctuality and intermittent attendance problems.<br>In two (67%) meetings conducted on-site, poor planning on behalf of the DHET caused delays in the start of the meeting.<br>Further challenges experienced at both types of meetings were the non-appointment, prior to the meeting, of a prepared and technologically skilled chairperson. The DHET's poor planning and lack of control resulted in meetings being delayed and smooth progress hampered, due to the unpreparedness of the chairperson. |                         |
|  | The lack of available information relating to names, designations and appointment confirmation dates prevented Umalusi from providing important feedback to the examination body in 42% of the marking guideline standardisation meetings.   |                         |

#### 4.4 Areas of Improvement

During the marking guideline standardisation meetings, areas of improvement were noted and some good practices identified by the external moderators. The following areas of improvement were noted:

NC(V) Level 3:

- The online meeting started on time for 100% of the meetings, compared to 94% in November 2021;
- Adjustments to the marking guideline were justified for all subjects, a 6% improvement compared to the 94% of November 2021;
- Umalusi signed off 100% of the marking guidelines. This was a 5% improvement from the 95% recorded in November 2021; and
- Umalusi considered 100% of the online meetings professional and well conducted (63% in November 2021).

#### NC(V) Level 4:

- a. Compared to 2021, attendance of the chief marker at the Level 4 meetings increased by 4%, from 88% in November 2021 to 92% in 2022;
- b. The attendance of markers increased by 19%, from 81% of the subjects in November 2021 to 100% in November 2022;
- c. In November 2022, 58% of the meetings were chaired by either the internal moderator or the chief marker, in comparison with 40% in November 2021;
- d. All changes and amendments were justified and would not affect the cognitive demands of question papers;
- e. By the end of the marking guideline standardisation meetings 100% of the marking guidelines were signed off, verbally or in writing; and
- f. All marking staff at 67% of the meetings displayed professional behaviour and regarded the standardisation of marking guidelines as an opportunity to uphold the principles of good marking.

### 4.5 Areas of Non-Compliance

The external moderator reports revealed some areas of non-compliance that could compromise the examination:

- a. Only 58% of the meetings started on time. This was on par with the 56% of November 2021;
- b. In only 17% (7% in November 2021) of NC(V) L4 subjects, the marking guideline was accepted without any adjustments;
- c. Umalusi reported challenges at the on-site marking guideline standardisation meetings where the marking centres were not prepared for the meetings;
- d. Meetings were delayed because replacement markers had to be sourced, informed of the meeting. They then attended the meeting unprepared (33%);
- e. Scripts for sample marking were not available and had to be sourced (33%); marking staff had to attend marking centre meetings before the onset of the marking guideline standardisation meetings;
- f. The examiners of four (33%) of the question papers chaired the meetings. This was a reduction of 23% compared to November 2021;
- g. A lack of lists identifying participants and their designations in 42% of the meetings made it difficult to verify attendance;
- h. Disruptions were caused by unmuted private conversations in 25% of the online meetings. These could not be muted or were not addressed by the chairperson; and
- i. The online platform was unfamiliar to some participants and this affected their participation in the process.

### 4.6 Directives for Compliance and Improvement

To improve the quality and standard of the marking guideline discussion meetings, the DHET must ensure that:

- a. The marking guideline discussion meetings start on time;
- b. Each meeting starts with a short session during which all participants are familiarised with the controls and use of the online platform and online meeting etiquette; and
- c. Either the examiner and/or internal moderator of the question paper chairs or attends the meeting.

### 4.7 Conclusion

It was encouraging to note the progress and efforts made by the DHET to comply with requirements to ensure effective marking. The implementation of online platforms for the marking guideline standardisation meetings proved beneficial for the standardisation process. With a concerted effort to ensure that all participants are prepared and conversant with the use of online platforms, the quality of the marking processes could improve in a most cost-effective manner.

# CHAPTER 5 VERIFICATION OF MARKING

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## 5.1 Introduction

An assessment body needs to maintain a high standard in marking to confirm the credibility of the students' examination results. The assessment body would verify the standard of assessment by checking the accuracy and consistency of marking. Umalusi monitors marking through external verification to ensure that it is conducted according to agreed and established practices and standards; and that it is consistent, fair and accurate.

The Department of Higher Education and Training (DHET) appointed a chief marker, an internal moderator and markers for each National Certificate (Vocational) [NC(V)] Level 4 question paper. The number of markers was determined by the number of expected scripts. The maximum number of scripts for each marker was set at 300. In the case of question papers with large numbers, two chief markers were appointed, for example, for Life Skills and Computer Literacy.

The purpose of verifying marking is to:

- a. Determine whether the approved marking guidelines are adhered to and applied consistently;
- b. Determine that mark allocation and calculations are accurate and consistent;
- c. Ascertain that internal moderation is conducted during marking;
- d. Identify possible irregularities; and
- e. Confirm that marking is fair, reliable and valid.

## 5.2 Scope and Approach

Umalusi verified the consistency of marking across a sample of scripts from selected subjects for NC(V) Levels 2, 3 and 4, across the nine provinces from a range of marking centres.

Lecturers responsible for teaching the NC(V) Level 2 and Level 3 subjects marked the examination scripts at various colleges/campuses where examinations were conducted. Umalusi identified specific subjects and requested that a sample of scripts be submitted to the Springs marking centre for verification. This sample comprised mainly fundamental subjects and included vocational subjects that were identified as problematic in the November 2021 and during the standardisation of marking guidelines for November 2022 examinations.

NC(V) Level 4 examination scripts were marked at eight centralised marking centres: the Asherville Campus of Thekwini Technical Vocational Education and Training (TVET) College; Bloemfontein Campus of Motheo TVET College; East London Campus of Buffalo City TVET College; Nelspruit Campus of Ehlanzeni TVET College; Potchefstroom Campus of Vuselela TVET College; Seshego Campus of Capricorn TVET College; Springs Campus of Ekurhuleni East TVET College; and the Tygerberg Campus of Northlink TVET College.

Umalusi, further, focused on the verification at the following marking centres: the Asherville Campus of Thekwini TVET College; the Bloemfontein Campus of Motheo TVET College; the East London Campus of Buffalo City TVET College; the Springs Campus of Ekurhuleni East TVET College; and the Tygerberg Campus of Northlink TVET College.

Umalusi moderated a sample of five subjects in the NC(V) Level 2, seven subjects (eight question papers) in the NC(V) Level 3 subjects and 12 subjects (13 question papers) in the NC(V) Level 4 of the November 2022 examination. While the sample size of the NC(V) Levels 2 and 3 remained the same, there was a substantial reduction of the sample size from the 71 subjects (78 question papers) in 2021, compared to the 12 subjects (13 question papers) in NC(V) Level 4 in 2022. The subjects and papers are listed in Tables 5A, 5B and 5C.

**Table 5A: Level 2 question papers included in the verification of marking**

| Number | Subject                                       |
|--------|---|
| 1.     | Electronic Control and Digital Electronics L2 |
| 2.     | Engineering Technology L2                     |
| 3.     | English First Additional Language L2 Paper 1  |
| 4.     | Mathematical Literacy L2 Paper 1              |
| 5.     | Mathematics L2 Paper 1                        |

Compared to the 2021 sample, there was a slight change in the composition of the sample in 2022. The sample of 2021 focused on the fundamental subjects only, while the sample of 2022 for Level 2 included both fundamental and vocational subjects.

**Table 5B: Level 3 question papers included in the verification of marking**

| Number | Subject                                      |
|--------|--|
| 1.     | Applied Accounting L3                        |
| 2.     | English First Additional Language L3 Paper 1 |
| 3.     | Governance L3                                |
| 4.     | Life Skills and Computer Literacy L3 Paper 1 |
| 5.     | Life Skills and Computer Literacy L3 Paper 2 |
| 6.     | Material Technology L3                       |
| 7.     | Mathematical Literacy L3 Paper 1             |
| 8.     | Mathematics L3 Paper 1                       |

The sample size of the NC(V) Level 3 subjects was increased from five subjects (six question papers) in 2021 to seven subjects (eight question papers) in 2022. Furthermore, in 2021 only one of the subjects was a vocational subject, whereas in 2022, three subjects were vocational while the remaining four were fundamentals.

Subjects with concessions during the November 2022 examination, which were approved, partially approved or rejected, were included in the sample for NC(V) Levels 2 and 3.

**Table 5C: Level 4 question papers included in the verification of marking**

| Number | Subject   |
|--------|---|
| 1.     | Applied Accounting L4 Paper 2                         |
| 2.     | Criminal Justice Process L4                           |
| 3.     | Data Communication and Networking L4                  |
| 4.     | English First Additional Language L4 Paper 1          |
| 5.     | Learning Psychology L4                                |
| 6.     | Life Skills and Computer Literacy L4 Paper 1          |
| 7.     | Life Skills and Computer Literacy L4 Paper 2          |
| 8.     | Management Practice L4                                |
| 9.     | Marketing L4  |
| 10.    | Mathematical Literacy L4 Paper 1                      |
| 11.    | Mathematics L4 Paper 1                                |
| 12.    | Personal Assistance L4                                |
| 13.    | Sustainable Tourism in SA and International Travel L4 |

Owing to various factors, including budgetary constraints, Umalusi had to reduce the sample size of 71 subjects (78 question papers) in 2021 to 12 subjects (13 question papers) in 2022. This resulted in a staggering decrease of 59 subjects when compared to 2021.

The following three tables (5D–5F) provide information on the question papers and the number of provinces and centres included in the Umalusi verification sample.

**Table 5D: NC(V) verification of marking Level 2: question papers, number of provinces and number of centres**

| NC(V) subject                                 | Number of provinces | Western Cape | Northern Cape | Free State | Eastern Cape | KwaZulu-Natal | Mpumalanga | Limpopo | Gauteng | North West |
|---|---------------------|--------------|---------------|------------|--------------|---------------|------------|---------|---------|------------|
| Electronic Control and Digital Electronics L2 | 9                   | 3            | 1             | 2          | 2            | 2             | 1          | 2       | 1       | 2          |
| Engineering Technology L2                     | 7                   | 2            | -             | 1          | 3            | 1             | 1          | 1       | 2       | -          |
| English First Additional Language L2 Paper 1  | 8                   | 1            | -             | 1          | 1            | 1             | 1          | 1       | 1       | 1          |
| Mathematical Literacy L2 Paper 1              | 8                   | 2            | -             | 2          | 3            | 1             | 1          | 1       | 1       | 1          |
| Mathematics L2 Paper 1                        | 9                   | 1            | 1             | 1          | 3            | 2             | 1          | 2       | 2       | 1          |

The focus of the verification of the NC(V) Level 2 was on fundamental and vocational subjects, as indicated in Table 5D. In two of the subjects, Electronic Control and Digital Electronics L2 and Mathematics L2 Paper 1, the sample that was verified represented all nine provinces while the rest represented seven and eight of the nine provinces.

**Table 5E: NC(V) verification of marking Level 3: question papers, number of provinces and number of centres**

| NC(V) subject                                | Number of provinces | Western Cape | Northern Cape | Free State | Eastern Cape | KwaZulu-Natal | Mpumalanga | Limpopo | Gauteng | North West |
|--|---------------------|--------------|---------------|------------|--------------|---------------|------------|---------|---------|------------|
| Applied Accounting L3                        | 8                   | 1            | -             | 1          | 2            | 2             | 1          | 2       | 2       | 1          |
| English First Additional Language L3 Paper 1 | 8                   | 2            | 1             | 2          | 3            | 3             | 2          | 3       | 2       | -          |
| Governance L3                                | 7                   | 3            | 1             | 3          | 2            | 2             | -          | 2       | 2       | -          |
| Life Skills and Computer Literacy L3 Paper 1 | 9                   | 2            | 1             | 2          | 2            | 1             | 1          | 1       | 1       | 1          |
| Life Skills and Computer Literacy L3 Paper 2 | 9                   | 2            | 1             | 2          | 3            | 3             | 1          | 2       | 2       | 2          |
| Material Technology L3                       | 9                   | 2            | 1             | 1          | 2            | 3             | 1          | 2       | 2       | 1          |
| Mathematical Literacy L3 Paper 1             | 9                   | 2            | 1             | 1          | 2            | 2             | 1          | 3       | 2       | 1          |
| Mathematics L3 Paper 1                       | 8                   | 3            | 1             | 2          | 3            | 3             | -          | 2       | 3       | 1          |



The sample selected for verification included fundamental and vocational subjects at various centres across the nine provinces. In two of the subjects, English First Additional Language L3 Paper 1 and Governance L3, no question papers were received from Northwest province and in Governance L3 and Mathematics L3 Paper 1 the sample did not include question papers from Mpumalanga.

**Table 5F: NC(V) verification of marking Level 4: question papers, number of provinces and number of centres**

| NC(V) subject   | Number of provinces | Western Cape | Northern Cape | Free State | Eastern Cape | KwaZulu-Natal | Mpumalanga | Limpopo | Gauteng | North West |
|---|---------------------|--------------|---------------|------------|--------------|---------------|------------|---------|---------|------------|
| Applied Accounting L4 Paper 2                         | 7                   | 1            | -             | 2          | 1            | 2             | 2          | 2       | 3       | -          |
| Criminal Justice Process L4                           | 6                   | 3            | 1             | 3          | 1            | -             | -          | 2       | 4       | -          |
| Data Communication and Networking L4                  | 7                   | 1            | -             | 2          | 2            | 1             | 1          | 2       | 1       | 1          |
| English First Additional Language L4 Paper 1          | 2                   | -            | 1             | 2          | -            | -             | -          | -       | -       | -          |
| Learning Psychology L4                                | 5                   | 2            | -             | 2          | 1            | 3             | -          | 2       | -       | -          |
| Life Skills and Computer Literacy L4 Paper 1          | 1                   | -            | -             | -          | -            | -             | -          | 19      | -       | -          |
| Life Skills and Computer Literacy L4 Paper 2          | 1                   | -            | -             | -          | -            | 14            | -          | -       | -       | -          |
| Management Practice L4                                | 7                   | -            | -             | 1          | 1            | 1             | 3          | 3       | 3       | 2          |
| Marketing L4  | 8                   | 1            | -             | 1          | 3            | 1             | 2          | 3       | 3       | 1          |
| Mathematical Literacy L4 Paper 1                      | 1                   | 12           | -             | -          | -            | -             | -          | -       | -       | -          |
| Mathematics L4 Paper 1                                | 1                   | -            | -             | -          | -            | 14            | -          | -       | -       | -          |
| Personal Assistance L4                                | 4                   | -            | -             | -          | -            | -             | 1          | 2       | 3       | 2          |
| Sustainable Tourism in SA and International Travel L4 | 7                   | 1            | -             | 3          | -            | 3             | 2          | 2       | 2       | 2          |

It should be noted that several factors played a role in the number of centres and number of provinces that were verified. Where the number of provinces verified was low and the number of centres was low, the sample represented a subject with low enrolment numbers. However, if the number of provinces verified was lower than four but the sample included a higher number of sites, then the subject was marked at more than one marking centre. In the case of English First Additional Language L4 Paper 1, the subject was marked at all seven marking centres. Where the sample represented more provinces, the chances were that these subjects were marked at one marking centre only.

The next section summarises the findings of the verification of the marking processes.

## 5.3 Findings

### NC(V) Level 2 and Level 3

The findings of Level 2 and Level 3 verification of marking are summarised in Table 5G. Thirteen question papers



were included in this moderation sample. While this is a small sample, the moderation of each question paper was of sufficient depth to provide an indication of marking practices across numerous centres.

**Table 5G: NC(V) findings: Level 2 and Level 3**

| Criteria                          | Findings   | Subject  |
|-----------------------------------|--|--|
| Delivery of scripts               | For all the subjects in the sample examination centres failed to submit their scripts in time for verification. Compared to 2021, this was a decrease of 17%.  | Applied Accounting L3<br>Electronic Control and Digital Electronics L2<br>Engineering Technology L2<br>English First Additional Language L2 Paper 1<br>English First Additional Language L3 Paper 1<br>Governance L3<br>Life Skills and Computer Literacy L3 Paper 1 and 2<br>Material Technology L3<br>Mathematical Literacy L2 Paper 1<br>Mathematical Literacy L3 Paper 1<br>Mathematics L2 Paper 1<br>Mathematics L3 Paper 1 |
| Marking guideline standardisation | There was sufficient documented evidence that marking guideline standardisation meetings took place in 77% of the subjects. Some were virtual meetings hosted by the DHET. These subjects included proof of the marking guideline standardisation meetings. Compared to 2021, this was a decrease of 6% from the 83% in November 2021. | Engineering Technology L2<br>English First Additional Language L2 Paper 1<br>English First Additional Language L3 Paper 1<br>Governance L3<br>Life Skills and Computer Literacy L3 Paper 1<br>Material Technology L3<br>Mathematical Literacy L2 Paper 1<br>Mathematical Literacy L3 Paper 1<br>Mathematics L2 Paper 1<br>Mathematics L3 Paper 1   |
|                                   | The reports that accompanied the scripts of three (23%) of the sample contained no evidence of marking guideline standardisation in the form of approved altered marking guidelines or minutes of meetings.  | Applied Accounting L3<br>Electronic Control and Digital Electronics L2<br>Life Skills and Computer Literacy L3 Paper 2   |

| Criteria                        | Findings  | Subject  |
|---------------------------------|---|--|
| Marking guideline changes       | In 92% of the sample no changes were made to the official marking guidelines distributed by DHET, which was a 17% improvement compared to the 75% in 2021.  | Applied Accounting L3<br>Electronic Control and Digital Electronics L2<br>Engineering Technology L2<br>English First Additional Language L2 Paper 1<br>English First Additional Language L3 Paper 1<br>Governance L3<br>Life Skills and Computer Literacy L3 Paper 1 and Paper 2<br>Material Technology L3<br>Mathematical Literacy L2 Paper 1<br>Mathematical Literacy L3 Paper 1<br>Mathematics L3 Paper 1 |
|                                 | Changes were made to the official marking guidelines distributed by the DHET during the marking process in only one (8%) of the question papers, which shows a 17% improvement of acceptance of the approved marking guidelines compared to 2021. | Mathematics L2 Paper 1   |
| Adherence to marking guidelines | There was an increase of 20% in good adherence to the marking guidelines, from 42% of the question papers in 2021 to 62% in November 2022.  | Engineering Technology L2<br>English First Additional Language L2 Paper 1<br>Life Skills and Computer Literacy L3 Paper 2<br>Material Technology L3<br>Mathematical Literacy L2 Paper 1<br>Mathematical Literacy L3 Paper 1<br>Mathematics L2 Paper 1<br>Mathematics L3 Paper 1  |
|                                 | Four (31%) of the question papers showed average adherence to the marking guidelines.   | Applied Accounting L3<br>English First Additional Language L3 Paper 1<br>Governance L3<br>Life Skills and Computer Literacy L3 Paper 1   |
|                                 | Adherence to the marking guideline for one question paper, 7%, was rated as poor.   | Electronic Control and Digital Electronics L2  |

| Criteria   | Findings  | Subject  |
|--|---|--|
| Marking approach   | In only one (8%) subject the markers followed a question-wise marking approach only. Markers marked the scripts question by question, per batch. This approach ensured consistency of marking and allowed markers to speed up the process. Compared to November 2021, where all (100%) of the subjects used the question-wise approach, this was a 92% difference. In two (15%) of the subjects, markers used the whole-script approach only. | Life Skills and Computer Literacy L3 Paper 2   |
|  | In eight (62%) of the subjects a combination of question-wise and whole-script marking was followed. This allowed markers to get an overview of the complete question paper per student, as well as focus on performance per question. Compared to the 25% of centres that used a combination in November 2021, there was a 37% increase in centres using both approaches in 2022.  | Applied Accounting L3<br>English First Additional Language L2 Paper 1  |
|  | In two (15%) of the subjects, markers used the whole-script approach only.  | Applied Accounting L3<br>English First Additional Language L2 Paper 1  |
|  | In eight (62%) of the subjects a combination of question-wise and whole-script marking was followed. This allowed markers to get an overview of the complete question paper per student, as well as focus on performance per question. Compared to the 25% of centres that used a combination in November 2021, there was a 37% increase in centres using both approaches in 2022.  | Engineering Technology L2<br>English First Additional Language L3 Paper 1<br>Governance L3<br>Life Skills and Computer Literacy L3 Paper 1<br>Material Technology L3<br>Mathematical Literacy L2 Paper 1<br>Mathematical Literacy L3 Paper 1<br>Mathematics L2 Paper 1 |
|  | In two (15%) of the subjects, Umalusi could not determine the marking approach used at the different centres.   | Electronic Control and Digital Electronics L2<br>Mathematics L3 Paper 1  |
| Procedures to be followed when more than the required number of questions were answered. | Umalusi found that all (100%) subjects indicated that there were no choice questions and no instances where students answered more than the required number of questions.   | All the sampled subjects.  |

| Criteria  | Findings   | Subject  |
|---|--|--|
| Standard of marking   | The standard of marking was rated as good in nine (69%) of the question papers. This finding was a welcome improvement of 27% compared to 42% in November 2021.  | Engineering Technology L2<br>English First Additional Language L2 Paper 1<br>Governance L3<br>Life Skills and Computer Literacy L3 Paper 2<br>Material Technology L3<br>Mathematical Literacy L2 Paper 1<br>Mathematical Literacy L3 Paper 1<br>Mathematics L2 Paper 1<br>Mathematics L3 Paper 1   |
|   | Umalusi rated marking as average in three (23%) of the sampled question papers.  | Applied Accounting L3<br>English First Additional Language L3 Paper 1<br>Life Skills and Computer Literacy L3 Paper 1  |
|   | The standard of marking of only one (8%) subject was rated as poor. Umalusi indicated that the poor marking was a result of non-adherence to the instruction relating to a concession granted for the marking of this paper. A further cause of poor marking was related to inconsistency resulting in deviations greater than 5% in mark allocation.  | Electronic Control and Digital Electronics L2  |
| The relationship between the adherence to marking guidelines and the standard of marking. | Umalusi's findings supported how the adherence to the marking guidelines, consistency in the allocation of marks and giving credit correlated with the standard of marking. The same subjects where markers showed good adherence to the assessment guidelines were rated as showing a good standard of marking. On the other hand, the rest scored average adherence and standard in marking.                         |  |
| Administration: mark indication   | Umalusi found that markers of all the sampled NC(V) subjects on Level 2 and Level 3 (100%) followed the prescribed procedure for recording marks per question on the cover page of the scripts. This was on par with 100% recorded in November 2021. Furthermore, in 100% of the sample markers recorded marks per question. All markers refrained from using correction fluid to correct mistakes on the mark sheets. | Applied Accounting L3<br>Electronic Control and Digital Electronics L2<br>Engineering Technology L2<br>English First Additional Language L2 Paper 1<br>English First Additional Language L3 Paper 1<br>Governance L3<br>Life Skills and Computer Literacy L3 Paper 1 and 2<br>Material Technology L3<br>Mathematical Literacy L2 Paper 1<br>Mathematical Literacy L3 Paper 1<br>Mathematics L2 Paper 1<br>Mathematics L3 Paper 1 |

| Criteria   | Findings  | Subject  |
|--|---|--|
| Administration: mistake indication               | Mistakes picked up by the moderator/examination assistants (EA) were clearly indicated in 100% of the NC(V) Level 3 question papers, while in only 60% of the NC(V) Level 2 question papers were mistakes indicated. The overall compliance was 85%, which was a 10% improvement compared to 75% in November 2021. Non-compliant subjects are listed. | Electronic Control and Digital Electronics L2<br>Mathematics L2 Paper 1  |
| Administration: transfer of marks                | Umalusi reported that in 92% of the subjects marks were transferred accurately to the cover pages and mark sheets. Compared to the sample in 2021 compliance increased remarkably, by 17%.  | Applied Accounting L3<br>Electronic Control and Digital Electronics L2<br>Engineering Technology L2<br>English First Additional Language L2 Paper 1<br>English First Additional Language L3 Paper 1<br>Governance L3<br>Life Skills and Computer Literacy L3 Paper 2<br>Material Technology L3<br>Mathematical Literacy L2 Paper 1<br>Mathematical Literacy L3 Paper 1<br>Mathematics L2 Paper 1<br>Mathematics L3 Paper 1 |
|  | Umalusi detected only one (8%) instance where marks were incorrectly transferred from the cover of a script to a mark sheet.  | Life Skills and Computer Literacy L3 Paper 1   |
| Administration: indicating marks as three digits | Of the sample, 47% indicated the marks on the cover pages and the mark sheets as three digits, as prescribed, while two (15%) on NC(V) Level 2 and five (38%) on NC(V) Level 3 still recorded the marks as two digits. The subjects that used two digits are listed in the subject column.  | Applied Accounting L3<br>Engineering Technology L2<br>English First Additional Language L3 Paper 1<br>Life Skills and Computer Literacy L3 Paper 1<br>Material Technology L3<br>Mathematics L2 Paper 1<br>Mathematics L3 Paper 1   |
| Control: marker identification                   | All the markers of the Level 2 subjects and 63% of the Level 3 markers clearly indicated their names on the cover pages of the question papers. This resulted in an overall compliance of 77%. This was 6% lower than the 83% compliance in 2021.   | Electronic Control and Digital Electronics L2<br>Engineering Technology L2<br>English First Additional Language L2 Paper 1<br>Governance L3<br>Life Skills and Computer Literacy L3 Paper 2<br>Material Technology L3<br>Mathematical Literacy L2 Paper 1<br>Mathematical Literacy L3 Paper 1<br>Mathematics L2 Paper 1<br>Mathematics L3 Paper 1  |
|  | Markers' names were not clearly indicated on the cover pages of the scripts in 23% of the question papers.  | Applied Accounting L3<br>English First Additional Language L3 Paper 1<br>Life Skills and Computer Literacy L3 Paper 1  |

| Criteria  | Findings   | Subject  |
|---|--|--|
| Standard of internal moderation   | Internal moderation was conducted in 12 (92%) of the question papers of the sample. This was 8% lower than the findings in 2021.   |  |
|   | In Life Skills and Computer Literacy L3 Paper 1 there was no evidence of moderation at one of the centres.   | Life Skills and Computer Literacy L3 Paper 1   |
|   | In all subjects the internal moderator used the whole-script approach and ensured that the sample cut across the performance range of the students. This was on par with the findings in 2021.   | All subjects in the sample   |
|   | Internal moderators of the NC(V) Level 2 subjects recorded their names on the scripts, while on L3 there was one subject where the name of the internal moderator was not recorded. Compared to 2021, the compliance rating remained at 92%. Furthermore, the same subject did not comply in 2021. | English First Additional Language L3 Paper 1   |
|   | The standard of internal moderation was rated as good in eight (61%) of the question papers. A remarkable improvement, compared to the 33% rating in 2021.   | Engineering Technology L2<br>English First Additional Language L2 Paper 1<br>Governance L3<br>Material Technology L3<br>Mathematical Literacy L2 Paper 1<br>Mathematical Literacy L3 Paper 1<br>Mathematics L2 Paper 1<br>Mathematics L3 Paper 1 |
|   | In 31% of the question papers, the standard of internal moderation was rated as average. This was 27% lower than the 58% in 2021.  | Applied Accounting L3<br>English First Additional Language L3 Paper 1<br>Life Skills and Computer Literacy L3 Paper 1 and Paper 2  |
|   | The standard of internal moderation was rated as poor for one of the subjects (8%).  | Electronic Control and Digital Electronics L2  |
|   | Evidence of shadow marking was prevalent at a number of centres in six (46%) of the question papers. This was a pleasing result compared to the 75% of subjects recorded in 2021.  | Applied Accounting L3<br>Electronic Control and Digital Electronics L2<br>English First Additional Language L3 Paper 1<br>Governance L3<br>Life Skills and Computer Literacy L3 Paper 1<br>Mathematics L2 Paper 1                                |
| The 54% of subjects where no shadow marking was noted indicated that internal moderation had focused on the quality of the assessment, rather than merely being a paper exercise of compliance. | Engineering Technology L2<br>English First Additional Language L2 Paper 1<br>Life Skills and Computer Literacy L3 Paper 2<br>Material Technology L3<br>Mathematical Literacy L2 Paper 1<br>Mathematical Literacy L3 Paper 1<br>Mathematics L2 Paper 1  |  |

| Criteria  | Findings   | Subject   |
|---|--|---|
| Candidates' responses   | The candidates performed as predicted by finding the easier questions uncomplicated and the more difficult questions more challenging in seven (54%) of the question papers, a sharp decline of 46% from the 100% in November 2021.  | Engineering Technology L2<br>English First Additional Language L2 Paper 1<br>English First Additional Language L3 Paper 1<br>Life Skills and Computer Literacy L3 Paper 2<br>Mathematical Literacy L2 Paper 1<br>Mathematical Literacy L3 Paper 1<br>Mathematics L2 Paper 1 |
|   | For the rest of the subjects, 46%, candidates struggled with the demands of all questions in the question papers.  | Applied Accounting L3<br>Electronic Control and Digital Electronics L2<br>Governance L3<br>Life Skills and Computer Literacy L3 Paper 1<br>Material Technology L3<br>Mathematics L3 Paper 1   |
| Questions that were unfair, beyond the level of the students or inaccurately presented. | In NC(V) Level 2 Umalusi did not detect any questions that were unfair, beyond the level of the students or inaccurately presented. In the NC(V) Level 3 subjects listed, cases of unfair questions, questions beyond the level of the paper and inaccurately presented questions were detected. | Unfair Question<br>Material Technology L3<br>Question beyond the level<br>Mathematics L3 Paper 1<br>Inaccurately presented<br>Applied Accounting L3<br>Governance L3<br>Mathematical Literacy L3 Paper 1  |
| Prevention and handling of irregularities   | None of the marking personnel of any of the subjects identified or reported on irregularities.   |   |

#### NC(V) Level 4

The findings for the verification of the Level 4 marking process are summarised in Table 5H. The findings were analysed and collated from the moderation of 13 questions papers at five marking centres.

| Criteria         | Findings  | Subject  |
|------------------|---|--|
| Script reception | Umalusi verified the marking of 100% of question papers on-site at the marking centres. At the time of verification all the scripts for ten (77%) of the subjects had been submitted to the centres where the marking took place. Compared to the 100% submission in 2021, there was a 23% decline in the scripts received on time. The subjects where scripts were still outstanding at the time of verification are reflected in the accompanying list. | Data Communication and Networking L4<br>Life Skills and Computer Literacy L4 Paper 1<br>Mathematical Literacy L4 Paper 1 |



| Criteria  | Findings  | Subject   |
|---|---|---|
| Training for the marking process  | The evidence provided indicated that marker training took place in 100% of the sample. In comparison with 2021, the results showed an increase of 9% in evidence of such training.  | Accounting L4 Paper 2<br>Criminal Justice Process L4<br>Data Communication and Networking L4<br>English First Additional Language L4 Applied Paper 1<br>Learning Psychology L4<br>Life Skills and Computer Literacy L4 Paper 1 and Paper 2<br>Management Practice L4<br>Marketing L4<br>Mathematical Literacy L4 Paper 1<br>Mathematics L4 Paper 1<br>Personal Assistance L4<br>Sustainable Tourism in SA and International Travel L4 |
| Sample marking  | Sample marking was conducted in all subjects. The size of the sample ranged from one to five scripts, depending on how quickly markers reached consistency in marking. For the two subjects listed, markers initially experienced challenges in adhering to the marking guidelines.   | English First Additional Language L4 Paper 1<br>Learning Psychology L4  |
| Marking procedure   | All markers in 100% of the subjects preferred the question-wise marking approach. This was an increase of 43%, compared to the 57% preference in 2021. This preference could have been influenced by the larger enrolment numbers in the subjects selected for the sample.  | Applied Accounting L4 Paper 2<br>Criminal Justice Process L4<br>Data Communication and Networking L4<br>English First Additional Language L4 Paper 1<br>Learning Psychology L4<br>Life Skills and Computer Literacy L4 Paper 1 and 2<br>Management Practice L4<br>Marketing L4<br>Mathematical Literacy L4 Paper 1<br>Mathematics L4 Paper 1<br>Personal Assistance L4<br>Sustainable Tourism in SA and International Travel L4       |
|   | In one subject marking personnel used whole-script marking.   | Marketing L4  |
| Procedure followed when a candidate answered more than the required number of questions | Cases where a candidate answered both optional questions:<br>in 77% of the question papers there were no choice questions, thus this criterion did not apply. However, in three (23%) of the question papers where there were choice questions, the markers marked the first option, drew a line through the additional answer and substantiated the reason. The question papers are recorded in the subject column.<br>In one question paper the markers indicated that both answers were marked and they would then give the candidate the benefit of the doubt by using the best mark. | First answer:<br>Applied Accounting L4 Paper 2<br>Management Practice L4<br>Personal Assistance L4<br>Case where both questions were marked and the best one taken:<br>Criminal Justice Process L4  |



| Criteria                       | Findings  | Subject  |
|--------------------------------|---|--|
|                                | <p>Cases where a candidate duplicated the answer to a question and forgot to delete one.</p> <p>The reports showed that in four (31%) of the subjects there was no duplication, whereas in five (38%) of the subjects markers marked the first of the two answers and the rest (31%) markers marked both and took the best mark.</p>  | <p>Markers marked the first answer in:</p> <p>Applied Accounting L4 Paper 2<br/>Data Communication and Networking L4<br/>Management Practice L4<br/>Mathematics L4 Paper 1<br/>Sustainable Tourism in SA and International Travel L4</p> <p>Both questions were marked, and the best taken</p> <p>Criminal Justice Process L4<br/>Life Skills and Computer Literacy L4 Paper 1 and 2<br/>Marketing L4</p>  |
| Adherence to marking guideline | <p>The 77% good adherence to marking guideline score was on par with the 78% in 2021.</p> <p>The adherence to marking guidelines in two subjects improved, in comparison to 2021:</p> <ul style="list-style-type: none"> <li>• Applied Accounting L4 Paper 2; and</li> <li>• Management Practice L4.</li> </ul> <p>There was a 23% average compliance compared to 15% in 2021. No subjects showed poor adherence to the marking guideline, compared to 7% in 2021. It should be noted that two of the subjects scored as average in 2021 were still regarded as average in 2022:</p> <ul style="list-style-type: none"> <li>• English First Additional Language L4 Paper 1; and</li> <li>• Life Skills and Computer Literacy L4 Paper 1.</li> </ul> <p>Adherence to the marking guideline in Marketing L4 improved, from poor adherence in 2021 to average in 2022.</p> | <p>Markers marked the first answer in:</p> <p>Applied Accounting L4 Paper 2<br/>Data Communication and Networking L4<br/>Management Practice L4<br/>Mathematics L4 Paper 1<br/>Personal Assistance L4</p> <p>Both questions were marked, and the best taken</p> <p>Criminal Justice Process L4</p> <p>Applied Accounting L4 Paper 2<br/>Criminal Justice Process L4<br/>Data Communication and Networking L4<br/>Learning Psychology L4<br/>Life Skills and Computer Literacy L4 Paper 2<br/>Management Practice L4<br/>Mathematical Literacy L4 Paper 1<br/>Mathematics L4 Paper 1<br/>Personal Assistance L4<br/>Sustainable Tourism in SA and International Travel L4</p> <p>English First Additional Language L4 Paper 1<br/>Life Skills and Computer Literacy L4 Paper 1<br/>Marketing L4</p> |

| Criteria                                   | Findings   | Subject   |
|--|--|---|
| Standard of marking                        | The adherence to marking guidelines had a positive influence on consistency in marking and the ability of markers to interpret the answers correctly and allocate marks for correct answers. This resulted in 77% of the sample maintaining a good standard of marking. Where marking was regarded as good, there was a minimal or no difference in mark allocation between marker and moderators. Umalusi was satisfied with the consistency in the standard of marking compared to the 77% in 2021 but would prefer constant improvement in future.  | Applied Accounting L4 Paper 2<br>Criminal Justice Process L4<br>Data Communication and Networking L4<br>Learning Psychology L4<br>Life Skills and Computer Literacy L4 Paper 2<br>Management Practice L4<br>Mathematical Literacy L4 Paper 1<br>Mathematics L4 Paper 1<br>Personal Assistance L4<br>Sustainable Tourism in SA and International Travel L4 |
|  | Marking in 23% of the question papers was rated as average because of inaccuracies and/or substantial differences in marks allocated by the marker/internal moderator and external moderator, where: <ul style="list-style-type: none"> <li>marks were not allocated according to the marking guidelines;</li> <li>markers were unable to interpret questions and give credit for correct answers;</li> <li>markers failed to allocate marks in a consistent way; and</li> <li>wrong answers were marked correct and vice versa.</li> </ul>  | English First Additional Language L4 Paper 1<br>Life Skills and Computer Literacy L4 Paper 1<br>Marketing L4  |
| Administration: recording marks on scripts | The prescribed procedure for recording of marks on the front page of the scripts was followed for 100% of the question papers. This was a 2% improvement on the 98% of 2021.   | All subjects in the sample.   |
| Administration: mark indication            | Marks were indicated per question for 100% of the question papers. This was 1% better than in 2021.  | All subjects in the sample.   |
| Administration: Correct transfer of marks  | Due to the control system that was in place, Umalusi did not detect any errors in the transfer of marks. The 100% compliance was consistent with the findings in 2021.   | All subjects in the sample.   |
| Administration: mark sheet completion      | Correct completion of mark sheets entailed refraining from using correction fluid, indicating marks as three digits, leaving no blank spaces and indicating the chief marker's name. The mark sheets of all subjects, barring one (8%), were fully compliant with all requirements. In the case of Mathematical Literacy L4 Paper 1 the verification of marking was scheduled very early in the marking process. At this stage the markers had not yet transferred the marks to the mark sheets and Umalusi could not verify whether the criteria had been met. The overall compliance at verification of marking was thus 92% of the sample, compared to the 72% in 2021, a pleasing increase of 20%. | Mathematical Literacy L4 Paper 1  |

| Criteria                       | Findings  | Subject   |
|--------------------------------|---|---|
| Control: marker identification | As recorded in 2021, all (100%) markers and/or chief markers indicated their names/ codes on the cover pages of the scripts next to the questions they had marked, in all of the subjects.  | All subjects in the sample.   |
| Internal moderation            | There was evidence of moderation of scripts throughout the marking process in 100% of the question papers. This was a 13% increase, compared to 87% in November 2021.<br>The sample selection included scripts across all levels of performance and all internal moderators performed whole-script moderation.  | All subjects in the sample.   |
|                                | At the time of verification of marking 69% of the sample had moderated scripts from all centres.<br>Internal moderation was still in progress at the remaining 31% listed.  | Applied Accounting L4<br>Data Communication and Networking L4<br>Learning Psychology L4<br>Sustainable Tourism in SA and International Travel L4  |
| Standard of moderation         | Umalusi concluded that in 84% of the question papers moderation was of a good standard. This was a result of good adherence to the marking guidelines, consistency in moderation with no signs of shadow marking and consistency in judgements. This was an improvement of 3% from the 81% of 2021.   | Applied Accounting L4 Paper 2<br>Criminal Justice Process L4<br>Data Communication and Networking L4<br>Learning Psychology L4<br>Life Skills and Computer Literacy L4 Paper 1 and 2<br>Management Practice L4<br>Mathematical Literacy L4 Paper 1<br>Mathematics L4 Paper 1<br>Personal Assistance L4<br>Sustainable Tourism in SA and International Travel L4 |
|                                | Internal moderation of one (8%) of the moderated scripts was rated as average compared, to the 12% of 2021. Internal moderation was of an acceptable standard with few deviations in moderation decisions.  | Marketing L4  |
|                                | In one (8%) subject internal moderation was rated as poor. Umalusi indicated that the standard was inadequate because the internal moderator and chief marker failed to see the relevance of correct answers that were marked incorrect. Candidates were unfairly disadvantaged because 78% of moderated scripts saw an increase of marks after Umalusi moderation.                       | English First Additional Language L4 Paper 1  |
| Fairness of the question paper | Umalusi judged the fairness of the question paper by identifying questions that were: <ul style="list-style-type: none"> <li>• unfair;</li> <li>• beyond the level of the paper; and/or</li> <li>• inaccurately presented.</li> </ul> <p>In 100% of the question papers the marking and moderation teams felt that questions in the question paper met all the criteria for fairness.</p> | All subjects in the sample.   |

| Criteria                          | Findings  | Subject   |
|-----------------------------------|---|---|
| Candidate performance             | <p>Umalusi's selected sample of scripts represented the complete range of performance of the candidates per subject. The findings showed that in 62% of the sampled subjects candidates performed as expected and predicted. Results included candidates who excelled; performed well; and average; and those who could not meet the demands of the questions.</p> <p>The five (38%) best performing subjects were:</p> <ul style="list-style-type: none"> <li>• Learning Psychology L4 where student performance ranged between 48% and 88%;</li> <li>• Sustainable Tourism in SA and International Travel L4 where the lowest mark was 30% and the highest 86%;</li> <li>• Life Skills and Computer Literacy L4 Paper 2, with performance ranging from 18% to 95%;</li> <li>• Life Skills and Computer Literacy L4 Paper 1 with the lowest mark at 24% and highest at 81%; and</li> <li>• Personal Assistance L4 with a range between 28% and 77%.</li> </ul> <p>A further three (23%) of the subjects showed average performance. It should be noted that the sample of subjects selected in 2022 was much lower than the sample selected in 2021. The selection of subjects and the size of the sample affected the final outcome. In 2021, 71% of the sample performed as expected, while in 2022 only 61% of the scripts sampled represented subjects where students performed as expected.</p> | <p>Well-performing</p> <p>Learning Psychology L4<br/>Life Skills and Computer Literacy L4 Paper 1 and Paper 2<br/>Personal Assistance L4<br/>Sustainable Tourism in SA and International Travel L4<br/>Average<br/>Management Practice L4<br/>Marketing L4<br/>Mathematical Literacy L4</p> |
|                                   | <p>In 38% of the sample all the students showed average performance and up to 50% of the students struggled with the demands of the question papers. In these cases, candidates misinterpreted questions, provided unrelated answers to questions or did not attempt the questions at all, resulting in marks lower than 40%.</p>   | <p>Applied Accounting L4 Paper 2<br/>English First Additional Language L4 Paper 1<br/>Criminal Justice Process L4<br/>Data Communication and Networking L4<br/>Mathematics L4 Paper 1</p>   |
| Irregularities found and reported | <p>Irregularities were detected and reported to the marking centre manager in only one (8%) of the subjects. This was 3% lower than the 12% of 2021.</p>  | <p>Marketing L4</p>   |

## 5.4 Areas of Improvement

A number of areas of improvement were noted during the verification of marking:

### A. NC(V) Level 2 and Level 3

- a. There was a pleasing increase of 20% in good adherence to the marking guideline, from 42% of the question papers in 2021 to 62% in November 2022;
- b. The good adherence to the marking guidelines improved the quality of marking by a substantial 27%, from the 42% marking rated as good in November 2021 to 69% in 2022;
- c. As in 2021 the prescribed procedure for the recording of marks was followed in 100% of the question papers;
- d. Mistakes detected by the moderator were clearly indicated in 85% of the sampled question papers. This was a 10% improvement compared to the 75% of 2021;
- e. There was a remarkable improvement of 17% in the transfer of marks when compared with 2021, to 92% in November 2022; and
- f. Although internal moderation was conducted in only 92% of the subjects, there was an improvement of 28% from the 33% of subjects where internal moderation was rated as good in 2021 to 61% in 2022.

### B. NC(V) Level 4

- a. Training for the marking process was conducted in 100% of the sample, compared to 91% in 2021;
- b. All markers in 100% of the sample preferred marking the scripts per question. This was an increase of 43%, compared to 57% in 2021. This method improved fairness and consistency in marking;
- c. Umalusi was pleased with the overall adherence to the administration of the recording of marks on scripts, the mark indication, correct calculation and transfer of marks and accuracy in the completion of mark sheets, in 100% of the subjects sampled. Compared to the findings in 2021, compliance improved slightly to, or remained constant at, 100%;
- d. There was sufficient evidence of internal moderation of scripts throughout the marking process in 100% of the subjects. This was an increase of 13% compared to 87% in November 2021;
- e. The standard of moderation improved from 81% in 2021 to 84% of the sample rating as good in 2022. This was the result of good adherence to the marking guideline, with no signs of shadow marking and a consistency in moderation judgements; and
- f. In 100% of the subjects the marking and moderation teams regarded the question paper as fair and valid.

## 5.5 Areas of Non-Compliance

While some areas of compliance improved from that of the November 2021 examination, other areas showed a decline. Such areas of non-compliance detract from the success of the marking process and compromise the quality and standard of marking.

### A. NC(V) Level 2 and Level 3

Some areas of non-compliance were noted from the external moderators' reports during the verification of marking of Levels 2 and 3:

- a. At the time of verification of marking by Umalusi, 100% of the subjects failed to submit all their scripts to the marking centres on time, compared to 83% in 2021;
- b. Compared to 83% of the sample providing documented evidence of marking guideline discussions, in November 2022 only 77% could provide evidence that such discussions had indeed taken place;
- c. It was a concern that in 53% of the subjects on Level 2 and 3 markers still indicated marks as two digits instead of three on both the cover pages of the scripts and the mark sheets. This was an increase in non-compliance of 3%, compared to 50% in 2021;
- d. Although internal moderation was conducted in 92% of the sample, it was worrying that in one subject there was no evidence of internal moderation. Although there was a reduction of 29% in instances of shadow marking, in 46% of the sample shadow marking was still prevalent; and
- e. Umalusi noted that although 54% of students performed as predicted, student performance was 46% poorer than in 2021. This was attributed to lack of preparation, language barriers and an inability to interpret questions correctly.

## B. NC(V) Level 4

Areas of non-compliance at Level 4 were evident in some question papers for some centres:

- a. It was disappointing that after the 100% on-time submission of scripts in November 2022, 23% of scripts were still outstanding at the marking centres at the time of Umalusi verification visits in 2022; and
- b. There was a decrease of 10% from 71% in 2021 to 61% in 2022 of the sample candidate performance that ranged from poor to excellent. The general finding in 2022 was that students did not perform as well as in previous years. This was attributed to lack of preparation, language barriers, misinterpretation of questions and students not attempting questions at all.

## 5.6 Directives for Compliance and Improvement

Compliance and improvement would enhance the marking process and give effect to the examination mechanisms of the DHET and benefit the TVET colleges at large.

### A. NC(V) Level 2 and Level 3

The DHET is required to:

- a. Ensure that the process of submission of marked scripts for verification is streamlined;
- b. Ensure that marking guideline standardisation meetings and assessment training sessions are conducted before any marking commences. Focus should be on the following areas: adherence to marking guidelines, the interpretation of questions and giving credit to correct answers and the correct completion of script covers and mark sheets;
- c. Provide training for internal moderators focusing on judging the adherence of markers to marking guidelines, the detection of mistakes and irregularities, the importance of refraining from shadow marking and the writing of quality reports. This would ensure that moderation is of the required quality; and
- d. Ensure lecturing staff at colleges receive support in interpreting and preparing students for the learning outcomes, assessment criteria and demands of assessment.

### B. NC(V) Level 4

The DHET is required to:

- a. Ensure that the process of submission of marked scripts for verification is streamlined;
- b. Strengthen the training of internal moderators and chief markers and focus on the detection of non-adherence of markers to marking guidelines and that the writing of reports is of a high quality; and
- c. Ensure lecturing staff at colleges receive support in interpreting and preparing students for the learning outcomes, assessment criteria and demands of assessment.

## 5.7 Conclusion

Overall, the marking process for the NC(V) L2–L4 November 2022 examination was implemented successfully. While marking in general was fair, there remain areas that would enhance the marking process if the role players made a concerted effort.

The implementation of the online platform for the standardisation of marking guidelines ensured that more role players were involved in the marking preparation process and that there was improvement in the reliability of the assessment. This platform should be strengthened as a continuous improvement intervention strategy, to inform, train and standardise teaching, learning and assessment nationally.

The success of the NC(V) programme depends on the effective implementation of the curriculum, the related assessment processes and the participation of all role players.



# CHAPTER 6 STANDARDISATION AND VERIFICATION OF RESULTS

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## 6.1 Introduction

Standardisation is a process informed by the evidence presented in 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 due to the standard of question papers, quality of marking and other related factors. It is for these reasons Umalusi standardises examination results: to control their variability from one examination session to the next. Umalusi derives this function from section 17A (4) of the General and Further Education and Training Quality Assurance Act (GENFETQA) 2001 (Act No. 58 of 2001, as amended in 2008), which states that the Council may adjust raw marks during the standardisation process.

In broad terms, standardisation involves verifying subject structures, mark capturing and the computer system used by an assessment body. It also involves the development and verification of historical averages (norms), culminating 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 and examination monitors, intervention reports presented by assessment bodies and other related information which may be available at the time. Finally, the process is concluded with the approval of standardisation decisions per subject, statistical moderation and the resulting process.

## 6.2 Scope and Approach

The Department of Higher Education and Training (DHET) presented 261 subjects linked to National Certificate (Vocational) [NC(V)] Levels 2–4 for standardisation purposes. In turn, Umalusi verified the historical averages, standardisation data, adjustments, statistical moderation and the resulting datasets.

### 6.2.1 Development of Historical Averages

The historical averages (norms) for NC(V) Levels 2–4 examinations are developed using the previous three to five November examination sittings. Once that has been done, as per policy requirements Umalusi calculates and submits the norms to the DHET. Where a distribution contains outliers, the historical average is calculated, excluding data from the outlying examination sittings. In addition, Umalusi applies the principle of outliers when calculating the historical average for such instructional offerings. Finally, Umalusi considers historical averages during the standardisation process.

### 6.2.2 Verification of Datasets and Standardisation Booklets

To prepare for the standardisation processes Umalusi, in conjunction with the DHET, embarked on a process of verification of the IT systems through dry runs. The aim was to ensure proper alignment of the examination computer systems and to ensure compatibility of data and formulae used for data processing. Additionally, the DHET submitted standardisation datasets and electronic booklets per the Umalusi management plan. The datasets were verified and approved timeously, resulting in the final standardisation of electronic booklets being printed on time.

### 6.2.3 Pre-Standardisation and Standardisation

The pre-standardisation and standardisation meetings for NC(V) Levels 2–4 were held from 07 January 2023 to 09 January 2023. Umalusi considered many factors to reach its standardisation decisions, including qualitative and quantitative information. Qualitative inputs included evidence-based reports presented by the DHET and the reports of Umalusi's external moderators and monitors on the conduct, administration and management of the examinations. Quantitative information included historical averages and pairs analysis. Lastly, standardisation decisions were guided by set standardisation principles.

## 6.2.4 Post-Standardisation

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

## 6.3 Summary of Findings

This section presents the most important findings and discusses the standardisation decisions taken.

### 6.3.1 Development of Historical Averages

The historical averages (norms) for the November 2022 NC(V) Levels 2–4 examinations were developed using the previous five examination sittings. The 2021 November examination sitting for Animal Production L4 was an outlier and was excluded when developing the norm for November 2022.

### 6.3.2 Standardisation Decisions

The qualitative reports produced by the external moderators and consolidated by Umalusi's Quality Assurance of Assessments Unit, together with the monitoring and intervention reports presented by the assessment body and application of the principles of standardisation, informed the final standardisation decisions. Table 6A lists the standardisation decisions taken.

**Table 6A: Standardisation decisions for the November 2022 NC(V) Levels 2–4**

| Description                            | Total      |
|--|------------|
| Number of subjects presented           | 261        |
| Raw marks accepted                     | 146        |
| Adjusted (mainly upwards)              | 66         |
| Adjusted (mainly downwards)            | 49         |
| <b>Number of standardised subjects</b> | <b>261</b> |

When compared to November 2021, an overall increase of 27% in candidate numbers across all three NC(V) levels was observed. This increase could be attributed to the waiver of the 80% attendance rule for candidates to be admitted to the examination.

The increase in the number of applications for marking concessions every year is an area of concern, particularly in subjects for which marking concessions are a recurring phenomenon. Also, the unavailability of the chief markers' and internal moderators' reports for certain subjects in Level 2 and Level 3 was concerning.

### 6.3.3 Post-Standardisation

The standardisation decisions were submitted to the assessment body and approved at first submission.

## 6.4 Areas of Good Practice

The findings revealed the following area of good practice:

- The DHET submitted the datasets and standardisation booklet for verification within the stipulated timeframes.

## 6.5 Areas of Non-Compliance

None



## 6.6 Directives for Compliance and Improvement

The DHET must ensure that:

- a. Quality assurance systems for item setting are improved to mitigate the high rate of marking concession requests; and
- b. Qualitative reports of chief markers and internal moderators for all subjects are submitted to Umalusi.

## 6.7 Conclusion

The process of standardisation was conducted in a systematic, objective and transparent manner. The decisions taken on whether to accept raw marks or make upward or downward adjustments were based on sound educational reasoning, guided by established standardisation principles. The majority of the DHET proposals corresponded with those of Umalusi, which is a clear indication of a maturing examination system.

# CHAPTER 7 CERTIFICATION

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## 7.1 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 candidate achievements for South African qualifications registered on the General and Further Education and Training Qualifications Sub-framework (GFETQSF) of the National Qualifications Framework (NQF). Accordingly, the responsibilities of Umalusi, amongst others, include 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 responsible for Higher Education and Training for the National Certificate (Vocational)[NC(V)], as registered on the NQF.

The quality assurance processes instituted by Umalusi for certification ensure that the qualification awarded to a candidate complies with all the requirements for the qualification as stipulated in the regulations. The Department of Higher Education and Training (DHET) must submit all candidate achievements to Umalusi, as 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 quality assurance has been done to ensure that

- a) The correct results are released to candidates,
- b) Umalusi approves all results before release and
- c) The certification of the candidate's achievements is done per the approved results.

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. For example, all records of candidates registered for the NC(V) examinations are submitted to Umalusi for certification.

Umalusi verifies all the data received from the DHET. The certification data must correspond with the quality-assured results, keeping in mind that all changes to marks must be approved before they are released to candidates. Where discrepancies are detected, the DHET must provide supporting documentation and explanations for such discrepancies. This process ensures that no candidate is inadvertently advantaged or disadvantaged because of a possible programme and/or human error; it also limits later requests to re-issue an incorrectly issued certificate.

This chapter focuses on the certification processes and the compliance of the DHET to the directives for certification.

## 7.2 Scope and Approach

The period covered in this report is from 01 December 2021 to 30 November 2022. All requests for certification received during this period that were finalised, in other words, feedback provided to the DHET by Umalusi, are included and addressed in this report. The main examination covered is the November 2021 examination and the supplementary examination of March 2022.

Certification of candidate achievements cannot be pinned to a single period in the year since it is a continuous process wherein certificates are issued throughout the year. The bulk of the certification happens, usually within three months of the release of the results. In addition, throughout the year, certificates are requested, either as first issues, duplicates, replacements due to change in status or re-issues.

To ensure that the data for certification is valid, reliable and in the correct format, Umalusi publishes directives for certification. These 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 with the certification directives by the DHET and how this can affect the quality assurance processes and the certification of candidate achievements. In addition, the number of requests received and the type of certificates issued in this period are also provided

Several findings were made during processing requests for certification in the reporting period. These findings should be regarded as critical points to be addressed.

### 7.3 Findings

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

Thus the first aspect to focus on is the submission of the subject structures for approval and alignment of the Information Technology (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 submitting the subjects' structures, the DHET must ensure that the structures are correctly registered for the new examination cycle and aligned with that of Umalusi.

The DHET submitted the subject structures compared with the Umalusi subject structures. Differences were indicated, rectified, and the subject structures were aligned on the IT systems.

Two submissions of registration data are required: the first, three months after registration has closed, and the final dataset at the end of October. The first submission is a preliminary registration, while the second is the final set of registration data.

A set of registration data was submitted to Umalusi for quality checking, and feedback was provided to the DHET for correction. The following errors were detected in the data:

- a. The "Type of Centre" indicated on the registration data was different from the actual centre registration, as well as on the records from previous certification data;
- b. All centres were submitted as "Private or Independent" colleges or had an "invalid" indicator that did not correlate with the prescribed types; and
- c. Incorrect identity document (ID) numbers and dates of birth were provided for some candidates.

The registration of NC(V) candidates was completed by the DHET, and the admission letters were dispatched to all public and private Technical and Vocational Education and Training (TVET) colleges. All TVET colleges were required to submit registration data electronically, to the DHET, according to a prescribed data format. After the DHET has loaded the registration data onto their mainframe system, the printing and verification of the preliminary entry schedules are followed. Finally, the correction and checking of the entries had been completed, and the admission permits/letters were printed and distributed to TVET colleges that offer the NC(V).

After the DHET has conducted the end-of-year examination, all results are submitted to Umalusi for standardisation, statistical moderation and the resulting of the candidate achievements. All the candidate records must be submitted to Umalusi for approval before the results can be released. Umalusi approves the results for release to candidates after several quality assurance processes.

During the processing of the certification datasets, a small percentage of candidate records requesting certification had not been approved during the resulting process. This caused a delay in the certification and issuing of certificates to these candidates. Therefore, a list of candidates rejected during the quality assurance checks was extracted by Umalusi and sent to the DHET to resolve the uncertified records.

The general principle that must be adhered to is that all results must be approved before release and the request for certification submitted to Umalusi. Any changes to marks must also be submitted for approval. Once a certificate has been issued, marks cannot be corrected by submitting mop-up datasets. A re-

issue must be requested to correct marks on a certificate that has already been issued.

The submission of datasets for certification and the declaration forms were made within three months of the release of results. However, it was noted that not all candidate records submitted for approval of results were submitted for certification.

Recording and finalising irregularities are essential to ensure that certificates are issued correctly to deserving candidates. The DHET must continuously inform Umalusi of all irregularities to allow Umalusi to record such instances on the Umalusi Certification IT system. It is of utmost importance that Umalusi is updated on the status of irregularities (pending, guilty, not guilty) before requests for certification are submitted. If this is not done, it is possible that candidates will not receive their certificates, or the issuing of certificates will be delayed because irregularities have not been finalised. Improvement in this area is necessary because the submission of irregularities in the prescribed format is not adhered to by the DHET.

Umalusi has noticed that candidate records rejected for non-compliance with the directives for certification were resubmitted for certification without the error being corrected. Resubmitting candidates' records without correcting errors delays the issuing of certificates to candidates. In some cases, the rejected record is not even resubmitted for certification.

There was an improvement in incorrect cancellation reasons in applications for re-issues of certificates compared to what was reported in the past. However, any change due to the correction of personal details on the national population register must be requested as a legal change. The evidence provided must be certified documentation from the Department of Home Affairs.

The phasing out of the automatic printing of subject statements was introduced at the request of the DHET. This was done to reduce the costs for certificates issued to private colleges and saved Umalusi the costs of printing subject statements. For the period under review, 83 652 transactions were certified where no subject statements were printed. Umalusi will only print subject statements requested by the DHET on behalf of the colleges. The DHET must, therefore, ensure that subject statements are requested for those candidates who need them; and must note that it is possible to request a subject statement should it not have been requested initially. The decision and procedure regarding the non-printing of subject statements must be communicated to all role players—including the candidates.

Progress was made this year with a reduced backlog of outstanding certificates. The DHET reported that more than 99% of the outstanding certificates had been issued. There remain, however, some outstanding full certificates, especially where candidates qualified for a certificate across multiple examinations. These candidate records must be identified, and the combining of results must be effected to allow for issuing these certificates.

Figure 7A reflects a summary of certificates issued from 01 December 2021 to 30 November 2022 (excluding subject statements).

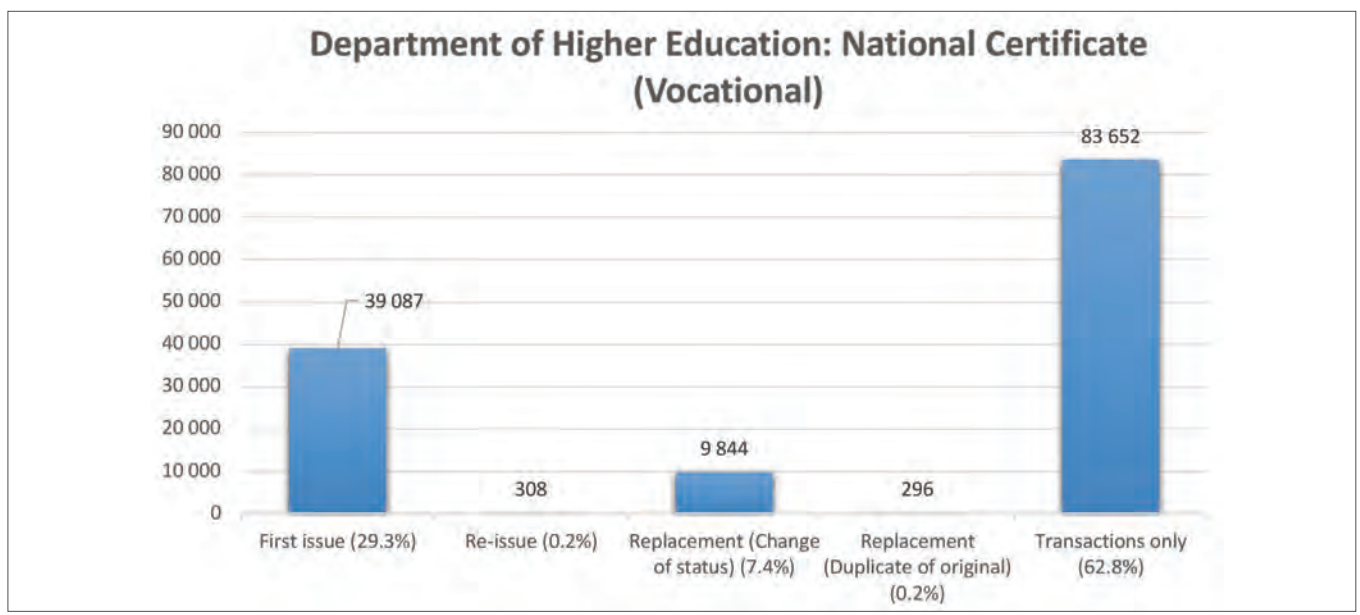


Figure 7A: Certificates issued during the period 01 December 2021 to 30 November 2022

Table 7A reflects the datasets and transactions processed during the same period.

**Table 7A: Number of datasets and transactions received during the period 01 December 2021 to 30 November 2022**

| National Certificate (Vocational) |                 |                          |                     |                          |                         |                     |                         |
|-----------------------------------|-----------------|--------------------------|---------------------|--------------------------|-------------------------|---------------------|-------------------------|
| NC(V) level                       | No. of datasets | No. of datasets accepted | Percentage accepted | No. of records submitted | No. of records accepted | Percentage accepted | No. of records rejected |
| 2                                 | 244             | 218                      | 99.19               | 101 228                  | 79 757                  | 90.30%              | 78.79                   |
| 3                                 | 288             | 269                      | 100%                | 69 391                   | 59 885                  | 84.40%              | 86.30                   |
| 4                                 | 363             | 241                      | 100.00%             | 48 718                   | 41 164                  | 85.40%              | 84.49                   |
| <b>Total</b>                      | <b>895</b>      | <b>728</b>               | <b>99.90%</b>       | <b>219 337</b>           | <b>180 806</b>          | <b>87.50%</b>       | <b>82.43</b>            |

## 7.4 Areas of Improvement (Including Innovations)

Areas of compliance and good practice are discussed below:

- The registration of NC(V) candidates was completed, and the admission letters were dispatched to all TVET and private colleges. The registration process has been improved, requiring all TVET and private colleges to submit registration data electronically in a prescribed format. This data was then uploaded to the DHET's examination system;
- The submission of datasets for the certification of candidate achievements improved and was made according to the directives. Many candidates were certified within the required period after the examination was conducted;
- There was an improvement in raw marks submitted for certification, and the marks did not change from those approved during the resulting process. The measures taken to ensure that candidates' marks were "locked" on the IT system and that changes to marks without prior approval would not occur in future were successfully implemented; and
- The reduction in the number of outstanding certificates went very well, and there remains a low percentage of outstanding certificates. Therefore, the management plan to certify within three months of the release of the results was adhered to, and the issue of outstanding certificates was prevented.

## 7.5 Areas of Non-Compliance

The following areas of non-compliance are discussed below:

- Umalusi requested that the DHET submit two sets of registration data, the first to be submitted no later than three months after the closing date for registration. This is regarded as the preliminary registration data. The final set of registration data must be submitted before the writing of the main examination commences. The DHET submitted only one set of registration data for this cohort of candidates instead of two;
- Care must be taken that all the required fields (field values) are populated with the correct values, as captured on the DHET IT system. This is with specific reference to the "type of centre" in terms of "Private and Public". This issue was also raised in the past with the assessment body;
- The most significant area of non-compliance was that not all the approved candidate records whose results were released by the DHET on statements of results were submitted for certification. Requests for certification are received where the results have not been approved for release; the results requested to be certified differ from those approved and, therefore, the certification requests are rejected. Any changes in subject marks must be approved, whether changes were due to capture errors, calculation errors, outstanding marks being updated, re-marks or rechecks. The resubmission of candidate records for certification without correcting identified errors delays the candidate's certification. To comply, the DHET is required to investigate and correct all errors before resubmission to Umalusi for certification;
- The finalisation and completion of irregularities were other areas of non-compliance. Where irregularities have been identified and reported to Umalusi, their status must be communicated to Umalusi in the prescribed data format (spreadsheet). The updated report on irregularities must also be submitted to Umalusi before bulk certification is requested. The absence of these updated reports causes unnecessary delays and rejections;

- e. The combining, or consolidation, of results across multiple examination sittings, must be resolved to eliminate the backlog in certificates. This challenge has remained unresolved and has affected candidates since the inception of the NC(V).

## 7.6 Directives for Compliance and Improvement

The DHET must ensure that:

- a. Umalusi approves all candidate records prior to extracting certification datasets to avoid unnecessary rejections and delays in issuing certificates to candidates, especially where candidates were involved in a re-mark or where marks have changed;
- b. Both the preliminary and the final sets of registration data are submitted to Umalusi. This submission will confirm that all registrations have been verified and correctly captured on the system and prevent certificate re-issue requests because of incorrect candidate details;
- c. The IT system is updated to allow for the issuing of subject statements where printing such was not initially requested. The DHET must ensure that subject statements are requested for those candidates who need them;
- d. All pending irregularity cases across all examination periods are attended to and resolved; and
- e. The updated irregularity reports are submitted to Umalusi as soon as irregularity cases are finalised, followed by the requests for certification for these candidates.

## 7.7 Conclusion

The DHET, as the assessment body, was compliant and executed the directives for certification in most aspects. However, it has been noted that measures have been put in place to prevent any outstanding certificates in future; and processes have been adopted to ensure that all outstanding certificates are issued.

Most candidates are resulted and certified without any problems, which is done within the management plans. However, it remains a challenge to achieve a certification rate of 100% and to certify without any problems. Even though the scope of the examination is huge and the system's complexity, there is room for improvement.

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**PART B:**

**QUALITY ASSURANCE OF  
NATED REPORT 190/191 ENGINEERING  
STUDIES N2-N3**

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# CHAPTER 8 MODERATION OF QUESTION PAPERS

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## 8.1 Introduction

Umalusi conducts external moderation of question papers that are set nationally and moderated internally by the Department of Higher Education and Training (DHET). The purpose of external moderation of examination question papers and marking guidelines is to ensure that quality and standards are maintained in all the NATED Report 190/191: Engineering Studies N2-N3 examination cycles.

The moderation of question papers is a critical element of the quality assurance of assessment processes. The external moderation process confirms that the question papers have been developed with rigour and comply with Umalusi's criteria and the curriculum and assessment policy documents of the assessment body.

The DHET is expected to appoint examiners and internal moderators, with the requisite content knowledge in the specific instructional offerings, to set and internally moderate the question papers before they are presented to Umalusi for external moderation. The question papers and marking guidelines are expected to be print-ready when submitted to Umalusi for external moderation. It therefore remains the specific responsibility of the internal moderators to ensure that the question papers and marking guidelines are of an acceptable standard.

To maintain public confidence in the national examination system, the question papers must be seen to be:

- a. Fair;
- b. Reliable;
- c. Representative of an adequate sample of the curriculum;
- d. Representative of relevant conceptual domains; and
- e. Representative of relevant levels of cognitive demand.

## 8.2 Scope and Approach

Umalusi moderated and approved a total of 50 question papers and marking guidelines for 50 instructional offerings of the November 2022 NATED Report 190/191: Engineering Studies N2-N3 examinations. External moderation was done off-site, with the question papers, marking guidelines, assessment frameworks and internal moderators' reports forwarded electronically to external moderators. The external moderators prepared assessment frameworks with which to appraise the cognitive demand and weighting of the syllabi topics and evaluated the question papers in terms of the specified criteria.

In addition, Umalusi moderated four back-up question papers selected by the DHET to as a contingency measure. These instructional offerings were Electrotechnology N3, Engineering Science N3, Fitting and Machining Theory N2 and Mathematics N3. These sets of question papers were set and internally moderated on-site, at the Department of Higher Education and Training (DHET) offices, from 24 to 30 September 2022.

Umalusi moderated and signed off the question papers between 30 September and 02 October 2022.

Table 8A indicates the instructional offerings moderated, per level.



**Table 8A: Instructional offerings included in the moderated sample of question papers**

| <b>Instructional offerings</b>           | <b>Level</b> |
|--|--------------|
| Aircraft Maintenance Theory              | N3           |
| Building and Civil Technology            | N3           |
| Building Drawing                         | N2 and N3    |
| Bricklaying and Plastering Theory        | N2           |
| Building Science                         | N2 and N3    |
| Carpentry and Roofing Theory             | N2           |
| Diesel Trade Theory                      | N2 and N3    |
| Electrical Trade Theory                  | N2 and N3    |
| Electrotechnology                        | N3           |
| Engineering Drawing                      | N2 and N3    |
| Engineering Science                      | N2 and N3    |
| Fitting and Machining Theory             | N2           |
| Industrial Electronics                   | N2 and N3    |
| Industrial Organisation and Planning     | N3           |
| Industrial Orientation                   | N2 and N3    |
| Instrument Trade Theory                  | N2 and N3    |
| Logic Systems                            | N2 and N3    |
| Mathematics                              | N2 and N3    |
| Mechanotechnology                        | N3           |
| Motor Electrical Theory                  | N2           |
| Motor Trade Theory                       | N2 and N3    |
| Plant Operation Theory                   | N2 and N3    |
| Platers' Theory                          | N2           |
| Plating and Structural Steel Drawing     | N2 and N3    |
| Plumbing Theory                          | N2           |
| Radio Theory                             | N2 and N3    |
| Radio and Television Theory              | N2 and N3    |
| Refrigeration Trade Theory               | N2 and N3    |
| Supervision in Industry                  | N3           |
| Waste-water Treatment Practice           | N3           |
| Water and Waste-water Treatment Practice | N2           |
| Water Treatment Practice                 | N3           |
| Welders' Theory                          | N2           |

For the November 2022 examination, the DHET administered a total of 55 instructional offerings for N2 and N3, of which Umalusi sampled 50 for moderation. Table 8B indicates the number of instructional offerings moderated by Umalusi, per level, and their percentages.

**Table 8B: Instructional offerings included in the sample of question papers**

| Level        | Number of instructional offerings offered | Number of instructional offerings moderated | Percentage of instructional offerings moderated |
|--------------|---|---|---|
| N2           | 30*                                       | 25  | 83%   |
| N3           | 25*                                       | 25  | 100%  |
| <b>Total</b> | <b>55*</b>                                | <b>50</b>                                   | <b>91%</b>                                      |

\*according to the DHET 2022 examination timetable

The question papers and marking guidelines were moderated according to the following ten criteria, or detailed quality indicators, set by Umalusi:

- Technical aspects, related to the presentation of the question papers and marking guidelines;
- Effectiveness of internal moderation in improving the quality of question papers;
- Adherence to the syllabus with respect to content coverage;
- Types of questions, formulation of questions and clarity of questions to achieve the desired response;
- Distribution of marks across cognitive levels;
- Consistency and appropriateness of mark allocation;
- Relevance and correctness of the marking guidelines;
- Appropriateness of language register, correct use of grammar in question papers and marking guidelines and content that is free from bias;
- Degree of predictability of questions and innovation in question papers; and
- An overall evaluation of the question papers in their suitability to the level assessed.

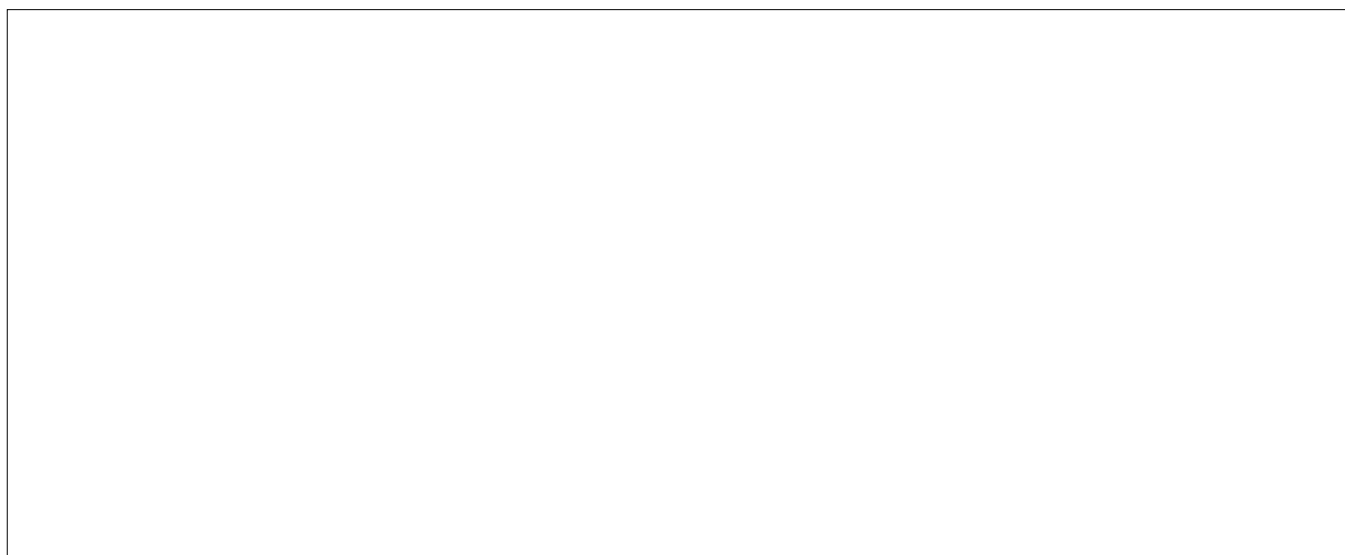
### 8.3 Summary of Findings

Table 8C indicates the findings of the preliminary moderation process of the 50 sampled question papers:

**Table 8C: Approval status of question papers and marking guidelines after preliminary moderation**

| November 2022 examinations                |  |                                    |  |                                    |
|---|--|------------------------------------|--|------------------------------------|
| Report 190/191: Engineering Studies N2-N3 | Number of question papers moderated by Umalusi | Number of question papers approved | Number of question papers conditionally approved | Number of question papers rejected |
| N2  | 25   | 9                                  | 16   | 0                                  |
| N3  | 25   | 5                                  | 19   | 1                                  |
| <b>Total</b>                              | <b>50</b>                                      | <b>14</b>                          | <b>35</b>  | <b>1</b>                           |

Figure 8A provides a summary of the findings after first moderation of the question papers and their marking guidelines, as captured from the external moderators' reports.



**Figure 8A: Approval status of the NATED Report 190/191: Engineering Studies question papers and marking guidelines after first moderation**

Table 8D provides a summary of the most significant findings from the moderation of the November 2022 examination question papers and marking guidelines. All findings are discussed in terms of the sample of (50) instructional offerings moderated.

**Table 8D: Summary of findings of the first moderation of question papers**

| Criterion  | Challenges  | Instructional offering concerned   |
|--|---|--|
| <b>Technical criteria</b>                                |   |  |
| Submission of supporting documents to external moderator | The internal moderation report was not completed for 28% of the question papers   | Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N3<br>Industrial Orientation N2 and N3<br>Instrument Trade Theory N2 and N3<br>Motor Electrical Theory N2<br>Motor Trade Theory N3<br>Radio Theory N2 |
| Layout of the question paper                             | The cover pages did not contain all relevant details, such as logo, name of instructional offering, time allocation, number of pages and additional information, for 22% of the question papers   | Aircraft Maintenance Theory N3<br>Building Drawing N2<br>Engineering Drawing N2 and N3<br>Engineering Science N2<br>Logic Systems N3<br>Mathematics N2<br>Motor Electrical Theory N2<br>Plant Operation Theory N3<br>Plating and Structural Steel Drawing N3<br>Water Treatment Practice N3  |
| Instructions to candidates                               | In 8% of the question papers the instructions to candidates were not clearly specified and were ambiguous, according to the DHET specifications. This was the case for 6% of the question papers in the November 2021 NATED examination | Building Drawing N2<br>Carpentry and Roofing Theory N2<br>Mathematics N3<br>Plating and Structural Steel Drawing N3  |
| Numbering of questions                                   | In 2% of the question papers the questions were not correctly numbered, compared to 10% of the question papers in the November 2021 NATED examination   | Motor Electrical Theory N2   |
| Header and footer  | In 6% of the question papers the headers and footers on each page were inconsistent and did not adhere to the required format. This compared to 2% of the question papers in the November 2021 examination                              | Mathematics N3<br>Mechanotechnology N3<br>Motor Electrical Theory N2   |
| Font type and size                                       | In 2% of the question papers the fonts were not consistently appropriate in the paper. This was the same in the November 2021 examination   | Motor Electrical Theory N2   |
| Mark and time allocation                                 | In 8% of the question papers the mark allocations were not clearly indicated. This was the case in 14% of the question papers in the November 2021 examination  | Building Drawing N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Water and Waste-Water Treatment Practice N2   |
|  | In 2% of the question papers the mark allocation on the paper was not the same as that in the marking guidelines, compared to 8% of question papers with this challenge in the November 2021 examination                                | Engineering Drawing N2   |

|   |   |   |
|---|---|---|
| Quality of graphics and illustrations               | The quality of illustrations, graphs and tables was poor and the graphs and tables were not clear, contained errors and were not print-ready in 16% of question papers, compared to 14% of the question papers in the November 2021 examination   | Carpentry and Roofing Theory N2<br>Engineering Drawing N2 and N3<br>Industrial Electronics N2<br>Mathematics N2<br>Plating and Structural Steel Drawing N3<br>Refrigeration Trade Theory N2<br>Water and Waste-Water Treatment Practice N2  |
| Format requirements to the syllabus                 | In 2% of the question papers the format requirements of the syllabus was not adhered to. This was the same in the November 2021 examination   | Fitting and Machining Theory N2   |
| <b>Internal moderation</b>                          |   |   |
| Internal moderator reports match the question paper | For 24% of the question papers, the internal moderator reports did not match the question papers, compared to 34% in the November 2022 examination  | Bricklaying and Plastering Theory N2<br>Building Drawing N2<br>Engineering Science N3<br>Fitting and Machining Theory N2<br>Industrial Electronics N3<br>Industrial Orientation N2 and N3<br>Motor Electrical Theory N2<br>Motor Trade Theory N3<br>Platers' Theory N2<br>Radio Theory N2<br>Supervision in Industry N3   |
| Quality and standard of internal moderation report  | In 28% of the question papers the internal moderator report was incomplete (the report did not include contact details of the examiner and internal moderator, the analysis grid, an evaluation of the paper in terms of specified criteria and the approval status of the question paper and marking guideline). This was an improvement when compared to 40% in the November 2021 examination | Bricklaying and Plastering Theory N2<br>Building Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N3<br>Industrial Orientation N2 and N3<br>Logic Systems N2 and N3<br>Mechanotechnology N3<br>Motor Electrical Theory N2<br>Motor Trade Theory N2 and N3<br>Radio Theory N2<br>Supervision in Industry N3   |
|   | The internal moderation reports were not up to standard for 30% of the question papers, compared to 38% in the November 2021 examination  | Building Drawing N2<br>Engineering Drawing N3<br>Engineering Science N3<br>Fitting and Machining Theory N2<br>Industrial Electronics N2 and N3<br>Industrial Orientation N2 and N3<br>Mathematics N2<br>Motor Electrical Theory N2<br>Motor Trade Theory N3<br>Plating and Structural Steel Drawing N3<br>Radio Theory N2<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3  |
|   | For 34% of the question papers the internal moderation reports were not relevant. This was a decrease, from 42% in the November 2021 examination  | Bricklaying and Plastering Theory N2<br>Building Drawing N2<br>Electrotechnology N3<br>Engineering Science N3<br>Fitting and Machining Theory N2<br>Industrial Electronics N2 and N3<br>Industrial Orientation N2 and N3<br>Mathematics N3<br>Mechanotechnology N3<br>Motor Electrical Theory N2<br>Motor Trade Theory N3<br>Platers' Theory N2<br>Radio Theory N2<br>Refrigeration Trade Theory N2<br>Supervision in Industry N3 |

## Content coverage

|                          |  |   |
|--------------------------|--|---|
| Coverage of the syllabus | In 8% of the question papers the syllabus was not covered adequately, compared to 6% in the November 2021 examination  | Industrial Organisation and Planning N3<br>Mathematics N3<br>Motor Trade Theory N3<br>Water Treatment Practice N3   |
|                          | In 16% of the question papers the questions did not accord with the prescribed weightings of the topics. This was an increase from 6% in the November 2021 examination   | Electrical Trade Theory N3<br>Engineering Drawing N2<br>Fitting and Machining Theory N2<br>Industrial Organisation and Planning N3<br>Mathematics N2 and N3<br>Motor Trade Theory N3<br>Refrigeration Trade Theory N2   |
|                          | In 6% of the question papers the topics were not spread appropriately. This was the same in the November 2022 examination  | Industrial Organisation and Planning N3<br>Mathematics N3<br>Motor Trade Theory N3  |
|                          | In 10% of the question papers the questions were not representative of the latest developments in the respective fields of the instructional offerings. This was the case for 12% in the August 2021 examination   | Aircraft Maintenance Theory N3<br>Building Drawing N2<br>Carpentry and Roofing Theory N2<br>Industrial Organisation and Planning N3<br>Motor Electrical Theory N2   |
| Types of questions       | Four percent of the question papers did not have various types of questions, e.g., multiple-choice, paragraph, data/source-based response, essay, real-life scenario and real-life problem-solving questions. This was the same in the November 2021 examination | Carpentry and Roofing Theory N2<br>Industrial Organisation and Planning N3  |
|                          | There was no correlation between mark allocation, level of difficulty and time allocation in 18% of the question papers, compared to 28% in the November 2021 examination  | Building Science N3<br>Carpentry and Roofing Theory N2<br>Engineering Drawing N2<br>Engineering Drawing N3<br>Fitting and Machining Theory N2<br>Mathematics N3<br>Motor Trade Theory N3<br>Plant Operation Theory N3<br>Refrigeration Trade Theory N3  |
| Quality of questions     | In six percent of the question papers the questions did not relate to what was pertinent in the instructional offerings. This was 4% in the November 2021 examination  | Carpentry and Roofing Theory N2<br>Industrial Organisation and Planning N3<br>Motor Electrical Theory N2  |
|                          | In 22% of the question papers the questions had vaguely defined problems, ambiguous wording, extraneous or irrelevant information, trivia and unintentional clues to the correct answers, compared to 16% in the November 2021 examination                       | Building Science N3<br>Carpentry and Roofing Theory N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Logic Systems N3<br>Mathematics N3<br>Motor Electrical Theory N2<br>Motor Trade Theory N3<br>Plant Operation Theory N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3 |
|                          | In 10% of the question papers the questions did not provide clear instructional key words/ verbs; this was the same in the November 2021 examination   | Carpentry and Roofing Theory N2<br>Electrotechnology N3<br>Mathematics N3<br>Plating and Structural Steel Drawing N2<br>Water and Waste-Water Treatment Practice N2   |

| Content coverage                  |  |   |
|-----------------------------------|--|---|
| Quality of questions              | In 20% of the question papers the questions did not contain sufficient information to elicit appropriate responses, compared to 16% in the November 2021 examination   | Carpentry and Roofing Theory N2<br>Industrial Electronics N2<br>Industrial Orientation N2<br>Mathematics N3<br>Motor Electrical Theory N2<br>Plant Operation Theory N3<br>Plating and Structural Steel Drawing N2<br>Radio and Television Theory N2 and N3<br>Refrigeration Trade Theory N3   |
|                                   | In 10% of the question papers the questions contained factual errors or misleading information, compared to 12% in the November 2021 examination   | Building Science N2<br>Industrial Electronics N2<br>Mathematics N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3   |
| Cognitive skills                  |  |   |
| Analysis grid                     | In 20% of the question papers the analysis grid did not show the cognitive level of each question/ sub-question, compared to 32% in the November 2021 examination  | Bricklaying and Plastering Theory N2<br>Engineering Science N3<br>Fitting and Machining Theory N2<br>Industrial Orientation N2 and N3<br>Mechanotechnology N3<br>Motor Electrical Theory N2<br>Motor Trade Theory N3<br>Plating and Structural Steel Drawing N2 and N3  |
|                                   | In 20% of the question papers there was no appropriate distribution of cognitive levels (Bloom's taxonomy or any other taxonomy that may have been used), compared to 18% in the November 2021 examination                 | Carpentry and Roofing Theory N2<br>Fitting and Machining Theory N2<br>Industrial Orientation N2 and N3<br>Logic Systems N3<br>Mathematics N2 and N3<br>Motor Electrical Theory N2<br>Motor Trade Theory N2 and N3   |
|                                   | In 2% of the question papers the choice questions were not of equal levels of difficulty/standard. This was the same in November 2021  | Fitting and Machining Theory N2   |
| Assessment of latest developments | In 10% of the question papers the questions were not representative of the latest developments in the teaching of their knowledge fields. This indicated an increase, when compared to 2% in the November 2021 examination | Aircraft Maintenance Theory N3<br>Building Drawing N2<br>Carpentry and Roofing Theory N2<br>Industrial Organisation and Planning N3<br>Motor Electrical Theory N2   |
| Marking guideline                 |  |   |
| Accuracy of marking guidelines    | Six percent of the marking guidelines did not correspond with the questions in the question papers. This was the same in the November 2021 examination   | Building Science N2<br>Mathematics N3<br>Plating and Structural Steel Drawing N3  |
| Accuracy of marking guidelines    | In 32% of the marking guidelines the answers were not accurate, compared to 36% in the November 2021 examination   | Building Science N2 and N3<br>Carpentry and Roofing Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Logic Systems N3<br>Mathematics N3<br>Motor Electrical Theory N2<br>Plant Operation Theory N3<br>Plating and Structural Steel Drawing N2<br>Refrigeration Trade Theory N2 and N3<br>Water and Waste-Water Treatment Practice N2<br>Water Treatment Practice N3 |

| Marking guideline                                  |   |  |
|--|---|--|
|  | Eighteen percent of the marking guidelines did not allow for alternative responses, where applicable, compared to 20% in the November 2021 examination  | Building Science N3<br>Engineering Science N2<br>Industrial Organisation and Planning N3<br>Logic Systems N2<br>Mathematics N3<br>Motor Electrical Theory N2<br>Plant Operation Theory N3<br>Radio and Television Theory N2<br>Refrigeration Trade Theory N3 |
| Mark allocation                                    | In 6% of the marking guidelines the mark allocations on the marking guidelines did not correspond with the mark allocations on the question papers. This was 10% in the November 2021 examination   | Engineering Drawing N2 and N3<br>Plant Operation Theory N3   |
|  | Ten percent of the marking guidelines had incomplete mark allocation and distribution in each of the questions, compared to 18% in the November 2022 examination                                    | Building Drawing N2<br>Industrial Electronics N2<br>Instrument Trade Theory N3<br>Plant Operation Theory N3<br>Refrigeration Trade Theory N3   |
| Prescribed macros                                  | All the marking guidelines were not laid out according to the prescribed macros   | All sampled  |
| Language and bias                                  |   |  |
| Grammar  | In 2% of the question papers subject terminology/ data was used incorrectly, compared to 4% in the November 2021 examination  | Engineering Drawing N2   |
|  | The language register/level and complexity of vocabulary were not appropriate for the level of the candidates in 4% of the question papers. This was also the case in the November 2021 examination | Engineering Drawing N2<br>Industrial Electronics N2  |
|  | In 6% of the question papers the language contained subtleties that might have created confusion for the candidates   | Carpentry and Roofing Theory N2<br>Industrial Electronics N2<br>Motor Trade Theory N3  |
|  | In 6% of the question papers the language used in the question paper was grammatically incorrect, compared to 8% in the November 2021 examination   | Industrial Electronics N2<br>Mathematics N3<br>Water and Waste-Water Treatment Practice N2   |
| Predictability                                     |   |  |
| Repetition of questions from previous examinations | In 14% of the question papers there were questions that could easily be spotted or predicted. This was an increase from 10% in the November 2021 examination  | Carpentry and Roofing Theory N2<br>Engineering Drawing N2<br>Logic Systems N2<br>Mathematics N3<br>Motor Trade Theory N2<br>Radio and Television Theory N2 and N3  |
|  | Eight percent of the question papers contained questions from examination question papers of the past three years. This was the same in the November 2021 examination                               | Carpentry and Roofing Theory N2<br>Motor Trade Theory N2<br>Radio and Television Theory N2 and N3  |
| Innovation   | Ten percent of the question papers lacked an appropriate degree of originality, compared to 8% in the November 2021 examination   | Engineering Drawing N2<br>Mathematics N2 and N3<br>Radio and Television Theory N2 and N3   |



| Overall impression          |  |   |
|-----------------------------|--|---|
| Standard of question papers | Six percent of the question papers were not in line with the relevant, current syllabus, compared to 8% from the November 2021 examination                                     | Fitting and Machining Theory N2<br>Motor Trade Theory N2 and N3   |
|                             | In 6% of the question papers the outcomes of the curriculum/syllabus were not assessed. This was 2% in the November 2021 examination   | Industrial Organisation and Planning N3<br>Motor Trade Theory N2 and N3   |
|                             | In 22% of the question papers the standard was not appropriate, compared to 16% in the November 2021 examination   | Carpentry and Roofing Theory N2<br>Engineering Drawing N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Industrial Organisation and Planning N3<br>Logic Systems N3<br>Mathematics N3<br>Motor Trade Theory N2 and N3<br>Radio and Television Theory N2 and N3 |
|                             | Twenty percent of the question papers did not compare favourably with the previous years' examination question papers. This was 18% in the November 2021 examination           | Carpentry and Roofing Theory N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Industrial Organisation and Planning N3<br>Logic Systems N3<br>Mathematics N3<br>Motor Electrical Theory N2<br>Motor Trade Theory N2<br>Radio and Television Theory N2 and N3    |
|                             | There was no balance in 10% of the question papers on the assessment of skills, knowledge, attitudes, values and reasoning. This was the same in the November 2021 examination | Industrial Organisation and Planning N3<br>Logic Systems N2<br>Mathematics N3<br>Motor Trade Theory N2 and N3   |

## 8.4 Areas of Improvement

The following areas of improvement were observed during the first moderation of question papers in the instructional offerings sampled:

- Questions were incorrectly numbered in only 2% of the question papers, an improvement when compared to 10% of the November 2021 NATED examination question papers; and
- The examination could be completed in the time allocated in 100% of the question papers.

## 8.5 Areas of Non-Compliance

The Umalusi moderator reports revealed the following areas of non-compliance:

- The internal moderation reports were not completed in 28% of the question papers;
- Fourteen percent of the question papers contained questions that could easily be spotted or predicted. This was an increase from 10% in the November 2021 examination;
- Twenty-two percent of the question papers were not of the appropriate standard, compared to 16% in the November 2021 examination; and
- In 10% of the question papers the questions were not representative of the latest developments in the teaching of the respective knowledge fields. This was an increase, compared to 2% in the November 2021 examination.

## 8.6 Directives for Compliance and Improvement

Based on the findings in the external moderators' reports, the following directives are issued to improve the quality of question papers and marking guidelines for national examinations:



The DHET must ensure that:

- a. Examiners refrain from using questions similar to those in examination question past papers;
- b. Examiners are capacitated to be more creative and innovative in formulating questions, rather than repeating questions from previous papers, and internal moderators should monitor this closely to minimise it as far as possible;
- c. Question papers are submitted together with all completed, relevant documentation.

## **8.7 Conclusion**

The moderation of question papers for the November 2022 NATED Report 190/191: Engineering Studies N2-N3 examinations was completed successfully. The question papers and marking guidelines were of a good quality; however, some instructional offerings required changes to align the question papers with the syllabus and to achieve high quality and standard.

The external moderators worked hard to ensure that all externally moderated question papers were of an acceptable standard.

# CHAPTER 9 MODERATION OF THE CONDUCT OF INTERNAL CONTINUOUS ASSESSMENT

## 9.1 Introduction

Umalusi has moderated and monitored the internal assessments of selected NATED Report 190/191: Engineering Studies N2–N3 instructional offerings since 2012.

The main objectives of moderating the internal continuous assessment (ICASS) are to:

- Verify that lecturers' portfolios of assessment (PoA) adhere to the ICASS guidelines;
- Ensure that evidence is competently collected and documented;
- Ascertain the appropriateness and standard of the assessment tasks;
- Ensure that assessments are consistently delivered across different sites and that standards are maintained; and
- Ensure that the quality assurance of the internal assessment component of NATED Report 190/191: Engineering Studies N2–N3 is effectively maintained.

The purpose of this section of the report is to:

- Outline the scope and approach followed in the moderation of ICASS;
- Provide an indication of the size of the sample included in the quality assurance of the ICASS exercise;
- Provide an overview of critical findings related to the quality and standard of this ICASS;
- Highlight areas of improvement and those requiring improvement; and
- Make recommendations to enhance the quality of internal assessment.

## 9.2 Scope and Approach

Umalusi external moderators were sent to eight of the nine provinces on 7 November to 11 November 2022 to moderate the ICASS of N2 and N3 students' and lecturers' portfolios from a sample of NATED Report 190/191 instructional offerings. The external moderators drafted reports on their findings at the sampled sites. Thirty-nine instructional offerings, compared with 42 in 2021, were moderated at 40 sites: 14 public Technical and Vocational Education and Training (TVET), 18 private Further Education and Training (FET) colleges and one correctional services centre. This compares to 14 public TVET, 27 private and one correctional services centre in November 2021.

Table 9A provides information on the sampled instructional offerings, sites and provinces involved in the external moderation NATED Report 190/191: Engineering Studies N2–N3 ICASS during November 2022.

**Table 9A: Moderation of Report 190/191 ICASS**

| No. | Instructional offering               | TVET/FET college              | Site              | Province |
|-----|--------------------------------------|-------------------------------|-------------------|----------|
| 1.  | Aircraft Maintenance Theory N2       | Motheo TVET                   | Hillside View     | FS       |
| 2.  | Bricklaying and Plastering Theory N2 | Tshwane North TVET            | Soshanguve North  | GP       |
| 3.  | Building and Civil Technology N3     | Gauteng City College          | Houghton          | GP       |
| 4.  | Building Science N2                  | Correctional Services         | Rustenburg Prison | NW       |
| 5.  | Building Science N3                  | Brooklyn City College         | Rustenburg        | NW       |
| 6.  | Diesel Trade Theory N2               | Future Success Skills Academy | Emalahleni        | MP       |
| 7.  | Diesel Trade Theory N3               | Kent Technical College        | Springs           | GP       |
| 8.  | Electrical Trade Theory N2           | Langeni City College          | Brits             | NW       |
| 9.  | Electrical Trade Theory N3           | Growth Path Projects          | Emalahleni        | MP       |
| 10. | Electrotechnology N3                 | Pretoria Vocational College   | Secunda           | MP       |
| 11. | Engineering Drawing N2               | Elangeni TVET                 | Pinetown          | KZN      |

| No. | Instructional offering                      | TVET/FET college                | Site                      | Province |
|-----|---|---------------------------------|---------------------------|----------|
| 12. | Engineering Drawing N3                      | Umgungundlovu TVET              | Plessislaer               | KZN      |
| 13. | Engineering Science N2                      | Be Competent Training Institute | Germiston                 | GP       |
| 14. | Engineering Science N3                      | Platinum TVET College           | Rustenburg                | NW       |
| 15. | Fitting and Machining Theory N2             | Springfield TVET College        | Durban                    | KZN      |
| 16. | Industrial Electronics N2                   | Boland TVET                     | Stellenbosch              | WC       |
| 17. | Industrial Electronics N3                   | Boland TVET                     | Strand                    | WC       |
| 18. | Industrial Organisation and Planning N3     | Good News Skills Academy        | Sebokeng                  | GP       |
| 19. | Industrial Orientation N2                   | Damelin                         | Mowbray                   | WC       |
| 20. | Industrial Orientation N3                   | Central Technical College       | Durban                    | KZN      |
| 21. | Instrument Trade Theory N2                  | Technicol SA College            | Pretoria                  | GP       |
| 22. | Instrument Trade Theory N3                  | Tshwane South TVET              | Pretoria West             | GP       |
| 23. | Logic Systems N2                            | Coastal KZN TVET                | Umlazi                    | KZN      |
| 24. | Logic Systems N3                            | Denver Technical College of SA  | Pretoria                  | GP       |
| 25. | Logic Systems N3                            | Coastal KZN TVET                | Umlazi                    | KZN      |
| 26. | Mathematics N2                              | Boland College TVET             | Paarl                     | WC       |
| 27. | Mathematics N3                              | Springfield TVET College        | Kempton                   | GP       |
| 28. | Mechanotechnology N3                        | Ithuteng FET College            | Mokopane                  | LP       |
| 29. | Motor Electrical Theory N2                  | Eastcape Midlands TVET          | Charles Goodyear          | EC       |
| 30. | Motor Trade Theory N2                       | Springfield TVET College        | Kempton                   | GP       |
| 31. | Motor Trade Theory N3                       | Ekurhuleni West TVET            | Kempton                   | GP       |
| 32. | Plant Operation Theory N2                   | South West Gauteng TVET         | Roodepoort West           | GP       |
| 33. | Plant Operation Theory N3                   | Majuba TVET                     | Majuba Technical Centre   | KZN      |
| 34. | Platers' Theory N2                          | Northlink TVET                  | Bellville                 | WC       |
| 35. | Plating and Structural Steel Drawing N2     | Coastal KZN TVET                | Swinton Road              | KZN      |
| 36. | Plating and Structural Steel Drawing N3     | Flavius Mareka TVET             | Sasolburg                 | FS       |
| 37. | Plumbing Theory N3                          | Berea Technical College         | Durban                    | KZN      |
| 38. | Radio and Television Theory N2              | Central Johannesburg TVET       | Ellis Park (Johannesburg) | GP       |
| 39. | Supervision in Industry N3                  | Eastview TVET College           | Pretoria                  | GP       |
| 40. | Water and Waste-Water Treatment Practice N2 | Majuba TVET                     | Majuba Technical Centre   | KZN      |

Umalusi's moderators were also requested to gather information on three additional instructional offerings. The sites were not informed prior to the visits for this additional monitoring of specific instructional offerings; the purpose being to obtain evidence of the additional instructional offerings and to prevent any suspected window-dressing of the tasks and accompanying documents.

## 9.3 Findings

Criteria that were not relevant to the teaching and learning practices conducted at some institutions were not included in the statistical reflection of data. Table 9B indicates the findings as reported by the external moderators for the implementation of internal assessment of the Engineering Studies instructional offerings. Shortcomings could hamper the effective delivery of the NATED Report 190/191 N2–N3 programmes.

**Table 9B: Findings observed in the ICASS moderation of November 2022**

| Criterion          | Findings   | College/site  |
|--------------------|--|---|
| Physical resources | The available facilities at 87% (83% in November 2021) of the sites were sufficient for the number of enrolled students.   | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Central Technical College<br>Charles Goodyear Campus<br>Correctional Services: Rustenburg<br>Damelin Mowbray<br>Denver Technical College<br>Eastview TVET College<br>Ellis Park Campus<br>Gauteng City College<br>Good News Skills Academy<br>Growth Path Projects<br>Hillside View Campus<br>Ithuteng FET College<br>Kempton Campus<br>Langeni City College<br>Majuba Technical Centre<br>Paarl Campus<br>Pinetown Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria Vocational College<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Springfield TVET College: Durban<br>Springfield TVET College: Kempton<br>Stellenbosch Campus<br>Strand Campus<br>Swinton Road Campus |
|                    | The textbooks/teaching material at 78% of the sites were available when the classes commenced at the beginning of the trimester. (Compared to 79% in November 2021.) | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Central Technical College<br>Charles Goodyear Campus<br>Correctional Services: Rustenburg<br>Damelin Mowbray<br>Eastview TVET College<br>Ellis Park Campus<br>Gauteng City College<br>Good News Skills Academy<br>Hillside View Campus<br>Kempton Campus<br>Langeni City College<br>Majuba Technical Centre<br>Paarl Campus<br>Pinetown Campus<br>Plessislaer Campus<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Springfield TVET College: Durban<br>Stellenbosch Campus<br>Strand Campus<br>Swinton Road Campus<br>Technical SA College<br>Umlazi Campus   |

| Criterion       | Findings  | College/site   |
|-----------------|---|--|
|                 | The students at 42% of the sites were exposed to practical implementation of the theory component of the subject at the site of learning.   | Bellville Campus<br>Berea Technical College<br>Charles Goodyear Campus<br>Correctional Services: Rustenburg<br>Denver Technical College<br>Ellis Park Campus<br>Gauteng City College<br>Kempton Campus<br>Majuba Technical Centre<br>Pinetown Campus<br>Plessislaer Campus<br>Pretoria West Campus<br>Roodepoort West Campus<br>Stellenbosch Campus<br>Strand Campus<br>Swinton Road Campus  |
|                 | There were computers and printers for the students at 74% of the sites to complete assignments/case studies and to do research. This was a 2% decrease, from 76%, in November 2021.     | Bellville Campus<br>Berea Technical College<br>Central Technical College<br>Charles Goodyear Campus<br>Damelin Mowbray<br>Eastview TVET College<br>Ellis Park Campus<br>Future Success Skills Academy<br>Gauteng City College<br>Growth Path Projects<br>Hillside View Campus<br>Kempton Campus<br>Kent Technical College<br>Langeni City College<br>Majuba Technical Centre<br>Paarl Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria Vocational College<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Springfield TVET College: Durban<br>Springfield TVET College: Kempton<br>Stellenbosch Campus<br>Strand Campus |
| Human resources | The college had a process in place for the identification of training needs of the staff members at 65% of the sites visited. This was a slight increase from the 64% in November 2021. | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Charles Goodyear Campus<br>Denver Technical College<br>Eastview TVET College<br>Ellis Park Campus<br>Gauteng City College<br>Hillside View Campus<br>Kempton Campus<br>Majuba Technical Centre<br>Paarl Campus<br>Pinetown Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Springfield TVET College: Kempton<br>Stellenbosch Campus<br>Strand Campus<br>Swinton Road Campus<br>Technical SA College<br>Umlazi Campus  |

| Criterion | Findings  | College/site  |
|-----------|---|---|
|           | The college had a plan for training/development of staff at 55% of the sites visited, a drop of 9% from 64% in November 2021.                 | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Charles Goodyear Campus<br>Denver Technical College<br>Ellis Park Campus<br>Gauteng City College<br>Hillside View Campus<br>Kempton Campus<br>Majuba Technical Centre<br>Paarl Campus<br>Pinetown Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Springfield TVET College: Kempton<br>Stellenbosch Campus<br>Strand Campus<br>Technical SA College  |
|           | There was evidence that the training plan was implemented at 53% of the sites visited, an increase of 8% from the 45% in November 2021.       | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Charles Goodyear Campus<br>Denver Technical College<br>Ellis Park Campus<br>Gauteng City College<br>Kempton Campus<br>Majuba Technical Centre<br>Paarl Campus<br>Pinetown Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Springfield TVET College: Kempton<br>Stellenbosch Campus<br>Strand Campus<br>Technical SA College  |
|           | There were areas where the lecturers felt that they needed further training at 80% of the sites, an increase of 4% from 76% in November 2021. | Bellville Campus<br>Berea Technical College<br>Brooklyn City College<br>Central Technical College<br>Charles Goodyear Campus<br>Correctional Services Rustenburg<br>Denver Technical College<br>Eastview TVET College<br>Ellis Park Campus<br>Gauteng City College<br>Growth Path Projects<br>Hillside View Campus<br>Kempton Campus<br>Kent Technical College<br>Majuba Technical Centre<br>Paarl Campus<br>Pinetown Campus<br>Plessislaer Campus<br>Pretoria Vocational College<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Springfield TVET College: Kempton<br>Stellenbosch Campus<br>Strand Campus<br>Swinton Road Campus<br>Technical SA College<br>Umlazi Campus |

| Criterion                                | Findings   | College/site  |
|--|--|---|
|  | The educators were exposed to the workplace environment/ relevant industry at 29% of the sites visited, a 2% decrease from 31% in November 2021. | Be Competent Training Institute<br>Bellville Campus<br>Central Technical College<br>Charles Goodyear Campus<br>Correctional Services: Rustenburg<br>Damelin Mowbray<br>Gauteng City College<br>Pinetown Campus<br>Plessislaer Campus<br>Roodepoort West Campus<br>Sasolburg Campus  |
| Internal assessment policies and systems | There was an up-to-date college assessment policy at 90% of the sites visited, a decrease of 10% from the 100% in November 2021.                 | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Brooklyn City College<br>Central Technical College<br>Charles Goodyear Campus<br>Correctional Services: Rustenburg<br>Damelin Mowbray<br>Denver Technical College<br>Eastview TVET College<br>Ellis Park Campus<br>Gauteng City College<br>Good News Skills Academy<br>Growth Path Projects<br>Hillside View Campus<br>Kempton Campus<br>Langeni City College<br>Majuba Technical Centre<br>Paarl Campus<br>Pinetown Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria Vocational College<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Springfield TVET College: Kempton<br>Stellenbosch Campus<br>Strand Campus<br>Swinton Road Campus<br>Technical SA College<br>Umlazi Campus |



| Criterion | Findings  | College/site   |
|-----------|---|--|
|           | <p>There was evidence of a structure/plan for the monitoring of assessment at the site of learning at 85% of the sites visited, 11% more than the 74% in November 2021.</p> | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Brooklyn City College<br/>           Central Technical College<br/>           Charles Goodyear Campus<br/>           Correctional Services: Rustenburg<br/>           Damelin Mowbray<br/>           Denver Technical College<br/>           Ellis Park Campus<br/>           Gauteng City College<br/>           Good News Skills Academy<br/>           Growth Path Projects<br/>           Hillside View Campus<br/>           Kempton Campus<br/>           Langeni City College<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria Vocational College<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield TVET College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Swinton Road Campus<br/>           Technical SA College</p> |
|           | <p>There was evidence of a subject monitoring report per lecturer at 60% of the sites visited, a decrease of 4% from 64% in November 2021.</p>                              | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Brooklyn City College<br/>           Charles Goodyear Campus<br/>           Correctional Services: Rustenburg<br/>           Ellis Park Campus<br/>           Gauteng City College<br/>           Hillside View Campus<br/>           Kempton Campus<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield TVET College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Technical SA College</p>   |

| Criterion | Findings   | College/site   |
|-----------|--|--|
|           | <p>There was a plan in place for the development of the assessment tasks at 83% of the sites, a 3% decrease from the 86% of November 2021.</p> | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Brooklyn City College<br/>           Central Technical College<br/>           Charles Goodyear Campus<br/>           Denver Technical College<br/>           Eastview TVET College<br/>           Ellis Park Campus<br/>           Future Success Skills Academy<br/>           Gauteng City College<br/>           Hillside View Campus<br/>           Kempton Campus<br/>           Kent Technical College<br/>           Langeni City College<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria Vocational College<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield TVET College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Technicol SA College<br/>           Umlazi Campus</p> |
|           | <p>The tasks were developed according to the plan/schedule of assessment at 78% of the sites, a decrease of 8% from 86% in November 2021.</p>  | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Brooklyn City College<br/>           Central Technical College<br/>           Charles Goodyear Campus<br/>           Denver Technical College<br/>           Eastview TVET College<br/>           Ellis Park Campus<br/>           Gauteng City College<br/>           Hillside View Campus<br/>           Kempton Campus<br/>           Kent Technical College<br/>           Langeni City College<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria Vocational College<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield TVET College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Technicol SA College</p>   |

| Criterion | Findings   | College/site  |
|-----------|--|---|
|           | At 80% of the sites (81% in November 2021), there were systems in place to ensure that tasks were of an acceptable standard.                         | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Brooklyn City College<br>Central Technical College<br>Charles Goodyear Campus<br>Eastview TVET College<br>Ellis Park Campus<br>Future Skills Academy<br>Gauteng City College<br>Hillside View Campus<br>Kempton Campus<br>Kent Technical College<br>Langeni City College<br>Majuba Technical Centre<br>Paarl Campus<br>Pinetown Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria Vocational College<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Springfield TVET College: Kempton<br>Stellenbosch Campus<br>Strand Campus<br>Technical SA College<br>Umlazi Campus |
|           | The college had an irregularity register at 68% of the sites visited, an increase of 11% from the 57% in November 2021.                              | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Brooklyn City College<br>Central Technical College<br>Charles Goodyear Campus<br>Correctional Services: Rustenburg<br>Damelin Mowbray<br>Denver Technical College<br>Eastview TVET College<br>Ellis Park Campus<br>Gauteng City College<br>Hillside View Campus<br>Kempton Campus<br>Majuba Technical Centre<br>Paarl Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria Vocational College<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Stellenbosch Campus<br>Strand Campus<br>Technical SA College<br>Umlazi Campus  |
|           | There were internal assessment irregularities recorded in the register at 28% of the sites visited, an increase of 2% from the 26% of November 2021. | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Denver Technical College<br>Gauteng City College<br>Kempton Campus<br>Majuba Technical Centre<br>Platinum TVET College<br>Pretoria West Campus<br>Sasolburg Campus  |

| Criterion      | Findings  | College/site  |
|----------------|---|---|
| Lecturer files | <p>Only 50% of the sites visited had lecturer files that contained all the following documents:</p> <ol style="list-style-type: none"> <li>Name;</li> <li>Certified copies of qualifications;</li> <li>SACE registration;</li> <li>Teaching/lecturing experience; and</li> <li>Workplace experience.</li> </ol> | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Charles Goodyear Campus<br/>           Gauteng City College<br/>           Hillside View Campus<br/>           Kempton Campus<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Technicol SA College</p>   |
|                | <p>The lecturer file contained the subject syllabus at 80% of the sites visited, compared to 91% in November 2021.</p>  | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Brooklyn City College<br/>           Central Technical College<br/>           Charles Goodyear Campus<br/>           Denver Technical College<br/>           Ellis Park Campus<br/>           Future Success Skills Academy<br/>           Gauteng City College<br/>           Hillside View Campus<br/>           Kempton Campus<br/>           Langeni City College<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria Vocational College<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield TVET College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Technicol SA College<br/>           Umlazi Campus</p> |

| Criterion | Findings  | College/site   |
|-----------|---|--|
|           | <p>The subject file contained lesson plans at 85% of the sites visited, an increase of 33% compared to 52% in November 2021.</p>  | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Brooklyn City College<br/>           Central Technical College<br/>           Charles Goodyear Campus<br/>           Damelin Mowbray<br/>           Denver Technical College<br/>           Eastview TVET College<br/>           Ellis Park Campus<br/>           Future Success Skills Academy<br/>           Gauteng City College<br/>           Growth Path Projects<br/>           Hillside View Campus<br/>           Kempton Campus<br/>           Langeni City College<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield TVET College: Durban<br/>           Springfield TVET College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Technical SA College<br/>           Umlazi Campus</p> |
|           | <p>The assessment file contained relevant documents at 45% of the sites visited namely:</p> <ol style="list-style-type: none"> <li>Assessment schedules;</li> <li>Assessment instruments and tools;</li> <li>Evidence of pre-assessment moderation;</li> <li>Evidence of post-assessment moderation; and</li> <li>Mark sheets of all groups.</li> </ol> | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Charles Goodyear Campus<br/>           Ellis Park Campus<br/>           Gauteng City College<br/>           Hillside View Campus<br/>           Kempton Campus<br/>           Paarl Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Technical SA College<br/>           Umlazi Campus</p>   |

|                         |   |  |
|-------------------------|---|--|
|                         | <p>Assessment scores were recorded accurately on the mark sheet at 80% of the sites visited, a decrease of 13% compared to the 93% of November 2021.</p>                  | <p>Be Competent Training Institute<br/> Bellville Campus<br/> Berea Technical College<br/> Central Technical College<br/> Charles Goodyear Campus<br/> Damelin Mowbray<br/> Denver Technical College<br/> Eastview TVET College<br/> Ellis Park Campus<br/> Gauteng City College<br/> Growth Path Projects<br/> Hillside View Campus<br/> Kempton Campus<br/> Kent Technical College<br/> Langeni City College<br/> Majuba Technical Centre<br/> Paarl Campus<br/> Pinetown Campus<br/> Platinum TVET College<br/> Plessislaer Campus<br/> Pretoria West Campus<br/> Roodepoort West Campus<br/> Sasolburg Campus<br/> Soshanguve Campus<br/> Springfield TVET College: Durban<br/> Springfield TVET College: Kempton<br/> Stellenbosch Campus<br/> Strand Campus<br/> Technical SA College<br/> Umlazi Campus</p> |
| <p>Content coverage</p> | <p>Copies of previous question papers or sections of previous question papers were used as assessment tasks (tests) at 68% of sites compared to 76% in November 2021.</p> | <p>Be Competent Training Institute<br/> Bellville Campus<br/> Berea Technical College<br/> Brooklyn City College<br/> Charles Goodyear Campus<br/> Correctional Services: Rustenburg<br/> Denver Technical College<br/> Ellis Park Campus<br/> Gauteng City College<br/> Hillside View Campus<br/> Kempton Campus<br/> Langeni City College<br/> Pinetown Campus<br/> Plessislaer Campus<br/> Pretoria Vocational College<br/> Pretoria West Campus<br/> Roodepoort West<br/> Sasolburg Campus<br/> Soshanguve Campus<br/> Springfield TVET: Durban<br/> Stellenbosch Campus<br/> Strand Campus<br/> Swinton Road Campus<br/> Technical SA College<br/> Umlazi Campus</p>  |

| Criterion | Findings   | College/site   |
|-----------|--|--|
|           | <p>Ninety percent of sites (95% in November 2021) ensured that a substantial amount of work had been covered in both tests.</p>      | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Brooklyn City College<br/>           Central Technical College<br/>           Charles Goodyear Campus<br/>           Correctional Services: Rustenburg<br/>           Damelin Mowbray<br/>           Eastview TVET College<br/>           Ellis Park Campus<br/>           Gauteng City College<br/>           Good News Skills<br/>           Hillside View Campus<br/>           Kempton Campus<br/>           Kent Technical College<br/>           Langeni City College<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria Vocational College<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield TVET College: Durban<br/>           Springfield TVET College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Swinton Road Campus<br/>           Technicol SA College<br/>           Umlazi Campus</p> |
|           | <p>The weighting and spread of content of the topic(s) in both tests was appropriate at 88% (93% in November 2021) of the sites.</p> | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Brooklyn City College<br/>           Central Technical College<br/>           Charles Goodyear Campus<br/>           Correctional Services: Rustenburg<br/>           Damelin Mowbray<br/>           Eastview TVET College<br/>           Gauteng City College<br/>           Good News Skills<br/>           Hillside View Campus<br/>           Kempton Campus<br/>           Kent Technical College<br/>           Langeni City College<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria Vocational College<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield TVET College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Swinton Road Campus<br/>           Technicol SA College<br/>           Umlazi Campus</p>  |

| Criterion                                     | Findings   | College/site   |
|---|--|--|
|   | <p>The type of questions was in line with the stipulated content at 88% of the sites, a decrease of 7% from the 95% in November 2021.</p>  | <p>Be Competent Training Institute<br/>Bellville Campus<br/>Berea Technical College<br/>Central Technical College<br/>Charles Goodyear Campus<br/>Correctional Services: Rustenburg<br/>Damelin Mowbray<br/>Denver Technical Pretoria<br/>Eastview TVET College<br/>Ellis Park Campus<br/>Gauteng City College<br/>Hillside View Campus<br/>Kempton Campus<br/>Kent Technical College<br/>Langeni City College<br/>Majuba Technical Centre<br/>Paarl Campus<br/>Pinetown Campus<br/>Platinum TVET College<br/>Plessislaer Campus<br/>Pretoria Vocational College<br/>Pretoria West Campus<br/>Roodepoort West Campus<br/>Sasolburg Campus<br/>Soshanguve Campus<br/>Springfield TVET College: Durban<br/>Springfield TVET College: Kempton<br/>Stellenbosch Campus<br/>Strand Campus<br/>Swinton Road Campus<br/>Technical SA College<br/>Umlazi Campus</p>                  |
| <p>Cognitive demand and difficulty levels</p> | <p>The two tasks varied in the levels of difficulty, were pitched at the right level and assessed a variety of knowledge and skills at 93% of the sites, a decrease of 4% from the 97% average of November 2021.</p> | <p>Be Competent Training Institute<br/>Bellville Campus<br/>Berea Technical College<br/>Brooklyn City College<br/>Central Technical College<br/>Charles Goodyear Campus<br/>Correctional Services: Rustenburg<br/>Damelin Mowbray<br/>Eastview TVET College<br/>Ellis Park Campus<br/>Future Success College<br/>Gauteng City College<br/>Growth Path<br/>Hillside View Campus<br/>Ithuteng FET College<br/>Kempton Campus<br/>Langeni City College<br/>Majuba Technical Centre<br/>Paarl Campus<br/>Platinum TVET College<br/>Plessislaer Campus<br/>Pretoria Vocational College<br/>Pretoria West Campus<br/>Roodepoort West Campus<br/>Sasolburg Campus<br/>Soshanguve Campus<br/>Springfield TVET College: Durban<br/>Springfield TVET College: Kempton<br/>Stellenbosch Campus<br/>Strand Campus<br/>Swinton Road Campus<br/>Technical SA College<br/>Umlazi Campus</p> |



| Criterion                           | Findings  | College/site  |
|-------------------------------------|---|---|
| Internal moderation of task marking | Eighty-eight percent of the sites, 83% in November 2021, had evidence of moderation of marking in both tests of a minimum sample of 10% of the scripts.   | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Brooklyn City College<br>Central Technical College<br>Charles Goodyear Campus<br>Damelin Mowbray<br>Denver Technical College<br>Eastview TVET College<br>Ellis Park Campus<br>Future Success Academy<br>Gauteng City College<br>Growth Path<br>Hillside View Campus<br>Ithuteng FET College<br>Kempton Campus<br>Kent Technical College<br>Langeni City College<br>Paarl Campus<br>Pinetown Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria Vocational College<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Springfield TVET College: Kempton<br>Stellenbosch Campus<br>Strand Campus<br>Technical SA College<br>Umlazi Campus |
|                                     | The sample of both tests that were internally moderated included the full range of performance, i.e., high, average and low scoring students, at 80% of sites, compared to 74% of sites in November 2021. | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Brooklyn City College<br>Central Technical College<br>Charles Goodyear Campus<br>Denver Technical College<br>Eastview TVET College<br>Ellis Park Campus<br>Future Success Academy<br>Gauteng City College<br>Growth Path<br>Hillside View Campus<br>Kempton Campus<br>Kent Technical College<br>Langeni City College<br>Paarl Campus<br>Pinetown Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria Vocational College<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Stellenbosch Campus<br>Strand Campus<br>Technical SA College<br>Umlazi Campus   |

| Criterion         | Findings  | College/site  |
|-------------------|---|---|
| Technical aspects | <p>Fifty-eight percent of the sites contained all relevant information:</p> <ol style="list-style-type: none"> <li>The name of the subject;</li> <li>The level of subject;</li> <li>Time allocation;</li> <li>Content covered;</li> <li>Number of test; and</li> <li>Date.</li> </ol> | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Brooklyn City College<br/>           Central Technical<br/>           Charles Goodyear Campus<br/>           Correctional Services: Rustenburg<br/>           Damelin Mowbray<br/>           Eastview TVET College<br/>           Ellis Park Campus<br/>           Future Success Skills<br/>           Gauteng City College<br/>           Growth Path<br/>           Hillside View Campus<br/>           Kempton Campus<br/>           Kent Technical College<br/>           Langeni City College<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria Vocational College<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield TVET College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Technical SA College<br/>           Umlazi Campus</p>   |
|                   | <p>The language and terminology used was appropriate and relevant in both tests at all the sites (98%), similar to November 2021.</p>   | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Brooklyn City College<br/>           Central Technical College<br/>           Charles Goodyear Campus<br/>           Correctional Services: Rustenburg<br/>           Damelin Mowbray<br/>           Denver Technical College<br/>           Eastview TVET College<br/>           Ellis Park Campus<br/>           Future Success Skills<br/>           Gauteng City College<br/>           Good News Skills Academy<br/>           Growth Path<br/>           Hillside View Campus<br/>           Ithuteng FET College<br/>           Kempton Campus<br/>           Kent Technical College<br/>           Langeni City College<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria Vocational College<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield TVET College: Durban<br/>           Springfield TVET College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Technical SA College<br/>           Umlazi Campus</p> |

| Criterion | Findings   | College/site  |
|-----------|--|---|
|           | <p>The mark allocation was clearly indicated for each question in both tests, at 93% of the sites, similar to November 2021.</p>                   | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Brooklyn City College<br/>           Charles Goodyear Campus<br/>           Correctional Services: Rustenburg<br/>           Damelin Mowbray<br/>           Denver Technical College<br/>           Eastview TVET College<br/>           Future Success Skills<br/>           Gauteng City College<br/>           Good News Skills Academy<br/>           Growth Path<br/>           Hillside View Campus<br/>           Ithuteng FET College<br/>           Kempton Campus<br/>           Kent Technical College<br/>           Langeni City College<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria Vocational College<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield TVET College: Durban<br/>           Springfield TVET College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Technical SA College<br/>           Umlazi Campus</p>               |
|           | <p>The mark allocation on the test was the same as that on the marking guideline for both tests at 93% of the sites, similar to November 2021.</p> | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Brooklyn City College<br/>           Central Technical College<br/>           Charles Goodyear Campus<br/>           Correctional Services: Rustenburg<br/>           Damelin Mowbray<br/>           Denver Technical College<br/>           Eastview TVET College<br/>           Future Success Skills<br/>           Gauteng City College<br/>           Good News Skills Academy<br/>           Hillside View Campus<br/>           Ithuteng FET College<br/>           Kempton Campus<br/>           Kent Technical College<br/>           Langeni City College<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria Vocational College<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield TVET College: Durban<br/>           Springfield TVET College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Technical SA College<br/>           Umlazi Campus</p> |

| Criterion          | Findings  | College/site   |
|--------------------|---|--|
|                    | The numbering on the test and/or marking guideline was incorrect at 13% of the sites.   | Central Technical College<br>Damelin Mowbray<br>Ithuteng FET College<br>Swinton Road Campus<br>Umlazi Campus   |
|                    | The time allocation was realistic for the administration of the tests at 93% of the sites.  | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Brooklyn City College<br>Central Technical College<br>Charles Goodyear Campus<br>Correctional Services: Rustenburg<br>Damelin Mowbray<br>Denver Technical College<br>Eastview TVET College<br>Future Success Skills<br>Gauteng City College<br>Good News Skills Academy<br>Hillside View Campus<br>Kempton Campus<br>Kent Technical College<br>Langeni City College<br>Majuba Technical Centre<br>Paarl Campus<br>Pinetown Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria Vocational College<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Springfield TVET College: Durban<br>Springfield TVET College: Kempton<br>Stellenbosch Campus<br>Strand Campus<br>Technical SA College<br>Umlazi Campus |
| Marking guidelines | The marking guidelines facilitated marking and were easy to use in both tests at 85% of sites, a decrease of 6% compared to 91% in November 2021. | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Brooklyn City College<br>Central Technical College<br>Charles Goodyear Campus<br>Damelin Mowbray<br>Eastview TVET College<br>Future Success Skills<br>Gauteng City College<br>Good News Skills Academy<br>Hillside View Campus<br>Ithuteng FET College<br>Kempton Campus<br>Kent Technical College<br>Langeni City College<br>Majuba Technical Centre<br>Paarl Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Springfield TVET College: Durban<br>Springfield TVET College: Kempton<br>Stellenbosch Campus<br>Strand Campus<br>Technical SA College<br>Umlazi Campus  |

| Criterion           | Findings  | College/site  |
|---------------------|---|---|
| Student performance | The students interpreted questions correctly and were able to answer all or most of the questions in the tests at 78% of sites, a decrease of 8% compared to 86% of the sites in November 2021. | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Charles Goodyear Campus<br>Damelin Mowbray<br>Denver Technical College<br>Eastview TVET College<br>Future Success Skills<br>Gauteng City College<br>Good News Skills Academy<br>Ithuteng FET College<br>Kempton Campus<br>Kent Technical College<br>Langeni City College<br>Majuba Technical Centre<br>Motheo Hillside View<br>Paarl Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria West Campus<br>Rustenburg Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Springfield TVET College: Durban<br>Strand Campus<br>Swinton Road Campus<br>Technicol SA College<br>Umlazi Campus |
| Quality of marking  | Marking was consistent with the marking guidelines at 73% of the sites, a decrease of 13% compared to 86% of sites visited in November 2021.  | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Central Technical College<br>Charles Goodyear Campus<br>Correctional Services: Rustenburg<br>Denver Technical College<br>Eastview TVET College<br>Ellis Park Campus<br>Gauteng City College<br>Hillside View Campus<br>Ithuteng FET College<br>Kempton Campus<br>Majuba Technical Centre<br>Paarl Campus<br>Pinetown Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Springfield TVET College: Kempton<br>Stellenbosch Campus<br>Strand Campus<br>Technicol SA College                            |

| Criterion | Findings   | College/site   |
|-----------|--|--|
|           | <p>The mark allocated was a true reflection of the students' performance in both tests at 70% of the sites, a decrease of 13% compared to the 83% of sites visited in November 2021.</p> | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Central Technical College<br/>           Charles Goodyear Campus<br/>           Correctional Services: Rustenburg<br/>           Denver Technical College<br/>           Eastview TVET College<br/>           Gauteng City College<br/>           Hillside View Campus<br/>           Ithuteng FET College<br/>           Kempton Campus<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Swinton Road Campus<br/>           Technical SA College<br/>           Umlazi Campus</p>   |
|           | <p>The totalling of marks and transfer of marks to the mark sheet were accurate at 85% of the sites, a decline of 8% compared to the 93% of sites visited in November 2021.</p>          | <p>Be Competent Training Institute<br/>           Bellville Campus<br/>           Berea Technical College<br/>           Central Technical College<br/>           Charles Goodyear Campus<br/>           Denver Technical College<br/>           Eastview TVET College<br/>           Ellis Park Campus<br/>           Future Success Skills<br/>           Gauteng City College<br/>           Growth Path Project<br/>           Hillside View Campus<br/>           Ithuteng FET College<br/>           Kempton Campus<br/>           Kent Technical College<br/>           Langeni City College<br/>           Majuba Technical Centre<br/>           Paarl Campus<br/>           Pinetown Campus<br/>           Platinum TVET College<br/>           Plessislaer Campus<br/>           Pretoria West Campus<br/>           Roodepoort West Campus<br/>           Sasolburg Campus<br/>           Soshanguve Campus<br/>           Springfield TVET College: Kempton<br/>           Stellenbosch Campus<br/>           Strand Campus<br/>           Swinton Road Campus<br/>           Technical SA College<br/>           Umlazi Campus</p> |

| Criterion                      | Findings   | College/site   |
|--------------------------------|--|--|
|                                | The quality and standard of marking was acceptable at 73% of the sites, a 10% decrease from the 83% of sites visited in November 2021. | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Central Technical College<br>Charles Goodyear Campus<br>Denver Technical College<br>Eastview TVET College<br>Gauteng City College<br>Hillside View Campus<br>Ithuteng FET College<br>Kempton Campus<br>Kent Technical College<br>Majuba Technical Centre<br>Paarl Campus<br>Pinetown Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Stellenbosch Campus<br>Strand Campus<br>Swinton Road Campus<br>Technical SA College<br>Umlazi Campus  |
| Internal moderation of marking | There was evidence that the students' work had been moderated internally at 85% of the sites,  | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Brooklyn City College<br>Central Technical College<br>Charles Goodyear Campus<br>Correctional Services: Rustenburg<br>Denver Technical College<br>Eastview TVET College<br>Ellis Park Campus<br>Future Success Skills<br>Gauteng City College<br>Growth Path Projects<br>Hillside View Campus<br>Ithuteng FET College<br>Kempton Campus<br>Kent Technical College<br>Langeni City College<br>Majuba Technical Centre<br>Paarl Campus<br>Pinetown Campus<br>Platinum TVET College<br>Plessislaer Campus<br>Pretoria Vocational College<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Soshanguve Campus<br>Springfield TVET College: Durban<br>Springfield TVET College: Kempton<br>Stellenbosch Campus<br>Strand Campus<br>Technical SA College<br>Umlazi Campus |

| Criterion | Findings  | College/site  |
|-----------|---|---|
|           | The quality and standard of internal moderation was acceptable at 68% of sites. | Be Competent Training Institute<br>Bellville Campus<br>Berea Technical College<br>Brooklyn City College<br>Central Technical College<br>Correctional Services: Rustenburg<br>Denver Technical College<br>Eastview TVET College<br>Future Success Skills Academy<br>Gauteng City College<br>Hillside View Campus<br>Kempton Campus<br>Kent Technical College<br>Langeni City College<br>Majuba Technical Centre<br>Paarl Campus<br>Platinum TVET College<br>Pretoria Vocational College<br>Pretoria West Campus<br>Roodepoort West Campus<br>Sasolburg Campus<br>Stellenbosch Campus<br>Strand Campus<br>Technicol SA College<br>Umlazi Campus |

### 9.3.1 Compliance Check of Additional Instructional Offerings

As indicated, the external moderators were requested to do an additional compliance check on documents pertaining to other instructional offerings at the sites visited. The external moderators found that there was agreement at only six of the sites (15%) between the numbers registered with the Department of Higher Education and Training (DHET) for all of these instructional offerings and the numbers registered at the colleges. An additional 15 (38%) sites had one or two subjects where the registered numbers of the DHET and the colleges were the same.

Table 9C provides information on the enrolments of these additional sampled instructional offerings at the sites involved in the spot-check moderation of NATED Report 190/191: Engineering Studies N2–N3 ICASS during November 2022. The six sites indicated in bold have agreement in numbers with DHET for all the instructional offerings.



**Table 9C: Additional instructional offerings moderated, including DHET enrolment numbers**

| College                                   | Campus/ site | Additional instructional offerings   | Enrolments as per DHET | Enrolments at the college/ campus |
|---|--------------|--------------------------------------|------------------------|-----------------------------------|
| Growth Path Projects                      | Emalahleni   | Industrial Electronics N2            | 47                     | Not available                     |
|   |              | Mathematics N2                       | 108                    | 103                               |
|   |              | Engineering Science N2               | 119                    | 102                               |
| Technical SA College                      | Pretoria     | Industrial Electronics N2            | 15                     | 15                                |
|   |              | Engineering Science N3               | 82                     | 106                               |
|   |              | Electrotechnology N3                 | 16                     | 10                                |
| Be Competent Training Institute (Pty) Ltd | Germiston    | Mathematics N2                       | 40                     | 32                                |
|   |              | Engineering Drawing N2               | 22                     | 19                                |
|   |              | Fitting and Machining Theory N2      | 10                     | 8                                 |
| Berea Technical College                   | Durban       | Instrument Trade Theory N2           | 56                     | 37                                |
|   |              | Mathematics N3                       | 55                     | 41                                |
|   |              | Electrical Trade Theory N2           | 85                     | 84                                |
| Boland TVET                               | Strand       | Electrotechnology N3                 | 38                     | 38                                |
|   |              | Engineering Science N2               | 53                     | 53                                |
|   |              | Mathematics N2                       | 91                     | 91                                |
| Boland TVET                               | Stellenbosch | Engineering Science N2               | 47                     | 47                                |
|   |              | Mathematics N2                       | 46                     | 46                                |
|   |              | Electrical Trade Theory N2           | 47                     | 47                                |
| Boland TVET                               | Paarl        | Building Science N2                  | 22                     | 22                                |
|   |              | Building Drawing N2                  | 22                     | 22                                |
|   |              | Bricklaying and Plastering Theory N2 | 22                     | 22                                |
| Brooklyn City College                     | Rustenburg   | Fitting and Machining Theory N2      | 20                     | 20                                |
|   |              | Engineering Science N2               | 75                     | 75                                |
|   |              | Mathematics N2                       | 85                     | 86                                |
| Central Johannesburg TVET                 | Johannesburg | Industrial Electronics N3            | 92                     | 92                                |
|   |              | Building Drawing N2                  | 93                     | 92                                |
|   |              | Mechanotechnology N3                 | 77                     | 78                                |
| Central Technical College                 | Durban       | Industrial Electronics N2            | 20                     | 20                                |
|   |              | Mathematics N3                       | 35                     | 20                                |
|   |              | Engineering Science N2               | 31                     | 29                                |
| Coastal KZN                               | Umlazi       | Industrial Electronics N2            | 161                    | 139                               |
|   |              | Engineering Science N3               | 49                     | 46                                |
|   |              | Electrical Trade Theory N2           | 171                    | 146                               |
| Coastal KZN                               | Umlazi       | Building Drawing N2                  | 84                     | 85                                |
|   |              | Building and Civil Technology N3     | 64                     | 58                                |
|   |              | Mathematics N3                       | 142                    | 135                               |

| College                        | Campus/ site      | Additional instructional offerings | Enrolments as per DHET | Enrolments at the college/ campus |
|--------------------------------|-------------------|------------------------------------|------------------------|-----------------------------------|
| Coastal KZN TVET               | Swinton Road      | Engineering Science N2             | 108                    | 57                                |
|                                |                   | Mathematics N3                     | 123                    | 107                               |
|                                |                   | Mechanotechnology N3               | 143                    | 110                               |
| Correctional Services          | Rustenburg Prison | Industrial Electronics N2          | 3                      | 2                                 |
|                                |                   | Mathematics N2                     | 13                     | 13                                |
|                                |                   | Electrical Trade Theory N2         | 4                      | 3                                 |
| Damelin                        | Mowbray           | Engineering Science N2             | 13                     | 13                                |
|                                |                   | Mathematics N2                     | 16                     | 16                                |
|                                |                   | Industrial Electronics N2          | 10                     | 10                                |
| Denver Technical College of SA | Pretoria          | Engineering Science N3             | 415                    | 420                               |
|                                |                   | Platers' Theory N2                 | 44                     | 44                                |
|                                |                   | Electrical Trade Theory N3         | 119                    | 119                               |
| Eastcape Midlands              | Charles Goodyear  | Mathematics N2                     | 120                    | 115                               |
|                                |                   | Engineering Science N3             | 41                     | 41                                |
|                                |                   | Building Science N2                | 46                     | 45                                |
| Eastview TVET College          | Pretoria          | Mathematics N3                     | 37                     | Not available                     |
|                                |                   | Fitting and Machining Theory N2    | 9                      | Not available                     |
|                                |                   | Engineering Science N3             | 30                     | Not available                     |
| Ekurhuleni West TVET           | Kempton           | Industrial Electronics N3          | 89                     | 89                                |
|                                |                   | Engineering Drawing N3             | 77                     | 71                                |
|                                |                   | Mathematics N3                     | 163                    | 161                               |
| Elangeni TVET                  | Pinetown          | Mathematics N2                     | 29                     | 29                                |
|                                |                   | Engineering Science N2             | 31                     | 30                                |
|                                |                   | Electrical Trade Theory N2         | 22                     | 22                                |
| Flavius Mareka                 | Sasolburg         | Industrial Electronics N2          | 206                    | 206                               |
|                                |                   | Electrotechnology N3               | 135                    | 135                               |
|                                |                   | Mathematics N3                     | 272                    | 272                               |
| Future Success Skills Academy  | Emalahleni        | Mathematics N3                     | 33                     | Not available                     |
|                                |                   | Engineering Science N3             | 25                     | 25                                |
|                                |                   | Electrical Trade Theory N2         | 10                     | Not available                     |
| Gauteng City College           | Houghton          | Mathematics N2                     | 215                    | 200                               |
|                                |                   | Fitting and Machining Theory N2    | 26                     | 18                                |
|                                |                   | Motor Trade Theory N2              | 43                     | 36                                |
| Good News Skills Academy       | Sebokeng          | Engineering Science N3             | 13                     | 16                                |
|                                |                   | Mathematics N3                     | 14                     | 18                                |
|                                |                   | Supervision in Industry N3         | 9                      | 9                                 |

| College                     | Campus/ site             | Additional instructional offerings | Enrolments as per DHET | Enrolments at the college/ campus |
|-----------------------------|--------------------------|------------------------------------|------------------------|-----------------------------------|
| Ithuteng FET College        | Mokopane                 | Mathematics N3                     | 42                     | Not available                     |
|                             |                          | Engineering Science N2             | 34                     | 36                                |
|                             |                          | Engineering Drawing N2             | 19                     | 5                                 |
| Kent Technical College      | Springs                  | Mathematics N2                     | 107                    | 20                                |
|                             |                          | Engineering Science N2             | 104                    | 21                                |
|                             |                          | Fitting and Machining Theory N2    | 35                     | No enrolments                     |
| Langeni City College        | Brits                    | Engineering Science N2             | 47                     | 11                                |
|                             |                          | Mathematics N2                     | 46                     | 12                                |
|                             |                          | Industrial Electronics N2          | 27                     | 5                                 |
| Majuba TVET                 | Majuba Technology Centre | Mathematics N3                     | 417                    | 332                               |
|                             |                          | Building Science N2                | 123                    | 82                                |
|                             |                          | Diesel Trade Theory N2             | 61                     | 38                                |
| Majuba TVET                 | Majuba Technology Centre | Engineering Science N3             | 384                    | 259                               |
|                             |                          | Industrial Electronics N3          | 132                    | 40                                |
|                             |                          | Mechanotechnology N3               | 151                    | 26                                |
| Motheo TVET                 | Hillside View Campus     | Industrial Electronics N2          | 141                    | 172                               |
|                             |                          | Mathematics N3                     | 196                    | 231                               |
|                             |                          | Engineering Science N3             | 136                    | 149                               |
| Northlink TVET              | Bellville                | Industrial Electronics N2          | 192                    | 190                               |
|                             |                          | Mathematics N3                     | 78                     | 71                                |
|                             |                          | Diesel Trade Theory N2             | 182                    | 171                               |
| Platinum TVET College       | Rustenburg               | Mathematics N2                     | 125                    | 136                               |
|                             |                          | Electrical Trade Theory N2         | 59                     | 60                                |
|                             |                          | Industrial Electronics N2          | 63                     | 67                                |
| Pretoria Vocational College | Secunda                  | Electrical Trade Theory N2         | 57                     | 57                                |
|                             |                          | Mathematics N3                     | 150                    | 150                               |
|                             |                          | Engineering Science N2             | 137                    | 137                               |
| South West Gauteng TVET     | Roodepoort West          | Industrial Electronics N2          | 209                    | 169                               |
|                             |                          | Mathematics N2                     | 238                    | 238                               |
|                             |                          | Engineering Science N3             | 134                    | 131                               |
| Springfield FET College     | Kempton Park             | Engineering Drawing N2             | 12                     | 10                                |
|                             |                          | Industrial Electronics N2          | 11                     | 11                                |
|                             |                          | Engineering Science N3             | 8                      | 8                                 |
| Springfield FET College     | Kempton Park             | Engineering Science N2             | 24                     | 23                                |
|                             |                          | Electrical Trade Theory N2         | 11                     | 11                                |
|                             |                          | Mathematics N2                     | 20                     | 19                                |

| College                 | Campus/ site            | Additional instructional offerings | Enrolments as per DHET | Enrolments at the college/ campus |
|-------------------------|-------------------------|------------------------------------|------------------------|-----------------------------------|
| Springfield FET College | Durban                  | Industrial Electronics N2          | 86                     | 18                                |
|                         |                         | Engineering Science N2             | 128                    | 28                                |
|                         |                         | Mathematics N2                     | 150                    | 41                                |
| Tshwane North College   | Soshanguve North Campus | Industrial Electronics N2          | 96                     | 92                                |
|                         |                         | Electrical Trade Theory N2         | 96                     | 87                                |
|                         |                         | Mathematics N2                     | 124                    | 116                               |
| Tshwane South TVET      | Pretoria West           | Industrial Electronics N2          | 96                     | 96                                |
|                         |                         | Electrotechnology N3               | 110                    | 110                               |
|                         |                         | Mathematics N3                     | 240                    | 242                               |
| Umgungundlovu TVET      | Plessislaer             | Fitting and Machining Theory N2    | 39                     | 36                                |
|                         |                         | Engineering Science N3             | 36                     | 28                                |
|                         |                         | Mathematics N2                     | 97                     | 86                                |

The sites were requested to provide evidence of the marked tests and mark sheets for the additional instructional offerings. The status of the sites and their compliance with the ICASS requirements, as stated in the 2022 DHET ICASS Instructions, follow in Table 9D.

**Table 9D: Evidence of one or both tests accompanied by the mark sheet**

| College                                   | Campus/ site | Additional instructional offerings | Test 1 | Test 2 | Correct conversion       |
|---|--------------|------------------------------------|--------|--------|--------------------------|
| Growth Path Projects                      | Emalahleni   | Industrial Electronics N2          | Y      | Y      | Mark sheet not available |
|   |              | Mathematics N2                     | Y      | Y      | Y                        |
|   |              | Engineering Science N2             | Y      | Y      | Y                        |
| Technical SA College                      | Pretoria     | Industrial Electronics N2          | Y      | Y      | Y                        |
|   |              | Engineering Science N3             | Y      | Y      | Y                        |
|   |              | Electrotechnology N3               | Y      | Y      | Y                        |
| Be Competent Training Institute (Pty) Ltd | Germiston    | Mathematics N2                     | Y      | Y      | Y                        |
|   |              | Engineering Drawing N2             | Y      | Y      | Y                        |
|   |              | Fitting and Machining Theory N2    | Y      | Y      | Y                        |
| Berea Technical College                   | Durban       | Instrument Trade Theory N2         | Y      | Y      | Y                        |
|   |              | Mathematics N3                     | Y      | Y      | Y                        |
|   |              | Electrical Trade Theory N2         | Y      | Y      | Y                        |
| Boland TVET                               | Strand       | Electrotechnology N3               | Y      | Y      | Y                        |
|   |              | Engineering Science N2             | Y      | Y      | Y                        |
|   |              | Mathematics N2                     | Y      | Y      | Y                        |
| Boland TVET                               | Stellenbosch | Engineering Science N2             | Y      | Y      | Y                        |
|   |              | Mathematics N2                     | Y      | Y      | Y                        |
|   |              | Electrical Trade Theory N2         | Y      | Y      | Y                        |

| College                        | Campus/ site      | Additional instructional offerings   | Test 1 | Test 2 | Correct conversion |
|--------------------------------|-------------------|--------------------------------------|--------|--------|--------------------|
| Boland TVET                    | Paarl             | Building Science N2                  | Y      | Y      | Y                  |
|                                |                   | Building Drawing N2                  | Y      | Y      | Y                  |
|                                |                   | Bricklaying and Plastering Theory N2 | Y      | Y      | Y                  |
| Brooklyn City College          | Rustenburg        | Fitting and Machining Theory N2      | Y      | Y      | Y                  |
|                                |                   | Engineering Science N2               | Y      | Y      | Y                  |
|                                |                   | Mathematics N2                       | Y      | Y      | Y                  |
| Central Johannesburg TVET      | Johannesburg      | Industrial Electronics N3            | Y      | Y      | Y                  |
|                                |                   | Building Drawing N2                  | Y      | Y      | Y                  |
|                                |                   | Mechanotechnology N3                 | Y      | Y      | Y                  |
| Central Technical College      | Durban            | Industrial Electronics N2            | Y      | Y      | Y                  |
|                                |                   | Mathematics N3                       | Y      | Y      | Y                  |
|                                |                   | Engineering Science N2               | Y      | Y      | Y                  |
| Coastal KZN                    | Umlazi            | Industrial Electronics N2            | Y      | Y      | Y                  |
|                                |                   | Engineering Science N3               | Y      | Y      | Y                  |
|                                |                   | Electrical Trade Theory N2           | Y      | Y      | Y                  |
| Coastal KZN                    | Umlazi            | Building Drawing N2                  | Y      | Y      | Y                  |
|                                |                   | Building and Civil Technology N3     | Y      | Y      | Y                  |
|                                |                   | Mathematics N3                       | Y      | Y      | Y                  |
| Coastal KZN TVET               | Swinton Road      | Engineering Science N2               | Y      | Y      | Y                  |
|                                |                   | Mathematics N3                       | Y      | Y      | Y                  |
|                                |                   | Mechanotechnology N3                 | Y      | Y      | Y                  |
| Correctional Services          | Rustenburg Prison | Industrial Electronics N2            | Y      | Y      | Y                  |
|                                |                   | Mathematics N2                       | Y      | Y      | Y                  |
|                                |                   | Electrical Trade Theory N2           | Y      | Y      | Y                  |
| Damelin                        | Mowbray           | Engineering Science N2               | Y      | Y      | Y                  |
|                                |                   | Mathematics N2                       | Y      | Y      | Y                  |
|                                |                   | Industrial Electronics N2            | Y      | Y      | Y                  |
| Denver Technical College of SA | Pretoria          | Engineering Science N3               | Y      | Y      | Y                  |
|                                |                   | Platers' Theory N2                   | Y      | Y      | Y                  |
|                                |                   | Electrical Trade Theory N3           | Y      | Y      | Y                  |
| Eastcape Midlands              | Charles Goodyear  | Mathematics N2                       | Y      | Y      | Y                  |
|                                |                   | Engineering Science N3               | Y      | Y      | Y                  |
|                                |                   | Building Science N2                  | Y      | Y      | Y                  |
| Eastview TVET College          | Pretoria          | Mathematics N3                       | Y      | Y      | Y                  |
|                                |                   | Fitting and Machining Theory N2      | N      | N      | N                  |
|                                |                   | Engineering Science N3               | N      | N      | N                  |
| Ekurhuleni West TVET           | Kempton           | Industrial Electronics N3            | Y      | Y      | Y                  |
|                                |                   | Engineering Drawing N3               | Y      | Y      | Y                  |
|                                |                   | Mathematics N3                       | Y      | Y      | Y                  |

| College                       | Campus/ site             | Additional instructional offerings | Test 1 | Test 2 | Correct conversion |
|-------------------------------|--------------------------|------------------------------------|--------|--------|--------------------|
| Elangeni TVET                 | Pinetown                 | Mathematics N2                     | Y      | Y      | Y                  |
|                               |                          | Engineering Science N2             | Y      | Y      | Y                  |
|                               |                          | Electrical Trade Theory N2         | Y      | Y      | Y                  |
| Flavius Mareka                | Sasolburg                | Industrial Electronics N2          | Y      | Y      | Y                  |
|                               |                          | Electrotechnology N3               | Y      | Y      | Y                  |
|                               |                          | Mathematics N3                     | Y      | Y      | Y                  |
| Future Success Skills Academy | Emalahleni               | Mathematics N3                     | N      | N      | N                  |
|                               |                          | Engineering Science N3             | Y      | Y      | Y                  |
|                               |                          | Electrical Trade Theory N2         | Y      | Y      | Y                  |
| Gauteng City College          | Houghton                 | Mathematics N2                     | Y      | Y      | Y                  |
|                               |                          | Fitting and Machining Theory N2    | Y      | Y      | Y                  |
|                               |                          | Motor Trade Theory N2              | Y      | Y      | Y                  |
| Good News Skills Academy      | Sebokeng                 | Engineering Science N3             | Y      | Y      | Y                  |
|                               |                          | Mathematics N3                     | Y      | Y      | Y                  |
|                               |                          | Supervision in Industry N3         | Y      | Y      | Y                  |
| Ithuteng FET College          | Mokopane                 | Mathematics N3                     | N      | N      | N                  |
|                               |                          | Engineering Science N2             | N      | N      | N                  |
|                               |                          | Engineering Drawing N2             | N      | N      | N                  |
| Kent Technical College        | Springs                  | Mathematics N2                     | Y      | Y      | Y                  |
|                               |                          | Engineering Science N2             | Y      | Y      | Y                  |
|                               |                          | Fitting and Machining Theory N2    | N      | N      | N                  |
| Langeni City College          | Brits                    | Engineering Science N2             | Y      | Y      | Y                  |
|                               |                          | Mathematics N2                     | Y      | Y      | Y                  |
|                               |                          | Industrial Electronics N2          | Y      | Y      | Y                  |
| Majuba TVET                   | Majuba Technology Centre | Mathematics N3                     | Y      | Y      | Y                  |
|                               |                          | Building Science N2                | Y      | Y      | Y                  |
|                               |                          | Diesel Trade Theory N2             | Y      | Y      | Y                  |
| Majuba TVET                   | Majuba Technology Centre | Engineering Science N3             | Y      | Y      | Y                  |
|                               |                          | Industrial Electronics N3          | Y      | Y      | Y                  |
|                               |                          | Mechanotechnology N3               | Y      | Y      | Y                  |
| Motheo TVET                   | Hillside View Campus     | Industrial Electronics N2          | Y      | Y      | Y                  |
|                               |                          | Mathematics N3                     | Y      | Y      | Y                  |
|                               |                          | Engineering Science N3             | Y      | Y      | Y                  |
| Northlink TVET                | Bellville                | Industrial Electronics N2          | Y      | Y      | Y                  |
|                               |                          | Mathematics N3                     | Y      | Y      | Y                  |
|                               |                          | Diesel Trade Theory N2             | Y      | Y      | Y                  |
| Platinum TVET College         | Rustenburg               | Mathematics N2                     | Y      | Y      | Y                  |
|                               |                          | Electrical Trade Theory N2         | Y      | Y      | Y                  |
|                               |                          | Industrial Electronics N2          | Y      | Y      | Y                  |

| College                     | Campus/ site            | Additional instructional offerings | Test 1 | Test 2 | Correct conversion |
|-----------------------------|-------------------------|------------------------------------|--------|--------|--------------------|
| Pretoria Vocational College | Secunda                 | Electrical Trade Theory N2         | Y      | Y      | Y                  |
|                             |                         | Mathematics N3                     | Y      | Y      | Y                  |
|                             |                         | Engineering Science N2             | Y      | Y      | Y                  |
| South West Gauteng TVET     | Roodepoort West         | Industrial Electronics N2          | Y      | Y      | Y                  |
|                             |                         | Mathematics N2                     | Y      | Y      | Y                  |
|                             |                         | Engineering Science N3             | Y      | Y      | Y                  |
| Springfield FET College     | Kempton Park            | Engineering Drawing N2             | Y      | Y      | Y                  |
|                             |                         | Industrial Electronics N2          | Y      | Y      | Y                  |
|                             |                         | Engineering Science N3             | Y      | Y      | Y                  |
| Springfield FET College     | Kempton Park            | Engineering Science N2             | Y      | Y      | Y                  |
|                             |                         | Electrical Trade Theory N2         | Y      | Y      | Y                  |
|                             |                         | Mathematics N2                     | Y      | Y      | Y                  |
| Springfield FET College     | Durban                  | Industrial Electronics N2          | Y      | Y      | N                  |
|                             |                         | Engineering Science N2             | Y      | Y      | Y                  |
|                             |                         | Mathematics N2                     | Y      | Y      | Y                  |
| Tshwane North College       | Soshanguve North Campus | Industrial Electronics N2          | Y      | Y      | Y                  |
|                             |                         | Electrical Trade Theory N2         | Y      | Y      | Y                  |
|                             |                         | Mathematics N2                     | Y      | Y      | Y                  |
| Tshwane South TVET          | Pretoria West           | Industrial Electronics N2          | Y      | Y      | Y                  |
|                             |                         | Electrotechnology N3               | Y      | Y      | Y                  |
|                             |                         | Mathematics N3                     | Y      | Y      | Y                  |
| Umgungundlovu TVET          | Plessislaer             | Fitting and Machining Theory N2    | Y      | Y      | Y                  |
|                             |                         | Engineering Science N3             | Y      | Y      | Y                  |
|                             |                         | Mathematics N2                     | Y      | Y      | Y                  |

In the sampled instructional offerings, seven of the sites experienced challenges with compliance that ranged from no compliance to partial compliance in marked tests and mark sheets. The sites that experienced challenges in complying with the ICASS

**Table 9E: Sites that experienced challenges in ICASS compliance**

| Evidence of additional Instructional offerings                            | College                           | Instructional offering        |
|---|-----------------------------------|-------------------------------|
| No evidence of tests and mark sheets                                      | Ithuteng FET College              | Mathematics N3                |
|   |                                   | Engineering Science N2        |
|   |                                   | Engineering Drawing N2        |
|   | Eastview TVET College Pretoria    | Fitting & Machining Theory N2 |
|   |                                   | Engineering Science N3        |
| Future Success Skills Academy   | Mathematics N3                    |                               |
| Kent Technical College  | Fitting and Machining Theory N2   |                               |
| No evidence of tests Marks on handwritten mark sheets converted correctly | Good News Skills Academy Sebokeng | Engineering Science N3        |
|   |                                   | Mathematics N3                |
|   |                                   | Supervision in Industry N3    |
| Incorrect conversion of marks to mark sheet                               | Springfield FET College Durban    | Industrial Electronics N2     |
| No mark sheet   | Growth Path Projects Emalaheni    | Industrial Electronics N2     |

## 9.4 Areas of Improvement

The following improvements were observed:

- The available facilities at 87% (83% in November 2021) of the sites were sufficient for the number of enrolled students;
- The college had a process in place for the identification of training needs of staff members at 65% of the sites visited. This was a slight increase from the 64% in November 2021;
- There was evidence that the training plan was implemented at 53% of the sites visited, an increase of 8% from the 45% in November 2021;
- There was evidence of a structure/plan for the monitoring of assessment at the site of learning at 85% of the sites visited, 11% more than the 74% in November 2021;
- The college had an irregularity register at 68% of the sites visited, an increase of 11% from the 57% in November 2021;
- There were internal assessment irregularities recorded in the register at 28% of the sites visited, an increase of 2% from the 26% of November 2021;
- The subject file contained lesson plans at 85% of the sites visited, an increase of 33% compared to 52% in November 2021; and
- Eighty-five percent (83% in November 2021) of the sites had evidence of moderation of marking in both tests, in a minimum sample of 10% of the scripts.

## 9.5 Areas of Non-Compliance

A number of concerns were raised, including:

- There were computers and printers for the students at 74% of the sites to complete assignments/case studies and for research. This was a 2% decrease from 76% in November 2021;
- There was an up-to-date college assessment policy at 90% of the sites visited, a decrease of 10% from the 100% in November 2021;
- There was evidence of a subject monitoring report per lecturer at 60% of the sites visited, a decrease of 4% from 64% in November 2021;
- The tasks were developed according to the plan/schedule of assessment at 78% of the sites, a decrease of 8% from 86% in November 2021;
- Assessment scores were recorded accurately on the mark sheet at 80% of the sites visited, a decrease of 13% compared to the 93% of November 2021;



- f. The type of questions was in line with the stipulated content at 88% of the sites, a decrease of 7% from 95% in November 2021;
- g. The two tasks varied in the levels of difficulty, were pitched at the right level, and assessed a variety of knowledge and skills at 93% of the sites, a decrease of 4% from the 97% average of November 2021;
- h. The numbering on the test and/or marking guideline was incorrect at 13% of the sites. The marking guideline facilitated marking and was easy to use in both tests at 85% of sites, a decrease of 6% compared with 91% in November 2021;
- i. The students interpreted questions correctly and were able to answer all or most of the questions in the tests at 78% of sites, a decrease of 8% compared with 86% of the sites in November 2021;
- j. Marking was consistent with the marking guidelines at 73% of the sites, a decrease of 13% compared with 86% of sites visited in November 2021;
- k. The mark allocated was a true reflection of the students' performance in both tests at 70% of the sites, a decrease of 13% compared with 83% of sites visited in November 2021;
- l. The totalling of marks and transfer of marks to the mark sheet was accurate at 85% of the sites, a decline of 8% compared with 93% of sites visited in November 2021; and
- m. The quality and standard of marking was acceptable at 73% of the sites, a 10% decrease from the 83% of sites visited in November 2021.

## 9.6 Directives for Compliance and Improvement

The DHET must address the following directives for compliance and improvement to ensure effective teaching, learning and assessment of the Engineering Studies' instructional offerings at the colleges, by ensuring that:

- a. Colleges' facilities are upgraded in accordance with their enrolments or, alternatively, they partner with industry for workshop and work-integrated learning experience;
- b. All students have access to computers and the internet;
- c. Lecturers are qualified and have enough industry experience to teach the instructional offering;
- d. Training needs of lecturers are addressed at college level;
- e. There are systems in place to ensure that tasks of standard are produced;
- f. Marking of tasks is consistent with the marking guidelines;
- g. Internal moderation is of high quality and adds value to the assessment practice; and
- h. Marks are calculated and recorded correctly.

## 9.7 Conclusion

The NATED Report 190/191: Engineering Studies N2–N3 programme remains a popular choice among students at private FET colleges. Although knowledge on the theory of subjects is gained, practical application of the theoretical components would prepare students for the industry. The internal assessment serves to prepare students for the final examination at the end of the trimester. The continuous internal assessments should, therefore, contribute to the holistic development of the student for the workplace and/or further studies.

# CHAPTER 10 STANDARDISATION OF MARKING GUIDELINES

## 10.1 Introduction

The standardisation of marking guidelines provides a platform for the Department of Higher Education and Training (DHET) markers, examiners, internal moderators and Umalusi's external moderators to discuss responses per question and to reach consensus before the final marking guidelines are approved.

The purpose of standardising the marking guidelines is to ensure that the personnel involved in the marking process share common understanding and interpretation of the marking guidelines. Further, this process aims to ensure that all possible alternative responses are included in the final marking guidelines before they are implemented. Umalusi participates in the finalisation of the marking guidelines to ensure that fairness prevails; and reports on the:

- a. Preparedness of markers, chief markers and internal moderators for the marking guideline discussions;
- b. Thoroughness of marking guideline discussions; and
- c. Standard and quality of the marking guidelines.

The standardisation of marking guidelines was conducted both online and face-to-face. These meetings were chaired by the respective examiner or the internal moderator responsible for the setting of the question paper. All appointed officials were required to take part in the marking guideline discussions. In the case of large enrolments, only the chief markers and internal moderators from each marking centre were invited to join the marking guideline discussion meetings.

## 20.2 Scope and Approach

Umalusi deployed 33 external moderators to attend the marking guideline discussion meetings for 40 instructional offerings, as listed in Table 10A and 10B below. The meetings for 32 instructional offerings were conducted on an online platform and, for eight instructional offerings, the standardisation of marking guidelines was conducted at marking centres in Centurion (seven) and Pretoria West (one).

Table 10A shows the criteria and quality indicators that were used during the evaluation of the finalisation of the marking guidelines process for N2 and N3 instructional offerings. The instrument requires Umalusi moderators to report the findings, based on the following criteria.

**Table 10A: Evaluation criteria and quality indicators for marking guideline discussions**

| Criterion  | Quality indicator  |
|--|--|
| Staff attendance   | The appointed markers, chief markers, internal moderators and external moderators attended the marking guideline discussions.<br>All participants arrived on time to attend the training sessions. |
| Appointment of marking staff   | All markers, chief markers and the internal moderators were appointed on time.<br>They all received their appointment letters before the marking guideline discussions.                            |
| External moderation  | Recommended changes made to the question paper and the marking guidelines.   |
| Adjustments to the marking guidelines  | The chief markers or the internal moderators made appropriate adjustments to the marking guidelines before the marking guideline discussions.  |
| Adjustments to the marking guidelines during the marking guideline discussions | Indication of adjustments made to the marking guidelines during the marking guideline discussions.   |

| Criterion  | Quality indicator   |
|--|---|
| Justification for changes to the marking guidelines  | Changes made to the marking guidelines were justified.  |
| Influence of changes to the marking guideline on the cognitive level of the answers/responses. | Indication of whether changes to the marking guidelines influenced the cognitive level of the answers/responses required from candidates. |
| Role of the external moderator in the marking guideline discussions                            | Role played by the external moderator.  |
| General conduct of internal moderators, chief markers and markers                              | Problems experienced with the internal moderators, chief markers and markers (general conduct).   |
| Signing off of the marking guidelines  | The external moderators signed off the marking guidelines.  |
| Comments and recommendations   | Comments and recommendations on the outcome of the marking guideline discussions.   |

Table 10B and 10C provide lists of the instructional offerings for which meetings were attended by Umalusi and the dates on which these were held, for N2 (Table 10B) and N3 (Table 10C) marking guideline meetings.

**Table 10B: N2 marking guideline discussion meetings conducted**

| Instructional offerings                  | Date             | Marking centre |
|--|------------------|----------------|
| Bricklaying and Plastering Theory        | 28 November 2022 | Online meeting |
| Building Drawing                         | 21 November 2022 | Online meeting |
| Building Science                         | 23 November 2022 | Online meeting |
| Carpentry and Roof Work                  | 28 November 2022 | Online meeting |
| Diesel Trade Theory                      | 24 November 2022 | Online meeting |
| Electrical Trade Theory                  | 28 November 2022 | Online meeting |
| Engineering Drawing                      | 01 December 2022 | Online meeting |
| Engineering Science                      | 23 November 2022 | Online meeting |
| Fitting and Machining Theory             | 24 November 2022 | Online meeting |
| Industrial Electronics                   | 17 November 2022 | Online meeting |
| Industrial Orientation                   | 26 November 2022 | Centurion      |
| Instrument Trade Theory                  | 03 December 2022 | Centurion      |
| Logic Systems                            | 24 November 2022 | Online meeting |
| Mathematics                              | 18 November 2022 | Online meeting |
| Motor Electrical Theory                  | 03 December 2022 | Pretoria West  |
| Platers' Theory                          | 29 November 2022 | Online meeting |
| Plating and Structural Steel Drawing     | 30 November 2022 | Online meeting |
| Plumbing Theory                          | 03 December 2022 | Pretoria West  |
| Refrigeration Trade Theory               | 03 December 2022 | Centurion      |
| Water and Waste-Water Treatment Practice | 28 November 2022 | Online meeting |
| Welders' Theory                          | 28 November 2022 | Online meeting |

**Table 10C: N3 marking guideline discussion meetings conducted**

| Instructional Offerings              | Date             | Marking Centre |
|--------------------------------------|------------------|----------------|
| Building and Civil Technology        | 29 November 2022 | Online meeting |
| Building Drawing                     | 28 November 2022 | Online meeting |
| Building Science                     | 17 November 2022 | Online meeting |
| Diesel Trade Theory                  | 25 November 2022 | Online meeting |
| Electrical Trade Theory              | 25 November 2022 | Online meeting |
| Electrotechnology                    | 01 December 2022 | Online meeting |
| Engineering Drawing                  | 29 November 2022 | Online meeting |
| Engineering Science                  | 22 November 2022 | Online meeting |
| Industrial Electronics               | 16 November 2022 | Online meeting |
| Industrial Organisation and Planning | 03 December 2022 | Online meeting |
| Logic systems                        | 29 November 2022 | Online meeting |
| Mathematics                          | 23 November 2022 | Online meeting |
| Mechanotechnology                    | 25 November 2022 | Online meeting |
| Plating and Structural Steel Drawing | 21 November 2022 | Online meeting |
| Radio and Television Theory          | 03 November 2022 | Centurion      |
| Refrigeration Trade Theory           | 03 December 2022 | Centurion      |
| Supervision in Industry              | 28 November 2022 | Centurion      |
| Waste-Water Treatment Practice       | 01 December 2022 | Online meeting |
| Water Treatment Practice             | 24 November 2022 | Online meeting |

### 10.3 Summary of Findings

Umalusi reported that participants were prepared on arrival for the discussions and finalisation of the marking guidelines. All the participants in the discussion meetings agreed with the changes that were made. Table 10D (NATED N2) and Table 10E (NATED N3) present the findings from the standardisation of marking guidelines process, as reported by Umalusi moderators.

**Table 10D: Findings from the standardisation of marking guidelines of NATED N2 instructional offerings**

| Evaluation criteria | Findings and challenges   | Instructional offering          |
|---------------------|---|---------------------------------|
| Staff attendance    | For 5% of the instructional offerings chief markers were not present at the marking guidelines discussion meetings. This was the same as in the November 2021 examinations. | Fitting and Machining Theory N2 |

| Evaluation criteria | Findings and challenges   | Instructional offering   |
|---------------------|---|--|
|                     | <p>Of the N2 markers who were appointed, only 90% were present. This was the same in the November 2021 examinations.</p>  | <p>Bricklaying and Plastering N2<br/>           Building Drawing N2<br/>           Building Science N2<br/>           Carpentry and Roofing Theory N2<br/>           Diesel Trade Theory N2<br/>           Electrical Trade Theory N2<br/>           Engineering Drawing N2<br/>           Engineering Science N2<br/>           Industrial Electronics N2<br/>           Industrial Orientation N2<br/>           Instrument Trade Theory N2<br/>           Logic Systems N2<br/>           Mathematics N2<br/>           Motor Electrical Theory N2<br/>           Platers' Theory N2<br/>           Plumbing Theory N2<br/>           Plating and Structural Steel Drawing N2<br/>           Refrigeration Trade Theory N2<br/>           Water and Waste-Water Treatment Practice N2</p>                                   |
|                     | <p>Ninety-five percent of the N2 internal moderators who were appointed were present at the marking guideline discussion meetings. This was the same in the November 2021 examinations.</p>           | <p>Bricklaying and Plastering N2<br/>           Building Drawing N2<br/>           Building Science N2<br/>           Carpentry and Roofing Theory N2<br/>           Diesel Trade Theory N2<br/>           Electrical Trade Theory N2<br/>           Engineering Drawing N2<br/>           Engineering Science N2<br/>           Industrial Electronics N2<br/>           Industrial Orientation N2<br/>           Instrument Trade Theory N2<br/>           Logic Systems N2<br/>           Mathematics N2<br/>           Motor Electrical Theory N2<br/>           Platers' Theory N2<br/>           Plumbing Theory N2<br/>           Plating and Structural Steel Drawing N2<br/>           Refrigeration Trade Theory N2<br/>           Water and Waste-Water Treatment Practice N2<br/>           Welders' Theory N2</p> |
|                     | <p>In 24% of the N2 instructional offerings the participants were not on time and the marking guideline discussion meetings started without them. This was 33% in the November 2021 examinations.</p> | <p>Bricklaying and Plastering N2<br/>           Building Drawing N2<br/>           Diesel Trade Theory N2<br/>           Logic Systems N2<br/>           Mathematics N2</p>  |

| Evaluation criteria                                       | Findings and challenges  | Instructional offering   |
|---|--|--|
| Appointment of marking staff                              | In 100% of the instructional offerings the participants received their appointment letters before the marking guideline discussion meetings took place. They received their appointment letters through emails and short message services (SMS). | All sampled instructional offerings  |
| Participation in the marking guideline discussion meeting | In 90% of the instructional offerings the participants were active in the discussions. This was a decrease from 100% in the November 2021 examination.   | Building Drawing N2<br>Building Science N2<br>Carpentry and Roofing Theory N2<br>Diesel Trade Theory N2<br>Electrical Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Industrial Orientation N2<br>Instrument Trade Theory N2<br>Logic Systems N2<br>Mathematics N2<br>Motor Electrical Theory N2<br>Platers' Theory N2<br>Plumbing Theory N2<br>Plating and Structural Steel Drawing N2<br>Water and Waste-Water Treatment Practice N2<br>Welders' Theory N2                                     |
| Changes justified   | Changes to 95% of the marking guidelines were justified. This was 90% in the November 2021 examination.  | Bricklaying and Plastering N2<br>Building Drawing N2<br>Building Science N2<br>Carpentry and Roofing Theory N2<br>Diesel Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Industrial Orientation N2<br>Instrument Trade Theory N2<br>Logic Systems N2<br>Mathematics N2<br>Motor Electrical Theory N2<br>Platers' Theory N2<br>Plumbing Theory N2<br>Plating and Structural Steel Drawing N2<br>Refrigeration Trade Theory N2<br>Water and Waste-Water Treatment Practice N2<br>Welders' Theory N2 |

| Evaluation criteria   | Findings and challenges  | Instructional offering   |
|---|--|--|
| Adjustments to the marking guidelines   | In 95% of the instructional offerings adjustments were made to the marking guidelines. This was 90% in the November 2021 examination.  | Bricklaying and Plastering N2<br>Building Drawing N2<br>Building Science N2<br>Carpentry and Roofing Theory N2<br>Electrical Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Industrial Orientation N2<br>Instrument Trade Theory N2<br>Logic Systems N2<br>Mathematics N2<br>Motor Electrical Theory N2<br>Platers' Theory N2<br>Plumbing Theory N2<br>Plating and Structural Steel Drawing N2<br>Refrigeration Trade Theory N2<br>Water and Waste-Water Treatment Practice N2<br>Welders' Theory N2 |
| Influence of changes to the marking guidelines on the cognitive level of the question paper | The changes made to 90% of the marking guidelines of the sampled instructional offerings had no effect on the cognitive level of questions. This was a decrease from the 100% in the November 2021 examinations.   | Bricklaying and Plastering N2<br>Building Drawing N2<br>Building Science N2<br>Carpentry and Roofing Theory N2<br>Diesel Trade Theory N2<br>Electrical Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Industrial Orientation N2<br>Instrument Trade Theory N2<br>Motor Electrical Theory N2<br>Platers' Theory N2<br>Plumbing Theory N2<br>Plating and Structural Steel Drawing N2<br>Refrigeration Trade Theory N2<br>Water and Waste-Water Treatment Practice N2<br>Welders' Theory N2             |
| Complaints about questions that were ambiguous, outside syllabus or beyond the level        | In 81% of the instructional offerings there were complaints received about questions that were ambiguous, outside the syllabus or beyond the level. This is a decrease from 100% in the November 2021 examination. | Bricklaying and Plastering N2<br>Building Drawing N2<br>Building Science N2<br>Carpentry and Roofing Theory N2<br>Diesel Trade Theory N2<br>Electrical Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Instrument Trade Theory N2<br>Motor Electrical Theory N2<br>Platers' Theory N2<br>Plumbing Theory N2<br>Plating and Structural Steel Drawing N2<br>Refrigeration Trade Theory N2<br>Water and Waste-Water Treatment Practice N2<br>Welders' Theory N2   |

| Evaluation criteria   | Findings and challenges  | Instructional offering   |
|---|--|--|
| Signing off of the marking guidelines                               | Marking guidelines for 100% of the sampled instructional offerings were signed off and Umalusi verbally agreed with all adjustments/ additions made. This was 81% in the November 2021 examination.  | All sampled instructional offerings  |
| Role of the external moderator in the marking guideline discussions | In all (100%) of the instructional offerings the external moderator played an observer role, guided the officials where required and assisted when clarification was needed.   | All sampled instructional offerings  |
| Conduct of marker/chief markers/internal moderator                  | In 86% of the instructional offerings no issues or difficulties were reported on the marking officials' overall behaviour. This was 95% in the November 2021 examination.  | Building Science N2<br>Carpentry and Roofing Theory N2<br>Diesel Trade Theory N2<br>Electrical Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Industrial Orientation N2<br>Instrument Trade Theory N2<br>Mathematics N2<br>Motor Electrical Theory N2<br>Platers' Theory N2<br>Plumbing Theory N2<br>Plating and Structural Steel Drawing N2<br>Refrigeration Trade Theory N2<br>Water and Waste-Water Treatment Practice N2<br>Welders' Theory N2 |
| Comments and recommendations  | The meetings were conducted online, through Microsoft Teams. They were concluded successfully, apart from minor issues experienced with connectivity issues and, in some cases, participants not muting their microphones while another person was speaking. | All sampled instructional offerings  |



**Table 10E: Findings from the standardisation of marking guidelines of NATED N3 instructional offerings**

| Evaluation criteria | Findings and challenges   | Instructional offering   |
|---------------------|---|--|
| Staff attendance    | For 100% of the instructional offerings chief markers were present at the marking guidelines discussion meetings. This was the same in the November 2021 examinations.                        | All sampled instructional offerings  |
|                     | Only 84% of the appointed markers were present. This was a decrease from 90% in the November 2021 examinations.   | Building and Civil Technology N3<br>Building Drawing N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Mathematics N3<br>Mechanotechnology N3<br>Plating and Structural Steel Drawing N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3<br>Water Treatment Practice N3  |
|                     | Ninety-five percent of the internal moderators who were appointed were present at the marking guideline discussion meetings. This was the same as in the November 2021 examination.           | Building and Civil Technology N3<br>Building Drawing N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Plating and Structural Steel Drawing N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3<br>Waste-Water Treatment Practice N3<br>Water Treatment Practice N3 |
|                     | In 58% of the instructional offerings the participants were not on time and the marking guideline discussion meetings started without them, compared to 33% in the November 2021 examination. | Building and Civil Technology N3<br>Building Drawing N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Mathematics N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3   |

| Evaluation criteria                                       | Findings and challenges   | Instructional offering  |
|---|---|---|
| Appointment of marking staff                              | In 5% of the instructional offerings the participants did not receive their appointment letters before the marking guideline discussion meetings took place. Those who were appointed received their appointment letters through emails and SMS. This was 10% in the November 2021 examination. | Mathematics N3  |
| Umalusi signed-off guideline presented at the meeting     | In 89% of the instructional offerings the marking guidelines that Umalusi had signed off were presented during the meeting.   | Building and Civil Technology N3<br>Building Drawing N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Plating and Structural Steel Drawing N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3<br>Water Treatment Practice N3 |
| Chief marker preparedness                                 | The chief markers came prepared to the meeting for 84% of the instructional offerings   | Building and Civil Technology N3<br>Building Drawing N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Refrigeration Trade Theory N3<br>Waste-Water Treatment Practice N3<br>Water Treatment Practice N3   |
| Participation in the marking guideline discussion meeting | In all (100%) the instructional offerings the marking personnel participated fully in the marking guideline discussions. This was the same in the 2021 November examination.  | All sampled instructional offerings   |

| Evaluation criteria   | Findings and challenges  | Instructional offering   |
|---|--|--|
| Changes justified   | Changes to 80% of the marking guidelines for the instructional offerings were justified, compared to 90% in the November 2021 examination.   | Building and Civil Technology N3<br>Building Drawing N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Plating and Structural Steel Drawing N3<br>Radio and Television Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3   |
| Adjustments to the marking guidelines   | In 79% of the instructional offerings adjustments were made to the marking guidelines. This was a decrease compared to 90% in the November 2021 examination.   | Building and Civil Technology N3<br>Building Drawing N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3  |
| Influence of changes to the marking guidelines on the cognitive level of the question paper | The changes made to the marking guidelines in 84% of the sampled instructional offerings had no effect on the cognitive levels of questions. This decreased from 100% in November 2021 examinations. | Building and Civil Technology N3<br>Building Drawing N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Plating and Structural Steel Drawing N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3<br>Water Treatment Practice N3 |

| Evaluation criteria  | Findings and challenges   | Instructional offering   |
|--|---|--|
| Complaints about questions that were ambiguous, outside syllabus or beyond the level | In 89% of the instructional offerings no complaints were received about questions that were ambiguous, outside of the syllabus or beyond the level of the syllabus. This was a decrease from the 100% in the November 2021 examination. | Building and Civil Technology N3<br>Building Drawing N3<br>Building Science N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Plating and Structural Steel Drawing N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3<br>Water Treatment Practice N3 |
| Signing off of the marking guidelines  | Marking guidelines for 89% of the sampled instructional offerings were signed off and Umalusi verbally agreed with all adjustments/ additions made to the final marking guidelines.   | Building and Civil Technology N3<br>Building Drawing N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3<br>Water Treatment Practice N3                      |
| Role of the external moderator in the marking guideline discussions                  | In all (100%) of the instructional offerings the external moderator played an observer role, guided the officials where required and assisted when clarification was needed.  | All sampled instructional offerings  |

| Evaluation criteria                                | Findings and challenges  | Instructional offering  |
|--|--|---|
| Conduct of marker/chief markers/internal moderator | In 95% of the instructional offerings no issues or difficulties were reported on the marking officials' overall behaviour. This was also 95% in the November 2021 examination.   | Building and Civil Technology N3<br>Building Drawing N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Plating and Structural Steel Drawing N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3 |
| Comments and recommendations                       | Eighty percent of the meetings were conducted online through Microsoft Teams. They were concluded successfully, apart from minor issues experienced with connectivity and, in some cases, participants not muting their microphones while another person was speaking. |   |

## 10.4 Areas of Improvement

The following areas of improvement were noted:

- a. Marking guidelines for 100% of the N2 sampled instructional offerings were signed off and Umalusi verbally agreed with all adjustments/additions. This was 81% in the November 2021; and
- b. In all (100%) N3 instructional offerings the marking personnel participated in the marking guideline discussions.

## 10.5 Areas of Non-Compliance

The following areas of non-compliance were noted:

- a. In 58% of the N3 instructional offerings not all the participants were time and the marking guideline discussion meetings started without those who were absent, compared to 33% in the November 2021 examinations; and
- b. Five percent of chief markers and internal moderators for N2 did not attend the standardisation of marking guideline discussion meetings. They nonetheless allowed to mark.

## 10.6 Directives for Compliance and Improvement

The following are the directives for compliance and improvement to the DHET:

- a. All participants should ensure that they prepare accordingly ahead of time and take into considerations issues such as loadshedding that might affect connectivity; and
- b. The DHET must ensure that all chief markers and internal moderators attend the standardisation of marking guidelines.

## 10.7 Conclusion

The marking guideline discussions for the November 2022 NATED report 190/191 examinations were successfully completed. The interrogation of marking guidelines is considered to be of utmost importance to ensure consistent and quality marking, therefore the DHET must ensure that all chief markers and internal moderators attend the standardisation of marking guideline discussions.

# CHAPTER 11 VERIFICATION OF MARKING

## 11.1 Introduction

Umalusi quality assures the conduct of marking processes to monitor and report on the consistency and accuracy of marking, as well as to establish that both the marking and internal moderation are conducted according to agreed and established practices and standards. It is through this process of moderation that the standard and quality of marking is verified.

The purpose of this section is to report on:

- The standard and quality of marking and internal moderation;
- The reliability and viability of the systems, processes and procedures as planned and implemented at the marking centres;
- Identification of improvement as well as areas of non-compliance; and
- To issue directives for compliance and improvement on the findings.

The verification of marking evaluated the adherence to the approved standardised marking guidelines for the marking of the Department of Higher Education and Training (DHET) November 2022 NATED Report 190/191: Engineering Studies N2-N3 examinations.

## 11.2 Scope and Approach

As shown in Table 11A, Umalusi sampled 46 instructional offerings from seven marking centres for on-site monitoring and verification. This sample consisted of 22 N2 and 24 N3 instructional offerings. Engineering Science N3 was moderated at three marking centres, namely Northdale, Pretoria West and Mpondozankomo.

**Table 11A: Distribution of instructional offerings across marking centres**

| Marking centre | Number of instructional offerings |
|----------------|-----------------------------------|
| Centurion      | 12                                |
| Pretoria West  | 16                                |
| Northdale      | 4                                 |
| Mpondozankomo  | 5                                 |
| Hillside View  | 1                                 |
| Thornton       | 3                                 |
| Seshego        | 5                                 |
| <b>TOTAL</b>   | <b>46</b>                         |

Umalusi deployed 30 external moderators to verify the standard and quality of marking as part of the verification process.

Table 11B lists the distribution of N2 instructional offerings across the marking centres.

**Table 11B: N2 Verification of marking samples**

| Instructional offering                      | Date            | Marking centre |
|---|-----------------|----------------|
| Bricklaying and Plastering Theory N2        | 6 December 2022 | Seshego        |
| Building Drawing N2                         | 6 December 2022 | Mpondozankomo  |
| Building Science N2                         | 7 December 2022 | Northdale      |
| Diesel Trade Theory N2                      | 5 December 2022 | Pretoria West  |
| Electrical Trade Theory N2                  | 6 December 2022 | Thornton       |
| Engineering Drawing N2                      | 6 December 2022 | Pretoria West  |
| Engineering Science N2                      | 5 December 2022 | Mpondozankomo  |
| Fitting and Machining Theory N2             | 7 December 2022 | Pretoria West  |
| Industrial Electronics N2                   | 6 December 2022 | Thornton       |
| Industrial Orientation N2                   | 5 December 2022 | Centurion      |
| Instrument Trade Theory N2                  | 7 December 2022 | Centurion      |
| Logic Systems N2                            | 5 December 2022 | Centurion      |
| Mathematics N2                              | 7 December 2022 | Seshego        |
| Motor Electrical Theory N2                  | 6 December 2022 | Pretoria West  |
| Plant Operation Theory N2                   | 6 December 2022 | Pretoria West  |
| Platers' Theory N2                          | 5 December 2022 | Pretoria West  |
| Plumbing Theory N2                          | 6 December 2022 | Pretoria West  |
| Plating and Structural Steel Drawing N2     | 6 December 2022 | Northdale      |
| Radio and Television Theory N2              | 6 December 2022 | Centurion      |
| Refrigeration Trade Theory N2               | 8 December 2022 | Centurion      |
| Water and Waste-Water Treatment Practice N2 | 8 December 2022 | Seshego        |
| Welders' Theory N2                          | 7 December 2022 | Northdale      |

Table 11C lists the distribution of N3 instructional offerings across the marking centres.

**Table 11C: N3 Verification of marking samples**

| Instructional offering           | Date            | Marking centre |
|----------------------------------|-----------------|----------------|
| Aircraft Maintenance Theory N3   | 5 December 2022 | Centurion      |
| Building and Civil Technology N3 | 5 December 2022 | Mpondozankomo  |
| Building Science N3              | 5 December 2022 | Pretoria West  |
| Diesel Trade Theory N3           | 6 December 2022 | Seshego        |
| Electrical Trade Theory N3       | 5 December 2022 | Pretoria West  |
| Electrotechnology N3             | 7 December 2022 | Hillside View  |
| Engineering Drawing N3           | 7 December 2022 | Pretoria West  |
| Engineering Science N3           | 6 December 2022 | Mpondozankomo  |
| Engineering Science N3           | 7 December 2022 | Pretoria West  |
| Engineering Science N3           | 6 December 2022 | Northdale      |

| Instructional offering                  | Date            | Marking centre |
|---|-----------------|----------------|
| Industrial Electronics N3               | 7 December 2022 | Thornton       |
| Industrial Organisation and Planning N3 | 5 December 2022 | Centurion      |
| Industrial Orientation N3               | 6 December 2022 | Centurion      |
| Instrument Trade Theory N3              | 8 December 2022 | Pretoria West  |
| Logic Systems N3                        | 5 December 2022 | Centurion      |
| Mathematics N3                          | 5 December 2022 | Pretoria West  |
| Mechanotechnology N3                    | 5 December 2022 | Pretoria West  |
| Motor Trade Theory N3                   | 7 December 2022 | Pretoria West  |
| Plant Operation Theory N3               | 7 December 2022 | Pretoria West  |
| Plating and Structural Steel Drawing N3 | 6 December 2022 | Mpondozankomo  |
| Radio and Television Theory N3          | 7 December 2022 | Centurion      |
| Refrigeration Trade Theory N3           | 8 December 2022 | Centurion      |
| Supervision in Industry N3              | 6 December 2022 | Centurion      |
| Waste-Water Treatment Practice N3       | 9 December 2022 | Seshego        |

Table 11D shows the criteria and quality indicators that were used during the evaluation of the marking process in N2 and N3 instructional offerings.

**Table 11D: Evaluation criteria and quality indicators for verification of marking**

| Criterion                                  | Quality indicators  |
|--|---|
| Sample marking                             | How sample marking was conducted after the marking guideline discussion.  |
| Marking                                    | All anticipated examination scripts received for marking at the centre.   |
| Training for marking                       | Training for marking conducted.   |
| Marking procedure                          | The approach followed during the marking procedure.   |
| Adherence to the marking guideline         | The adherence to the marking guideline.   |
| Standard of marking                        | The rating of the standard of marking conducted.  |
| Administration                             | The prescribed procedure for allocation of marks;<br>Marks indicated per question;<br>Mistakes clearly indicated;<br>Marks transferred correctly from the cover page to the mark sheet;<br>Mark sheets completed correctly; and<br>Notes kept throughout the marking period to assist with report writing at the end. |
| Control                                    | Markers and internal moderators indicated their names on each script.   |
| Internal moderation                        | Evidence of moderation of scripts throughout the marking process.   |
| Response to the examination question paper | The performance of the candidates in line with predicted expectations.  |
| Prevention and handling of irregularities  | Evidence and reporting of irregularities.   |
| Reports                                    | Chief markers, markers and internal moderators prepared/ contributed to qualitative reports.  |



Table 11E indicates the number of instructional offerings, provinces and examination centres included in the sample. It should be noted that the reason for the inclusion of scripts from only one examination centre or one province was, in most cases, because while those scripts were marked at various marking centres, Umalusi verified marking at only one centre.

**Table 11E: Verification of marking N2 and N3: instructional offerings, number of provinces and examination centres, per province**

| Instructional offering                  | Number of provinces | Western Cape | Northern Cape | Free State | Eastern Cape | KwaZulu-Natal | Mpumalanga | Limpopo | Gauteng | North West | Province 10* |
|---|---------------------|--------------|---------------|------------|--------------|---------------|------------|---------|---------|------------|--------------|
| Aircraft Maintenance Theory N3          | 1                   | 0            | 0             | 0          | 0            | 0             | 0          | 0       | 4       | 0          | 0            |
| Building and Civil Technology N3        | 1                   | 0            | 0             | 0          | 0            | 0             | 15         | 0       | 0       | 0          | 0            |
| Building Drawing N2                     | 1                   | 0            | 0             | 0          | 0            | 0             | 19         | 0       | 0       | 0          | 0            |
| Building Science N2                     | 1                   | 0            | 0             | 0          | 0            | 17            | 0          | 0       | 0       | 0          | 0            |
| Building Science N3                     | 6                   | 0            | 0             | 1          | 3            | 3             | 0          | 2       | 3       | 3          | 0            |
| Bricklaying and Plastering Theory N2    | 1                   | 0            | 0             | 0          | 0            | 0             | 0          | 16      | 0       | 0          | 0            |
| Diesel Trade Theory N2                  | 9                   | 5            | 2             | 1          | 1            | 1             | 0          | 1       | 2       | 1          | 1            |
| Diesel Trade Theory N3                  | 1                   | 0            | 0             | 0          | 0            | 0             | 0          | 14      | 0       | 0          | 0            |
| Electrical Trade Theory N2              | 1                   | 11           | 0             | 0          | 0            | 0             | 0          | 0       | 0       | 0          | 0            |
| Electrical Trade Theory N3              | 9                   | 2            | 2             | 2          | 1            | 3             | 2          | 0       | 2       | 2          | 2            |
| Electrotechnology N3                    | 2                   | 0            | 2             | 7          | 0            | 0             | 0          | 0       | 0       | 0          | 0            |
| Engineering Drawing N2                  | 3                   | 0            | 0             | 0          | 0            | 0             | 0          | 0       | 11      | 5          | 1            |
| Engineering Drawing N3                  | 4                   | 0            | 0             | 0          | 2            | 3             | 0          | 0       | 7       | 6          | 0            |
| Engineering Science N2                  | 1                   | 0            | 0             | 0          | 0            | 0             | 9          | 0       | 0       | 0          | 0            |
| Engineering Science N3                  | 3                   | 0            | 0             | 0          | 0            | 16            | 12         | 0       | 4       | 4          | 2            |
| Fitting and Machining Theory N2         | 4                   | 0            | 0             | 0          | 0            | 0             | 2          | 0       | 8       | 8          | 2            |
| Industrial Electronics N2               | 1                   | 10           | 0             | 0          | 0            | 0             | 0          | 0       | 0       | 0          | 0            |
| Industrial Electronics N3               | 1                   | 11           | 0             | 0          | 0            | 0             | 0          | 0       | 0       | 0          | 0            |
| Industrial Organisation and Planning N3 | 4                   | 0            | 0             | 0          | 0            | 0             | 2          | 0       | 8       | 8          | 2            |
| Industrial Orientation N3               | 6                   | 0            | 0             | 1          | 0            | 2             | 3          | 4       | 5       | 2          | 0            |
| Instrument Trade Theory N2              | 8                   | 0            | 2             | 2          | 0            | 2             | 3          | 1       | 1       | 2          | 1            |

| Instructional offering                      | Number of provinces | Western Cape | Northern Cape | Free State | Eastern Cape | KwaZulu-Natal | Mpumalanga | Limpopo | Gauteng | North West | Province 10* |
|---|---------------------|--------------|---------------|------------|--------------|---------------|------------|---------|---------|------------|--------------|
| Instrument Trade Theory N3                  | 8                   | 1            | 2             | 2          | 0            | 1             | 3          | 3       | 1       | 5          | 0            |
| Logic Systems N2                            | 6                   | 0            | 1             | 0          | 0            | 3             | 1          | 1       | 6       | 2          | 0            |
| Logic Systems N3                            | 5                   | 0            | 1             | 0          | 0            | 2             | 0          | 2       | 6       | 0          | 0            |
| Mathematics N2                              | 1                   | 0            | 0             | 0          | 0            | 0             | 0          | 15      | 0       | 0          | 0            |
| Mathematics N3                              | 2                   | 0            | 0             | 0          | 0            | 0             | 0          | 0       | 10      | 4          | 0            |
| Mechanotechnology N3                        | 5                   | 0            | 0             | 0          | 1            | 0             | 0          | 6       | 10      | 2          | 1            |
| Motor Electrical Theory N2                  | 4                   | 0            | 4             | 0          | 0            | 0             | 0          | 3       | 7       | 4          | 0            |
| Motor Trade Theory N3                       | 2                   | 0            | 0             | 0          | 2            | 0             | 0          | 0       | 1       | 0          | 0            |
| Plant Operation Theory N2                   | 5                   | 2            | 0             | 0          | 3            | 0             | 0          | 0       | 9       | 2          | 1            |
| Plant Operation Theory N3                   | 7                   | 2            | 0             | 1          | 4            | 0             | 1          | 3       | 8       | 1          | 0            |
| Platers' Theory N2                          | 7                   | 1            | 0             | 0          | 0            | 1             | 1          | 1       | 1       | 1          | 1            |
| Plating and Structural Steel Drawing N2     | 1                   | 0            | 0             | 3          | 0            | 13            | 0          | 0       | 0       | 0          | 0            |
| Plating and Structural Steel Drawing N3     | 7                   | 1            | 0             | 0          | 0            | 2             | 7          | 1       | 3       | 1          | 3            |
| Plumbing Theory N2                          | 7                   | 1            | 0             | 1          | 1            | 1             | 0          | 1       | 1       | 1          | 0            |
| Radio and Television Theory N2              | 2                   | 0            | 0             | 0          | 0            | 0             | 0          | 2       | 4       | 0          | 0            |
| Radio and Television Theory N3              | 2                   | 0            | 0             | 0          | 0            | 0             | 0          | 1       | 2       | 0          | 0            |
| Refrigeration Trade Theory N2               | 5                   | 1            | 0             | 0          | 1            | 2             | 0          | 0       | 1       | 0          | 1            |
| Refrigeration Trade Theory N3               | 4                   | 4            | 0             | 0          | 0            | 1             | 0          | 0       | 7       | 0          | 8            |
| Supervision in Industry N3                  | 4                   | 1            | 0             | 0          | 0            | 1             | 0          | 0       | 8       | 2          | 0            |
| Waste-Water Treatment Practice N3           | 4                   | 0            | 0             | 1          | 0            | 0             | 4          | 4       | 6       | 0          | 0            |
| Water and Waste-Water Treatment Practice N2 | 6                   | 1            | 0             | 0          | 2            | 0             | 2          | 4       | 5       | 4          | 0            |
| Welders' Theory N2                          | 8                   | 1            | 0             | 1          | 1            | 1             | 1          | 1       | 1       | 1          | 0            |

\*Examination centres outside the borders of The Republic of South Africa

### 11.3 Summary of Findings

Tables 11F and 11G present the findings of the verification of marking process as reported by Umalusi moderators for each instructional offering in the sample.

**Table 11F: Findings from the verification of marking of N2 instructional offerings**

| Evaluation criteria | Findings and challenges  | Instructional offering   |
|---------------------|--|--|
| Sample marking      | <p>In 95% of the instructional offerings each marker received a copy of the same script to Mark, to determine consistency in marking. This was an improvement from 76% in the November 2021 examination.</p> | <p>Bricklaying &amp; Plastering Theory N2<br/>           Building Drawing N2<br/>           Building Science N2<br/>           Diesel Trade Theory N2<br/>           Electrical Trade Theory N2<br/>           Engineering Science N2<br/>           Fitting and Machining Theory N2<br/>           Industrial Electronics N2<br/>           Industrial Orientation N2<br/>           Instrument Trade Theory N2<br/>           Logic Systems N2<br/>           Mathematics N2<br/>           Motor Electrical Theory N2<br/>           Plant Operation Theory N2<br/>           Platers' Theory N2<br/>           Plating and Structural Steel Drawing N2<br/>           Radio and Television Theory N2<br/>           Refrigeration Trade Theory N2<br/>           Welders' Theory N2<br/>           Plumbing Theory N2<br/>           Water and Waste-Water Treatment Practice N2</p> |
|                     | <p>In 82% of the instructional offerings each marker thereafter received a sample of scripts from a range of centres to mark, which was an improvement from 64% in the November 2021 examination.</p>        | <p>Bricklaying &amp; Plastering Theory N2<br/>           Building Science N2<br/>           Diesel Trade Theory N2<br/>           Electrical Trade Theory N2<br/>           Engineering Science N2<br/>           Fitting and Machining Theory N2<br/>           Industrial Electronics N2<br/>           Industrial Orientation N2<br/>           Instrument Trade Theory N2<br/>           Mathematics N2<br/>           Plant Operation Theory N2<br/>           Platers' Theory N2<br/>           Plating and Structural Steel Drawing N2<br/>           Radio and Television Theory N2<br/>           Refrigeration Trade Theory N2<br/>           Welders' Theory N2<br/>           Plumbing Theory N2<br/>           Water and Waste-Water Treatment Practice N2</p>  |

| Evaluation criteria | Findings and challenges   | Instructional offering   |
|---------------------|---|--|
|                     | <p>For 91% of the instructional offerings the markers adhered to the marking guidelines, compared to 84% in the November 2021 examination.</p>                              | <p>Bricklaying &amp; Plastering Theory N2<br/>           Building Drawing N2<br/>           Building Science N2<br/>           Diesel Trade Theory N2<br/>           Electrical Trade Theory N2<br/>           Engineering Drawing N2<br/>           Engineering Science N2<br/>           Fitting and Machining Theory N2<br/>           Industrial Electronics N2<br/>           Industrial Orientation N2<br/>           Instrument Trade Theory N2<br/>           Mathematics N2<br/>           Motor Electrical Theory N2<br/>           Plant Operation Theory N2<br/>           Platers' Theory N2<br/>           Plating and Structural Steel Drawing N2<br/>           Refrigeration Trade Theory N2<br/>           Welders' Theory N2<br/>           Plumbing Theory N2<br/>           Water and Waste-Water Treatment Practice N2</p> |
| Marking             | <p>In 41% of the instructional offerings all expected scripts to be marked at these centres were received; a decrease compared to 72% in the November 2021 examination.</p> | <p>Building Drawing N2<br/>           Building Science N2<br/>           Electrical Trade Theory N2<br/>           Engineering Science N2<br/>           Industrial Electronics N2<br/>           Industrial Orientation N2<br/>           Mathematics N2<br/>           Plating and Structural Steel Drawing N2<br/>           Water and Waste-Water Treatment Practice N2</p>  |
|                     | <p>In 59% of the instructional offerings not all expected scripts to be marked at these centres were received. This was 28% in the November 2021 examination.</p>           | <p>Bricklaying &amp; Plastering Theory N2<br/>           Diesel Trade Theory N2<br/>           Engineering Drawing N2<br/>           Fitting and Machining Theory N2<br/>           Instrument Trade Theory N2<br/>           Logic Systems N2<br/>           Motor Electrical Theory N2<br/>           Plant Operation Theory N2<br/>           Platers' Theory N2<br/>           Radio and Television Theory N2<br/>           Refrigeration Trade Theory N2<br/>           Welders' Theory N2<br/>           Plumbing Theory N2</p>   |

| Evaluation criteria  | Findings and challenges  | Instructional offering   |
|----------------------|--|--|
| Training for marking | Training was done for 77% of the instructional offerings. This was 88% in the November 2021 examination.               | Bricklaying & Plastering Theory N2<br>Building Drawing N2<br>Building Science N2<br>Diesel Trade Theory N2<br>Electrical Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Orientation N2<br>Mathematics N2<br>Motor Electrical Theory N2<br>Plant Operation Theory N2<br>Platers' Theory N2<br>Plating and Structural Steel Drawing N2<br>Refrigeration Trade Theory N2<br>Welders' Theory N2<br>Water and Waste-Water Treatment Practice N2 |
|                      | Training was not done for 23% of the instructional offerings.  | Industrial Electronics N2<br>Instrument Trade Theory N2<br>Logic Systems N2<br>Radio and Television Theory N2<br>Plumbing Theory N2  |
| Marking procedure    | In 59% of the instructional offerings the question-wise marking approach was followed when marking was conducted.      | Bricklaying & Plastering Theory N2<br>Building Drawing N2<br>Diesel Trade Theory N2<br>Electrical Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Mathematics N2<br>Plant Operation Theory N2<br>Platers' Theory N2<br>Plumbing Theory N2<br>Water and Waste-Water Treatment Practice N2  |
|                      | In 45% of the instructional offerings the whole script by one marker approach was followed when marking was conducted. | Building Drawing N2<br>Building Science N2<br>Industrial Orientation N2<br>Instrument Trade Theory N2<br>Logic Systems N2<br>Motor Electrical Theory N2<br>Plating and Structural Steel Drawing N2<br>Radio and Television Theory N2<br>Refrigeration Trade Theory N2<br>Welders' Theory N2  |

| Evaluation criteria            | Findings and challenges  | Instructional offering   |
|--------------------------------|--|--|
| Adherence to marking guideline | Adherence to marking guidelines was rated as good in 77% instructional offerings, compared to 84% in the November 2021 examination.                | Building Drawing N2<br>Building Science N2<br>Diesel Trade Theory N2<br>Electrical Trade Theory N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Industrial Orientation N2<br>Instrument Trade Theory N2<br>Logic Systems N2<br>Mathematics N2<br>Motor Electrical Theory N2<br>Platers' Theory N2<br>Plating and Structural Steel Drawing N2<br>Refrigeration Trade Theory N2<br>Welders' Theory N2<br>Water and Waste-Water Treatment Practice N2   |
|                                | Adherence to marking guidelines was rated as average in 14% of the instructional offerings. This was 24% in the November 2021 examination.         | Bricklaying & Plastering Theory N2<br>Engineering Drawing N2<br>Plumbing Theory N2   |
|                                | Adherence to marking guidelines was rated as poor in 9% of the instructional offerings.  | Plant Operation Theory N2<br>Radio and Television Theory N2  |
| Standard of marking            | The standard of marking was rated as good in 82% of the instructional offerings. This was a decline from the 84% of the November 2021 examination. | Bricklaying & Plastering Theory N2<br>Building Drawing N2<br>Building Science N2<br>Diesel Trade Theory N2<br>Electrical Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Industrial Orientation N2<br>Instrument Trade Theory N2<br>Mathematics N2<br>Motor Electrical Theory N2<br>Platers' Theory N2<br>Plating and Structural Steel Drawing N2<br>Refrigeration Trade Theory N2<br>Welders' Theory N2<br>Water and Waste-Water Treatment Practice N2 |
|                                | The standard of marking was rated as average in 9% of the instructional offerings.   | Logic Systems N2<br>Plumbing Theory N2   |
|                                | The standard of marking was rated poor in 9% of the instructional offerings.   | Plant Operation Theory N2<br>Radio and Television Theory N2  |

| Evaluation criteria | Findings and challenges   | Instructional offering  |
|---------------------|---|---|
| Administration      | The prescribed procedure for allocation of marks was followed in 100% of the sampled instructional offerings. This was 96% in the November 2021 examination.      | All sampled instructional offerings   |
|                     | The prescribed procedure for allocation of marks was followed in 100% of the sampled instructional offerings. This was 96% in the November 2021 examination.      | All sampled instructional offerings   |
|                     | Mistakes picked up by moderator and/or examination assistants were clearly indicated in 95% of the instructional offerings, compared to 80% in the November 2021. | Bricklaying & Plastering Theory N2<br>Building Drawing N2<br>Building Science N2<br>Diesel Trade Theory N2<br>Electrical Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Industrial Orientation N2<br>Instrument Trade Theory N2<br>Logic Systems N2<br>Mathematics N2<br>Motor Electrical Theory N2<br>Plant Operation Theory N2<br>Platers' Theory N2<br>Plating and Structural Steel Drawing N2<br>Refrigeration Trade Theory N2<br>Welders' Theory N2<br>Plumbing Theory N2<br>Water and Waste-Water Treatment Practice N2 |
|                     | Marks were transferred correctly to the cover pages and mark sheets in 95% of the instructional offerings.  | Bricklaying & Plastering Theory N2<br>Building Drawing N2<br>Building Science N2<br>Diesel Trade Theory N2<br>Electrical Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Industrial Orientation N2<br>Instrument Trade Theory N2<br>Logic Systems N2<br>Mathematics N2<br>Motor Electrical Theory N2<br>Plant Operation Theory N2<br>Platers' Theory N2<br>Plating and Structural Steel Drawing N2<br>Refrigeration Trade Theory N2<br>Welders' Theory N2<br>Plumbing Theory N2<br>Water and Waste-Water Treatment Practice N2 |

| Evaluation criteria | Findings and challenges  | Instructional offering   |
|---------------------|--|--|
|                     | <p>Mark sheets were completed correctly in 91% of the instructional offerings</p>  | <p>Bricklaying &amp; Plastering Theory N2<br/>           Building Drawing N2<br/>           Building Science N2<br/>           Diesel Trade Theory N2<br/>           Electrical Trade Theory N2<br/>           Engineering Drawing N2<br/>           Engineering Science N2<br/>           Fitting and Machining Theory N2<br/>           Industrial Electronics N2<br/>           Industrial Orientation N2<br/>           Instrument Trade Theory N2<br/>           Logic Systems N2<br/>           Mathematics N2<br/>           Plant Operation Theory N2<br/>           Platers' Theory N2<br/>           Plating and Structural Steel Drawing N2<br/>           Radio and Television Theory N2<br/>           Refrigeration Trade Theory N2<br/>           Welders' Theory N2<br/>           Plumbing Theory N2<br/>           Water and Waste-Water Treatment Practice N2</p> |
|                     | <p>Notes were kept in 77% of the instructional offerings throughout the marking period to facilitate report writing, compared to 84% in the November 2021 examination.</p>           | <p>Bricklaying &amp; Plastering Theory N2<br/>           Building Drawing N2<br/>           Building Science N2<br/>           Diesel Trade Theory N2<br/>           Electrical Trade Theory N2<br/>           Engineering Drawing N2<br/>           Engineering Science N2<br/>           Fitting and Machining Theory N2<br/>           Industrial Electronics N2<br/>           Instrument Trade Theory N2<br/>           Mathematics N2<br/>           Plant Operation Theory N2<br/>           Platers' Theory N2<br/>           Plating and Structural Steel Drawing N2<br/>           Refrigeration Trade Theory N2<br/>           Welders' Theory N2<br/>           Water and Waste-Water Treatment Practice N2</p>  |
| <p>Control</p>      | <p>In 77% of the instructional offerings the markers indicated their codes/ names in red ink on the cover pages of the script, compared to 92% in the November 2021 examination.</p> | <p>Bricklaying &amp; Plastering Theory N2<br/>           Building Science N2<br/>           Diesel Trade Theory N2<br/>           Electrical Trade Theory N2<br/>           Engineering Science N2<br/>           Fitting and Machining Theory N2<br/>           Industrial Electronics N2<br/>           Industrial Orientation N2<br/>           Instrument Trade Theory N2<br/>           Mathematics N2<br/>           Motor Electrical Theory N2<br/>           Plant Operation Theory N2<br/>           Platers' Theory N2<br/>           Plating and Structural Steel Drawing N2<br/>           Refrigeration Trade Theory N2<br/>           Welders' Theory N2<br/>           Water and Waste-Water Treatment Practice N2</p>  |



| Evaluation criteria | Findings and challenges   | Instructional offering  |
|---------------------|---|---|
|                     | <p>The name of the chief marker was clearly indicated on the moderated scripts of 86% of the instructional offerings. This was an improvement, from 68%, in the November 2021 examination.</p>                          | <p>Bricklaying &amp; Plastering Theory N2<br/>           Building Drawing N2<br/>           Diesel Trade Theory N2<br/>           Electrical Trade Theory N2<br/>           Engineering Drawing N2<br/>           Engineering Science N2<br/>           Fitting and Machining Theory N2<br/>           Industrial Electronics N2<br/>           Industrial Orientation N2<br/>           Instrument Trade Theory N2<br/>           Logic Systems N2<br/>           Mathematics N2<br/>           Motor Electrical Theory N2<br/>           Plant Operation Theory N2<br/>           Platers' Theory N2<br/>           Plating and Structural Steel Drawing N2<br/>           Refrigeration Trade Theory N2<br/>           Welders' Theory N2<br/>           Water and Waste-Water Treatment Practice N2</p> |
| Internal moderation | <p>There was evidence of internal moderation throughout the marking process in 100% of the instructional offerings, compared to 72% in the November 2021 examination.</p>   | <p>All sampled instructional offerings</p>  |
|                     | <p>Criteria used in sampling of scripts for internal moderation was a random selection of high, medium and low marks from a batch of scripts for all instructional offerings where internal moderation was evident.</p> | <p>All sampled instructional offerings</p>  |
|                     | <p>In 73% of the instructional offerings' samples of examination scripts from all examination centres were moderated. This was an increase from 48% in the November 2021 examination.</p>                               | <p>Bricklaying &amp; Plastering Theory N2<br/>           Building Drawing N2<br/>           Building Science N2<br/>           Diesel Trade Theory N2<br/>           Electrical Trade Theory N2<br/>           Engineering Drawing N2<br/>           Engineering Science N2<br/>           Fitting and Machining Theory N2<br/>           Industrial Orientation N2<br/>           Mathematics N2<br/>           Platers' Theory N2<br/>           Plating and Structural Steel Drawing N2<br/>           Refrigeration Trade Theory N2<br/>           Welders' Theory N2<br/>           Plumbing Theory N2<br/>           Water and Waste-Water Treatment Practice N2</p>  |

| Evaluation criteria                       | Findings and challenges   | Instructional offering   |
|---|---|--|
|   | A whole-script moderation approach was followed during the internal moderation process in all of the instructional offerings.                       | All sampled instructional offerings  |
|   | The standard of internal moderation was rated as good in 77% of the instructional offerings.  | Bricklaying & Plastering Theory N2<br>Building Science N2<br>Diesel Trade Theory N2<br>Electrical Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Electronics N2<br>Instrument Trade Theory N2<br>Mathematics N2<br>Motor Electrical Theory N2<br>Platers' Theory N2<br>Plating and Structural Steel Drawing N2<br>Refrigeration Trade Theory N2<br>Welders' Theory N2<br>Plumbing Theory N2<br>Water and Waste-Water Treatment Practice N2 |
|   | The standard of internal moderation was rated as fair in 14% of the instructional offerings.  | Industrial Orientation N2<br>Plant Operation Theory N2<br>Radio and Television Theory N2   |
|   | The standard of internal moderation was rated as poor in 9% of the instructional offerings  | Building Drawing N2<br>Logic Systems N2  |
| Prevention and handling of irregularities | Evidence of irregularities was found in 50% of the instructional offerings. This was an increase, compared to 28% in the November 2021 examination. | Diesel Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Orientation N2<br>Instrument Trade Theory N2<br>Motor Electrical Theory N2<br>Plating and Structural Steel Drawing N2<br>Refrigeration Trade Theory N2<br>Welders' Theory N2<br>Water and Waste-Water Treatment Practice N2  |

| Evaluation criteria | Findings and challenges  | Instructional offering   |
|---------------------|--|--|
| Reports             | In 77% of the instructional offerings the marking reports were completed. This was 92% in the November 2021 examination. | Bricklaying & Plastering Theory N2<br>Building Drawing N2<br>Building Science N2<br>Electrical Trade Theory N2<br>Engineering Drawing N2<br>Engineering Science N2<br>Fitting and Machining Theory N2<br>Industrial Orientation N2<br>Logic Systems N2<br>Mathematics N2<br>Plant Operation Theory N2<br>Platers' Theory N2<br>Plating and Structural Steel Drawing N2<br>Radio and Television Theory N2<br>Refrigeration Trade Theory N2<br>Welders' Theory N2<br>Water and Waste-Water Treatment Practice N2 |
|                     | In 23% of the instructional offerings the marking reports had not yet been completed during the visit by Umalusi.        | Diesel Trade Theory N2<br>Industrial Electronics N2<br>Instrument Trade Theory N2<br>Motor Electrical Theory N2<br>Plumbing Theory N2  |

**Table 11G: Findings from the verification of marking of N3 instructional offerings**

| Evaluation criteria | Findings and challenges  | Instructional offering  |
|---------------------|--|---|
| Sample marking      | In 92% of the instructional offerings each marker received a copy of the same script to mark to determine consistency in marking. This was the same as in the November 2021 examination. | Building and Civil Technology N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Science N3<br>Engineering Science N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Industrial Orientation N3<br>Instrument Trade Theory N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Motor Trade Theory N3<br>Plant Operation Theory N3<br>Plating and Structural Steel Drawing N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3 |

| Evaluation criteria | Findings and challenges   | Instructional offering  |
|---------------------|---|---|
| Sample marking      | <p>In 88% of the instructional offerings each marker thereafter received a sample of scripts from a range of centres to mark, compared to 79% in the November 2021 examination.</p> | <p>Building Science N3<br/>           Diesel Trade Theory N3<br/>           Electrical Trade Theory N3<br/>           Electrotechnology N3<br/>           Engineering Drawing N3<br/>           Engineering Science N3<br/>           Engineering Science N3<br/>           Engineering Science N3<br/>           Industrial Electronics N3<br/>           Industrial Orientation N3<br/>           Instrument Trade Theory N3<br/>           Logic Systems N3<br/>           Mathematics N3<br/>           Mechanotechnology N3<br/>           Motor Trade Theory N3<br/>           Plant Operation Theory N3<br/>           Plating and Structural Steel Drawing N3<br/>           Radio and Television Theory N3<br/>           Refrigeration Trade Theory N3<br/>           Supervision in Industry N3<br/>           Waste-Water Treatment Practice N3</p> |
|                     | <p>For 75% of the instructional offerings the markers adhered to the marking guidelines. This had decreased from 88% in the November 2021 examination.</p>                          | <p>Building Science N3<br/>           Diesel Trade Theory N3<br/>           Electrical Trade Theory N3<br/>           Electrotechnology N3<br/>           Engineering Drawing N3<br/>           Engineering Science N3<br/>           Engineering Science N3<br/>           Engineering Science N3<br/>           Industrial Electronics N3<br/>           Industrial Organisation and Planning N3<br/>           Industrial Orientation N3<br/>           Instrument Trade Theory N3<br/>           Mechanotechnology N3<br/>           Motor Trade Theory N3<br/>           Plating and Structural Steel Drawing N3<br/>           Refrigeration Trade Theory N3<br/>           Supervision in Industry N3<br/>           Waste-Water Treatment Practice N3</p>   |
| Marking             | <p>In 50% of the instructional offerings all expected scripts to be marked at these centres were received, compared to 54% in the November 2021 examination.</p>                    | <p>Aircraft Maintenance Theory N3<br/>           Building and Civil Technology N3<br/>           Electrotechnology N3<br/>           Engineering Science N3<br/>           Engineering Science N3<br/>           Engineering Science N3<br/>           Industrial Electronics N3<br/>           Industrial Orientation N3<br/>           Instrument Trade Theory N3<br/>           Plating and Structural Steel Drawing N3<br/>           Refrigeration Trade Theory N3<br/>           Waste-Water Treatment Practice N3</p>  |

| Evaluation criteria  | Findings and challenges  | Instructional offering  |
|----------------------|--|---|
|                      | In 50% of the instructional offerings not all expected scripts to be marked at these centres were received. This was the same in the November 2021 examination.      | Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Engineering Drawing N3<br>Industrial Organisation and Planning N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Motor Trade Theory N3<br>Plant Operation Theory N3<br>Radio and Television Theory N3<br>Supervision in Industry N3  |
| Training for marking | Training was done for markers in 92% of the instructional offerings, compared to 88% in the November 2021 examination.   | Aircraft Maintenance Theory N3<br>Building and Civil Technology N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Industrial Orientation N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Motor Trade Theory N3<br>Plant Operation Theory N3<br>Plating and Structural Steel Drawing N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3 |
|                      | Training was not done for 8% of the instructional offerings, compared to 13% in the November 2021 examination.   | Instrument Trade Theory N3<br>Radio and Television Theory N3  |
| Marking procedure    | In 71% of the instructional offerings the question-wise marking approach was followed when marking was conducted. This was an improvement from 58% in November 2021. | Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Engineering Science N3<br>Engineering Science N3<br>Industrial Organisation and Planning N3<br>Industrial Orientation N3<br>Instrument Trade Theory N3<br>Mathematics N3<br>Mechanotechnology N3<br>Motor Trade Theory N3<br>Plant Operation Theory N3<br>Plating and Structural Steel Drawing N3<br>Waste-Water Treatment Practice N3   |

| Evaluation criteria            | Findings and challenges  | Instructional offering  |
|--------------------------------|--|---|
|                                | In 29% of the instructional offerings the whole script by one marker approach was followed when marking was conducted, compared to 42% in the November 2021 examination. | Aircraft Maintenance Theory N3<br>Building and Civil Technology N3<br>Industrial Electronics N3<br>Logic Systems N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3  |
| Adherence to marking guideline | Adherence to marking guidelines was rated as good in 83% of the instructional offerings, compared to 79% in the November 2021 examination.                               | Aircraft Maintenance Theory N3<br>Building and Civil Technology N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Engineering Science N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Industrial Orientation N3<br>Instrument Trade Theory N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Motor Trade Theory N3<br>Refrigeration Trade Theory N3<br>Waste-Water Treatment Practice N3 |
|                                | Adherence to marking guidelines was rated as average in 13% of the instructional offerings, compared to 21% in the November 2021 examination.                            | Plant Operation Theory N3<br>Plating and Structural Steel Drawing N3<br>Supervision in Industry N3  |
|                                | Adherence to marking guidelines was rated as poor in 4% of the instructional offerings, compared to 17% in the November 2021 examination.                                | Radio and Television Theory N3  |
| Standard of marking            | The standard of marking was rated as good in 71% of the instructional offerings. This was a decrease from 79% in the November 2021 examination.                          | Aircraft Maintenance Theory N3<br>Building and Civil Technology N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Engineering Science N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Instrument Trade Theory N3<br>Logic Systems N3<br>Mechanotechnology N3<br>Motor Trade Theory N3<br>Waste-Water Treatment Practice N3   |

| Evaluation criteria  | Findings and challenges  | Instructional offering  |
|--|--|---|
| Standard of marking  | The standard of marking was rated as average in 17% of the instructional offerings.  | Industrial Orientation N3<br>Plant Operation Theory N3<br>Plating and Structural Steel Drawing N3<br>Supervision in Industry N3   |
|  | The standard of marking was rated as poor in 13% of the instructional offerings.   | Mathematics N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3   |
| Administration   | The prescribed procedure for allocation of marks was followed in all (100%) the sampled instructional offerings. This was the same as in the November 2021 examination.  | All the sampled instructional offerings   |
|  | The marks were indicated per question in all the instructional offerings.  | All the sampled instructional offerings   |
|  | Mistakes picked up by moderators and/or examination assistants were clearly indicated in 92% of the instructional offerings.   | Aircraft Maintenance Theory N3<br>Building and Civil Technology N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Engineering Science N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Industrial Orientation N3<br>Instrument Trade Theory N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Motor Trade Theory N3<br>Plating and Structural Steel Drawing N3<br>Radio and Television Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3 |
| Marks were transferred correctly to the cover pages and mark sheets in 92% of the instructional offerings. | Aircraft Maintenance Theory N3<br>Building and Civil Technology N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Engineering Science N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Industrial Orientation N3<br>Instrument Trade Theory N3<br>Logic Systems N3<br>Mechanotechnology N3<br>Motor Trade Theory N3<br>Plant Operation Theory N3<br>Plating and Structural Steel Drawing N3<br>Radio and Television Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3 |   |

| Evaluation criteria | Findings and challenges   | Instructional offering  |
|---------------------|---|---|
| Administration      | <p>Mark sheets were completed correctly in 92% of the instructional offerings</p>   | <p>Aircraft Maintenance Theory N3<br/>           Building and Civil Technology N3<br/>           Building Science N3<br/>           Diesel Trade Theory N3<br/>           Electrical Trade Theory N3<br/>           Electrotechnology N3<br/>           Engineering Drawing N3<br/>           Engineering Science N3<br/>           Engineering Science N3<br/>           Engineering Science N3<br/>           Industrial Electronics N3<br/>           Industrial Organisation and Planning N3<br/>           Industrial Orientation N3<br/>           Instrument Trade Theory N3<br/>           Logic Systems N3<br/>           Mechanotechnology N3<br/>           Motor Trade Theory N3<br/>           Plant Operation Theory N3<br/>           Radio and Television Theory N3<br/>           Refrigeration Trade Theory N3<br/>           Supervision in Industry N3<br/>           Waste-Water Treatment Practice N3</p> |
|                     | <p>Notes were kept in 88% of the instructional offerings throughout the marking period to facilitate report writing, compared to 71% in the November 2021 examination.</p>          | <p>Building and Civil Technology N3<br/>           Building Science N3<br/>           Diesel Trade Theory N3<br/>           Electrical Trade Theory N3<br/>           Electrotechnology N3<br/>           Engineering Drawing N3<br/>           Engineering Science N3<br/>           Engineering Science N3<br/>           Engineering Science N3<br/>           Industrial Electronics N3<br/>           Industrial Organisation and Planning N3<br/>           Instrument Trade Theory N3<br/>           Mathematics N3<br/>           Mechanotechnology N3<br/>           Motor Trade Theory N3<br/>           Plant Operation Theory N3<br/>           Plating and Structural Steel Drawing N3<br/>           Radio and Television Theory N3<br/>           Refrigeration Trade Theory N3<br/>           Supervision in Industry N3<br/>           Waste-Water Treatment Practice N3</p>                                   |
| Control             | <p>In 88% of the instructional offerings the markers indicated their code/ name in red ink on the cover page of the script. This was the same in the November 2021 examination.</p> | <p>Building and Civil Technology N3<br/>           Building Science N3<br/>           Diesel Trade Theory N3<br/>           Electrical Trade Theory N3<br/>           Electrotechnology N3<br/>           Engineering Drawing N3<br/>           Engineering Science N3<br/>           Engineering Science N3<br/>           Engineering Science N3<br/>           Industrial Electronics N3<br/>           Industrial Organisation and Planning N3<br/>           Industrial Orientation N3<br/>           Instrument Trade Theory N3<br/>           Logic Systems N3<br/>           Mathematics N3<br/>           Mechanotechnology N3<br/>           Motor Trade Theory N3<br/>           Plant Operation Theory N3<br/>           Plating and Structural Steel Drawing N3<br/>           Supervision in Industry N3<br/>           Waste-Water Treatment Practice N3</p>   |



| Evaluation criteria | Findings and challenges  | Instructional offering   |
|---------------------|--|--|
| Control             | The name of the chief marker was clearly indicated on the moderated scripts of 83% of the instructional offerings.   | Building and Civil Technology N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Engineering Science N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Industrial Orientation N3<br>Instrument Trade Theory N3<br>Mathematics N3<br>Mechanotechnology N3<br>Plant Operation Theory N3<br>Plating and Structural Steel Drawing N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3 |
| Internal moderation | There was evidence of internal moderation throughout the marking process in 79% of the instructional offerings, compared to 92% in the November 2021 examination.  | Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Engineering Science N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Instrument Trade Theory N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Plant Operation Theory N3<br>Plating and Structural Steel Drawing N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3<br>Waste-Water Treatment Practice N3  |
|                     | Internal moderation was not completed in 21% of the instructional offering, as internal moderators were not appointed by the DHET due to the small number of scripts. This was an increase from the 9% in the November 2021 examination. | Aircraft Maintenance Theory N3<br>Building and Civil Technology N3<br>Industrial Orientation N3<br>Motor Trade Theory N3<br>Supervision in Industry N3   |
|                     | Criteria used in sampling of scripts for internal moderation was a random selection of high, medium and low marks from a batch of scripts for all instructional offerings where internal moderation was evident.                         | All the sampled instructional offerings  |

| Evaluation criteria | Findings and challenges   | Instructional offering   |
|---------------------|---|--|
| Internal moderation | In 38% of the instructional offerings' samples of examination scripts from all examination centres were moderated. This was a decrease from 63% in the November 2021 examination. | Building Science N3<br>Diesel Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Engineering Science N3<br>Engineering Science N3<br>Plating and Structural Steel Drawing N3<br>Waste-Water Treatment Practice N3  |
|                     | A whole-script moderation approach was followed during the internal moderation process in 96% of the instructional offerings.   | Aircraft Maintenance Theory N3<br>Building and Civil Technology N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Engineering Science N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Industrial Orientation N3<br>Instrument Trade Theory N3<br>Logic Systems N3<br>Mathematics N3<br>Mechanotechnology N3<br>Plant Operation Theory N3<br>Plating and Structural Steel Drawing N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3 |
|                     | The standard of internal moderation was rated as good in 58% of the instructional offerings.  | The standard of internal moderation was rated as good in 58% of the instructional offerings.   |
|                     | The standard of internal moderation was rated as average in 17% of the instructional offerings.   | Electrotechnology N3<br>Plant Operation Theory N3<br>Plating and Structural Steel Drawing N3<br>Radio and Television Theory N3   |
|                     | The standard of internal moderation was rated as poor in 21% of the instructional offerings.  | Aircraft Maintenance Theory N3<br>Industrial Orientation N3<br>Logic Systems N3<br>Mathematics N3<br>Refrigeration Trade Theory N3   |

| Evaluation criteria                        | Findings and challenges   | Instructional offering   |
|--|---|--|
| Response to the examination question paper | Candidates found the question papers to be fair in 79% of the instructional offerings. This was a decrease from 88% in the November 2021 examination. | Aircraft Maintenance Theory N3<br>Building and Civil Technology N3<br>Building Science N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Engineering Science N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Industrial Orientation N3<br>Instrument Trade Theory N3<br>Mathematics N3<br>Mechanotechnology N3<br>Motor Trade Theory N3<br>Plating and Structural Steel Drawing N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3 |
| Prevention and handling of irregularities  | Evidence of irregularities was found in 58% of the instructional offerings.   | Building and Civil Technology N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Engineering Science N3<br>Industrial Orientation N3<br>Instrument Trade Theory N3<br>Mathematics N3<br>Mechanotechnology N3<br>Plating and Structural Steel Drawing N3<br>Waste-Water Treatment Practice N3   |
|  | No evidence of irregularities was found in 33% of the instructional offerings. This was an improvement from 61% in the November 2021 examination.     | Aircraft Maintenance Theory N3<br>Industrial Electronics N3<br>Logic Systems N3<br>Motor Trade Theory N3<br>Plant Operation Theory N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3   |

| Evaluation criteria | Findings and challenges  | Instructional offering  |
|---------------------|--|---|
| Reports             | In 92% of the instructional offerings the marking reports were completed. This was an improvement from 67% in the November 2021 examination. | Aircraft Maintenance Theory N3<br>Building and Civil Technology N3<br>Building Science N3<br>Diesel Trade Theory N3<br>Electrical Trade Theory N3<br>Electrotechnology N3<br>Engineering Drawing N3<br>Engineering Science N3<br>Engineering Science N3<br>Engineering Science N3<br>Industrial Electronics N3<br>Industrial Organisation and Planning N3<br>Industrial Orientation N3<br>Mathematics N3<br>Mechanotechnology N3<br>Motor Trade Theory N3<br>Plant Operation Theory N3<br>Plating and Structural Steel Drawing N3<br>Radio and Television Theory N3<br>Refrigeration Trade Theory N3<br>Supervision in Industry N3<br>Waste-Water Treatment Practice N3 |
|                     | In 8% of the instructional offerings the marking reports had not yet been completed during the visit by Umalusi.                             | Instrument Trade Theory N3<br>Logic Systems N3  |

## 11.4 Areas of Improvement

The following areas of improvement were identified during the Umalusi visit at marking centres for the November 2022 examination:

- In N2, for 91% of the instructional offerings each marker received a copy of the same script to mark, to determine consistency in marking. This was an improvement, from 76%, in the November 2021 examination;
- In N2, for 82% of the instructional offerings each marker thereafter received a sample of scripts to mark from a range of centres. This signified an improvement, from 64%, in the November 2021 examination;
- Mistakes picked up by moderators and/or examination assistants were clearly indicated in 95% of the N2 instructional offerings, compared to 80% in the November 2021 examination;
- There was evidence of internal moderation throughout the marking process in 100% of the N2 instructional offerings, compared to 72% in the November 2021 examination; and
- In 73% of the N2 instructional offerings, a sample of examination scripts from all examination centres were moderated. This was an increase, from 48%, in the November 2021 examination.

## 11.5 Areas of Non-Compliance

The following areas of non-compliance were identified by Umalusi:

- In N3, for 38% of the instructional offerings, samples of examination scripts from all examination centres were moderated. This was a decrease from 63% in the November 2021 examination; and
- There was evidence of irregularities found in 58% of the N3 instructional offerings. This was more than half of the sampled instructional offerings.

## 11.6 Directives for Compliance and Improvement

To improve the standard and quality of marking, the DHET should ensure that the following is adhered to:

- a. All instructional offerings should be moderated, regardless of the number of candidates writing that examination, to ensure consistency in the marking process.

## 11.7 Conclusion

The reports from the external moderators indicated that the marking process for the November 2022 examination for NATED Report 190/191: Engineering Studies in N2 was fair and internal moderation was, in general, conducted thoroughly. However, for 21% of N3 instructional offerings with low enrolments, internal moderation was not done.

# CHAPTER 12 STANDARDISATION AND VERIFICATION OF RESULTS

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## 12.1 Introduction

Standardisation is a process informed by the evidence presented in 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 due to the standard of question papers, quality of marking and other related factors. It is for these reasons Umalusi standardises examination results: to control their variability from one examination session to the next. Umalusi derives this function from section 17A (4) of the General and Further Education and Training Quality Assurance Act (GENFETQA) 2001 (Act No. 58 of 2001, as amended in 2008), which states that the Council may adjust raw marks during the standardisation process.

In broad terms, standardisation involves verifying subject structures, mark capturing and the computer system used by an assessment body. It also involves developing and verifying historical averages (norms), culminating 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 and examination monitors, intervention reports presented by assessment bodies and other related information that may be available at the time. Finally, the process is concluded with the approval of standardisation decisions per subject, statistical moderation and the resulting process.

## 12.2 Scope and Approach

The Department of Higher Education and Training (DHET) presented 56 subjects for the standardisation of the November 2022 NATED Report 190/191 Engineering Studies. In turn, Umalusi verified the historical averages, standardisation data, adjustments, statistical moderation and the resulting datasets.

### 12.2.1 Development of Historical Averages

The historical averages (norms) for the NATED Report 190/191 Engineering Studies examination were developed using the previous five examination sittings. Once that has been done, as per policy requirements, Umalusi calculates and submits the norms to the DHET. Where a distribution contains outliers, the historical average is calculated, excluding data from the outlying examination sitting. In addition, Umalusi applies the principle of outliers when calculating the historical average for such instructional offerings. Finally, Umalusi considers historical averages during the standardisation process.

### 12.2.2 Verification of Datasets and Standardisation Booklets

The DHET submitted standardisation datasets and electronic booklets as per the Umalusi management plan. The datasets were verified and approved, as a result of which final standardisation booklets were printed timeously.

### 12.2.3 Pre-Standardisation and Standardisation

The pre-standardisation and standardisation meetings for NATED Report 190/191 Engineering Studies N2–N3 were held on 09 January 2022. Umalusi considered many factors to reach its standardisation decisions, including qualitative and quantitative information. Qualitative inputs included evidence-based reports presented by the DHET and the reports of Umalusi's external moderators and monitors on the conduct, administration and management of the examinations. Quantitative information included historical averages and pairs analysis. Lastly, standardisation decisions were guided by set standardisation principles.

### 12.2.4 Post-Standardisation

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

## 12.3 Summary of Findings

This section presents the most important findings and discusses the standardisation decisions taken.

### 12.3.1 Development of Historical Averages

The historical averages (norms) for the November 2022 NATED Report 190/191 Engineering Studies N2–N3 examinations were developed using the previous five examination sittings. Table 13A indicates the instructional offerings with outliers.

**Table 12A: Instructional offerings with outliers**

| Level | Code     | Instructional offering               | Excluded examination sessions |
|-------|----------|--------------------------------------|-------------------------------|
| N3    | 4090113  | Industrial Organisation and Planning | 202008                        |
| N3    | 11040343 | Electrotechnology                    | 202208                        |

### 12.3.2 Standardisation Decisions

The qualitative reports produced by the external moderators and consolidated by Umalusi's Quality Assurance of Assessments Unit, together with the monitoring and intervention reports presented by the assessment body and application of the principles of standardisation, informed the final standardisation decisions. Table 13B lists the standardisation decisions taken.

**Table 12B: Standardisation decisions – NATED Report 190/191: Engineering Studies N2 and N3**

| Description                                    | Total |
|--|-------|
| Number of instructional offerings presented    | 56    |
| Raw marks accepted                             | 35    |
| Adjustments (mainly upwards)                   | 11    |
| Adjustments (mainly downwards)                 | 09    |
| Not standardised                               | 01    |
| Number of instructional offerings standardised | 55    |

When compared to November 2021, a significant increase of 38% in candidate numbers was observed. The learning area Electrical Trade Theory N3 was not standardised for two reasons. Firstly, while Umalusi quality assured and approved a question paper for this learning area, the DHET administered a different question paper. Secondly, the paper that was administered by the DHET contained questions comprising 63% of marks from outside the scope of the new syllabus. Although a marking concession was granted, the Assessment Standards Committee concluded that the results lacked sufficient credibility to be standardised.

### 12.3.3 Post-Standardisation

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

## 12.4 Areas of Compliance

The following areas of compliance were observed:

- The DHET submitted the datasets and standardisation booklet for verification within the stipulated timeframes. The excellent quality of the standardisation booklets was commendable.

## **12.5 Areas of Non-Compliance**

None

## **12.6 Directives for Improvement and Compliance**

None

## **12.7 Conclusion**

The process of standardisation was conducted in a systematic, objective and transparent manner. The decisions taken on whether to accept raw marks or make upward or downward adjustments were based on sound educational reasoning, guided by established standardisation principles. The majority of the DHET proposals corresponded with those of Umalusi, which is a clear indication of a maturing examination system.



# CHAPTER 13 CERTIFICATION

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## 12.1 Introduction

Umalusi is mandated by the General and Further Education and Training Quality Assurance Act (GENFETQA) 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). Accordingly, the responsibilities of Umalusi, amongst others, include 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 Higher Education, Science and Innovation for the National N3 and the National Senior Certificate (Colleges), as registered on the NQF.

The quality assurance processes instituted by Umalusi for certification ensure that the qualification awarded to a candidate complies with all the requirements for the qualification as stipulated in the regulations. The Department of Higher Education and Training (DHET) must submit all candidate achievements to Umalusi, as 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 quality assurance has been done to ensure that

- a. The correct results are released to candidates;
- b. Umalusi approves all results before release; and
- c. The certification of the candidate's achievements is done per the approved results.

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. For example, all records of candidates registered for the NATED Report 190/191 Engineering Studies N2-N3 examinations, including those who qualify for an instructional offering only in a particular examination cycle, are submitted to Umalusi for certification.

Umalusi verifies all the data received from the DHET. The certification data must correspond with the quality-assured results, keeping in mind that all changes to marks must be approved before they are released to candidates. Where discrepancies are detected, the DHET must provide supporting documentation and explanations for such discrepancies. This process ensures that no candidate is inadvertently advantaged or disadvantaged because of a possible programme and/or human error; it also limits later requests to re-issue an incorrectly issued certificate.

This chapter focuses on the certification processes and the compliance of the DHET to the directives for certification.

## 12.2 Scope and Approach

The period covered in this report is from 01 December 2021 to 30 November 2022. All requests for certification received during this period that were finalised, in other words, feedback provided to the DHET by Umalusi, are included and addressed in this report. The main examination covered is the November 2021 examination.

Certification of candidate achievements cannot be pinned to a single period in the year since it is a continuous process, with certificates issued throughout the year. The bulk of the certification happens within three months of the release of results. Throughout the year, certificates are requested, either as first issues, duplicates, replacements due to change in status or re-issues.

This chapter focuses on the shortfalls in compliance with the certification directives by the DHET and how this can affect the quality assurance processes and the certification of candidate achievements. In addition, the number of requests received and the type of certificates issued in this period are also provided

Several findings were made during processing requests for certification in the reporting period. These findings should be regarded as critical points to be addressed.

### 13.3 Summary of Findings

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

Thus the first aspect to focus on is the submission of the subject structures for approval and alignment of the Information Technology (IT) systems. Any changes in subject structures and/or new subjects must be applied for, at least 18 months in advance, to Umalusi. With submitting the subject structures, the DHET must ensure that the structures are correctly registered for the new examination cycle and aligned with those of Umalusi by submitting the subject structure in electronic format to Umalusi.

After the DHET has conducted the examinations, all results are submitted to Umalusi for standardisation, statistical moderation and resulting of the candidates' achievements. All candidate records must be submitted to Umalusi for approval before the results can be released.

The general principle must be adhered to is 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 a mop-up dataset: a re-issue must be requested to correct marks on a certificate already issued. The DHET is complying with this directive.

The recording and finalisation of irregularities is critical to ensure that certificates are issued correctly to deserving candidates. The DHET must continually inform Umalusi of all irregularities for Umalusi to record such instances on its IT system. Therefore, it is of utmost importance that Umalusi is updated on the status of irregularities (pending, guilty, not guilty) before submitting the requests for certification. If irregularities are not finalised, candidates may not receive their certificates, and the issuing of certificates is delayed. Unfortunately, one of the leading causes for the delay is that the DHET does not adhere to the prescribed format for submitting irregularities.

Umalusi has also noticed that candidate records rejected for non-compliance with the directives for certification are resubmitted for certification without the error being corrected. This delays the issuing of certificates to candidates. In some cases, the rejected record is not even resubmitted for certification.

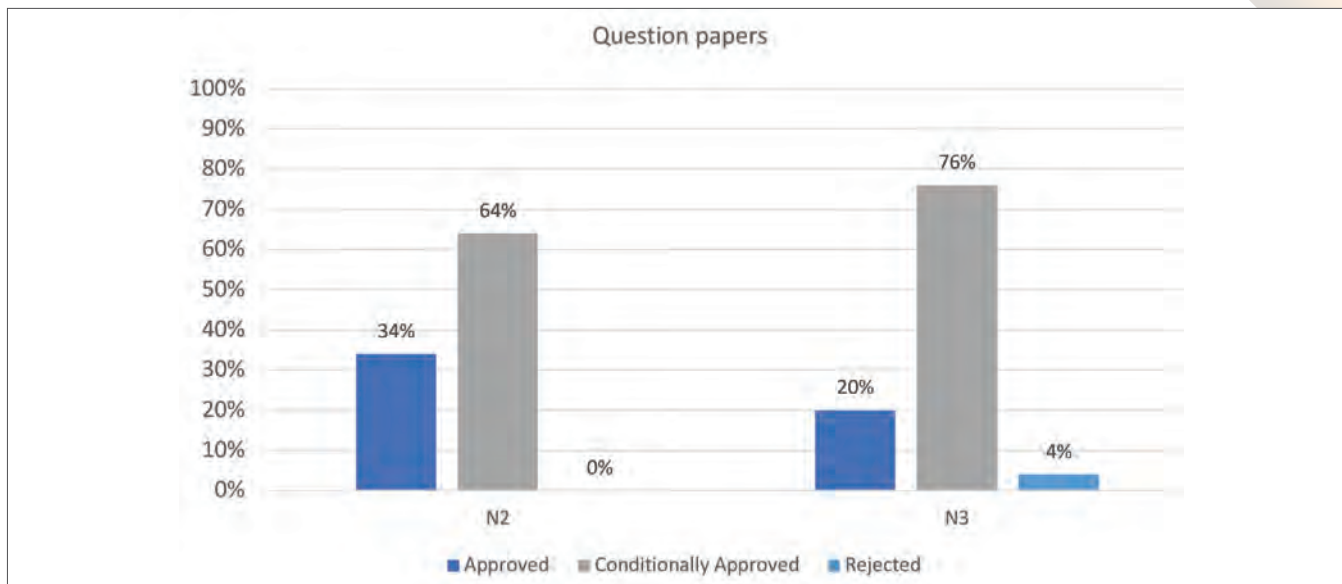
The phasing out of the National Senior Certificate (NSC) (Technical Colleges) and the combining of Senior Certificate subjects with N3 subjects was implemented, with effect from January 2021. This included the phasing out of business languages.

The phasing out of the automatic printing of subject statements was introduced based on a request from the DHET. This was done to reduce the cost of subject statements issued to private colleges, which, according to the DHET, had no "value". Umalusi only prints subject statements that the DHET requests on behalf of the colleges. However, there are cases where candidates want the hard copy and cannot obtain a printed certificate. The DHET is encouraged to cater to such candidates and to request a certificate from Umalusi, per directives issued.

The DHET must ensure that subject statements are requested for candidates who need them; and that it is possible to request a subject statement should it not have been requested initially. Further, the decision on the non-printing of subject statements and procedures to be followed must be communicated and clarified to all role players, especially the candidates.

During the last year, progress has been made in reducing the certification backlog of certificates. There remain, however, outstanding certificates, especially where candidates qualified across multiple examinations for a certificate. Therefore, every effort must be made to ensure that all possible certificates are issued to candidates who qualify for a certificate; and that there are no outstanding certificates.

Figure 13A shows a summary of certificates issued from 01 December 2021 to 30 November 2022.



**Figure 13A: Certificates issued during the period 01 December 2021 to 30 November 2022**

Tables 13A and 13B summarise certificates issued for the examination periods November 2021, August 2022 and 01 December 2021 to 30 November 2022.

**Table 13A: Certificates issued for the exam periods November 2021 and August 2022**

| Type of certificate issued   | November 2021 | August 2022 |
|------------------------------|---------------|-------------|
| First issue – N3 Certificate | 2 659         | 2 528       |
| First issue – NSC            | 0             | 0           |
| Replacement – N3 Certificate | 4             | 1 185       |
| Replacement – NSC            | 0             | 0           |
| Re-issue – N3                | 0             | 0           |
| Certified transactions only  | 14 905        | 16 738      |
| Total transactions           | 19 273        | 20 451      |

**Table 13B: Number of datasets and transactions received during the period 01 December 2021 to 30 November 2022**

| N3/NSC (Colleges)  |                             |                     |                             |                            |                     |                 |                      |
|--------------------|-----------------------------|---------------------|-----------------------------|----------------------------|---------------------|-----------------|----------------------|
| Number of datasets | Number of datasets accepted | Percentage accepted | Number of records submitted | Number of records accepted | Percentage accepted | Number rejected | Certificates printed |
| 273                | 271                         | 99.2%               | 67 564                      | 65 833                     | 97.44%              | 1 731           | 13 486               |

### 13.4 Areas of Improvement (Including Innovations)

Areas of improvement noted were:

- The registration of candidates for the examinations was completed and admission letters were dispatched to all Technical and Vocational Education and Training (TVET) colleges. The electronic submission of registration data by colleges to the DHET has continued to improve and become more effective; and
- The submission of datasets for candidate certification was made according to the directives. As a result, most candidates were certified within the required period after the examination. Submitting irregularities immediately after National Examination and Assessment Irregularity Committee (NEIAC) meetings ensures that certificates are issued to deserving candidates.

### 13.5 Areas of Non-Compliance

The following areas of non-compliance were identified:

- a. The most significant area of non-compliance was that not all approved candidate records whose results were released by the DHET on statements of results were submitted for certification;
- b. The resubmission of candidate records for certification without correcting identified errors caused delays in the certification of the candidates and
- c. The finalisation and completion of irregularities was another area of non-compliance. Where irregularities have been identified and reported to Umalusi, their status must be communicated to Umalusi in the prescribed data format (spreadsheet). The absence of these updated reports causes unnecessary delay and rejections.

### 13.6 Directives for Compliance and Improvement

The DHET must ensure that:

- a. Combining or consolidating results across multiple examination sittings is resolved to eliminate the backlog of certificates. This challenge has remained unresolved and has affected candidates since the identification of a backlog;
- b. Umalusi approves all candidate records before extracting certification datasets to avoid unnecessary rejections and delays in issuing certificates to candidates. This is especially so where candidates have been involved in a re-mark or where marks have changed;
- c. The IT system is updated to allow for the issuing of a subject statement where initially, the printing thereof was not requested;
- d. Subject statements are requested for those candidates who need them;
- e. Investigations are carried out, and errors are corrected before candidates' records are resubmitted to Umalusi for certification; and
- f. The updated report on irregularities is submitted to Umalusi before bulk certification is requested.

### 13.7 Conclusion

The DHET, as an assessment body, is compliant and executes the directives for certification in most aspects. Most candidates are resulted and certified without any problems. However, getting the certification rate to 100% and certifying without any problems remains challenging. This adds to the current certification backlog. Even though the scope of the examination is huge and the system's complexity, there is room for improvement.

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**PART C:**

**UMALUSI EXAMINATION MONITORING PROCESSES  
AND THE STATE OF READINESS OF THE DHET  
TO CONDUCT, ADMINISTER AND MONITOR  
EXAMINATIONS**

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# CHAPTER 14 MONITORING THE STATE OF READINESS TO CONDUCT EXAMINATIONS

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## 14.1 Introduction

Umalusi undertook the external audit of the state of readiness of the Department of Higher Education and Training (DHET) to conduct the November 2022 National Certificate (Vocational) [NC(V)] Level 2-4 and National Education (NATED) Report 190/191 Engineering Studies N2-N3 examinations.

The purpose of conducting the monitoring and verification of the state of readiness of the DHET to conduct, administer and manage the November 2022 NC(V) Level 2-4 and NATED Report 190/191 Engineering Studies N2-N3 examinations was to:

- a. Test the level of preparedness of the DHET to conduct the November 2022 NC(V) and NATED examinations;
- b. Track the progress made in addressing the directives for compliance and improvement issued after the November 2021 NC(V) and NATED examinations; and
- c. Verify whether the DHET had systems in place to ensure the integrity of the November 2022 examinations..

## 14.2 Scope and Approach

Umalusi audited the DHET on their readiness to administer the NC(V) Level 2-4 and NATED Report 190/191 Engineering Studies N2-N3 examinations on 10 October 2022. This was a final verification audit of a process that started in May 2022. Umalusi used a risk management-based approach in evaluating the level of preparedness of the assessment body to conduct the November 2022 examinations. The aim was to identify any potential risks that could compromise the delivery of a credible examination in the Technical and Vocational Education and Training (TVET) sector.

The following phased-in approach was implemented.

### Phase 1: Documents Required for Desktop Evaluation

Documents that were to be submitted by the DHET included:

- a. A completed self-evaluation instrument;
- b. The examination management plan for the November 2022 examinations; and
- c. Implementation plans and progress reports emanating from the improvement plans submitted to Umalusi

### Phase 2: Risk Analysis and Feedback

Umalusi analysed the documents submitted by the DHET to determine a risk profile. This process informed Umalusi's verification of the state of readiness of the DHET to conduct, administer and manage the November 2022 examinations.

### Phase 3: Conduct of Evidence-based Verification Audits

During this phase Umalusi evaluated the intervention measures and related evidence in the reports received from the DHET. Further, the verification audit instruments were administered during an on-site verification visit and the findings were recorded and classified according to their potential impact on the forthcoming examinations.

The information in this report is limited to the findings generated from the audit visit and evidence and data provided by the DHET at the time of the Umalusi visit.

## 14.3 Summary of Findings

The findings gathered from the audit visit are detailed hereunder.

### **14.3.1 Human Capacity to Conduct and Manage Examination Processes**

The DHET was found to have the capacity to carry out all examinations' related deliverables at all of the levels indicated below:

- a. National Office: the staff complement was adequate and able to manage the processes relating to the November 2022 DHET examinations; and
- b. College management: the staff appointed to manage the November 2022 examinations' activities was adequate.

### **14.3.2 Registration of Candidates**

At the time of the Umalusi visit it was found that:

The candidates' registration process had been completed and the number of candidates registered for both the NC(V) qualifications and NATED programmes was provided;

- a. Candidate registration was carried out by different public and private colleges;
- b. Preliminary entry schedules were forwarded to colleges for verification to ensure that all candidates had been correctly registered;
- c. Registration data was verified by the colleges; and
- d. The November 2022 mark sheets and examination admission permits were printed and dispatched to the colleges as scheduled.

### **14.3.3 Registration of Examination Centres**

At the time of the Umalusi visit the following information was verified:

- a. Examination centre audits had been completed by the DHET; and
- b. Colleges had conducted desktop evaluations and submitted completed reports to the DHET for analysis; however, not all colleges had submitted the reports, which presented challenges.

### **14.3.4 State of Readiness Audit and Verification Conducted for Internal Continuous Assessments (ICASS)/ Integrated Summative Assessment Tasks (ISAT)**

At the time of the Umalusi visit it was confirmed that:

- a. ICASS Instructions were available;
- b. Monitoring templates were available;
- c. ISAT guidelines were received;
- d. Training sessions were held with college principals, deputy principals, academic and campus managers on the administration of ICASS/ISAT. (April–May 2022 training was conducted by the DHET in various provinces);
- e. The DHET conducted monitoring and moderation visits for the implementation of ICASS;
- f. ICASS Instruments were specific for fundamental and vocational subjects;
- g. Follow-up visits were conducted to support non-compliant colleges;
- h. Samples of monitoring and moderation reports were shared with Umalusi; and
- i. ISAT monitoring and/or moderation was not carried out because of a lack of subject matter experts.

### **14.3.5 Moderation Conducted at National Level**

Umalusi was provided with the DHET management plan to be followed in monitoring and moderating the ICASS (see Table 14A and Table 14B):



**Table 14A: DHET ICASS monitoring and moderation management plan 2022 for NATED Engineering Studies**

| Province      | Venue                | Programme           | Date                |
|---------------|----------------------|---------------------|---------------------|
| Western Cape  | Tygerberg Campus     | Engineering Studies | 07–09 November 2022 |
| Northern Cape | City Campus          | Engineering Studies | 07–09 November 2022 |
| Free State    | Hillside Campus      | Engineering Studies | 07–09 November 2022 |
| Eastern Cape  | East London Campus   | Engineering Studies | 14–16 November 2022 |
| KwaZulu-Natal | Durban Campus        | Engineering Studies | 14–16 November 2022 |
| Mpumalanga    | Nelspruit Campus     | Engineering Studies | 14–16 November 2022 |
| Limpopo       | Polokwane Campus     | Engineering Studies | 21–23 November 2022 |
| Gauteng       | Pretoria West Campus | Engineering Studies | 21–23 November 2022 |
| North West    | Potchefstroom Campus | Engineering Studies | 21–23 November 2022 |

**Table 14B: DHET ICASS Monitoring and Moderation Management Plan 2022 For National Certificate (Vocational) L2-L4**

| Province      | Venue                | Programme                         | Date                  |
|---------------|----------------------|-----------------------------------|-----------------------|
| Western Cape  | Tygerberg Campus     | National Certificate (Vocational) | 05–06 November 2022   |
| Northern Cape | City Campus          | National Certificate (Vocational) | 05 – 06 November 2022 |
| Free State    | Hillside Campus      | National Certificate (Vocational) | 05 – 06 November 2022 |
| Eastern Cape  | East London Campus   | National Certificate (Vocational) | 05 – 06 November 2022 |
| KwaZulu-Natal | Durban Campus        | National Certificate (Vocational) | 05 – 06 November 2022 |
| Mpumalanga    | Nelspruit Campus     | National Certificate (Vocational) | 05 – 06 November 2022 |
| Limpopo       | Polokwane Campus     | National Certificate (Vocational) | 05 – 06 November 2022 |
| Gauteng       | Pretoria West Campus | National Certificate (Vocational) | 05 – 06 November 2022 |
| North West    | Potchefstroom Campus | National Certificate (Vocational) | 05 – 06 November 2022 |



### 14.3.6 Awareness Strategy to Prevent Irregularities

The DHET implemented the strategy described in Table 14C to minimise irregularities.

**Table 14C: DHET Plan on the management of irregularities; awareness strategy**

| Activity  | Responsibility    | Due date      |
|---|-------------------|---------------|
| Examination conduct guidelines are reviewed to include the directive to colleges to train students and make them aware of what is allowed or not allowed during examinations. | DHET              | April 2022    |
| Reviewed conduct guidelines are distributed to colleges.  | DHET              | May 2022      |
| Colleges to conduct awareness training and keep records/evidence of such training for monitoring purposes.  | Colleges          | October 2022  |
| Resuscitating colleges' irregularities committees and ensuring that these are functional.   | DHET and colleges | On-going      |
| Colleges' irregularities' committees to treat site-based assessment irregularities in the same way as examinations irregularities.  | Colleges          | On-going      |
| Certified transactions only   | 14 905            | 16 738        |
| <b>Total transactions</b>   | <b>19 273</b>     | <b>20 451</b> |

### 14.3.7 Printing, Packaging, Storage and Distribution of Question Papers/Examination Materials

During the Umalusi visit it was established that:

- The DHET had secured a printing contract with the external service provider;
- The new service level agreement (SLA) was put in place on 1 January 2020 and would expire on 30 November 2023; and
- Late submission of question papers delayed the printing process.

### 14.3.8 Security Measures for Printing, Packaging and Storage of Examination Papers

The DHET had security measures in place for the printing, packaging and storage of examination question papers.

#### a) Security measures

The measures met the following minimum-security requirements:

- Controlled access: closed circuit surveillance cameras and security guards were available at all entrances to the printing venue;
- Secured building: up to date alarm systems, smoke detectors and fire hydrants were available;
- The standard operation procedure (SOP) which outlined the norms and standards for printing, packaging and distribution of examination materials was in place;
- Security clearance certificates for personnel handling live question papers was provided;
- Signed agreements to maintain secrecy were presented; and
- Signed declarations of confidentiality, which included the pronouncement of any close relatives registered for any TVET examinations, were provided.

DHET developed a monitoring instrument for on-site monitoring of printers when printing was in progress. The monitoring took place weekly.

A detailed printing plan was in place and outlined the management of the printing of NATED and NC(V) L2-L4 examination materials. The plan detailed activities for the final, signed-off timetable, preparation of question papers, data extraction, printing and packing timelines and handover dates to the courier for delivery at various delivery points.

## **b) Packaging**

During the Umalusi visit to the Government Printing Works (GPW) on 14 June 2022 it was observed that question papers were physically removed from the printing machines to be loaded onto the packaging machines.

The security of the question papers was strengthened through barcoding, whereby each question paper had a unique, sequential barcode created to identify question papers printed, packed and distributed.

## **c) Storage of printed question papers prior to distribution to delivery points**

The service provider had a secure storage facility in place with the same security measures applied to the areas of printing and packaging as prescribed in the norms and standards for question papers.

## **d) Distribution of question papers**

The DHET appointed an external service provider for the distribution of examination materials. The service provider was appointed by National Treasury by means of an RT5–2016 contract, as regulated for all service providers used by government departments. The service provider complied with the same measures the printers should comply with, in terms of the DHET management plan.

Measures were in place to ensure that occupational health and safety (OHS) requirements are complied with at all delivery points. The safety measures were clearly outlined and captured in the DHET guideline document. These were mediated with all established examination centres through instructions on the conduct, administration and management of examinations of the TVET programmes and qualifications.

## **e) Audit of delivery points**

The DHET appointed delivery point managers and deputy managers across its delivery points. They were appointed according to personnel administrative measures (PAM) requirements. The appointed officials were nominated by the management of central offices of TVET colleges. The desktop audit of the delivery points was conducted and reports were shared with the DHET national office for verification. The evidence presented to Umalusi during the verification and evaluation was that all delivery points met the required and prescribed standards for the storage of examination materials, in line with the DHET criteria for the approval of storage points.

To improve the management of question papers and scripts at delivery points, the DHET conducted meetings at various centres with all the distribution point managers, deputy distribution point managers, marking centre managers and deputy marking centre managers: administration, during the period 28 March to 6 May 2022. Umalusi was also invited to attend such meetings; and the following was discussed:

- I. The DHET must provide a database in the form of a scripts register that indicates all relevant examination centres;
- II. The scripts register must indicate the date of the examination, centre number, centre name, subject, mark sheet number, number of scripts expected per mark sheet and marking centre;
- III. Distribution point managers must filter centres under their distribution point; and
- IV. A meeting must be held with all examination centres that will be submitting scripts to explain the process.

### **14.3.9 Management of the Examinations**

The DHET applied the following criteria to planning for the November 2022 examinations:

#### **a) Monitoring of examinations**

Examination centres were assessed for risk and a strategy was adopted to monitor such centres as necessary.

Examination centres were profiled according to the following risk levels:

- a. Red = High Risk;
- b. Amber = Moderate Risk; and
- c. Green = Low Risk.

The high-risk examination centres would be monitored at least twice or more during each cycle of the examinations by each of the different monitors (i.e., national, external, resident and regional monitors).

The moderate-risk colleges would be monitored by the external monitors and regional monitors during this examination cycle.

The low-risk colleges would be sampled and may be monitored once during the three-phase examinations.

The DHET provided a list of examination centres with recurring irregularities. Such colleges were to be prioritised for sampling by the DHET and Umalusi during the monitoring of examinations. Table 14D reflects the list:

**Table 14D: List of colleges with recurring irregularities (N1–N3)**

| College  | Centre number |
|--|---------------|
| Growth Path Projects                             | 699992602     |
| Crane International Academy: Burgersfort (N1-N6) | 699992607     |
| National Skills and Technical College            | 699992619     |
| ABM College SA (Pty) Ltd                         | 699992621     |
| Innovation Technology Campus                     | 699992623     |
| Nkangala Training Centre                         | 699992626     |
| Strausburg "C" College                           | 799990726     |
| Bristol Training College                         | 899992885     |
| Bagvin College                                   | 899993801     |
| Sharpeville Technical College                    | 899995873     |
| Watersrand Computer and Business College         | 899998822     |
| Overcomers Training College: N1-N3               | 899998864     |
| Jengrac Tech College: Sebokeng                   | 899998867     |

### **b) Invigilation training strategy**

The DHET informed colleges that mandatory training of all invigilators and examination officials must take place in the following manner:

- a. Each examination centre would be issued with the examination instructions;
- b. Each examination centre would use updated videos which had been uploaded on the TVET colleges website, the Lecturer Support System (LSS). Private colleges would use the same videos; and
- c. Minutes would be taken and registers signed by all invigilators and examination officials who attended the training sessions.

DHET national officials would also visit various colleges, but especially the high-risk colleges, to monitor their readiness to conduct the examinations and to check that invigilation training had been conducted.

### **c) Selection and appointment of monitors**

External monitors were appointed based on their previous TVET experience. The DHET appointed 37 retired, seasoned external monitors. Updated training manuals had been shared with them at the time of the Umalusi visit to the DHET.

### **d) Selection, appointment of markers and marking centres**

The policy and criteria for the appointment of marking personnel (i.e. chief markers, deputy chief markers, internal moderators, markers and examination assistants) were submitted.

Umalusi was invited to observe the following meetings:

- a. The selection and appointment of markers, as per the DHET selection criteria, for the NATED Report 190/191 Engineering Studies N2-N3, held on 16–18 June 2022; and
- b. The selection and appointment of markers, as per the DHET selection criteria, for the NC(V) L2-L4, held on 01–02 September 2022.

The list of all appointed officials was submitted to Umalusi during the audit of the state of readiness; however, Umalusi noted that the reserve list of markers was not completed/finalised.

Plans were in place for the training of marking centre management teams and for the training of chief markers and internal moderators.

The following documents were submitted to Umalusi:

- a. Marking management plans for the November 2022 examinations;
- b. List of marking centres and their physical addresses; and
- c. List of subjects per marking centre.

e) Monitoring of examination centres outside the borders of South Africa

Principals of colleges outside the borders of South Africa were requested by the DHET to monitor all examinations administered at all centres in Namibia and Eswatini. Plans were in place for the monitoring of a sample of these centres by the DHET officials.

#### **14.3.10 Systems Used for the Capturing of Marks**

Systems for the capturing of the marks were found to be in place. The capturing of ISAT and ICASS components across all levels within TVET qualifications was done by college data capturers. These were submitted electronically to the DHET to effect the resulting of duly registered candidates, per examination cycle.

#### **14.3.11 Irregularities**

Measures were in place for managing irregularities.

##### **a) Management of examination irregularities**

Umalusi noted the following in the management of irregularities:

- a. The policy on the conduct, administration and monitoring of examinations was available;
- b. Minutes of meetings with regional officials for the previous year's irregularities were shared, for intervention strategies; and
- c. A presentation on the management of irregularities was available and shared with Umalusi officials.

##### **b) Standard operating procedure for managing irregularities**

The management of irregularities in private and public colleges is guided by the national policy on the conduct, administration and management of the assessment of the NC(V) and NATED.

##### **c) Roles and responsibilities**

- a. The Minister of Higher Education, Science and Innovation established the National Examination and Assessment Irregularities Committee (NEAIC) to manage and coordinate the handling of irregularities, to ensure that the credibility and integrity of the November 2022 NC(V) and NATED examinations are maintained across all public and private colleges in South Africa; and make recommendations thereof to the regional director;
- b. After the regional director endorses the recommendations they will be presented to the NEAIC whose responsibility it is to ensure that the irregularities are managed in accordance with the prescribed policy and that the sanctions imposed are in keeping with the recommended sanctions listed in these regulations;

- c. The NEAIC will present a national report on all examination irregularities emanating from a specific examination;
- d. The campus manager will establish a Campus Examinations and Irregularities Committee. The function of such a committee will be to promote the integrity of the examination and to support and coordinate the management of irregularities at campus level; and
- e. Private Further Education and Training colleges will establish the same committees to handle irregularities.

#### **14.4. Areas of Improvement**

The following areas of improvement were observed:

- a. Training sessions were undertaken by DHET officials to advocate new policies;
- b. Relevant circulars on the conduct, administration and management of examinations were issued and communicated to public and private colleges;
- c. A series of training meetings were held with the marking centre management teams, distribution point managers, chief markers and internal moderators; and
- d. Training manuals for invigilators were reviewed.

#### **14.5 Areas of Non-Compliance**

The following areas of non-compliance were observed:

- a. Not all examination centres presented evidence of self-evaluation reports;
- b. ISAT monitoring or moderation was not carried out, the result of a lack of available subject matter experts;
- c. Physical contact/human interference during the printing and packaging of the national examination question papers was noted; and
- d. No formal audit was done on examination centres outside the borders of South Africa.

#### **14.6 Directives for Compliance and Improvement**

The DHET is requested to:

- a. Ensure that all colleges registered to conduct examinations submit self-evaluation state of readiness reports;
- b. Monitor ISAT conduct;
- c. Ensure that there is no physical contact/human interference during the printing and packaging of national examination question papers, from live question papers to custom-made boxes; and
- d. Ensure that colleges offering TVET qualifications outside the borders of South Africa are monitored and reported on.

#### **14.7 Conclusion**

Umalusi was satisfied with the evidence presented during the verification and evaluation undertaken to determine the readiness of the DHET to conduct the November 2022 examination process. The evidence provided clear, acceptable readiness measures that the DHET had in place to manage the examinations. Overall, the evidence presented in the state of readiness file proved that the DHET was ready to conduct, administer and manage the November 2022 NC(V) Level 2-4 and NATED Report 190/191 Engineering Studies N2-N3 examinations.

# CHAPTER 15 MONITORING THE WRITING OF EXAMINATIONS

## 15.1 Introduction

Umalusi monitors the writing of examinations with the purpose of determining whether the Department of Higher Education and Training (DHET) conducts, administers and manages the examinations in accordance with approved guidelines and policies. This is done to ensure the credibility of examinations of the Technical and Vocational Education and Training (TVET) qualifications and programmes registered on the General and Further Education and Training Sub-framework (GFETQSF).

This chapter reports on the findings from the monitoring of a sample of 60 examination centres. It also acknowledges areas of improvement, areas of non-compliance and provides directives for compliance and improvement.

## 15.2 Scope and Approach

Sixty examination centres from nine provinces were selected for the sample to be monitored for the writing of the November 2022 National Certificate (Vocational) [NC(V)] Level 2-4 and NATED Report 190/191: Engineering Studies N2-N3 examinations. Umalusi monitors and staff collected data from the selected centres through verification, observation and interview methods. Reports were generated from the data collected at the selected examination centres.

Table 15A contains the details of the examination centres monitored.

**Table 15A: Examination centres monitored by Umalusi**

| Name of college and type                   | Centre/Campus | Province      | Subject                       | Date visited |
|--|---------------|---------------|-------------------------------|--------------|
| Berea Technical College (Private)          | Durban        | KwaZulu-Natal | Engineering Science N3        | 17/11/2022   |
| Better Best Educational Projects (Private) | Mokopane      | Limpopo       | Electrotechnology N3          | 29/11/2022   |
| Boland TVET College (Public)               | Caledon       | Western Cape  | Introduction to Governance L2 | 10/11/2022   |
| Boland TVET College (Public)               | Stellenbosch  | Western Cape  | Electrical Trade Theory N2    | 24/11/2022   |
| Brighton College SA (Private)              | Rustenburg    | North West    | Engineering Science N3        | 17/11/2022   |
| Coastal TVET College (Public)              | As Salaam     | KwaZulu-Natal | Applied Accounting L2         | 23/11/2022   |
| Coastal TVET College (Public)              | Umlazi BB     | KwaZulu-Natal | Economic Environment L3       | 10/11/2022   |
| College of Cape Town TVET College (Public) | Athlone       | Western Cape  | Mathematics N2                | 15/11/2022   |

| Name of college and type                     | Centre/Campus               | Province      | Subject                                      | Date visited |
|--|-----------------------------|---------------|--|--------------|
| College of Cape Town TVET College (Public)   | Gugulethu                   | Western Cape  | Engineering Science N3                       | 17/11/2022   |
| College on Hills (Private)                   | Witbank                     | Mpumalanga    | Electrical Trade Theory N2                   | 24/11/2022   |
| College on Hills (Private)                   | Secunda                     | Mpumalanga    | Engineering Science N2                       | 18/11/2022   |
| Damelin City Campus (Private)                | Pietermaritzburg            | KwaZulu-Natal | Mathematics N2                               | 15/11/2022   |
| Damelin East London (Private)                | East London                 | Eastern Cape  | Building Science N2                          | 17/11/2022   |
| Ehlanzeni TVET College (Public)              | Mthimba                     | Mpumalanga    | Soil Science L2                              | 15/11/2022   |
| Ehlanzeni TVET College (Public)              | Nelspruit                   | Mpumalanga    | Business Practice L3                         | 22/11/2022   |
| Elangeni TVET College (Public)               | KwaDabeka                   | KwaZulu-Natal | Workshop Practice L2                         | 15/11/2022   |
| Flavius Mareka TVET College (Public)         | Kroonstad                   | Free State    | Mathematical Literacy L3 Paper 2             | 25/11/2022   |
| Gert Sibande TVET College (Public)           | Perdekop                    | Mpumalanga    | Mathematical Literacy L4 Paper 2             | 28/11/2022   |
| Groenpunt Prison                             | Sasolburg                   | Free State    | Engineering Science N3                       | 17/11/2022   |
| Ikhala TVET College (Public)                 | Queen Nonesi                | Eastern Cape  | Mathematical Literacy L4 Paper 1             | 01/11/2022   |
| Jirah Academy (Private)                      | Durban                      | KwaZulu-Natal | Engineering Science N3                       | 17/11/2022   |
| King Sabata Dalindyebo TVET College (Public) | Libode                      | Eastern Cape  | Mathematical Literacy L4 Paper 2             | 28/11/2022   |
| King Sabata Dalindyebo TVET College (Public) | Ntabozuko                   | Eastern Cape  | Mathematics L2 Paper 2                       | 28/11/2022   |
| Kingdom Varsity College (Private)            | Nongoma                     | KwaZulu-Natal | Engineering Science N3                       | 17/11/2022   |
| Langeni City College (Private)               | Brits                       | North West    | Engineering Science N3                       | 17/11/2022   |
| Letaba TVET College (Public)                 | Giyani                      | Limpopo       | Mathematics L2 Paper 2                       | 25/11/2022   |
| Majuba TVET College (Public)                 | Newcastle Technology Centre | KwaZulu-Natal | Life Skills and Computer Literacy L4 Paper 1 | 09/11/2022   |
| Maluti TVET College (Public)                 | Bonamelo                    | Free State    | Life Skills and Computer Literacy L3 Paper 1 | 18/11/2022   |
| Maluti TVET College (Public)                 | Tseki                       | Free State    | English First Additional Language L4 Paper 1 | 02/11/2022   |
| Mnambithi TVET College (Public)              | Estcourt                    | KwaZulu-Natal | New Venture Creation L2                      | 17/11/2022   |



| Name of college and type                   | Centre/Campus | Province      | Subject                                       | Date visited |
|--|---------------|---------------|---|--------------|
| Mnambithi TVET College (Public)            | Ladysmith     | KwaZulu-Natal | Office Data Processing L4                     | 07/11/2022   |
| Motheo TVET College (Public)               | Bloemfontein  | Free State    | Mathematical Literacy L4 Paper 1              | 18/11/2022   |
| Mthashana TVET College (Public)            | Vryheid       | KwaZulu-Natal | Electrical Control and Digital Electronics L3 | 08/11/2022   |
| Ncome Prison                               | Vryheid       | KwaZulu-Natal | Mathematics N2                                | 15/11/2022   |
| Nkangala TVET College (Public)             | Middelburg    | Mpumalanga    | Applied Accounting L4                         | 23/11/2022   |
| Nkangala TVET College (Public)             | Mpondozankomo | Mpumalanga    | Mathematics N3                                | 18/11/2022   |
| Northern Cape Rural TVET College (Public)  | Kuruman       | Northern Cape | Mathematical Literacy L2 Paper 2              | 28/11/2022   |
| Rhodes Technical College (Private)         | Kimberley     | Northern Cape | Mathematics N2                                | 15/11/2022   |
| Rostec FET College (Private)               | Bloemfontein  | Free State    | Engineering Science N3                        | 17/11/2022   |
| Rostec Technical College (Private)         | Vereeniging   | Gauteng       | Life Skills and Computer Literacy L2 Paper 1  | 09/11/2022   |
| Rostec Technical College (Private)         | Pretoria      | Gauteng       | English First Additional Language L2 Paper 1  | 02/11/2022   |
| Rostec Technical College (Private)         | Rustenburg    | North West    | Engineering Science N3                        | 17/11/2022   |
| Saint Ignatius College (Private)           | Johannesburg  | Gauteng       | Electrotechnology N3                          | 29/11/2022   |
| South Cape TVET College (Public)           | George        | Western Cape  | Life Skills and Computer Literacy L3 Paper 1  | 18/11/2022   |
| Springfield FET College (Private)          | Rustenburg    | North West    | Diesel Trade Theory N2                        | 21/11/2022   |
| Springfield FET College (Private)          | Lichtenburg   | North West    | Mathematical Literacy L3 Paper 2              | 25/11/2022   |
| Technical SA College (Private)             | Centurion     | Gauteng       | Industrial Electronics N2                     | 14/11/2022   |
| Thekwini TVET College (Public)             | Asherville    | KwaZulu-Natal | Mathematical Literacy L4 Paper 2              | 28/11/2022   |
| Tshwane North TVET College (Public)        | Mamelodi      | Gauteng       | Mathematical Literacy L4 Paper 2              | 28/11/2022   |
| Tshwane North TVET College (Public)        | Pretoria      | Gauteng       | Hospitality Generics L3                       | 14/11/2022   |
| Tshwane South TVET College (Public)        | Centurion     | Gauteng       | Mathematical Literacy L3 Paper 2              | 25/11/2022   |
| Umbilo Private Technical College (Private) | Durban        | KwaZulu-Natal | Mathematics N2                                | 15/11/2022   |



| Name of college and type         | Centre/Campus        | Province      | Subject                                      | Date visited |
|----------------------------------|----------------------|---------------|--|--------------|
| Umfoloji TVET College (Public)   | Mandeni              | KwaZulu-Natal | Mathematics L2 Paper 2                       | 28/11/2022   |
| Umfoloji TVET College (Public)   | Richtech             | KwaZulu-Natal | Engineering Drawing N2                       | 29/11/2022   |
| Umfoloji TVET College (Public)   | Chief Albert Luthuli | KwaZulu-Natal | Life Skills and Computer Literacy L2 Paper 1 | 09/11/2022   |
| Vhembe TVET College (Public)     | Tshisimane           | Limpopo       | Mathematical Literacy L2 Paper 2             | 28/11/2022   |
| Vhembe TVET College (Public)     | Shingwedzi           | Limpopo       | Mathematics N2                               | 15/11/2022   |
| West Coast TVET College (Public) | Vredenburg           | Western Cape  | Engineering Science N3                       | 17/11/2022   |
| Western TVET College (Public)    | Randfontein          | Gauteng       | Mathematical Literacy L4 Paper 2             | 28/11/2022   |

### 15.3 Summary of Findings

The findings from the monitoring of the writing of examinations are indicated below, by criteria, as per Umalusi's monitoring of the writing of the examinations Instrument.

Table 15B lists the detailed findings by Umalusi at the monitored examination centres.

**Table 15B: Detailed findings at monitored examination centres**

| Criteria                         | Findings  | Examination centres  |
|----------------------------------|---|--|
| Preparations for the examination | It was evident that the DHET had verified the state of readiness and availability of facilities at 51 (85%) of the examination centres visited. This was a 6% decrease in comparison to the 91% in 2021.  | Asherville<br>College on Hills (Secunda)<br>Kingdom Varsity College<br>Langeni City College (Brits)<br>Mamelodi<br>Ncome Prison<br>Queen Nonesi<br>Saint Ignatius College (Johannesburg)<br>Springfield FET College (Rustenburg) |
|                                  | Nine (15%) of the examination centres had not been verified by the DHET.  |  |
|                                  | There was an official timetable for the current examinations at 59 (98%) examination centres, compared to 100% in the November 2021 examinations, a decrease of 2%.   | Saint Ignatius College (Johannesburg)<br><br>College on Hills (Witbank)  |
|                                  | Only one (2%) examination centre could not provide the official timetable.<br>Fifty-nine (98%) examination centres had sufficient examination rooms to accommodate all registered candidates. This was lower than the 100% compliance in November 2021. |  |
|                                  | One (2%) examination centre did not have enough examination rooms to accommodate all the registered candidates in one sitting.  |  |

| Criteria | Findings  | Examination centres  |
|----------|---|--|
|          | <p>At 58 (97%) examination centres monitored all the candidates were registered to write the examination. This was a decrease of 2% in comparison with the November 2021 examinations.</p> <p>At the two (3%) examination centres where not all the candidates were registered to write the examination, the invigilators completed the required documentation.</p> | Caledon<br>Kroonstad   |
|          | <p>At 57 (95%) examination centres, examination rooms had sufficient space to accommodate all candidates and they were seated one metre apart.</p> <p>At three (5%) examination centres, examination rooms were cramped and candidates were seated less than one metre apart.</p>   | College on Hills (Witbank)<br>College on Hills (Secunda)<br>Perdekop |
|          | Sufficient and suitable furniture was provided at 60 (100%) of the examination centres monitored. This was an improvement of 2% compared to the 98% in November 2021.   | All examination centres monitored                                    |
|          | <p>There was proper lighting in the examination rooms at 59 (98%) examination centres; a decrease of 2% compared to 100% in the November 2021 examinations.</p> <p>At one (2%) examination centre there was an electricity fault after a rainstorm which resulted in the candidates writing the examination in natural light.</p>                                   | Perdekop   |
|          | Sixty (100%) examination centres had water and sanitation; that was on par with the 100% in the November 2021 examinations.   | All examination centres monitored                                    |
|          | At 60 (100%) of the examination centres there was a safe/strong room where examination material was stored; this was the same as in November 2021 examinations.   | All examination centres monitored                                    |
|          | <p>The environment was conducive for writing examinations at 59 (98%) examination centres. This was on a par with the 98% in 2021.</p> <p>In one (2%) examination centre in the central business district (CBD) there were increased noise levels due to traffic, which affected conduciveness for the writing of examinations.</p>                                 | Damelin City Campus (Pietermaritzburg)                               |
|          | <p>Chief invigilators collected/received question papers from the nodal point at 57 (95%) examination centres.</p> <p>The remaining three (5%) examination centres received the question papers either by courier the day before a morning paper or by email on the day of the sitting.</p>   | KwaMashu<br>Lichtenburg<br>Umlazi BB                                 |

| Criteria  | Findings   | Examination centres   |
|---|--|---|
|   | <p>At 59 (98%) examination centres, the chief invigilator or authorised personnel received the examination documents; 2% less than in the November 2021 examinations.</p> <p>One (2%) examination centre was not in possession of an authorisation letter for personnel to receive the examination documents.</p>  | Saint Ignatious College (Johannesburg)  |
|   | The chief Invigilators verified that the correct question papers were delivered/collected at 60 (100%) examination centres; an increase of 2% compared to 98% in the November 2021 examinations.   | All examination centres monitored   |
|   | An updated stock control register was kept at 60 (100%) examination centres; an increase of 7% when compared to 93% in the November 2021 examinations.   | All examination centres monitored   |
| Invigilators and their training                       | <p>Campus managers were appointed as chief invigilators at 56 (93%) examination centres monitored; this was a decrease of 7% compared to November 2021.</p> <p>Four (7%) examination centres did not comply. At three, there was evidence that other staff members were appointed as chief invigilators, while there was no evidence of an appointment letter at Saint Ignatious College.</p>  | Berea<br>Langeni City College (Brits)<br>Perdekop<br>Saint Ignatious College (Johannesburg)   |
|   | <p>The assessment body trained invigilators at 56 (93%) examination centres; an increase of 4% when compared to 89% in the November 2021 examinations.</p> <p>At four (7%) examination centres there was no evidence that the chief invigilators had been trained by the assessment body.</p>  | Langeni City College (Brits)<br>Nelspruit<br>Saint Ignatious College (Johannesburg)<br>Springfield  |
|   | <p>Invigilators were appointed in writing at 59 (98%) examination centres; 2% lower than in November 2021 examinations.</p> <p>At one (2%) examination centre there was no evidence of the appointment of invigilators.</p>  | Saint Ignatious College (Johannesburg)  |
|   | <p>Invigilators at 58 (97%) examination centres had received training for the current examination; an increase of 1% when compared to 96% in November 2021 examinations.</p> <p>At two (3%) examination centres there was no evidence that invigilators had been trained.</p>  | College on Hills (Witbank)<br>Saint Ignatious College (Johannesburg)  |
| Preparations for writing and examination rooms/venues | <p>At 52 (87%) examination centres candidates were seated 30 minutes before the examination commenced; an increase of 14% when compared with 73% in November 2021 examinations.</p> <p>At eight (13%) examination centres candidates were not seated 30 minutes before the commencement of the examination. At some of the centres students were allowed to enter the examination room up to the time that the examination had to start.</p> | Caledon<br>College on Hills (Secunda)<br>Damelin City Campus (Pietermaritzburg)<br>Langeni City College (Brits)<br>Perdekop<br>Saint Ignatious College (Johannesburg)<br>Shingwedzi<br>Springfield FET College (Rustenburg) |

| Criteria | Findings   | Examination centres  |
|----------|--|--|
|          | <p>At 58 (97%) examination centres monitored invigilators verified candidates' admission letters/identity documents before they were allowed into the examination venue; a decrease of 1% when compared to the November 2021 examinations.</p> <p>At two (3%) examination centres monitored candidates' admission letters/identity documents were not verified before they were allowed into the examination venue.</p>  | <p>Damelin City Campus (Pietermaritzburg)<br/>Saint Ignatious College (Johannesburg)</p> |
|          | <p>At 59 (98%) examination centres monitored there was an appropriate number of invigilators; a decrease of 2% when compared to 100% in the November 2021 examinations.</p> <p>At one (2%) examination centre monitored one room was over-allocated with invigilators while there was an under-allocation at another room.</p>   | Tseki  |
|          | <p>There was an invigilation timetable at 60 (100%) examination centres; the same when compared to 100% in November 2021.</p>  | All examination centres monitored  |
|          | <p>Fifty-nine (98%) examination centres had relief timetables; an increase of 2% when compared to 96% in the November 2021 examinations.</p> <p>There was no relief timetable at one (2%) examination centre.</p>  | Rostec (Pretoria)  |
|          | <p>Invigilators at 58 (97%) examination centres signed an attendance register; a decrease of 3% when compared to 100% in November 2021 examinations.</p> <p>At two (3%) examination centres attendance registers were not signed by the invigilators.</p>  | <p>College on Hills (Witbank)<br/>Damelin (Pietermaritzburg)</p>                         |
|          | <p>At 57 (95%) examination centres, candidates were seated according to a seating plan; a decrease of 3% when compared to 98% in the November 2021 examinations.</p> <p>At three (5%) examination centres candidates were not seated according to a seating plan. At one of the centres a seating plan was available but the seat numbers were duplicated. The invigilators intervened in the confusion that ensued and placed the candidates at empty desks. At another, there was no seating plan but the desks were marked with candidate ID numbers.</p> |  |
|          | <p>A clock or another device displaying the time was clearly displayed in every examination venue at 59 (98%) examination centres; 2% down compared to the November 2021 examinations.</p> <p>There was one (2%) examination centre that did not display a clock in every venue.</p>   | College on Hills (Secunda)   |

| Criteria | Findings   | Examination centres  |
|----------|--|--|
|          | <p>An information board was visible at 59 (98%) examination centres; an increase of 5% when compared to 93% in the November 2021 examinations.</p> <p>At one (2%) examination centre the board was visible but the information was not related to the examination being written.</p>   | Springfield FET College (Rustenburg)   |
|          | The examination venue/s at all monitored examination centres were free of any material/writing/drawings that could aid candidates writing the examinations; the same as in the November 2021 examinations.   | All monitored examination centres  |
|          | <p>Invigilators at 57 (95%) examination centres ensured that candidates were not in possession of cell phones or any material/ equipment that was not required for the examination; a decrease of 1% when compared to 96% in the November 2021 examinations.</p> <p>At three (5%) examination centres invigilators did not ensure that candidates were not in possession of cell phones or any material/equipment that was not required for the examination.</p> | College on Hills (Witbank) Nelspruit<br>Saint Ignatious College (Johannesburg)   |
|          | <p>Invigilators at 48 (80%) examination centres checked calculators for compliance, where applicable.</p> <p>At seven (12%) examination centres calculators were not checked for compliance.</p> <p>At five (8%) of the examination centres a calculator was not applicable to the question paper being written.</p>   | College on Hills (Secunda)<br>College on Hills (Witbank)<br>Damelin City Campus (Pietermaritzburg)<br>Ncome Prison<br>Ntabozuko<br>Perdekop<br>Saint Ignatious College (Johannesburg)<br><br>Bonamelo<br>Chief Albert Luthuli<br>Kingdom Varsity College<br>Nelspruit<br>Tseki |
|          | <p>The examination files were available in the examination rooms at 57 (95%) examination centres.</p> <p>At three (5%) examination centres the examination files were not available in the examination rooms but kept in the principal's office.</p>   | <p>The examination files were available in the examination rooms at 57 (95%) examination centres.</p> <p>At three (5%) examination centres the examination files were not available in the examination rooms but kept in the principal's office.</p>                           |

| Criteria        | Findings   | Examination centres  |
|-----------------|--|--|
|                 | <p>The examination files were complete at 38 (63%) examination centres, an improvement of 50% compared to the 13% in the November 2021 examinations.</p> <p>At 22 (37%) of examination centres the examination files did not contain all the prescribed documents.</p>   | <p>As Salaam<br/>Asherville<br/>Athlone<br/>Berea<br/>Chief Albert Luthuli<br/>College on Hills (Secunda)<br/>College on Hills (Witbank)<br/>Kingdom Varsity College<br/>Langeni City College (Brits)<br/>Ncome Prison<br/>Ntabozuko<br/>Perdekop<br/>Randfontein<br/>Rhodes (Kimberley)<br/>Richtech<br/>Rostec (Bloemfontein)<br/>Rostec (Pretoria)<br/>Rostec (Rustenburg)<br/>Saint Ignatius College (Johannesburg)<br/>Springfield FET College (Rustenburg)<br/>Tseki<br/>Umlazi BB</p> |
| Time management | <p>Invigilators arrived on time at 56 (93%) examination centres, an increase of 4% when compared to 89% in the November 2021 examinations.</p> <p>Invigilators did not arrive on time at four (7%) examination centres.</p>  | <p>Damelin City Campus (Pietermaritzburg) (08:31)<br/>Perdekop (08:10)<br/>Estcourt (12:40)<br/>Saint Ignatius College (Johannesburg) (08:30)</p>  |
|                 | <p>An attendance register was signed by candidates at 60 (100%) examination centres; an improvement of 2% compared to the 98% of the November 2021 examinations.</p>   | <p>All examination centres monitored</p>   |
|                 | <p>Candidates were issued with the official answer book at 60 (100%) examination centres; the same as in the November 2021 examinations.</p>   | <p>All examination centres monitored</p>   |
|                 | <p>The invigilators at 55 (92%) examination centres verified that the information on the cover page of answer books was correct; a decrease of 4% compared to 98% in the November 2021 examinations.</p> <p>Invigilators at five (8%) examination centres did not verify information on the cover page of answer books.</p>                                      | <p>College on Hills (Secunda)<br/>College on Hills (Witbank)<br/>Damelin City Campus (Pietermaritzburg)<br/>Ntabozuko<br/>Shingwedzi</p>   |
|                 | <p>The question papers were opened in the presence of candidates at 59 (98%) examination centres; a decrease of 2% compared to 100% in the November 2021 examinations.</p> <p>The question papers were not opened in front of the candidates at one (2%) examination centre because they were printed at the college and sealed in an envelope with staples.</p> | <p>Lichtenburg</p>   |
|                 |  |  |

| Criteria | Findings   | Examination centres  |
|----------|--|--|
|          | <p>Question papers were distributed to candidates on time at 54 (90%) examination centres; a decrease of 6% when compared to 96% in the November 2021 examinations.</p> <p>At three (5%) examination centres question papers were not distributed to candidates on time. No reason was given as to why the papers were distributed late.</p> <p>At three (5%) of the examination centres late distribution was a result of external factors over which the centre had no control:</p> <ol style="list-style-type: none"> <li>At Groenpunt Prison the question papers were distributed late from the nodal point as result of a late delivery from the examination body;</li> <li>At Lichtenburg the examination paper was sent to the centre via electronic mail and the printing was only completed at 08:54;</li> <li>At Ncome Prison the question papers were opened late due to a jammed lock on the official distribution bag, which had to be broken to access the question papers.</li> </ol> | <p>College on Hills (Secunda) (09:00)<br/>College on Hills (Witbank) (08:58)<br/>Damelin City Campus (Pietermaritzburg) (08:52)</p> <p>Groenpunt Prison (10:12)<br/>Lichtenburg (08:55)<br/>Ncome Prison (08:57)</p>   |
|          | <p>Question papers were checked for technical accuracy at 52 (87%) examination centres; a decrease of 4% when compared to 91% in the November 2021 examinations.</p> <p>Invigilators at eight (13%) examination centres did not check question papers for technical accuracy.</p>  | <p>Athlone<br/>Chief Albert Luthuli<br/>College on Hills (Secunda)<br/>College on Hills (Witbank)<br/>Damelin City Campus (Pietermaritzburg)<br/>Langeni City College (Brits)<br/>Ntabozuko<br/>Saint Ignatious College (Johannesburg)</p>   |
|          | <p>Candidates were given the required reading time at 49 (82%) examination centres; a decrease of 18% when compared to 100% in the November 2021 examinations.</p> <p>Candidates were not given the required reading time at 11 (18%) examination centres.</p>   | <p>Athlone (05 minutes)<br/>Caledon (06 minutes)<br/>College on Hills (Secunda) (0 minutes)<br/>College on Hills (Witbank) (0 minutes)<br/>Damelin City Campus (Pietermaritzburg) (0 minutes)<br/>Lichtenburg (07 minutes)<br/>Perdekop (05 minutes)<br/>Rostec (Pretoria) (05 minutes)<br/>Rostec (Rustenburg) (13 minutes)<br/>Saint Ignatious College (Johannesburg) (0 minutes)<br/>Springfield FET College (Rustenburg) (0 minutes)</p> |
|          | <p>Examination rules were read to candidates at 58 (97%) examination centres; a decrease of 3% compared to 100% in the November 2021 examinations.</p> <p>At two (3%) of examination centres the invigilators did not read the examination rules.</p>  | <p>Estcourt<br/>Saint Ignatious College (Johannesburg)</p>   |



| Criteria                  | Findings  | Examination centres   |
|---------------------------|---|---|
|                           | <p>The examination started at the time indicated on the timetable at 56 (93%) examination centres; a decrease of 3% when compared to 96% in the November 2021 examinations.</p> <p>The examination was not started at the time indicated on the timetable at four (7%) examination centres.</p>   | <p>College on Hills (Witbank) (09:01)<br/>Groenpunt Prison (10:10)<br/>Lichtenburg Campus (09:05)<br/>Ncome Prison (09:10)</p>  |
|                           | <p>Candidates who arrived within the stipulated time were admitted at 58 (97%) examination centres; a decrease of 1% from the 97% in November 2021.</p> <p>Candidates who arrived after the stipulated time were admitted at two (3%) examination centres.</p>  | <p>Asherville (08:40)<br/>Ntabozuko (13:13)</p>   |
|                           | <p>Invigilators stamped the answer books at 55 (92%) examination centres; a decrease of 6% when compared to 98% in November 2021.</p> <p>Answer books were not stamped at three (5%) examination centres.</p> <p>At two (3%) of the examination centres answer books were incorrectly stamped. The name of the centre appeared on the stamp.</p>  | <p>As Salaam<br/>College on Hills (Secunda)<br/>Saint Ignatius College (Johannesburg)<br/>Langeni City College (Brits)<br/>Perdekop</p>                                   |
|                           | <p>The examination ended at the stipulated time at 56 (93%) examination centres; an improvement of 10% compared to the November 2021 examinations.</p> <p>At three (5%) of the examination centres the examination ended late because of the examination starting late.</p> <p>At one (2%) examination centre the examination ended early.</p>  | <p>Groenpunt Prison (13:20)<br/>Lichtenburg (12:05)<br/>Ncome Prison (12:10)</p> <p>College on Hills (Secunda) (11:50)</p>  |
| Activities during writing | <p>Invigilators were not asked to clarify any aspect of the question paper at 60 (100%) examination centres; an improvement of 2% compared to 98% in November 2022.</p> <p>At 59 (98%) examination centres candidates did not leave the examination room temporarily without any escort; a decrease of 2% when compared to 100% in November 2021 examinations.</p> <p>At one (2%) examination centre candidates left the examination room temporarily without any escort.</p> <p>There were no unauthorised personnel in any of the examination rooms at any of the examination centres during the examination session; same as in the November 2021 examinations.</p> <p>Officials at 57(95%) examination centres did not allow any candidates to leave the examination venue during the last 15 minutes of the session; a decrease of 5% when compared to 100% in November 2021 examinations.</p> <p>Candidates were allowed to leave the examination venue during the last 15 minutes of the session, at three (5%) examination centres.</p> | <p>All examination centres monitored</p> <p>Athlone</p> <p>All examination centres monitored</p> <p>Chief Albert Luthuli<br/>College on Hills (Secunda)<br/>Umlazi BB</p> |



| Criteria                                  | Findings  | Examination centres   |
|---|---|---|
|   | <p>There were no irregularities reported during the examination session at 54 (90%) examination centres; a decrease of 3% compared to November 2021.</p> <p>Irregularities were reported during the examination session at six (10%) examination centres.</p>   | <p>Groenpunt Prison<br/>Kroonstad<br/>Lichtenburg<br/>Ncome Prison<br/>Rostec (Pretoria)<br/>Springfield FET College (Rustenburg)</p> |
|   | <p>Invigilators at 58 (97%) examination centres were active, moving around and vigilant throughout the examination session; a decrease of 3% when compared to 100% in November 2021.</p> <p>Invigilators at two (3%) examination centres were not active, moving around and vigilant throughout the examination session:</p> <p>a. At Langeni City College (Brits) invigilators were involved with other administration duties and at times candidates were left without an Invigilator;<br/>b. At Nelspruit Campus the relief arrived at 08:30 and left at 09:10 and did not return to support the conduct of the examination.</p> | <p>Langeni City College (Brits)<br/>Nelspruit</p>   |
|   | <p>There were no official errata at 59 (98%) examination centres.</p> <p>There was an official erratum at one (2%) examination centre.</p>  | <p>Rhodes Technical College (Kimberley)</p>   |
| Packaging and transport of answer scripts | <p>Scripts were counted and packed in a secured area at 57 (95%) examination centres; a decrease of 3% compared to November 2021.</p> <p>At College on Hills (Witbank) the scripts were counted and packed in one of the examination venues.</p> <p>At Middelburg and Nelspruit, the scripts were counted in the campus manager's office and an HOD office. This was not aligned with security and venue size requirements.</p>   | <p>College on Hills (Witbank)</p> <p>Middelburg<br/>Nelspruit</p>   |
|   | <p>Absentee forms were inserted at 60 (100%) examination centres.</p>   | <p>All examination centres monitored</p>  |
|   | <p>Only authorised personnel were present during the packing of scripts at 60 (100%) examination centres.</p>   | <p>All examination centres monitored</p>  |
|   | <p>The scripts were packaged in the sequence on the mark sheet at 60 (100%) examination centres.</p>  | <p>All examination centres monitored</p>  |
|   | <p>The number of scripts corresponded to the number on the wrapper at 60 (100%) examination centres.</p>  | <p>All examination centres monitored</p>  |
|   | <p>Scripts were sealed in the satchel provided at 59 (98%) examination centres; a 7% improvement compared to November 2021.</p> <p>At one (2%) of the examination centres the invigilator did not have enough official transparent bags, which resulted in four wrapped packs of scripts not placed in the official satchel.</p>  | <p>College on Hills (Secunda)</p>   |

| Criteria               | Findings  | Examination centres  |
|------------------------|---|--|
|                        | <p>The scripts were sealed in the presence of the monitor at 58 (97%) of the examination centres; a 6% improvement compared to the 91% in November 2021</p> <p>At two (3%) of the examination centres the scripts were not sealed in the presence of the monitor.</p>   | College on Hills (Secunda)<br>Pretoria   |
|                        | <p>The chief invigilators at 51 (85%) examination centres completed a daily situational report; an increase of 4% when compared to 81% in the November 2021 examinations.</p> <p>There was no evidence that the chief invigilator had completed a daily situational report at nine (15%) examination centres.</p> | As Salaam<br>Asherville<br>Centurion<br>College on Hills (Secunda)<br>College on Hills (Witbank)<br>KwaMashu<br>Kroonstad<br>Randfontein<br>Springfield FET College (Rustenburg)   |
|                        | Scripts were transported to a nodal point by authorised personnel at 60 (100%) examination centres.   | All examination centres monitored  |
| Monitoring by the DHET | <p>There was evidence of monitoring by the assessment body at 36 (60%) examination centres; a decrease of 16% when compared to 76% in November 2021.</p> <p>At 24 (40%) examination centres there was no evidence that the assessment body had monitored the examination centres during Umalusi's visit/s.</p>    | As Salaam<br>Athlone<br>Berea<br>Centurion<br>Chief Albert Luthuli<br>College on Hills (Secunda)<br>Kingdom Varsity College<br>Ladysmith<br>Langeni City College (Brits)<br>Mamelodi<br>Ncome<br>Newcastle Technology Centre<br>Perdekop<br>Rhodes Technical College (Kimberley)<br>Richtech<br>Rostec (Bloemfontein)<br>Rostec (Pretoria)<br>Rostec (Rustenburg)<br>Saint Ignatious College (Johannesburg)<br>Shingwedzi<br>Springfield FET College (Rustenburg)<br>Tseki<br>Umlazi BB<br>Vryheid |

### 15.3.1 Irregularities and Incidents Identified by Umalusi

Umalusi noted the following irregularities and incidents at examination centres:

- a. College on Hills (Secunda):
  - i. The spacing of desks in both examination rooms was not as per the examination regulations;
  - ii. Candidates entered the examination room from 08:35 until 09:00;
  - iii. There was no clock or timing device available in the examination rooms;
  - iv. The invigilators did not check calculators for compliance, nor did they verify the correctness of the information on the cover page of the answer books;

- v. The examination file was incomplete and was not available in the examination room;
- vi. The invigilators distributed the question papers at 09:00, which left no time for checking the question paper for technical accuracy or allowing the candidates to read the paper;
- vii. The chief invigilator indicated that the answer books were not stamped because the stamp was broken; and
- viii. The candidates were allowed to leave the examination venue during the last 15 minutes of the session.

**b. College on Hills (Witbank)**

- i. The centre did not have enough examination rooms to accommodate the 250 registered candidates. The site had six rooms that could accommodate approximately 110 candidates in one sitting;
- ii. A signed invigilation register was not available;
- iii. Invigilators did not check whether the candidates were in possession of cell phones or any other inadmissible material/equipment during the examination;
- iv. Calculators were not checked for compliance; and
- v. The invigilators distributed the question papers at 08:58, which left too little time to check the question paper for technical errors and for candidates to read the paper.

**c. Damelin City Campus (Pietermaritzburg):**

- i. As the examination centre was situated in the Central Business District (CBD) traffic noise levels affected the conduciveness of the environment;
- ii. The candidates were not seated in the examination room by 08:30 because the invigilators arrived at the venue at 08:31;
- iii. Calculators were not checked for compliance; and
- iv. The question papers were distributed to the candidates at 08:52, therefore there was insufficient time to check the technical accuracy of the paper and to allow the candidates' reading time.

**d. Groenpunt Prison:**

- i. The question papers were delivered at the examination centre at 10:00 from the nodal point after a late delivery from the examination body; and
- ii. The examination only commenced at 10:12 and ended at 13:20.

**e. Lichtenburg:**

- i. The Mathematics Literacy Level 3 Paper 2 was sent by email to the examination centre and was received at 08:14;
- ii. Printing of 110 copies of the eight-page question paper was concluded at 08:54 and the question papers were taken to the examination room in an envelope, sealed with staples, to be distributed to the candidates at 08:55; and
- iii. Candidates were given seven minutes' reading time and the writing commenced at 09:05 and ended at 12:05.

**f. Perdekop:**

- i. The three classrooms that were used for 87 candidates who wrote the examination did not have sufficient space for one metre distance between the desks;
- ii. On the day of the examination the electricity was not working as a fault occurred after the rains over the weekend, resulting in the candidates writing in natural light on an overcast day;
- iii. The candidates started entering the examination room at 08:30 and the last one entered at 08:55;
- iv. The seat numbers on the seating plan were duplicated and the chief invigilator had to intervene to place the students in vacant seats;
- v. The invigilators did not check calculators for compliance; and
- vi. The invigilators did not distribute the question papers on time; thus candidates had five minutes only to read the question papers.

**g. Saint Ignatious College (Johannesburg):**

- i. The centre did not have a copy of the official timetable on the file;
- ii. There was no authorisation letter available for personnel collecting the question papers and the examination centre did not keep a stock register;
- iii. There was no evidence of the appointment of invigilators;

- iv. Candidates entered the venue after 08:30 and no verification of admission letters/identity documents was done on admission to the examination room;
- v. The invigilators did not sign the attendance register;
- vi. No seating plan was available and thus it could not be verified if candidates were seated according to a seating plan;
- vii. The invigilator did not read the rules or check for cell phones or other material that could assist the candidates and did not check calculators for compliance;
- viii. The examination file was available but incomplete;
- ix. The invigilator arrived at 08:30 and did not check the technical accuracy of the paper, give the candidates reading time or read the rules; and
- x. The answer books were not stamped.

## 15.4 Areas of Improvement

The following areas of improvement were observed:

- a. Sufficient and suitable furniture was provided at 60 (100%) of the examination centres, an increase of 2% when compared to the November 2021 examinations;
- b. At 56 (93%) examination centres chief invigilators received training from the assessment body, an increase of 4% when compared with the November 2021 examinations;
- c. At 52 (95%) examination centres candidates were seated 30 minutes before the examination commenced, an increase of 14% when compared with 73% in the November 2021 examinations;
- d. The examination file was complete at 38 (63%) of the examination centres, an improvement of 50% compared to the November 2021 examinations;
- e. Invigilators arrived on time at 56 (93%) examination centres, an increase of 4% when compared to 89% in the November 2021 examinations;
- f. Candidates did not ask invigilators to clarify any aspect of the question paper at all (100%) examination centres, an improvement of 2% compared to 98% in the November 2021 examinations;
- g. Scripts were sealed in the satchels provided at 59 (98%) examination centres, a 7% improvement compared to the November 2021 examinations;
- h. The scripts were sealed in the presence of the monitor at 58 (97%) examination centres, a 6% improvement compared to 91% in November 2021; and
- i. The chief invigilators at 51 (85%) examination centres completed a daily situational report, an increase of 4% compared to 81% in November 2021.

## 15.5 Areas of Non-Compliance

The following areas of non-compliance were observed:

- a. In the preparation of examination rooms/venues it was found that:
  - i. In some examination centres examination rooms did not have sufficient space and candidates were not seated one metre apart (in all directions); and
  - ii. In some of the examination centres there were no seating plans and candidates were seated randomly.
- b. In the invigilation of examinations it was apparent at some examination centres that:
  - i. There was no evidence that the campus manager was appointed as chief invigilator;
  - ii. There was no evidence that the chief invigilators and invigilators had been trained;
  - iii. Invigilators did not arrive on time;
  - iv. Attendance registers were not signed by the invigilators;
  - v. Candidates were allowed to leave the examination room temporarily without any escort;
  - vi. Question papers were not distributed to candidates on time;
  - vii. Candidates were not given the required reading time;
  - viii. Invigilators did not verify that the information on the cover of the answer book was correct;
  - ix. Invigilators did not check the technical accuracy of the question papers;
  - x. The examination was not started at the time indicated on the timetable;
  - xi. Candidates were allowed to leave the examination venue in the last 15 minutes of the examination session;
  - xii. There was no relief invigilation timetable; and
  - xiii. The examination body had not monitored 40% of the examination centres at the time of monitoring by Umalusi.

## 15.6 Directives for Compliance and Improvement

The DHET is required to ensure that:

- a. Examination centres comply with the policy pertaining to the conduct, administration, and management of the examinations; and
- b. Examination centres strengthen invigilation processes by ensuring that:
  - i. Attendance registers are signed;
  - ii. Invigilators arrive on time at the venues;
  - iii. Question papers are distributed on time;
  - iv. Candidates are given regulated reading time;
  - v. Examinations start and end as per the time indicated on the timetable;
  - vi. Candidates who arrive after the stipulated time into the examination room/venue are not permitted; and
  - vii. Examination centres display seating plans, invigilation and relief timetables at all times.

## 15.7 Conclusion

The conduct, administration and management of the November 2022 NC(V) Level 2-4 and NATED Report 190/191 Engineering Studies N2-N3 examinations was of an acceptable standard and most of the examination centres monitored complied. Although some challenges were observed at some examination centres, these did not compromise the overall integrity and credibility of the examinations.

# CHAPTER 16 MONITORING OF MARKING CENTRES

## 16.1 Introduction

Umalusi monitored the marking centres of the November 2022 examinations for the National Certificate (Vocational) [NC(V)] level 4 and National Accredited Technical Education Diploma (NATED) Report 190/191 Engineering Studies N2-N3, as part of its quality assurance of assessment mandate. The purpose of this monitoring was to establish whether the Department of Higher Education and Training (DHET) had put in place the required systems and processes to ensure the integrity and credibility of the marking processes in accordance with approved guidelines and policies.

The DHET provided Umalusi with the following:

- Registration data that indicated the number of candidates enrolled for various subjects for the November 2022 examinations;
- Subjects to be marked at various marking centres;
- The location of the various marking centres, including the physical addresses; and
- The dates for the marking of the NC(V) level 4 and NATED Report 190/191 Engineering Studies N2-N3 November 2022 examination scripts.

This chapter reports on the findings from the monitoring of 15 DHET marking centres. It also acknowledges areas of improvement, highlights areas of non-compliance and provides directives for compliance and improvement.

## 16.2 Scope and Approach

The marking of the November 2022 examinations of NC(V) level 4 and NATED Report 190/191 Engineering Studies N2-N3 was conducted at 15 marking centres established by the DHET across eight provinces. Umalusi sent out staff members and monitors to monitor marking centres used by the DHET.

Data used to compile this report was gathered from on-site monitoring of the marking centres, as well as interviews and observations conducted by Umalusi staff and monitors, using an instrument designed for this purpose. The details of the monitored marking centres are provided in Tables 16A and 16B.

**Table 16A: Marking centres monitored by Umalusi staff members**

| Centre               | Province      | Date            |
|----------------------|---------------|-----------------|
| Asherville Campus    | KwaZulu-Natal | 5 December 2022 |
| East London Campus   | Eastern Cape  | 5 December 2022 |
| Tygerberg Campus     | Western Cape  | 5 December 2022 |
| Northdale Campus     | KwaZulu-Natal | 6 December 2022 |
| Potchefstroom Campus | North West    | 6 December 2022 |
| Thornton Campus      | Western Cape  | 6 December 2022 |
| Centurion Campus     | Gauteng       | 7 December 2022 |
| Nelspruit Campus     | Mpumalanga    | 7 December 2022 |
| Springs Campus       | Gauteng       | 8 December 2022 |
| Pretoria West Campus | Gauteng       | 9 December 2022 |
| Seshego Campus       | Limpopo       | 9 December 2022 |

**Table 16B: Marking centres monitored by Umalusi monitors**

| Centre               | Province     | Date            |
|----------------------|--------------|-----------------|
| Hillside View Campus | Free State   | 3 December 2022 |
| Bloemfontein Campus  | Free State   | 4 December 2022 |
| Mpondozankomo Campus | Mpumalanga   | 7 December 2022 |
| Struandale Campus    | Eastern Cape | 8 December 2022 |

### 16.3 Summary of Findings

The findings in Table 16C are presented according to the criteria used for the monitoring of marking centres, as prescribed by Umalusi.

**Table 16C: Findings at marking centres monitored by Umalusi staff and monitors**

| Criteria                             | Findings   | Marking centre (campus) |
|--------------------------------------|--|-------------------------|
| Preparation and planning for marking | At 13 marking centres the preparation and planning for marking was in order. The exceptions were two centres, as listed:   |                         |
|                                      | <ul style="list-style-type: none"> <li>I. The appointed chief data capturer declined the position and a new chief data capturer was appointed at short notice, without due process being followed;</li> <li>II. Many markers declined their appointment to mark NC(V) scripts and some markers did not report for training;</li> <li>III. There was no evidence of training the reserve markers (appointed late) before they commenced marking;</li> <li>IV. The attendance register template for marking personnel was poorly designed and did not assist in extracting required data, such as number of markers arriving on time; and</li> <li>V. The minutes of the training meeting were not available; the training manual in the marking centre file was used to verify that training took place.</li> </ul> | East London             |
|                                      | There was a delay in receiving some of the marking guidelines from the assessment body.  | Northdale               |
| Marking centre resources             | <p>Twelve marking centres with all necessary resources were found to be suitable for marking.</p> <p>The three marking centres listed below were lacking in some areas:</p>  |                         |

| Criteria                   | Findings  | Marking centre (campus)     |
|----------------------------|---|-----------------------------|
|                            | I. The parking area was not sufficient for all marking personnel using their own motor vehicles; and<br>II. Some marking personnel parked on the street.  | Asherville                  |
|                            | Accommodation and meals were not provided by the marking centre. This inconvenienced the marking personnel, who had to source their own accommodation and meals.  | Bloemfontein                |
|                            | The dedicated control room was not large enough to keep the NC(V) and NATED scripts.  | East London                 |
| Security measures provided | The security measures provided at 12 of the marking centres were appropriate.<br><br>At three centres some security measures required improvements:   |                             |
|                            | There was a need for surveillance cameras in the control room at two marking centres.   | Asherville<br>Mpondozankomo |
|                            | Two markers were seen using laptops in the marking venue.   | Nelspruit                   |
|                            | In spite of the above, there was some innovation to be applauded at one of the marking centres:<br><br>Some security officers, in plain clothes, were deployed at the marking centre.                             | Northdale                   |
| Handling of irregularities | The processes and procedures for handling irregularities as set out by the DHET were observed at 13 marking centres.<br><br>Two listed centres did not adhere fully to the irregularity processes and procedures: |                             |
|                            | The centres did not keep a record book to report on internal irregularities.  | East London<br>Springs      |



| Criteria  | Findings  | Marking centre (campus)   |
|---|---|---|
| Monitoring by the assessment body                   | There was evidence of monitoring by the assessment body at 13 marking centres.  |   |
|   | At seven marking centres, as listed, the monitors from the assessment body left a report detailing their findings.  | Bloemfontein<br>Nelspruit<br>Potchefstroom<br>Pretoria West<br>Springs<br>Struandale<br>Tygerberg |
|   | The monitors from the assessment body did not leave a report at six of the listed marking centres.  | Asherville<br>East London<br>Hillside View<br>Mpondozankomo<br>Northdale<br>Seshego               |
|   | At the time of the Umalusi visit there was no evidence of monitoring by the assessment body at two of the listed marking centres.   | Centurion<br>Thornton   |
| Quality assurance procedures and capturing of marks | <p>At most marking centres visited by Umalusi monitors and staff:</p> <ol style="list-style-type: none"> <li>i. Examination assistants checked that marks were correctly totalled and transferred to the front pages of scripts and the mark sheets;</li> <li>ii. The system for capturing marks at the marking centres was quality assured by the use of a double-entry system, where one official captured and another verified;</li> <li>iii. The capturing coordinator rechecked the captured data after the capturers had rechecked each other's work; and</li> <li>iv. A separate room equipped with computers was used for capturing the marks at all marking centres.</li> </ol> <p>Only one marking centre, as listed, did not comply with all requirements for quality assurance procedures for mark capturing:</p> |   |
|   | On the day of the Umalusi visit, the newly appointed chief data capturer was absent and data capturers were carrying out their duties unsupervised.   | East London   |

| Criteria | Findings   | Marking centre (campus) |
|----------|--|-------------------------|
| Reports  | <p>At most marking centres:</p> <ol style="list-style-type: none"> <li>The markers made notes to augment the qualitative report;</li> <li>The chief markers completed qualitative reports after the marking processes;</li> <li>The internal moderators completed qualitative reports;</li> <li>There was a system in place to control the receipt of qualitative reports; and</li> <li>The deputy marking centre manager: academic quality assured all the submitted reports.</li> </ol> <p>Only one marking centre, as listed, did not follow the reporting procedures strictly:</p> |                         |
|          | <ol style="list-style-type: none"> <li>The templates for the daily recording of markers were not used as working documents; and</li> <li>The chief markers did not collect markers' notes daily.</li> </ol>  | East London             |

### 6.3.1 Marking Concessions

Umalusi received 18 marking concession requests for the November 2022 examinations: 13 for NC(V) and five for the NATED Report 190/191 Engineering Studies N2-N3 examinations.

Umalusi staff and monitors were provided with a list of marking concessions, as requested by the DHET, for the November 2022 examinations of NC(V) level 4 and NATED Report 190/191 Engineering Studies N2-N3; to ensure that the marking centres abided by the decisions/verdicts (marking concessions) during their marking processes.

Umalusi monitors and staff found, during monitoring, that all marking centres marked strictly according to the decisions/verdicts of marking concessions for the affected subjects.

## 16.4 Areas of Improvement

Umalusi staff and monitors observed, and noted, the following:

- At the Bloemfontein marking centre:
  - The Marking Centre Manager and markers reported on time and maintained good discipline in the examination venues; and
  - More signage was posted outside the marking centre, which provided clear directions to persons using the respective venues.
- The Hillside View and Mpondozankomo marking centres maintained good time management, engaged in comprehensive training and welcomed the markers with enthusiasm;
- The Nelspruit marking centre provided meals for the marking personnel. This practice ensured that all marking personnel remained within the confines of the marking centre at all the times and no time was wasted leaving the campus to obtain meals;
- Internet connectivity at the Asherville, Mpondozankomo and Northdale marking centres was good. This was beneficial to the marking centres as it facilitated quick communication and downloading and uploading of files; and

- e. At the Hillside View marking centre:
  - i. Colour codes were used to describe marking personnel: red tags for managers and white tags for markers;
  - ii. The security officers were familiarised with the coding system and checked all movements; and
  - iii. Surveillance by security officers was efficient and South African Police Services (SAPS) members were on site to support them.

## 16.5 Areas of Non-Compliance

The Umalusi monitors and staff noted the following areas of non-compliance:

- a. At the East London marking centre the following irregularities were identified:
  - i. The appointment of staff, without due process being followed;
  - ii. The absence of key staff during marking sessions;
  - iii. Data capturers carrying out their duties unsupervised;
  - iv. Some markers not reporting for training;
  - v. The attendance register template for marking personnel was poorly designed;
  - vi. The minutes of the training meeting was not available at the marking centre;
  - vii. The dedicated control room was not large enough to accommodate (NC)V and NATED Report 190/191 Engineering Studies N2-N3 scripts;
  - viii. The template for the daily recording of markers was not used as a working document; and
  - ix. The chief markers did not collect markers' notes each day.
- b. The parking area at the Asherville marking centre was not sufficient for all marking personnel using their own vehicles;
- c. There was a need for surveillance cameras in the control room at the Asherville and Mpondozankomo marking centres;
- d. The East London and Springs marking centres did not keep a record book to report on internal irregularities;
- e. The Occupational Health and Safety (OHS) certificates of compliance at the Bloemfontein and Hillside View marking centres had expired more than three years prior and are in urgent need of renewal; and
- f. At the Nelspruit marking centre two markers were seen using laptops in the marking venue.

## 16.6 Directives for Improvement and Compliance

The DHET must ensure that:

- a. Marking guidelines are supplied to the marking centres on time;
- b. Due process is followed when appointing key marking personnel;
- c. There are contingency measures (reserve markers) in place to account for marking personnel declining appointments at short notice; and that reserve markers receive training;
- d. All marking centres comply with prescribed regulations and that the marking centres with gross violations be closely monitored; and
- e. All question papers and accompanying marking guidelines be thoroughly moderated to curb the marking concessions.

## 16.7 Conclusion

All the marking centres monitored were adequately prepared for the marking processes; with the exception of the East London marking centre, which experienced challenges.

All marking centres were capable of handling irregularities efficiently, by adhering to processes and procedures set out by the assessment body. In addition, the quality assurance processes and reporting was effective across all marking centres.



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