# Quality Assurance of the 2015 National Senior Certificate (NSC) Examinations and Assessment of the Independent Examinations Board (IEB)

UMALUSI

Council for Quality Assurance in
General and Further Education and Training

# QUALITY ASSURANCE OF THE 2015 NATIONAL SENIOR CERTIFICATE (NSC) EXAMINATIONS AND ASSESSMENT OF THE INDEPENDENT EXAMINATIONS BOARD (IEB)

## DECEMBER 2015

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# EXECUTIVE SUMMARY

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

The Independent Examination Board (IEB) is one of the assessment bodies whose assessment programmes are moderated, verified and quality assured by Umalusi. This report presents the findings reported by Umalusi staff, external moderators and monitors on aspects of the IEB assessment programmes and examinations. The information contained in this report serves to inform the Umalusi Council of the processes followed, as well as the areas of good practice and the areas of concern identified during the monitoring, moderation and verification. Based on this information, the Council can take informed decisions regarding the formulation of directives for compliance and improvement, and approval of the release of the results of the NSC examinations as administered and presented by the IEB. Nine aspects of the IEB 2015 assessment and examinations have been quality assured and reported on by Umalusi staff, moderators and monitors.

This report comprises nine chapters. Each chapter provides summaries and analyses of the findings of the moderation processes:
- Chapter 1: Moderation of Question papers
- Chapter 2: Moderation of school-based assessment (SBA)
- Chapter 3: Monitoring of the state of readiness
- Chapter 4: Monitoring of writing
- Chapter 5: Monitoring of marking
- Chapter 6: Marking guidelines discussion
- Chapter 7: Verification of marking
- Chapter 8: Standardisation and Resulting
- Chapter 9: The Status of Certification of the National Senior Certificate, 2014/2015

The moderation of question papers and the related marking guidelines for the final NSC examination in October/November is carried out annually. The purpose of the moderation is to ensure that the question papers:
- test the content area adequately,
- sample the total content area that has to be assessed based on the weighting prescribed in the approved assessment guidelines and curriculum policies,
- measure the knowledge or abilities it claims to measure, and
- maintain consistent standards and rigour over the years.
- Status of Certification

The question paper and marking guideline moderation of the IEB was conducted between March and August 2015. During this process, 79 question papers were moderated for the November 2015

NSC examinations and 30 papers for the March 2016 supplementary examinations.

The approval of a paper is determined by the level of compliance with the quality indicators contained in the Umalusi moderation instruments. The moderation found that the setting and internal moderation of question papers were generally good. However, some papers required more than two moderations before final approval. The percentage of IEB papers for the November 2015 and 2016 supplementary examinations that were approved at first moderation amounted to 45%, with 41% of papers being approved at second moderation. A comparative analysis of the November 2015 NSC and March 2016 supplementary examination revealed a high correlation between the standards of the two sets of papers, with a compliance rate of above 90% with the Umalusi quality indicators at first moderation.

The next aspect of assessment to be subjected to Umalusi moderation was the school-based assessment (SBA). The moderation was conducted in October and December 2015 during the IEB regional and national moderation processes respectively. The SBA moderation requires an evaluation of teacher files and evidence of learner performance to determine the appropriateness, fairness, validity and reliability of assessment practices. This was done with teachers' files and evidence of learners' performance from schools affiliated to the IEB.

The IEB standards are exceptional in many respects. However, pre-and post-moderation in some of the sampled schools seemed to be lacking and, if done, was done with little rigour in many schools. The moderation of tasks is essential for maintaining quality standards and needs to be addressed by the IEB. In eight out of fourteen of the subjects monitored regionally, internal moderation was noted as either lacking overall or not evident at the different levels of moderation. This was also noted in one of the nationally moderated subjects.

The other aspect of the assessment process undertaken by Umalusi was the monitoring of the writing of the examinations. The purpose of this exercise was to ensure that verifiable security is maintained prior to, during and after the writing of the examinations. Umalusi monitored a sample of 25 examination centres around South Africa. The IEB continues to enhance the safety and security of examination materials through the provision of electronic lockable security bags to their member schools. The exam centres complied in the main with the requirements as prescribed in the IEB examination policy document and the environment was found to be very conducive to the writing of examinations. Every effort was made to ensure that noise levels were kept to a minimum and the lighting and ventilation were good.

Three IEB marking centres in Gauteng were selected for monitoring on 9 December 2015. At all three centres there was clear evidence of planning for marking. The marking centre managers were in possession of well-developed marking plans, thus enabling the smooth conduct of the marking process. All marking personnel arrived on time at the marking centre.
There were adequate security personnel to control the flow of visitors to the centres except in one instance, which is mentioned in the report. The IEB has developed a document that was shared with

all markers that outlined procedures to be followed in the event of an irregularity being suspected. At the time of monitoring there were two alleged cases of irregularities that still had to be confirmed.

The marking guideline discussions for the IEB were held for 12 subjects, consisting of 25 papers, which were written during the November 2015 examinations. The IEB marking guideline discussions were chaired either by the chief marker or the examiner, who guided and directed the process. As part of standardisation, the panel members marked a sample of scripts, which were then discussed and used to inform the final marking guidelines.

Umalusi's verification of marking for the IEB took place on-site for all 12 subjects verified. The findings reflect evidence of the meticulous way in which the IEB conducts its marking. The marking process could not be faulted, except in Business Studies, where the moderator was not fully satisfied with the details of the marking guideline.

As concerns standardisation and resulting, the subject structures were verified and approved and the electronic data sets were verified before the final standardisation booklets were printed. The following data sets were verified and approved after several moderations: the statistical distribution, the raw mark distribution and the graphs per subject. The pairs analysis and the percentage distribution per subject were also verified and approved.

Finally, the report provides an overview of the status of certificates, as well as the types and number of certificates, issued by Umalusi to the IEB during the examination period of November 2014 to March 2015.

# Abbreviations

| | |
|---|---|
| CAPS | Curriculum and Assessment Policy Statement |
| CAT | Computer Applications Technology |
| CEO | Chief Executive Officer |
| EA | Examination Assistant |
| EGD | Engineering Graphics and Design |
| EM | External Moderator |
| FAL | First Additional Language |
| GENFETQA | General and Further Education and Training Quality Assurance |
| HL | Home Language |
| IM | Internal Moderator |
| IT | Information Technology |
| KZN | KwaZulu-Natal |
| MCM | Marking Centre Manager |
| NQF | National Qualification Framework |
| NSC | National Senior Certificate |
| P1, P2, P3 | Paper 1, Paper 2, Paper 3 |
| SAG | Subject Assessment Guideline |
| SAIC | School Assessment and Irregularities Committees |
| SAL | Second Additional Language |
| SBA | School- Based Assessment |
| Umalusi | Council for Quality Assurance in General and Further Education and Training |

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# Chapter 1

# Moderation of Question Papers

## 1.1     INTRODUCTION AND PURPOSE

The moderation of examination question papers is conducted by Umalusi every year for each exit examination. Trained moderators, who are subject specialists, are deployed for this process. The moderation is conducted to ensure that quality standards are maintained in all assessment practices and that the examination question papers and the accompanying marking guidelines are correct, fair, valid and reliable; have been assembled with rigour; and comply with the policies of the Curriculum and Assessment Policy Statement (CAPS) and the Independent Examination Board (IEB) Subject Assessment Guidelines (SAGs).

This chapter reports on the moderation of the examination question papers and marking guidelines for the November 2015 and March 2016 examination period. The report begins by indicating the total number of examination papers submitted to Umalusi for moderation and the number of times that each paper was moderated before its approval. It then summarises the findings obtained with regard to the overall level of compliance of the IEB examination papers. The report concludes by highlighting areas of good practice, areas of concern and directives for compliance and/or improvement for future processes. Where possible, the findings from the 2015 end of year examination and the 2016 supplementary question paper are compared to the findings of the previous examination period of 2014/2015. This comparison is undertaken in order to assess the levels of IEB compliance with the previous years' directives and also to assist Umalusi in assessing the impact of its quality assurance processes.

## 1.2     SCOPE AND APPROACH

*Table 1.1 Totals of examination papers moderated for the 2014/2015 and 2015/2016 examination period*

| Examination period | 2014/15 | 2015/16 |
|---|---|---|
| November papers | 76 | 79 |
| March supplementary | 73 | 30 |
| Totals | 148 | 109 |

The submissions for 2014 and 2015 varied, with the number of papers presented by the IEB in 2015 increasing. In 2014, 76 examination papers were submitted, whereas 79 were submitted in 2015. Two subjects, Agricultural Management Practices and Agricultural Sciences, were offered by the IEB for the first time in 2015 and account for the new question papers. Compared to the March 2015 supplementary submissions, where 73 papers were presented, only 30 papers were submitted for the March 2016 supplementary examinations.

**The Moderation Instrument**

Question Papers and Marking Guidelines (2014), shown in Figure 1.1 below.

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

*Figure 1.1 The Umalusi instrument for the moderation of question papers, 2015*

The instrument is divided into three parts: A, B and C. Part A focuses on the question paper, Part B on the marking guideline and Part C captures the overall impression of both the question paper and the marking guideline. Each section consists of broad criteria and specific indicators, as shown in Figure 1.1.

**Question Papers Approved at each Level of Moderation**

*Table 1.2 Total percentage of question papers approved at each level of moderation*

| Moderation level | 2014/15 | 2015/16 |
|---|---|---|
| 1st moderation | 52% | 45% |
| 2nd moderation | 37% | 46% |
| 3rd moderation | 11% | 7% |
| 4th moderation | 0% | 2% |

Table 1.2 shows that there has been a decrease in the number of papers approved at first moderation for the 2015/2016 examination period when compared to the 2014/2015 examination period. 52% of the question papers were approved at the first moderation in the 2014/2015 examination period, whilst only 45% were approved at the same level in the 2015/2016 examination period, thus indicating a decrease of 7% of the question papers. This might be attributed to the decrease in the number of

supplementary examination question papers submitted for external moderation in 2015/16. In addition, the number of question papers approved at the fourth moderation increased from 0% to 2% in the two examination periods. There is therefore a need for the IEB examination panels to ensure that the technical aspects of the question papers are fully attended to before the first submission to avoid delays in approval.

**Comparison of the November and March Papers**

It is Umalusi's mandate to ensure that the papers set for November and March are given the same rigour and adhere to the same quality standards. This is done to ensure that all candidates, irrespective of the examination they write, are fairly assessed.

In order to assess the level at which this equity was achieved in the IEB papers during the current examination period, this section of the report compares the percentage of the November 2015 and the March 2016 papers that complied with the criteria. It should be noted here that because the total number of papers submitted for these two examination sessions was not the same (see Table 1.1), it was deemed statistically unreasonable to compare all subjects. Therefore, the graph in Figure 1.2 represents a comparison of the 30 common papers submitted for both November 2015 and March 2016.

### Nov-15 and Mar-16 Question Papers for Compliance per Criteria

| | Tech-nical Criteria | Inter-nal Mode-ration | Content Cove-rage | Text Selec-tion | Cog-nitive Skills | Lan-guage Bias | Pre-dicta-bility | Memo De-velop-ment | Con-formity with paper | Accu-racy and Relia-bility | Overall Impres-sion |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 |
| Nov-15 | 93 | 94 | 93 | 94 | 95 | 96 | 95 | 90 | 85 | 84 | 82 |
| Mar-16 | 91 | 95 | 89 | 93 | 97 | 92 | 95 | 90 | 79 | 84 | 80 |
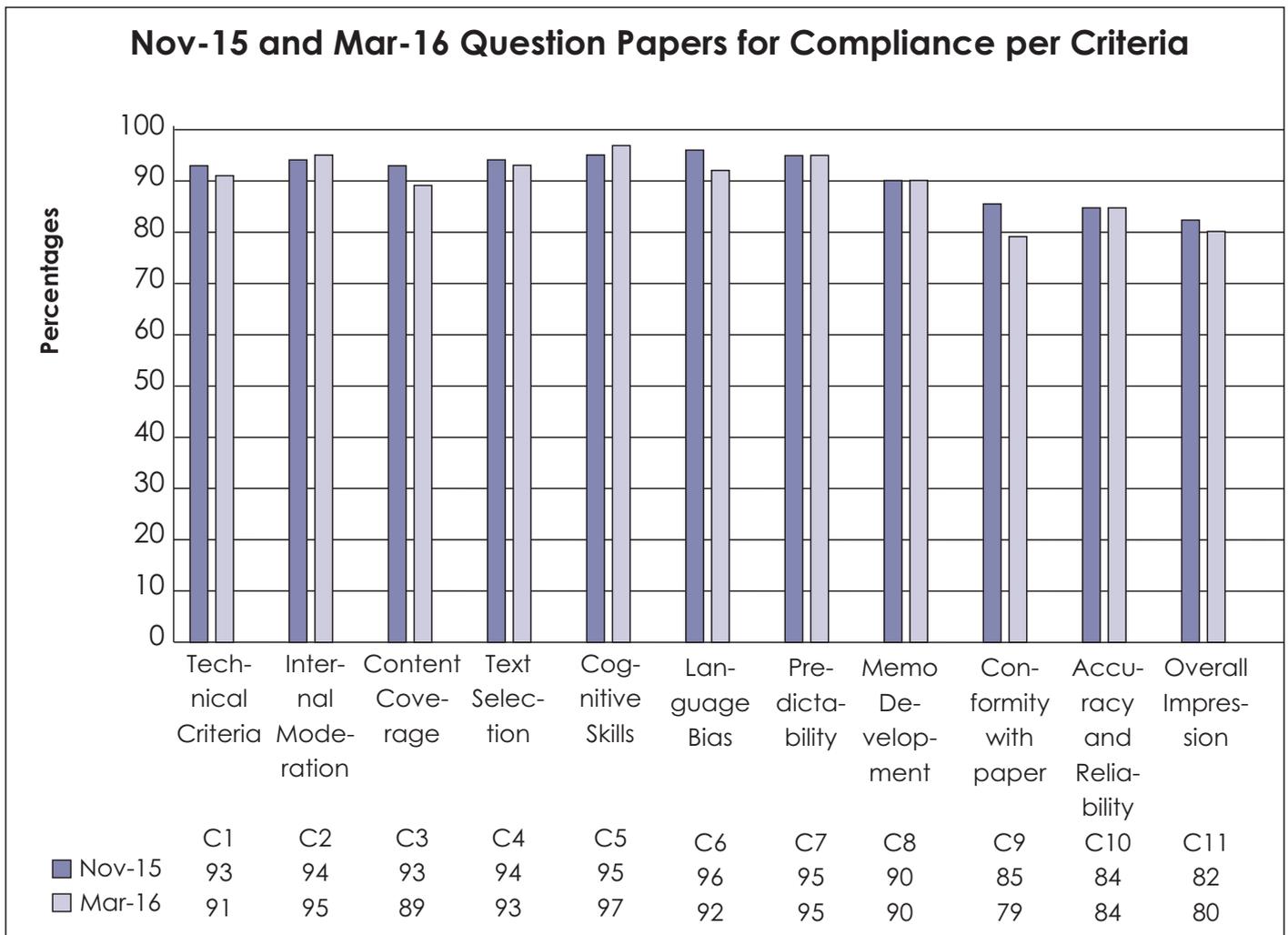
*Figure 1.2 Percentage compliance of Nov '15 and March '16 papers per criterion*

Figure 1.2 above depicts the 11 criteria for external moderation of the question papers and marking guidelines, with the first seven criteria focusing on the moderation of question papers; and the next four on the marking guideline. The last criterion captures the overall impression. The compliance percentages were calculated based on the Umalusi moderators' negative or positive responses to each of the one hundred and eleven (111) indicators included in the moderation instrument. For example, 93% of the November papers were found to be compliant as opposed to 91% of the March papers. Figure 1.2 provides evidence of the high standards maintained in the setting of the IEB question papers, except for the criterion, conformity of the marking guideline with question paper which was 79%, in the March 2016 examination. All the Umalusi criteria were satisfied at above 80%. Although 100% would have been desirable, these are commendable levels. However, when looking at individual papers, there were papers which complied at 100%.

## 1.3    SUMMARY OF FINDINGS

### Compliance of Question Papers to the Moderation Criteria for the November and March Examinations at First Moderation

In the following discussion, each criterion is discussed separately to show where papers were found to be non-complaint. The discussion includes the number of subjects that were found to have faulted on each indicator, the frequency with which this happened, examples of papers and the observations made by the Umalusi moderator relating to the specific indicator.

Since the instrument has a total of 110 indicators, it is not practical to focus on each indicator for each of the 109 papers; for that reason, a summary of the findings is presented and, where applicable, supported by selected examples. Should further clarity be required, the individual reports on each question paper can be made available.

The first section discusses the question-paper-related indicators within a criterion (C) and the next focuses on the marking guideline-related criteria.

### Technical Aspects (Criterion 1)

This criterion focuses on technical aspects such as the paper layout, the numbering, and the inclusion of all documents relating to the setting of the question paper. As noted in Figure 1.2 above, for this criterion alone, **compliance** was found to be at 93% for the November and 91% for the March question papers. In other words, for this criterion the satisfaction level achieved by all question papers combined was at 92%. A closer analysis, shows that papers were only found to be unsatisfactory on nine (9) of the fourteen (14) indicators in this criterion. The specific indicators on which compliance was low focus on clarity and quality of diagrams/illustrations and relate to the face validity of the question paper.

It became clear that it was largely the same papers, that is, both the November and the March sets of

papers for a subject that were found to be non-compliant. For example, English HL P2 was non-compliant on indicator 2 for both March and November; similarly, Life Sciences P1, P2 & P3 were found to be non-compliant for both examinations.

Some of the gaps identified relate to poor question numbering, and layout for enhancing the clarity of instructions and diagrams. Gaps worth mentioning included non- examinable content (Physical Sciences). Three papers, Latin SAL P1, Life Science P1 & P2 and Mathematical Literacy P2, were of a longer length than the learners would have been able to cope with in the time allowed. While it is acknowledged that most of the problems found under this criterion were largely editorial and could be easily addressed, the non-compliance affected the overall face validity of some of the papers at first appearance. For example, except for Consumer Studies, the compliance percentage was lowered by other factors; papers such as Agricultural Management Practices, Civil Technology and Tourism had a significant number of negative values on this criterion which affected their overall compliance.

**Internal Moderation (Criterion 2 )**

This section of the moderation instrument uses four indicators and is aimed at ensuring that quality has been assured and that relevant internal moderation has taken place. As noted in Figure 1.2 above, compliance at 95% is considered acceptable for this criterion, especially during the first level of moderation.

The analysis shows that the indicator relating to the quality of the internal moderator's inputs received the highest non-compliance values. Twelve of the November 2015 papers and six of the March 2016 papers were found to be lacking in this regard. These included Agricultural Management Practices, Agricultural Sciences P1 & P2 and Mathematical Literacy P1 & P2. In the Mathematical Literacy P1 and Mathematics P2, in particular, it was noted that the imbalance in the weighting of questions had not been picked up by the internal moderator. Despite this, this criterion could be said to be the second strongest in compliance overall.

An improvement in compliance with this criterion is noted compared to the 2014 report, where one of the observations was that the internal moderator's reports were missing and that some papers were not addressing the internal moderator's comments. In the current (2015) papers, despite the quality of the moderation found in some, most papers submitted included an internal moderator's report.

**Content Coverage (Criterion 3)**

The purpose of this criterion is to assess whether papers have complied with the topic coverage as stated in the curriculum and that the requirements prescribed in the SAGs have been followed. Five indicators were used to assess compliance.

A close analysis of the specific indicators shows that three of the November 2015 papers did not

provide a satisfactory analysis grid. These included Agricultural Sciences, Agricultural Management Practices and Business Studies; the last three making up the three papers that erred similarly in the March 2016 exam papers. There also other papers which did not adequately cover the prescribed topics, making this an area which requires serious attention.

For this criterion, compliance was at 93% for the November papers and 89% for the March papers. Although these percentages could be said to be low, the 11% non-compliance is the highest in comparison with what was achieved in the other indicators of the question-paper-related criteria. Except for Latin SAL P1, which was unsatisfactory in integrating appropriate standards, the weakness in the other 10 papers was in providing an analysis grid showing how questions and sub-questions are linked (Agricultural Management Practices, Agricultural Science P1 & 2 and Business Studies P2). These and the rest of the papers (Life Sciences P1 & 2 and Mathematics P2) were found not to comply with topic coverage as prescribed IEB SAGs. Looking back at the 2014 report (page 5), these problems still persist, albeit in different subjects for 2015.

**Text Selection, Types and Quality of Questions (Criterion 4)**

This is the longest criterion in the instrument, with a total of 22 indicators. It was found that 12 of the 22 indicators, were not complied with. Areas of non-compliance were noticed in five of these by one paper, two by two papers and the rest by more than two papers. It raises issues of variety, ambiguity, appropriateness, mark allocation, phrasing and word choice and clarity.

As noted in Figure 1.2, compliance with this criterion was found to be 93% for the March papers. The third indicator had the largest number of papers that did not comply and measures the correlation between mark allocation, level of difficulty and time allocation. Nine papers attracted a 'No' response for at least one of the listed options. These were Agricultural Management Practices, French SAL P2, Latin P1 & P2, and Mathematical Literacy P1 & P2, Mathematics P1 & P2. This indicator relates to a paper's ability to offer a balanced test so as not to demand more than is required or require more than can be expected from students.

**Cognitive Skills (Criterion 5)**

With five quality indicators, the purpose of this criterion is to assess whether the cognitive levels at which questions are pitched have been indicated, that they are appropriately matched to Bloom's or any other taxonomy applicable to the specific subject, and that the questions are at an equal level of difficulty especially if appearing in one section.

As noted in Figure 1.2, compliance was found to be 95% in November and 97% in the March papers for this criterion. Thus, this is the second highest rating for compliance in November and the highest in March.

The analysis shows that five out of thirty and four out of seventy nine papers of the March and

November respectively did not comply with this criterion in terms of whether the analysis grid shows the cognitive levels. More papers, ten out of seventy nine, either did not provide or did not use the taxonomies appropriately. These papers were Agricultural Management Practices, Agricultural Science, Latin SAL P1, Latin FAL P1, Life Sciences P1, P2 & P3, Mathematical Literacy P1 & P2, and Mathematics P1. This problem was noted as prevalent in the 2014 papers, especially the supplementary papers.

**Language Bias (Criterion 6)**

This criterion, which uses eight indicators, aims at establishing whether the use of language is grammatically correct, the register and level of complexity is at the level of the target candidates, that there are no biases and that special needs students are accommodated.

As noted in Figure 1.2, compliance with this criterion was at 92% for the March papers and 96% for the November papers. The 15 papers which fell short of compliance included 10 subjects from November and March combined; namely, Afrikaans FAL P1 & P2, Agricultural Management Practice, Computer Application Technology P1 & P2, Consumer Studies (slang and descriptions not aligned with Consumer Studies terminology), Dance Studies (extensive grammatical errors), French SAL (foreign terms or expressions which are not part of an everyday vocabulary), Information Technology, Life Sciences P1, P2 & P3 (a lot of complex reading required in many questions), Latin SAL P1 & P2, Mathematics Literacy P1 & P2 and Physical Sciences P1 & P2.

Overall this criterion would seem to have been fairly well managed, with 96% compliance in November and slightly lower at 92% in March.

**Predictability of Question Paper (Criterion 7)**

The purpose of this criterion is to assess the level at which papers are original, and have not been carried over from at least the previous three years' examination papers. Only three indicators are used.

The analysis reflects that 12 of the 109 papers did not comply, making this one of the least problematic criteria in terms of non-compliance. This corroborates the 5% non-compliance rating found (see Fig. 1.2) above for this criterion in both the November and March papers. The papers which were found to have used past examinations questions were Latin SAL P1 & P2, Mathematical Literacy P1 and Physical Sciences P1. The Xitsonga papers were the only ones that were marked down for an inability to interpret the guidelines on how to use the prescribed material. Only Dramatic Arts and Mathematical Literacy P1 were noted as not innovative in question formulation.

**Marking Guideline Development (Criterion 8)**

This section of the report presents the findings of the analysis of the marking guideline development

criteria. This set of criteria was found to be less compliant than the first seven question paper criteria.
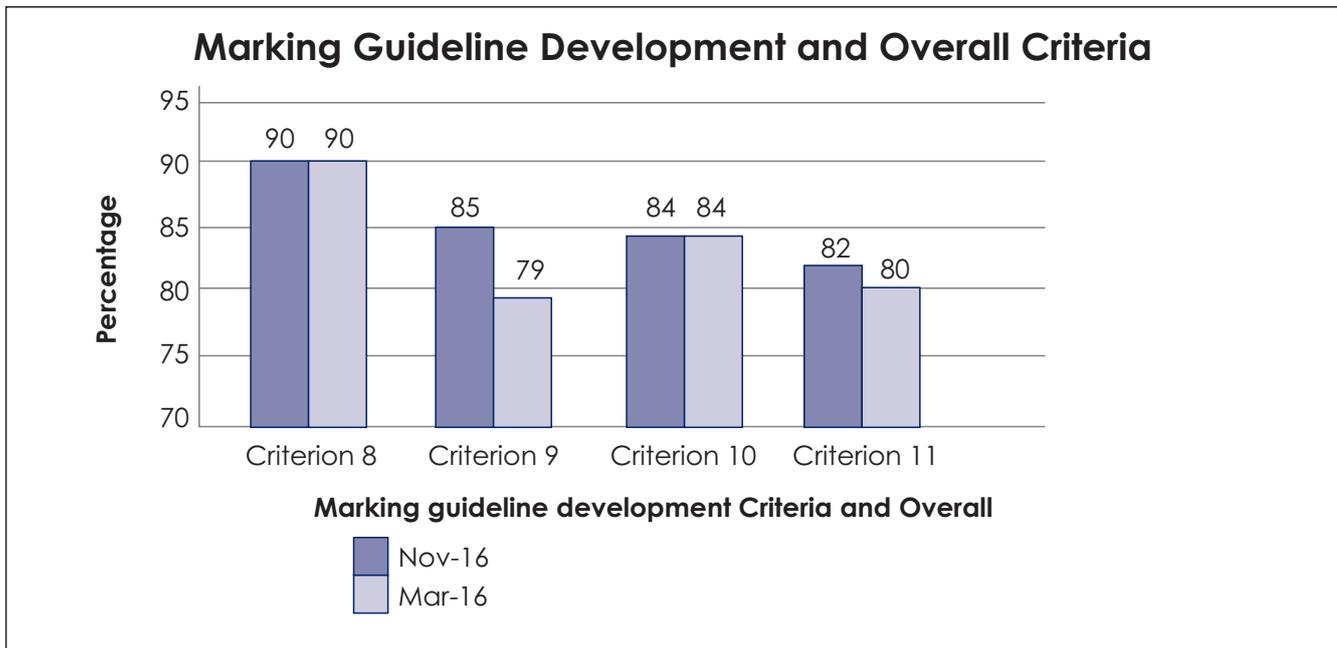


*Figure 1.3 Percentage compliance in the marking guideline development criteria for November 2015 and March 2016*

The three indicators under this criterion pertain to the development of the marking guideline, and its accuracy, reliability and alignment with the question paper. Interestingly, and without necessarily comparing these, the percentage compliance level in this criterion was 90% for both the November and March papers. In most of the papers, the following comment was made: 'the marking guidelines were found to be inaccurate'. In the November papers alone, ten out of eighteen papers', marking guidelines were found to be inaccurate (Agricultural Management Practices, Agricultural Sciences P1 & P2, Business Studies P2, History P1 & P2, Information Technology P1, Sepedi HL P1, siSwati FAL P1 & P2). The same comment was made for five (Agricultural Management Practices, Agricultural Sciences P1 & P2, and History P1 & P2) out of six of the March papers. Other papers in the November set, such as Dance Studies P1, French SAL P1, Xitsonga P1 & P2, Consumer Studies P1 and Afrikaans FAL P1, were faulted for not being potentially ready to facilitate marking because marking guidelines were not fully aligned with the question paper.

**Conformity with Question Paper (Criterion 9)**

This criterion has three indicators which focus on the degree to which the marking guideline is aligned to the question paper in terms of language and mark allocation. This group of papers was found not to comply with these expectations.

The papers which did not satisfy the different indicators can be summarised as follows.

*Table 1.3 Papers not satisfying the indicators for criterion 9*

| Specific indicator | November 2015 papers | March 2016 papers |
|---|---|---|
| **9.1 The marking guideline corresponds with the question paper** | **8** = Civil Technology, Consumer Studies P1, isiZulu P1, Life Sciences P1, P2 & P3, Sepedi P1 & P2 | **7** = Latin SAL P1 & P2, Life Sciences P1, P2 & P3, Mathematical Literacy P2, Physical Sciences P2 |
| **9.2 The marking guideline matches the command words in the questions** | **9** = Civil Technology, Consumer Studies P1, Dance Studies, Life Sciences P1, P2 & P3, isiXhosa FAL P1, Mathematics, Literacy P2, Tourism P1 | **4** = Life Sciences P1, P2 & P3, Mathematical Literacy P2 |
| **9.3 The marks for each (sub-) question shown in the marking guideline correspond with the marks in the question paper** | **5** = Civil Technology, Computer Applications Technology P1 & P2, Dance Studies, isiXhosa FAL P1 | **2** = Mathematical Literacy P2, Physical Sciences P2 |

**Accuracy and Reliability of the Marking Guideline (Criterion 10)**

The 12 indicators under this criterion focus on the ability of the marking guideline to facilitate marking. This is deemed to be possible if the marking guideline is free of errors, it is complete, it allocates marks in line with the cognitive demands of each question, it makes allowance for discriminating the low and high performers, and it allows for relevant alternatives. The analysis has shown that many of the papers for November and March combined were not fully compliant.

**The Overall Impression (Criterion 11)**

As the name suggests, this criterion assesses the overall impression of the paper and the marking guideline on first moderation on the basis of the external moderators' conclusions. Six indicators are used to assess this aspect.

Looking at the papers in totality, it was found that four out of 79 (November) and three out of 30 papers (March) were not in line with policy guidelines. These were Agricultural Management Practices, Agricultural Sciences P1 & P2 and Consumer Studies. In the case of Consumer Studies, the moderator noted that it did not comply with the first five indicators.

The findings emphasise the observations that the marking guideline development for the IEB papers is an issue of concern. Compliance with the marking guideline related indicators was lower than the question paper related indicators.

Looking at the findings in totality, it is clear that the IEB standards were very high and in some cases exceptional, and also that these quality standards were maintained for both the November and

March examinations. Apart from criterion 1 and 5, in terms of which the March papers were rated as being more compliant than the November papers, with a variance of 10% and 11% respectively, in all the other criteria, the percentage differences were below 10%.

## 1.4    AREAS OF GOOD PRACTICE

- The levels at which some of the IEB papers are complying with the Umalusi criteria are very high and generally impressive.
- It is commendable that the standard of most of the papers between examination periods is comparable. This shows that the same rigour is being applied across the November and March papers by the IEB.
- The IEB is commended for the huge improvement in the submission of the internal moderators' reports as compared to the previous year.

## 1.5    AREAS OF CONCERN

- The quality of the internal moderator's inputs received the highest non-compliance values. Twelve of the November 2015 papers and six of the March 2016 papers were found to be lacking in this regard. These included Agricultural Management Practices, Agricultural Sciences P1 & P2 and Mathematical Literacy P1 & P2. In the Mathematical Literacy P1 and Mathematics P2, in particular, it was noted that the imbalance in the weighting of questions had not been picked up by the internal moderator.
- Ten out of eighteen question papers in the November examinations had inaccurate marking guidelines. (Agricultural Management Practice, Agricultural Sciences P1 & P2, Business Studies P2, History P1 & P2, Information Technology, Sepedi HL P1, siSwati FAL P1 & P2), and five out of six March papers (Agricultural Management Practices, Agricultural Sciences P1 & P2, and History P1 & P2). Some marking guidelines were not aligned to the question papers in the November 2015 examinations (Dance Studies P1, French SAL P1, Xitsonga P1 & P2, Consumer Studies P1 and Afrikaans FAL P1).
- The same papers which were identified as non-compliant in the previous year seem to have reappeared in the current exam period examination question papers. Ten out of seventy nine papers, either did not provide or did not use the taxonomies appropriately. These papers were Agricultural Management Practices, Agricultural Sciences, Latin SAL P1, Latin FAL P1, Life Sciences P1, P2 & P3, Mathematical Literacy P1 & P2, and Mathematics P1.
- Some of the non-compliance areas, such as layout, clarity of instruction and diagrams, should ideally be dealt with at the internal moderation. Some papers had a significant number of negative values on this criterion which affected their overall compliance (Agricultural Management Practices, Civil Technology and Tourism).

## 1.6    DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

The IEB has an obligation to monitor the progress in those subjects that seem to consistently under-achieve in terms of compliance. Therefore, the IEB improvement plan must address the following aspects:

- Prepare a training plan addressing the following aspects: quality of internal moderation, alignment of question papers with marking guidelines, the use and application of taxonomies, layout, clarity of instruction and diagrams for all subjects listed under areas of concern above.

## 1.7    CONCLUSION

It may be concluded that the moderation of the IEB question papers was done with rigour and precision by Umalusi, as there are sufficient indicators to attest to Umalusi having identified good practices in the main, with a few lapses and areas of concern that require improvement. While the levels at which papers were approved and some technical aspects such as aligning the cognitive levels of questions require attention, it is impressive to note that the IEB examiners are setting question papers that are of a high standard; a standard that applies to both the November and the March examinations.

# Chapter 2

# Moderation of School-Based Assessment

## 2.1    INTRODUCTION AND PURPOSE

Umalusi is mandated to moderate and verify the standard of school-based assessment (SBA) conducted by the Independent Examination Board (IEB). The SBA marks contribute 25% to the final promotion mark for subjects without a practical component, 50% for subjects with a practical component and 100% for subjects such as Life Orientation. Therefore, SBA is an essential component of the learners' assessment. It is the assessment bodies' responsibility to present assessment tasks and marks that have been quality assured internally and reflect the competence of each learner. To manage the process, the assessment body, in this case the IEB, develops tasks that must fulfil all policy requirements as stipulated in the Curriculum and Assessment Policy Statement (CAPS) and the IEB subject assessment guidelines (SAGs), as well as Umalusi directives on internal moderation.  It is the IEB's responsibility to ensure that learner evidence has been quality assured internally for validity, reliability and authenticity and that the moderation of tasks takes place at the school, regional and national levels before being submitted to Umalusi for external moderation.

Umalusi communicates the criteria for the sampling of learner evidence of performance to the assessment bodies. Subsequently, external moderators are deployed to the various assessment bodies to moderate a sample of selected educator files and learner evidence. Internal assessment must be subjected to the quality assurance processes prescribed by Umalusi.

This chapter reports on Umalusi's findings on the degree to which the IEB SBA tasks complied with the CAPS, IEB SAGs and Umalusi's directives. This is done to verify whether the prescribed tasks were duly completed and that pre- and post-moderation of the assessment tasks was conducted internally. The report concludes by identifying areas of good practice and areas of concern and, where required, gives directives on areas that the IEB needs to comply with.

## 2.2    SCOPE AND APPROACH

Umalusi conducted a rigorous moderation of the IEB SBA internal moderation processes, focusing on the verification of the teachers' files and learners' portfolios. The external moderation occurred at both regional and national levels.   A total 19 subjects were sampled for external moderation: 13 subjects were sampled across four IEB regions at regional level and six subjects at the national level.

Tables 2.1 and 2.2 below list the subjects sampled for the external moderation of SBA during the IEB regional and national moderation processes.

*Table 2.1: Subjects sampled for external moderation of SBA during the IEB regional moderation*

|   | Learning areas/subjects | Total regions | Total schools |
|---|---|---|---|
| 1 | Accounting | 1 | 7 |
| 2 | Afrikaans FAL | 2 | 6 |
| 3 | Business Studies | 2 | 16 |
| 4 | Dramatic Arts | 1 | 9 |
| 5 | CAT | 4 | 4 |
| 6 | English HL | 4 | 6 |
| 7 | Geography | 1 | 8 |
| 8 | History | 1 | 14 |
| 9 | Life Orientation | 2 | 19 |
| 10 | Life Sciences | 1 | 12 |
| 11 | Mathematic Literacy | 2 | 14 |
| 12 | Mathematics | 2 | 6 |
| 13 | Physical Sciences | 2 | 15 |

*Table 2.2: Subjects sampled for external moderation of SBA during the IEB national moderation*

|   | Subjects moderated at national level | Total regions | Total schools |
|---|---|---|---|
| 1 | English FAL | 6 | 9 |
| 2 | Civil Technology | 1 | 3 |
| 3 | Economics | 1 | 5 |
| 4 | Agricultural Sciences | 1 | 3 |
| 5 | Hospitality Studies | 1 | 7 |
| 6 | Engineering Graphic Design | 5 | 5 |

The moderation and verification was conducted using the Umalusi Instrument for the Moderation of School-Based Assessment (SBA). The moderation focused on the five criteria used to evaluate the level of compliance per subject for the teachers' files and three criteria for the verification of the conduct of SBA at school level, as depicted in Table 2.3 below:

*Table 2.3: Criteria for the moderation of SBA*

|   | Criteria for the moderation of teachers' files | Criteria for the verification of learners' portfolios |
|---|---|---|
| 1 | Technical criterion | Learners performance |
| 2 | Content coverage and quality of the assessment tasks | Quality of marking |
| 3 | Cognitive demands and level of difficulty | Internal moderation |
| 4 | Quality of marking tools | |
| 5 | Adherence to policy on internal assessment | |

## 2.3    SUMMARY OF FINDINGS

The data analysis was conducted according to subject area. The levels of satisfaction for each of the criteria relating to the teacher and learner files were analysed for every subject. In the main, the findings of the analysis would seem to be common and similar across many subjects. Therefore, the report provides a summarised discussion of the findings with supporting evidence being provided where necessary. This is followed by a general presentation of the good practices and areas of concern that were observed.  The report concludes with a number of directives for compliance with a view to improvement for the IEB SBA.

### Quality of Assessment Tasks and Content Coverage

In most of the subjects which were moderated, the IEB schools were found to have made commendable efforts to adhere to policy requirements with regard to content covered and tasks assessed. Of those schools which did not fully comply, the moderation process noted that some were using content that had been removed. In addition, because past examination papers had been used in some cases, the content tested was irrelevant. This was found to be the case in six of the 13 regional-level moderated subject areas: Computer Applications Technology (CAT), Geography, History, Life Orientation, Life Sciences and Mathematical Literacy. At the national moderation it was observed that one school had used a film study title from an outdated curriculum (English FAL).

The spread of content was generally acceptable in all subject areas except for Physical Sciences where deviation from the IEB-prescribed weighting was noted. While the quality of the tasks set in a majority of the subject areas was very good to outstanding (English HL), the same quality levels were not evident with the majority of schools for Life Orientation. In general, tasks in this subject were found to be weak, very basic, unsuitable and inappropriate for the grade.

In one school, it was noted that three instead of one test were given – contrary to the IEB SAG requirements . While this may be a good move, it is expected that the SBA tasks will be in line with what is prescribed (Civil Technology).

### Cognitive Demand and Level of Difficulty

This criterion focuses on whether the tasks and internal examination papers set adhere to the prescribed guidelines as set out in the IEB SAGs. Every subject is therefore expected to submit an analysis grid as supporting evidence for the analysis of the cognitive levels.

Overall, this aspect of the assessment was in good order in most schools for which IEB should be commended. However, there were schools that did not comply with the distribution of cognitive weighting as per the IEB SAGs (Accounting, CAT and Afrikaans FAL) and the inappropriate classification of cognitive levels was evident in Geography and Agricultural Sciences from the schools sampled for moderation.

In addition, tasks presented by some schools for Mathematical Literacy and Life Orientation did not test the appropriate cognitive skills; tasks tested content and knowledge ranging between lower and middle cognitive order levels and no higher order questions were provided. Most of these items required regurgitation of information and did not challenge the learners to critique issues, provide solutions, or solve problems (Life Orientation). Some schools at both the regional and the national level did not submit analysis grids for the question papers used for the SBA (English HL and Physical Sciences; English FAL; Hospitality Studies).

**Quality of Marking Tools**

This aspect of the moderation Instrument assesses the reliability, validity and accuracy of the marking tools. This criterion examines compliance with the marking guidelines, the actual marking of the learners' tasks and the recording of marks.

In most of the schools, moderators found high levels of compliance and marking rubrics were provided. The marking was generally good and the feedback in subjects such as Dramatic Arts, English HL, Accounting, Life Orientation, Life Sciences and English FAL was constructive. Generally, the feedback given to learners in most subjects was constructive.

In several subjects, the marking guidelines were good and made provision for alternative responses. However, in Life Sciences, Business Studies, Civil Technology and Economics the marking guidelines provided by some schools did not allow for alternative responses and/or the allocation of marks was erratic. In addition, some schools did not provide learner files, so assessing the application of the memo was not possible (Geography, English FAL).

**Internal Moderation**

This aspect of the moderation instrument aims to ascertain whether the pre-moderation of tasks and the post-moderation of marking of learners' work has been done. The moderation should ideally be conducted according to moderation criteria and a report should be provided. In addition, the moderation should happen both internally at the school and at the regional and national levels, and reports should be provided.

Based on the reports of the Umalusi moderators, the quality of internal moderation varied from subject to subject. For example, in Geography regional moderation was good yet school moderation was scant; in Mathematical Literacy school moderation was balanced; in Engineering Graphics Design (EGD) moderation was good in all but two schools; in Civil Technology the moderation was rigorously conducted, but no constructive feedback was given to the teacher. In some schools in the Agricultural Sciences it was also noted that teachers are not given enough constructive feedback. Again, in subjects such as Accounting, Afrikaans, Business Studies, Life Orientation, Physical Sciences, Geography, Economics and English FAL there was little or no evidence in some schools that pre- and post-moderation had taken place. In some of the schools, the learner files were not provided for

moderation. For this reason it was not possible to evaluate the quality of the feedback given to learners (English FAL).

This makes the overall picture with regard to internal moderation in most of the IEB subjects a challenging one.

**Learner Performance**

As already noted, not all schools submitted learner files so the comments on learner performance were based on the mark sheets which were included in the teacher's files. However, in the subjects where learner files had been provided, the overall performance of IEB learners was found to be very good to outstanding and meritorious. This does not mean that all learners were outstanding, but even the weaker learners had been given a lot of support and remedial opportunities to improve. This practice was found to be widespread at both the regional and the national moderation.

Learners in some schools were also encouraged to be ethical in terms of acknowledging the use of other people's work (required to sign an ethics form).

## 2.4    AREAS OF GOOD PRACTICE

This section summarises the comments made on the areas of good practice identified in the fourteen subjects that were moderated. An attempt has been made to thematise the areas and practices that apply to the majority of the IEB schools.

**Presentation of Portfolios and Adherence to Policy Guidelines**
- Teachers' portfolios were very well presented, arranged in an orderly fashion and the contents easily accessible.
- In the majority of cases it may be said that IEB schools are working in line with the IEB SAGs.
- The inclusion of documents such as ethics forms in the learner file is a good practice, as it trains learners in the importance of ethical academic behaviour at an early age.
- It is noted than the majority of schools had included an analysis grid as evidence of how tasks had been cognitively balanced.
- Similarly, most schools had included a moderation report using the IEB format.

**Assessment Practices**
- The IEB policy of discouraging educators from using old examination papers is very helpful in addressing the development of educators in setting test or examination papers.
- The practice by most schools of providing a variance between the preliminary marks and overall portfolio marks is admirable as it provides an opportunity for determining the learners' performance levels and comparing the marks for their other assessment tasks and the marks of the preliminary examination
- Innovations were observed in some schools where graphs were used to show learner improvement

trends (Dramatic Arts, English FAL).

• The IEB is to be commended for adopting a team marking approach in English HL, which provides a three-dimensional approach to learner support and feedback.

**Teaching Methods**

• A number of innovative teaching methods have been cited in a number of the reports. For example, in the English HL report it was noted: 'The model for process writing designed by schools is fantastic. There are no other words to describe the standard of this preparation task, which prepares learners for writing throughout their school years.'

**Peer Support Structures**

• While this may not be applicable to all schools and regions for a number of practical reasons, in certain regions where cluster moderation support was practised it was found to be very effective (Pretoria). In some subjects, such as Dramatic Arts, clusters were using group emails to share ideas and experiences.

## 2.5    AREAS OF CONCERN

Despite the fact that schools have made reference to policy documents such as the assessment policies, analysis grids and moderation reports, the absence of those documents in the teachers' files was cited as an area of concern among external moderators.

Non-compliance was further noted in the following aspects:

• The absence of assessment schedules or rank order sheets as part of the package that was submitted to Umalusi.

• Some few schools are still struggling to achieve a balance in the cognitive weighting.

• It is a matter of concern that, in some of the subjects moderated, the allocation of time and marks was found still to be problematic (Life Sciences, English FAL); the use of outdated jargon such as 'learning outcomes' was evident (Business Studies, History); modelling of internal tests on the final examination was lacking (Business Studies, English FAL, Agricultural Sciences) and some of the internally constructed tests were not up to an acceptable standards.

• The lack of qualitative information in the moderation reports for Hospitality Studies  is an area of concern.

• The pre-and post-moderation seemed to be lacking and, if done, was done with little rigour in many of the schools verified. In eight out of 14 regional subjects, this aspect was noted as either lacking overall or not evident at the different levels of moderation. This was also not noted in nationally moderated subjects (English FAL).

• The use of past examination papers largely from other assessment bodies is noted as a concern and a potential risk to quality standards.

• A number of the IEB schools, five out of the 14 regionally moderated schools, did not provide the grid.

• It was noted with concern that in some subjects the allocation of time and marks was still

problematic (Life Sciences, English FAL); the use of outdated jargon such as 'learning outcomes' was evident (Business Studies, History); modelling of internal tests on the final examination was lacking (Business Studies, English FAL, Agricultural Sciences); and some of the internally constructed tests were not of an acceptable standard (CAT).

- The fact that in Life Orientation tasks were found to be weak and very basic, unsuitable and inappropriate for the grade, is an area of serious concern as it contributes 100% to the final promotion mark.

## 2.6 DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

**Use and Inclusion of Policy Documents**
- IEB SAGs, in particular, were found in very few schools. Umalusi expects that the IEB SAGs be included in the teacher file in preparation for external moderation.

**Assessment Practices**
- It is mandatory that the assessment schedules or rank order sheets form part of the package that is submitted to Umalusi.
- Umalusi require all schools to include the full analysis grids as evidence that it was applied accurately.
- Linked to the above is the observation that a few schools are still struggling to achieve a balance in the cognitive weighting. This is an area that the IEB should improve on.
- The IEB training sessions with schools should address the development of quality of tasks including Life Orientation, time and mark allocation and curriculum requirements as per SAG to avoid the use of old terminology.
- Consistent standards should be applied across subjects to address the quality of moderation reports in Hospitality Studies.

**Maintenance of Quality Standards**
- Although the IEB standards are exceptional in many respects, pre-and post-moderation should be given more attention; in addition, schools should be encouraged to provide constructive feedback especially in the four subjects namely Agricultural Sciences, Civil Technology, Mathematical Literacy and EGD were identified as a concern at regional and national level.
- Educators should focus on post moderation and include the actual marking in order to quality assure that the educator's marking is indeed authentic.

## 2.7 CONCLUSION

On the whole, the SBA teacher files and learner files (where they were included) were prepared very professionally. With the exception of two regions, where the presentation of documents was substandard and subject content coverage was faulty, Umalusi is satisfied with the standard of the assessment tasks and the creativity and innovativeness that were demonstrated in both teaching and assessment practices. The report, however, shows that whilst the IEB is consciously managing the processes, there are a number of areas in which improvement is required.

# Chapter 3

## Monitoring the State of Readiness

### 3.1    INTRODUCTION AND PURPOSE

Section 17 of the General Further Education and Training Quality Act, Act no 58 of 2001, as amended in 2008, mandates Umalusi to approve the publication of the results, if all quality assurance standards have been adhered to by the respective assessment bodies. This implies that assessment bodies should at all times protect and uphold the integrity of all their assessment processes, including the examinations.

One of the quality assurance processes adopted by Umalusi to ensure the integrity of the assessment of qualifications on its sub-framework, is the monitoring of the state of readiness for the conduct, administration and management of the writing and marking phases of the examinations. Prior to the examinations of qualifications on its sub-framework being written, Umalusi embarks on a state of readiness (SOR) process to assess the assessment bodies' level of preparedness to administer such examinations.

The Independent Examinations Board (IEB) is a private assessment body that has been accredited by Umalusi to conduct, administer and manage the National Senior Certificate (NSC) examination. It is therefore incumbent of Umalusi to verify the IEB's level of readiness to administer examinations that are free from irregularities that might jeopardise the integrity of the 2015 NSC examination. Therefore, this chapter reports on the findings of the Umalusi monitoring processes with regard to the IEB's level of readiness to administer the 2015 October/November NSC examinations.

### 3.2    SCOPE AND APPROACH

In order to verify the maintenance of standards and adherence to applicable policies and regulations, Umalusi provided the IEB with a self-evaluation instrument that had to be completed and returned to Umalusi. Umalusi then visited the IEB head office and a sample of 14 of its registered examination centres to verify the information provided in this instrument. The instrument focused on critical areas that would give an indication of the IEB's readiness to administer examinations. Those critical areas include:
- availability of policies and regulations on assessment processes;
- planning for the conduct, management and administration of examination;
- registration of candidates and examination centres;
- the appointment and training of examiners and internal moderators;
- facilities for printing, packaging and storage of question papers;
- security systems for examination materials;
- arrangements for the distribution of question papers;
- appointment and training of invigilators and chief invigilators;
- plan for invigilation;
- preparation for marking processes;

- appointment and training of marking personnel including Examination Assistants;
- planning for monitoring.

## 3.3    SUMMARY OF FINDINGS

**Strategic Management Issues**

The IEB has a well-established organogram which has been approved by its board. The organogram consists of the chief executive officer (CEO), who is responsible for overall policy formulation, budgeting, management and reporting to the Board and the other stakeholders. Designated personnel have been appointed for materials production, materials handling, events, entry and resulting. Their responsibilities cover all the critical areas for the management of the examination. During 2015, the staff complement was increased in the materials handling, finance, entry and resulting sections. Contract workers were employed for question paper development, the marking and moderation of candidates' answer scripts and monitoring the assessment process.

A service provider was also appointed to print, pack and distribute the examination material. Adequate provision for conducting the October/November 2015 NSC examinations was made in the IEB's annual budget. This assessment body also has adequate infrastructure and equipment of excellent quality for the management of the examinations.

**Management Plan for the Conduct and Administration of the Examinations**

A detailed management plan for conducting, managing and administering the November/ December 2015 NSC examinations was in place and also caters for the March 2016 NSC supplementary examination. This management plan is monitored in weekly reporting and project meetings where more thorough planning and reporting are done. The plan highlights all the processes for conducting, managing and administering the examinations with accompanying timelines.

**Registration of Candidates and Examination Centres**

When Umalusi visited the IEB, the registration of candidates was complete and there was a notable increase in the number of candidates enrolled for the 2015 NSC Examinations as compared to 2014. Schools had until 31 August to correct the spelling of names and Identity Document (ID) numbers and candidates were not allowed to change subjects after February. The IEB has registered a total of 10 878 candidates for the 2015 NSC examinations with a varying number of subject entries, as depicted in Table 3.1 below.

*Table 3.1: Number of candidates registered per subject entry*

| Subject entries | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | **TOTAL** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Number of candidates | 188 | 267 | 98 | 48 | 18 | 17 | 8997 | 1898 | 45 | 2 | **10 878** |

Part-time candidates are usually registered by their previous schools and the majority of such candidates enrol to improve their marks and as such do not take a new subject. If they register for a new subject, then they must be registered by a school so that all the School-Based Assessment (SBA) can be completed, as well as the outcomes for Grades 10 and 11. The IEB arranges an examination centre for private candidates who are unable to write at their old school. This is normally an IEB school where candidates are full time. Part-time candidates write in a separate venue.

It should be noted that the IEB had registered a total of 537 immigrant candidates. The procedure for the registration of immigrant candidates, which is outlined in the IEB's handbook for conducting the examination, provides certain directives which were complied with. A total of 420 full-time and 20 part-time candidates from outside the borders of South Africa were registered by the IEB for the 2015 NSC examinations.

Subject changes are managed by the IEB. For this process, the school principals have to sign an affidavit confirming that the learner has completed all the outcomes for Grades 10 and 11. The learner and his/her parents have to countersign the agreement, indicating that the learner will complete the work that they missed. When the final entries are submitted to the IEB, the principal signs a further declaration that all the learners have completed all the outcomes for Grades 10 and 11 and are ready for the examinations. The IEB has policies and procedures in place that govern, verify and approve concessions of all types. Concessions were granted to 833 candidates and 13 cases were still in progress for approval for the 2015 NSC examination.

For the 2015 NSC examinations, the IEB registered 235 examination centres with 15 of those being outside the borders of South Africa and 14 being newly registered centres. These examination centres are audited by the IEB before registration and monitored during the writing of examinations. Existing centres are further audited when they move premises or if the centre has experienced challenges in managing the examinations. All examination centres monitored by Umalusi confirmed that they had received and returned the preliminary schedules to the IEB and had also received the candidates' examination permits.

**Moderation of School-Based Assessments**

The management and administration of SBA is guided by the relevant policy which is found in the IEB's handbook for conducting NSC examinations and the SBA manual. SBA requirements for every subject are also found in the Subject Assessment Guidelines (SAGs) document. All schools are obliged to belong to a cluster and they must attend two cluster meetings. The discussion on the standard of SBA tasks and the allocation of tasks took place at the first cluster meeting.

Moderation of SBA tasks took place at the second cluster meeting. An IEB appointed moderator then conducted the regional moderation for the bigger subjects. For the regional moderation, every school is required to submit the teacher file for the selected subject as well as the learner files. The moderators then prepare and submit a report to the IEB. A random selection of learner files and the

teacher file is required to be submitted for national moderation in December. If the SBA files are non-compliant, then the SBA marks are discarded during the resulting process.

**Printing, Packaging and Distribution of Examination Materials**

The IEB outsourced the printing of examination material to an external printing company. Umalusi visited this printing company to monitor the way it conducts and manages the process of printing examination material. The printing company has two main buildings; one is used for the printing of study guides, books and other study material while the other is used exclusively for the printing of examination material. The premises are highly secured with security officials manning the gate and the premises are surrounded by an electric fence.

In the building where the printing of question papers is done, there are two additional security officials at the door. No cell phones are allowed in the printing facilities. There are five surveillance cameras inside the building. There are sufficient printing machines which are linked to a computer loaded with M-File software. This type of system grants temporary access to authorised people only. The only concern is that these machines cannot package the printed material, thus requiring human intervention for this task.

All the people who work with the printing of examination material have been subjected to police clearance and lie detector tests. They were also made to sign confidentiality forms. At first, only one question paper is printed so that it can be quality-assured and approved by the IEB. Once approved, question papers are printed on a large scale. Any spoilt papers are put aside to be shredded by the exams printing manager once printing is complete. Once the papers have been printed, workers pack, label and seal them in bins designed for this purpose.

If question papers are not transported on the day of printing, they are stored in a strong room which is controlled by the exams printing manager. There is a surveillance camera in the strong room and everyone entering this room has to sign in. In case any of the printing machines break down during printing, machines other than those used to print study guides and books in the other building are used. The company also employs two permanent technicians to deal with any printing machine breakdowns. In cases where additional manpower is needed to fast-track the printing of question papers, the staff from the study guide and book printing section are called in to plug the gap. There is a huge generator on standby in case of load shedding.

For the 2015 NSC examinations, the IEB were intending to dispatch examination material as follows;
- A courier service would deliver the question papers and other examination material to schools in the Eastern and Western Cape, Namibia and outlying areas.
- For schools in KwaZulu-Natal, examination material is delivered to central points in Pietermaritzburg and Durban.
- The IEB delivers question papers to schools in Limpopo, Mpumalanga, Gauteng and Namibia. While Swaziland collects the examination material from Mpumalanga.

**Safety and Security of Examination Materials at Examination Centre Level**

The examination centres monitored by Umalusi confirmed the delivery mode of examination material as explained above. In all centres monitored, examination material was to be stored in safes/strong rooms that are located in the office of the chief invigilators or in the administration block of the school. Security was found to be adequate, with examination centres having a combination of alarm systems, surveillance cameras, 24-hour security guards and burglar bars on all doors and windows. The IEB provides question papers in a vinyl bag that can only be opened with an electronic key via satellite 15 minutes before the examination starts. At the end of the examination session, the centre has a few minutes to close the bag electronically. In case of extended time being needed owing to concessions, the IEB has to be informed and a special time setting is provided.

**Appointment and Training of Invigilators and Monitors**

The heads of the schools were appointed as chief invigilators in writing by the CEO of IEB. Every school that is writing for the first time with the IEB or has a new chief invigilator has to attend an invigilation workshop. Two invigilation workshops were held in June, one in the Western Cape and one in Gauteng, and a third one was held in September in KZN. The chief invigilators are required to appoint and train invigilators at centre level. The IEB plans to monitor each school at least once every two years.

External monitors were appointed for monitoring the examinations. This has enabled the IEB to visit a school more than once during the examination session. It was verified in the centres monitored that invigilators had been appointed and trained. None of the centres monitored by Umalusi would be using the services of external invigilators and the drafting of invigilation timetables was still in progress in some centres.

**The Examination Rooms**

All examination centres monitored were provided with an audit instrument which was completed and forwarded to the IEB. Classrooms and school halls were to be used as examination rooms for the writing of the 2015 NSC examinations. Upon inspection, monitors observed that the examination rooms at the centres visited, including the furniture, were suitable and adequate to accommodate the number of registered candidates when writing the examinations. It was also noticed that water supply, electricity and ablution facilities were not a challenge at any of the centres.

Centres which offer Computer Applications Technology (CAT) had enough computers in good working order for the candidates registered. Lights and plug points were in good working condition and computers were installed with relevant software. For power interruptions, centres will use back-up generators and in some instances local authorities had been informed of the date on which CAT and IT would be written.

**The Management of Irregularities**

The IEB has a policy for managing irregularities and provides an overview of the types of irregularity, instructions to the chief invigilators on how they must deal with irregularities, forms to be used in the case of irregularities, composition of the examination irregularities committee and ways in which the committee should deal with irregularities. The IEB also has a standing committee which is tasked with handling irregularities and the minutes of these meetings are kept. School Assessment and Irregularities Committees (SAIC) had been established at almost all the examination centres visited.

**Selection of Markers and Marking Centres**

The policy on marking outlines the criteria for the selection and appointment of marking personnel. The criteria include relevant qualifications, experience as a teacher for the subject, success achieved as a teacher, marking experience and participation in IEB regional moderation processes. For the 2015 NSC examinations, the IEB had appointed 1 541 markers, 197 senior markers, 90 chief markers and 60 internal moderators. 300 examination assistants were still to be appointed.

Training of markers is done through the pre-marking of a percentage of papers and this process is overseen by chief markers and internal moderators. Subsequently, the whole team of markers has to attend the memo discussion with the Umalusi external moderator. General training on the marking procedures and administration of scripts is also conducted prior to the memo discussion session. Novice markers have to attend all the training sessions and they are also given on-task training and their marking is close monitored by the senior sub-examiner.

The IEB has identified and selected three schools that will serve as marking centres for the 2015 NSC examinations. They have been selected because they have the required facilities, adequate security, enough rooms for the marking panels, and sufficient ablution facilities, dining halls, meeting rooms and suchlike. Two of the marking venues are close to each other to facilitate transport arrangements. These two schools also have boarding facilities which are used in an effort to curb the cost of marking. They also have catering facilities that accommodate all the markers.

**Capturing of Marks and Certification**

The IEB has procedural documents and a detailed management plan in place for the capturing of marks. A double capturing method is implemented in all cases and there is an audit trail in the system to check if and when any changes have been made. The IEB does not use mark sheets as marks are captured directly from the scripts.

## 3.4    AREAS OF GOOD PRACTICE

- The IEB had a detailed management plan in place for the conduct, management and administration of the 2015 November examinations.

- The registration of candidates and the related processes were completed at the time of Umalusi's monitoring visit.
- The examination centres monitored have good facilities for writing the examinations.
- The consistent use of electronic bags for the security of question papers is commended.

## 3.5 AREAS OF CONCERN

- The only concern cited is that the printing machines cannot package the printed material, thus require human intervention for this task.

## 3.6 DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

The IEB needs to enhance the safety and security of exam materials by reducing human intervention.

## 3.7 CONCLUSION

The IEB has generally prepared and implemented systems and processes to ensure the efficient conduct, management and administration of the 2015 November/December NSC examinations. Therefore, the IEB was found to be ready to administer the 2015 October-November NSC examinations.

# Chapter 4

# Monitoring of Writing

## 4.1    INTRODUCTION AND PURPOSE

During October and November 2015, Umalusi monitored the writing of the National Senior Certificate (NSC) examinations at selected examination centres registered by the Independent Examinations Board (IEB). The purpose of this report is to provide an overview of the compliance levels identified at the various centres with respect to the policy and guidelines that govern the writing of the NSC exams. In this report, the words "school" and "examination centre" will be used interchangeably.

## 4.2    SCOPE AND APPROACH

Umalusi monitored a sample of 25 examination centres affiliated to the IEB across the country. The monitors were provided with a set of criteria against which they had to evaluate the standard of the conduct and administration of the examination. The criteria were captured in the monitoring instrument, which was completed by recording observations on procedures, scrutinising documentation and interviewing relevant personnel.

Table 4.1: Examination centres monitored for the writing of examinations

|    | PROVINCE | CENTRE | DATE | SUBJECT | CANDIDATES |
|----|----------|--------|------|---------|------------|
| 1  | MP  | Penryn College | 14 Oct 2015 | CAT P1 | 12 |
| 2  | GP  | Beaulieu College | 25 Nov 2015 | English HL P2 | 76 |
| 3  | GP  | Cornwall Hill College | 16 Nov 2015 | Physical Sciences P2 | 24 |
| 4  | GP  | St Teresa's School | 14 Oct 2015 | CAT P1 | 6 |
| 5  | WC  | Silvermine Academy | 15 Oct 2015 | Information Technology P2 (Practical) | 4 |
| 6  | KZN | Southcity Christian College | 14 Oct 2015 | CAT P1 | 20 |
| 7  | WC  | Curro Mossel Bay | 16 Nov 2015 | Physical Sciences P2 | 4 |
| 8  | L P | Curro Private School | 15 Oct 2015 | Information Technology | 1 |
| 9  | LP  | Ridgeway High | 16 Nov 2015 | Physical Sciences P2 | 11 |
| 10 | GP  | Verney College | 25 Nov 2015 | English HL P2 | 33 |
| 11 | GP  | Henley Preparatory and High School | 19 Nov 2015 | Business Studies P1 | 12 |
| 12 | GP  | St Dunstan College | 16 Nov 2015 | Physical Sciences P2 | 63 |
| 13 | EC  | Diocesan School for Girls | 13 Nov 2015 | Accounting P1 | 4 |
| 14 | EC  | St Andrews College | 13 Nov 2015 | Accounting P1 | 28 |
| 15 | KZN | Embury College | 25 Nov 2015 | English P2 | 23 |
| 16 | KZN | Wykeham Collegiate | 16 Nov 2015 | Physical Sciences P2 | 35 |
| 17 | WC  | Bridge House School | 16 Nov 2015 | Physical Sciences P2 | 22 |
| 18 | GP  | Pretoria Chinese School | 19 Nov 2015 | Business Studies P1 | 9 |
| 19 | GP  | Tyger Valley College | 15 Oct 2015 | Information Technology | 7 |
| 20 | GP  | Shangri la Academy | 16 Nov 2015 | Physical Sciences P2 | 20 |
| 21 | LP  | Jabez Christian Academy | 16 Nov 2015 | Physical Sciences P2 | 10 |
| 22 | LP  | Eagles Nest Christian School | 30 Oct 2015 | Physical Sciences P1 | 22 |
| 23 | NC  | CBC St Patrick's College | 16 Nov 2015 | Physical Sciences P2 | 6 |
| 24 | GP  | Curro Private School | 25 Nov 2015 | English HL P2 | 16 |
| 25 | MP  | Cambridge Academy | 16 Nov 2015 | Physical Sciences P2 | 7 |

## 4.3  SUMMARY OF FINDINGS

The findings show that most of the examination centres complied with the policy guidelines on the conduct of the NSC examination. A discussion of the findings then follows under each criterion.

**Delivery and Storage of Examination Material**

The delivery and storage of examination material was given priority attention. The IEB delivers examination material to the exam centre on a fortnightly basis in most instances, although at Ridgeway High, the exam material was delivered weekly. The exam material was sealed in plastic bags and placed in security bags which are locked and delivered to the exam centres. These bags are stored in the strong room and are only accessed on the day of the exam.

The security bags can only be opened once the IEB has provided the chief invigilator with the code to open the lock. This system ensures that question papers are kept secure and that no leakages can occur. The centres have access control, walk-in strong rooms as well as fire extinguishers. The area is secured with a functioning alarm system and burglar proofing on the windows. In most instances, a courier service had been appointed to deliver exam material to and collect answer scripts from the exam venue. On average, three deliveries and three collections are done for the duration of the exams. Answer books that are not collected on the day of the examination are stored in a lockable cabinets and the keys to the office are safely kept by an authorized official.

**The Invigilators and their Training**

The principal or the deputy principal is appointed by the IEB as the chief invigilator. At one college the registrar was appointed as the chief invigilator. While most invigilators are educators at the schools, there have been cases where retired educators or community members were appointed as invigilators. However, several centres were guilty of not officially appointing invigilators in writing.

Training of both the chief invigilator and invigilators shows some unevenness. Not all the chief invigilators and invigilators had undergone training in the current year, with some chief invigilators being trained in the previous year and others as far back as 2013. The reasoning for this lapse, as given by one chief invigilator, is that she/he has done this job for several years and has the necessary knowledge and know-how to conduct the exams.

**Preparations for Writing and the Examination Venues**

The exam centres complied in the main with the requirements as described in the policy document. The environment is very conducive to the writing of examinations. Every effort was made to ensure that noise levels were kept to a minimum and the lighting and ventilation was good. It has become common practice for some centres not to verify the candidates that they admit to the exam room, arguing that they know the candidates and that in itself is a form of verification. However,  this

common practice seem to be applied outside the scope of national examination regulations.

**Time Management**

The management of time was exceptional. Well before the starting time of 09:00 all the necessary key activities were carried out such that the candidates were not prejudiced in any way. Candidates were seated in most instances by 08:00 on the morning of the exam, while at other centres candidates had to be seated before 08:30.

**Checking the Immediate Environment**

Prior to the commencement of the examinations the male and female toilets were checked daily for any concealed material.

**Activities during Writing**

There were some centres that did not read the examination rules at every sitting. It was stated in this regard that, according to IEB requirements, reading the exam rules at the very first sitting was adequate. At the end of the examinations candidates were requested to stay seated at their desks while the scripts were collected and verified against the mark sheet, after which candidates were allowed to leave. The attendance register was signed by the candidates during the exam.

However, at one school monitored the signing of the attendance register and verification of the accuracy of the cover page of the answer book were done at the end of the examination when invigilators were collecting answer scripts from candidates.

**Packaging and Transmission of Answer Scripts**

Examination regulations were strictly followed during the packaging of scripts. The sequencing was done according to the mark sheets, scripts were sealed in secure envelopes and the attendance registers were then placed on the envelopes and secured with an elastic band. All sealed envelopes were packed inside the IEB electronic lockable security bags and kept in the safe until the scheduled date of collection by the IEB officials or the courier service.

According to the chief invigilators, the IEB does not require the centres to provide daily situational reports.

**Monitoring by the Assessment Body**

In most centres visited, there was evidence of monitoring by the IEB and written feedback was provided where necessary. The feedback provided was in the main good, however, there were a few centres that had been visited by the IEB and had not kept any record of these monitoring visits.

**Reporting of Irregularities**

**Irregularities reported by Umalusi Monitors**

No irregularities were reported by the Umalusi monitors during the writing and the marking process.

*Table 4.3: Irregularities reported by the IEB*

| Nature of Irregularity | Details of the Irregularity | Subject involved | Number of candidates involved |
|---|---|---|---|
| Technical | The insert that should have accompanied the poems was not included | Hebrew | 124 |
| Unauthorised equipment | Learner caught with cell phone | Economics | 1 |

## 4.4    AREAS OF GOOD PRACTICE

- The use of generators as backup should there be an electricity outage has to be commended.
- The strict security measures in place for maintaining the security of examination material is to be welcomed. The IEB's electronic locking and unlocking system ensures that exam material is secured at all times.

## 4.5    AREAS OF CONCERN

The following issues were noted during the monitoring visits and need to be addressed:
- In a few cases, the invigilator's attendance register was not available or not signed.
- There were no appointment letters for invigilators at some centres.
- It has become common practice for some centres not to verify candidates that they admit to the exam room,

## 4.6    DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

- The invigilator's attendance register must be available and signed.
- The IEB must ensure that invigilators and chief invigilators are officially appointed in writing.
- Examination rules should be applied consistently, verification of candidates admitted in the examination rooms is an examination regulation.

## 4.7    CONCLUSION

It can be safely concluded that the IEB exam centres have conducted the examinations competently. Things can only get better if the relevant IEB centres pay more attention to the areas of concern which are highlighted in 4.5 above.

# Chapter 5

## Monitoring of Marking

### 5.1    INTRODUCTION AND PURPOSE

As part of its mandate, Umalusi monitors the marking of examination scripts of candidates who have written the National Senior Certificate (NSC) examinations. The purpose of this report is to provide the reader with an overview of the compliance levels displayed at the various marking centres with respect to the policy and guidelines that govern the marking of the exam scripts. This marking monitoring report consolidates the findings of the monitors' visits to three IEB centres.

### 5.2    SCOPE AND APPROACH

Three IEB marking centres in Gauteng were selected for monitoring on 9 December 2015. This monitoring of marking focused, among other things, on the following key aspects:
- general management of the marking process with respect to provision of adequate and suitable facilities
- the marking and moderation processes followed
- all aspects of security relating to answer scripts.

Table 5.1 below indicates the marking centres monitored by Umalusi monitors.

*Table 5.1: Marking centres at which Umalusi monitoring took place*

| NO. | PROVINCE | CENTRE | DATE |
|-----|----------|--------|------|
| 1. | Gauteng | Roedean School (SA) | 9 December 2015 |
| 2. | Gauteng | St John's College | 9 December 2015 |
| 3. | Gauteng | St Stithians School | 9 December 2015 |

### 5.3    SUMMARY OF FINDINGS

On the whole, the marking of the IEB examination scripts at the centres mentioned in Table 5.1 above was performed according to the marking policy and guidelines. It was heartening to note that compliance at these centres met all the criteria, except for security and training of marking personnel, where there is still room for improvement. Table 5.2 below summarises the level of compliance per criterion.

*Table 5.2: Level of compliance in relation to criteria*

| CRITERIA | Met all the criteria | Met most of the criteria | Met few/none of the criteria |
|---|---|---|---|
| Planning for marking | 3 | - | - |
| Marking centre | 3 | - | - |
| Security | - | 3 | - |
| Training of marking personnel | - | 3 | - |
| Marking procedure | 3 | - | - |
| Monitoring of marking | 3 | - | - |
| Handling of irregularities | 3 | - | - |
| Quality assurance procedures | 3 | - | - |
| Reports | 3 | - | - |

**Planning for Marking**

At all three centres there was clear evidence of planning for marking. The marking centre managers were in possession of a well-developed marking plan thus enabling the smooth conduct of the marking process. The marking personnel arrived on time at the marking centre.

**Marking Centres**

The marking centres were clean, neat and tidy. The environment was very conducive to marking, allowing the various designated IEB personnel to fulfil their roles and responsibilities unhindered. The centres in the main had adequate communication facilities. The markers were accommodated in hotels and/or hostel accommodation and special provision was made for dietary requirements. The centres did not have script control rooms as such; the marking centre manager (MCM) had a temporary office in a classroom or in the school library but this venue did not serve as the script control room.

The IEB officials were responsible for script control, and the scripts were handed directly to the chief markers (CMs). The IEB prepared documents for their marking teams, providing a list of the centre numbers, the batches of scripts and the responsible CMs. The CMs verified the number of scripts on the summary list against the batches handed over to them and then signed for the scripts. Once the scripts had been marked, moderated and checked by examination assistants (EAs), the CMs verified the batches, which were then collected by IEB staff and transported to the data capturing centre. In terms of the observations made by the monitor, the role of script control manager was performed by the CMs.

**Security**

Adequate security personnel were in place to control the flow of visitors to the centres. However, security was compromised at one of the marking centres where access was granted to the Umalusi monitor without searching of his car properly; it was only on his departure that the car was properly searched. In addition, positive identification was a matter of concern. Vehicles hired by the IEB were used to transport the scripts to and from the marking centre. This transportation of scripts to and from

the marking centre did, as the Umalusi monitor observed, present a security risk.  However, the IEB indicated that this mode of delivery suits the IEB's preference for avoiding drawing the attention of the public, as the provision of escorts might expose their vehicles to greater risk.

**Training of Marking Personnel**

It was reported that the training of marking personnel has occurred at all levels however, the MCM were not aware of the details of the duration and who conducted the training.

**Marking Procedures**

All three centres monitored used claim forms as attendance registers, as markers were expected to sign the claim form daily. The CMs checked these claim forms every day to ensure that they had been signed by those present. Each marker wore legible name tag. When distributing the batches, the CMs ensured that no marker received scripts from his/her own centre. At two centres it was mentioned that the MCMs supervised the marking by paying random visits to marking rooms, while at the third centre the assessment specialists monitored the marking.

**Monitoring of Marking**

The CM and IM monitored the performance of the markers at all three centres. Each CM monitored the marking in his/her own way, as there was no set of criteria (checklist) against which to monitor marker performance. Under-performing markers were assisted by changing the question they were marking or by pairing him/her with another better performing marker. As a last resort, the marker was relieved of his/her duties. The evaluation reports of the CMs and IMs are used to inform the selection of markers for the next marking session.

**Handling of Irregularities**

The IEB issued each marker with a document outlining the procedures to be followed in the event of an irregularity being suspected. At the time of monitoring there were two alleged cases of irregularity that still had to be confirmed.

**Quality Assurance Procedures**

The quality assurance procedures adopted by the IEB is unique the marks are not transferred from the script to a mark sheet as the IEB does not use a mark sheet. Thus the CM, IM and EAs play a crucial role in the accuracy and completeness of the marking and marks are captured on the database using a process commonly referred to as the "double entry".  In the first entry, the marks are captured per candidate question by question. The software is programmed such that the maximum mark for each question has already been captured. Hence, if a mark captured is higher than that in the question paper, the computer flashes, indicating that the mark captured is greater than in the question paper.

The entry and resetting manager will then override and correct the data on the spread sheet. The computer totals the marks and checks them against the total captured. Again, if the totals differ, the entry and resetting manager overrides and corrects. The second entry is identical to the first entry. The marks are locked in only if there is a computer beep to indicate that the data has been checked and all is in order. The double entry system ensures the accuracy of the captured data.

**Reports**

All centres required the CMs and IMs to prepare qualitative input reports on the quality of marking which are for the assessment body. The IEB has developed a reporting template to ensure that minimum standards are met. These reports are then used during the standardisation meeting called by Umalusi. The reports are also forwarded to the schools and placed on the website, thereby serving as a tool for improvement.

## 5.4    AREAS OF GOOD PRACTICE

• The "double entry" system used in the capture of data is an area of good practice.

## 5.5    AREAS OF CONCERN

A number of areas of concern were noted that need to be addressed; these are contained in Annexure A. The following is a summary of these concerns:

• Inconsistent application of security rules by security personnel when carrying out their duties poses a security risk at the marking centre.
• The transportation of scripts without any security measures in place poses a risk to the safety and security of examination scripts.

## 5.6    DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

• The IEB should strengthen the training of security personnel to ensure the consistent application of rules when dealing with visitors' access to the marking centre.
• The IEB should put measures in place, like trackers in the vehicles to ensure that the security of examination scripts is not compromised during their transportation to and from the centre.

## 5.7    CONCLUSION

Notwithstanding, it was found that the general management of the marking process was excellent with specific reference to the provisioning of adequate and suitable facilities by the IEB. However, the IEB should consider putting additional security measures in place to enhance the safety and security of examination scripts during transportation to and from the marking centre.

# Chapter 6

# Marking Guidelines Discussion

## 6.1    INTRODUCTION AND PURPOSE

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

The marking guidelines discussions took place at the three centres of the Independent Examination Board (IEB), namely, St John's College, St Stithians and Roedean College. The CAT marking guidelines discussions took place at SAHETI School. These meetings consisted of the panels convened for each subject, which included Umalusi external moderators (EMs) responsible for the moderation of the IEB NSC question papers, internal moderators (IMs), chief markers (CMs) and markers. The meetings, which were hosted by the IEB, served to standardise the marking guidelines and to incorporate alternative responses into the final marking guidelines before the marking process started.

## 6.2    SCOPE AND APPROACH

The marking guidelines discussions for the IEB were held for 12 subjects, comprising 25 papers written during the November 2015 examinations. The subjects are listed in the Table 6.1 below:

*Table 6.1 List of subjects sampled for marking guidelines discussion*

| Subjects sampled for marking guidelines discussions | |
|---|---|
| Accounting P1 & P2 | Geography P1 & P2 |
| Afrikaans FAL P1 & P2 | History P1 & P2 |
| Business Studies P1 & P2 | Life Sciences P1, P2 & P3 |
| CAT P1 & P2 | Mathematical Literacy P1 & P2 |
| Economics P1 | Mathematics P1 & P2 |
| English HL P1 & P2 | Physical Sciences P1 & P2 |

The IEB marking guidelines discussions were chaired either by the chief marker or the examiner, who guided and directed the process. As part of standardisation, the panel members were expected to mark a sample of scripts, which were then discussed and used to inform the final marking guidelines, and signed off by the Umalusi moderator and the IEB examiners.

The marking guideline discussions for the IEB were conducted using the instrument shown in Table 6.2 below:

*Table 6.2 Umalusi marking guidelines moderation tool*

| PART A | PART B | PART C |
|---|---|---|
| • Pre- marking guidelines discussion meeting (1 indicator)<br>• Preparation by chief markers and IMs (3 indicators) | • Processes and procedures (13 indicators) | • Training at marking guidelines discussion meeting (6 indicators)<br>• Quality of marking guidelines (9 indicators) |

## 6.3    SUMMARY OF FINDINGS

This section reports on the findings with regard to the marking guidelines discussion for each of the IEB papers moderated by Umalusi.

### Part A: Pre- marking guideline Discussions

The IEB processes are such that senior sub-markers have to come to the marking guidelines discussion with prepared possible responses in order to inform the standardisation process. Furthermore, the IEB expects educators to submit a report of their impressions of the paper. Both the examiners and the internal moderator then read through these submissions and compile a report on their findings. These comments are used to inform the standardisation of the marking guidelines.

This process was evident in Accounting, Business Studies, Economics, Life Sciences, Geography, History, Mathematical Literacy, and Physical Sciences. In one paper, Afrikaans, the internal moderator arrived late which compromised this process. In all the papers, the participants had marked a sample of scripts.

### Part B: Processes and Procedures

The processes and procedures that Umalusi measures relate to attendance, logistical preparations and the rigour with which the marking guidelines discussions are conducted. The table below summarises the findings per paper as reported by the Umalusi moderators.

### Part C: Training at Marking Guidelines Discussion Meetings

This part of the Umalusi moderation instrument is to establish whether training of markers took place and that all participants were provided with a sample of scripts during training. This section also measures the quality of the final marking guidelines; that it is clear, detailed, and will facilitate effective marking. Table 6.3 below summarises the findings of Parts B and C for all the subjects' verified by Umalusi.

*Table 6.3 Umalusi findings relating to Parts B and C*

| Papers | Part B: Processes and procedures | Part C: Training and quality of memo |
|---|---|---|
| Accounting | All examiners attended the discussions, which were led by the chief marker. Marking guidelines for P1 & P2 were discussed concurrently and then debated question by question with alternatives provided. The Umalusi moderator's role was to monitor decisions and make final decisions in case of disagreement. All participants were active in the meeting and gave valuable inputs and suggestions. Problematic questions were identified and debated. Adjustments to the marking guidelines did not affect the cognitive levels of the papers. | Training was conducted on day 2. The five senior markers attending the marking guidelines discussion were provided with three copies of three actual photocopied scripts for marking. The training was valuable. On average, a 2% deviation was noted between the chief and the senior markers. The criteria relating to the quality of the marking guidelines were all satisfied. |
| Afrikaans | All the senior sub-examiners attended the marking guidelines discussion, which was led by the IM. The marking guidelines was discussed and alternative answers were added based on the inputs of the senior examiners, examiner and IM, although little discussion occurred. The Umalusi moderator's ruling was requested on a few questions where alternative answers were added to the marking guidelines. The changes made did not affect the cognitive levels. | Training took place on day 2 where three to five sample scripts were used. The marking guideline was detailed and accurate and would facilitate reliable marking. The criteria relating to the quality of the marking guidelines were all satisfied. |
| Business Studies | A very fruitful discussion emanated from expected approaches to the questions in the long answer type questions in P2. Each senior sub-examiner duly gave feedback on the question paper. Different interpretations of questions were given to facilitate understanding; and the scope of marking was | Training was conducted. After each question was marked, a detailed discussion ensued focusing on marker consistency and reliability. The marking guidelines was endorsed as clear, complete and valid. The criteria relating to the quality of the marking guidelines were all satisfied. |

| | thoroughly debated. Changes made to the marking guidelines did not affect cognitive levels. | |
|---|---|---|
| CAT | Informal discussions took place between the chief examiner and the IM in order to plan the administrative processes that would be used during the marking of the roughly 1 500 scripts. No discussion on the question paper and marking guidelines took place.<br>The EM was not party to these discussions. | As part of training, each participant had worked through the question paper each having formulated solutions to each question. During the training process, two complete scripts were marked by each participant. The marking guidelines was endorsed as clear, complete and valid. The criteria relating to the quality of the marking guidelines were all satisfied. |
| Economics | All essential participants were in attendance. The examiner led the discussion and outlined the marking guidelines discussion protocols to be observed. Markers' participation was rigorous and substantial. All relevant alternatives and interpretations were added to the marking guideline and clarified. Where consensus could not be reached, the Umalusi EM took the final decision. The changes effected had no impact on the cognitive levels of the questions. | After the marking guidelines discussions, three sample scripts were marked. All alternatives were captured in the updated marking guidelines.  Variations in the marking of sample scripts were found to be within the acceptable tolerance ranges. The marking guideline was finalised with the confidence that it would facilitate effective marking. The criteria relating to the quality of the marking guidelines were all satisfied. |
| English HL | Nine senior examiners appointed from four provinces (Gauteng, KZN, EC and WC) attended the memorandum discussion, which was facilitated by the examiner. The senior sub-examiners had marked three scripts prior to the meeting. After debates and discussions, changes/additions/ alternative responses were recorded. In particular, responses to the comprehension and poetry questions were interrogated in detail as some of the questions required critical evaluation.   None of the changes made had any impact on the core | Training was provided.  Participants provided alternative responses. The criteria relating to the quality of the marking guidelines were all satisfied. The marking guideline was passed as being a reliable document that would facilitate marking fairly and consistently. |

| | | |
|---|---|---|
| | responses; they were made to facilitate marking. | |
| Geography | The discussion was attended by all participants responsible for managing the marking session, namely, the IM, chief markers (examiners) and senior sub-markers. The sub-examiners' expertise in the subject enriched the discussion. Questions and their corresponding responses were analysed in detail. Additional responses did not affect the question paper. | After the discussion, each senior sub-marker was given three dummy scripts to mark. The criteria relating to the quality of the marking guidelines were all satisfied. |
| History P1 & P2 | All the senior sub-examiners attended and actively participated in the discussions, which were facilitated by the examiner. The discussions focused on alternative responses to the questions, adapting the discursive essay marking guidelines and the extended writing marking guidelines. The discussions were meaningful and all the sub-examiners participated constructively throughout the discussions. The Umalusi EM approved the amendments and/or additions to the marking guidelines and signed off the final marking guidelines. | The training complied fully with expectations. The criteria relating to the quality of the marking guidelines were all satisfied. |
| Life Sciences P1 & P2 | All sub-examiners were in attendance at the discussions, which were led by the examiner. Participants gave their reports. Amendments to the marking guidelines were effected electronically and immediately. Extensive discussions and debates took place on all the questions. Integrity was maintained by the participants. The Umalusi moderator participated and provided clarity as well as checking and approving the final memo. The changes made did not affect cognitive levels. | Training was conducted on day 2. The marking guidelines were approved. The criteria relating to the quality of the marking guidelines were all satisfied. |

| | | |
|---|---|---|
| Mathematical Literacy | All senior stakeholders attended the discussion, which was chaired by the chief examiner. Discussion related to mark allocations and possible alternate solutions. The EM facilitated discussion where necessary and provided input in cases of deadlock. Explanations regarding the mark allocation were provided in detail and the mark allocation was adjusted where necessary. Clear guidelines were provided on how to deal with erroneous solutions/answers. The Umalusi moderator provided guidance and support throughout the discussions. Changes were made but they did not affect the cognitive weightings of the questions. | The training of all markers was conducted on the following day. The senior markers together with the markers were trained under the guidance of the chief examiners for both papers. The final marking guidelines were neatly typed and easy to follow, and was subsequently presented to the EM for signing off. The criteria relating to the quality of the marking guidelines were all satisfied. |
| Mathematics P1 & P2 | All senior markers attended. All necessary items such as question papers and marking guidelines were available for all participants. Final decisions were announced verbally. The meetings for P1 & P2 were held simultaneously. Discussions were very lively at both meetings, but new members did not participate fully. Owing to time constraints discussions were not exhaustive. Changes were subsequently made to the marking guidelines. | The criteria relating to the quality of the marking guidelines were all satisfied. |
| Physical Sciences P1 & P2 | All the senior markers attended the marking guidelines discussion meeting, which was led by the examiner (chief marker). Senior sub-examiners debated answers; in this way alternative answers and more detail were added to increase the Marking guidelines's value as a good guide for marking. Because they came with their own answers to the | Dummy scripts were marked by the examiner, IM and senior sub-examiners. Rigorous discussion followed and this led to changes being made to the marking guidelines. The same scripts were then used to train the markers. The criteria relating to the quality of the marking guidelines were all satisfied. |

| | marking guidelines discussion, the contributions made by the senior sub-examiners were very valuable. The EM's role was to take decisions when deadlocks occurred and to make inputs when requested by the examiner. Changes to the marking guidelines did not change cognitive demand. | |
|---|---|---|

## 6.4    AREAS OF GOOD PRACTICE

The report shows more good practices by the IEB with regard to the marking guidelines discussions. In all the subjects
- attendance at the marking guideline discussions was good and all key participants were represented
- sample scripts were marked
- discussions were robust and fruitful
- adjustments to the marking guidelines did not affect the cognitive weightings of questions
- training was conducted
- the Umalusi criteria for the quality of the marking guidelines were fully satisfied.

## 6.5    AREAS OF CONCERN

The IEB is conducting its marking guideline discussions in a very professional manner; however, the following were noted as areas of concern:
- Insufficient time allocated in some of the processes to the training of markers.
- In the Mathematics paper, for example, the external moderator observed that changes to the marking guidelines were announced verbally.
- In CAT, the training was done with physical scripts from the learner disks instead of dummy scripts.
- During training, the markers interacted with only two dummy scripts.

## 6.6    DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

- The IEB needs to review its practices by creating more time to accommodate discussion of and interaction with at least five dummy scripts during the training of markers.
- Rather than changes being announced verbally, the IEB should make it compulsory for all changes made to the marking guidelines to be projected on a screen, so that the final marking guidelines are transparent

## 6.7    CONCLUSION

Umalusi was able to monitor all the IEB marking guideline discussion meetings. Except for the one concern raised about the time allocated to this process, the 2015 IEB marking guideline discussion processes were found to be fruitful and productive, and markers were trained and engaged fully with the documents in order to refine them. Consequently, Umalusi found very few areas of serious concern. All the marking guidelines were approved as complete documents, fit to be used for marking the respective examinations.

# Chapter 7

# Verification of Marking

## 7.1    INTRODUCTION AND PURPOSE

Umalusi verifies all marking as one of its quality assurance processes. This is done to ensure that marking is conducted fairly and that there is consistency in the interpretation of the marking guidelines in all subjects and papers.

The verification of marking for the Independent Examinations Board (IEB) took place on-site for all papers. This involved verifying the marking at the assessment body's premises where the teams of external moderators converged to mark. The benefit of using the on-site approach to the verification of marking is that any discrepancies in marking that are identified by the external moderators can be addressed immediately and markers are guided accordingly to improve the marking process. In most cases, the marking of the IEB papers takes place immediately after the marking guideline discussions.

## 7.2    SCOPE AND APPROACH

Umalusi verified 11 subjects, as shown in Table 7.1. The Umalusi instrument used to conduct the verification covered the criteria outlined below:
*   Adherence to marking marking guidelines
*   Quality and standard of marking
*   Candidates' performance

## 7.3    SUMMARY OF FINDINGS

The findings on how each of the subjects (papers) satisfied the first two Umalusi criteria are tabulated in Table 7.1, the tabulated information is then followed by graphs which capture the candidates' performance from a sample of scripts verified by the Umalusi moderators.

| Subjects | Adherence to marking guidelines | Quality and standard of marking |
|---|---|---|
| Accounting | 100% | Generally good. P1: Markers failed to identify the difference between accuracy marks and method marks when marking. |
| Afrikaans FAL P1 & P2 | 100% | In the sample of 18 scripts moderated, the deviation between the marker and the moderator varied between 0 and 1. The difference between the external moderator and the marker/moderator was minimal – 0 to 2 marks. |
| CAT | 100% | The external moderator blind marked the |

| | | exam scripts. The table in the annexure to this report shows that in close to 90% of the scripts verified, the difference in the marks awarded by the marker and those awarded by the external moderator were within the accepted tolerance range. |
|---|---|---|
| Business Studies | Changes were made to the memoranda | Notwithstanding the fact that qualitative answers could appear in the marking guidelines, the nature of the open-ended questions demands a greater degree of ingenuity in the actual allocation of marks. Therefore, the memo was not fully documented in terms of the process/technique required for the marking. This is usually finalised during the standardisation process. |
| Economics | 100% complaint | From the randomly sampled scripts that were moderated, it was evident that senior sub-examiners and sub-examiners understood the marking guidelines, as they were consistent and accurate in the allocation of marks for the questions they were responsible for. |
| English HL | 100% compliant | Insignificant differences between markers were noted. However, there was evidence of very good internal moderation. |
| Geography | 100% compliant | Scripts were thoroughly moderated by the senior markers as well as the chief marker and the internal moderator. All the batches that were verified showed that effective internal moderation had taken place. |
| History | 100% compliant | P1: The marking process included double marking and rigorous moderation, which is highly commendable. Only in a very few instances (i.e. 1 out of 20 moderated scripts) did the difference between marker and moderator go beyond 3 marks, with the biggest difference being 5 marks. |
| Maths Literacy | 100% compliant | Just one discrepancy was noted in P1 which was duly rectified by remarking all the scripts that had been completely |

| | | marked thus far. Other changes were within allowable tolerance range. |
|---|---|---|
| Mathematics | 100% compliant | A few inconsistencies involving just one or two marks were noted. In general, marking was effective. |
| Physical Sciences | 100% compliant | P1& P2: Moderation occurred at different levels. The sub-examiners moderated more than 10% to ensure that mistakes were eliminated as far as possible right at the beginning of marking. As a result of intense moderation, mark differences between the various moderators' marks at different levels were negligible. |

**Candidate's Performance**

The performance of learners as presented below is sampled from the 11 gateway subjects.

The graphs below summarise the candidates' performance in each subject. Under each graph a brief comment by the moderator follows on the general performance.

*Figure 7.1 Accounting P1*
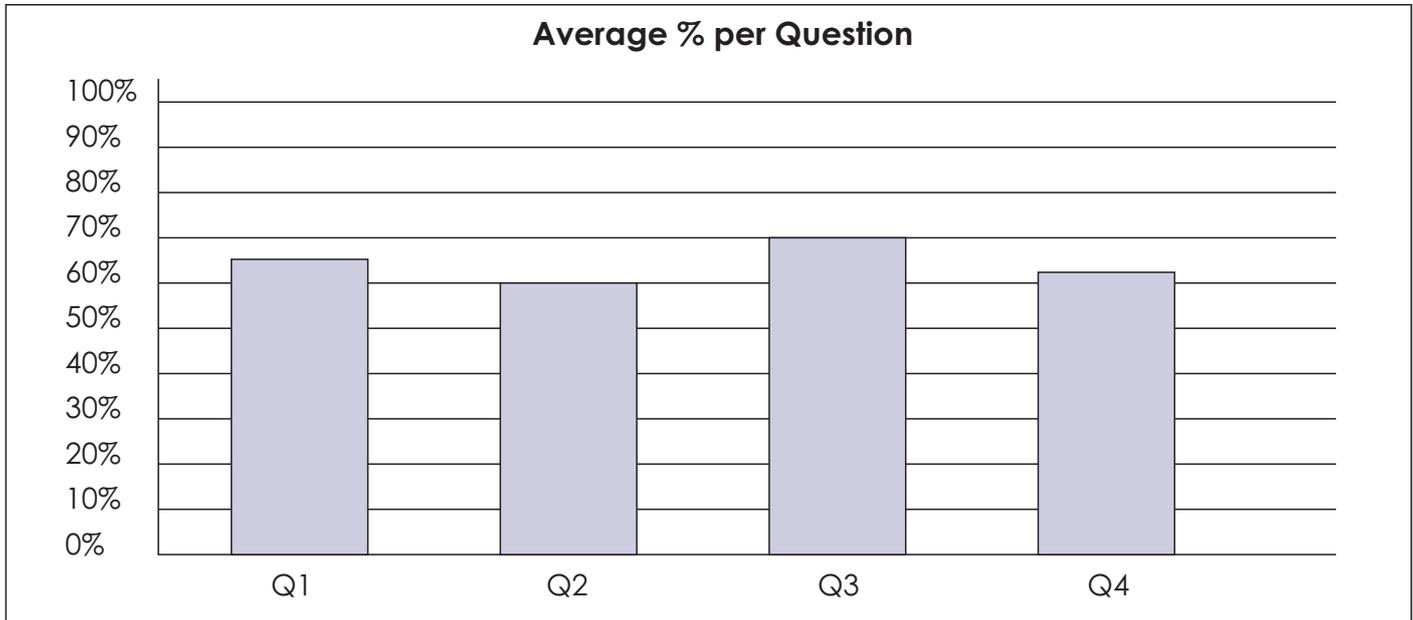


Based on the marking verification, the candidates generally seemed to perform well in all the questions. Some of the candidates were unable to complete the paper, and did not attempt to answer the last three sub-questions of question 4 (i.e. question 4.4.3–4.4.6).

Question 1 for 37 marks, which covered the manufacturing and VAT sections, was found to be well answered in general, with all candidates attempting this question. Question 2 for 60 marks, which covered financial statements, was answered fairly well, although candidates struggled to answer the sub-question containing the balance sheet, which counted 21 marks. Question 3, which covered the

cash flow statement was found to be better than any of the other questions, something that was not expected as this section seemed to be challenging for candidates in most cases. Question 4, which covered budgets, was found to be answered fairly well in general, with a number of candidates leaving the last four  questions blank; namely, question 4.4.3 for 4 marks, question 4.4.4 for 3 marks, question 4.4.5 for 4 marks and question 4.4.6 for 3 marks.

The mark distribution indicated that most of the candidates fell within Level (L) 3 and Level (L) 7, which the assessment body should be pleased with.
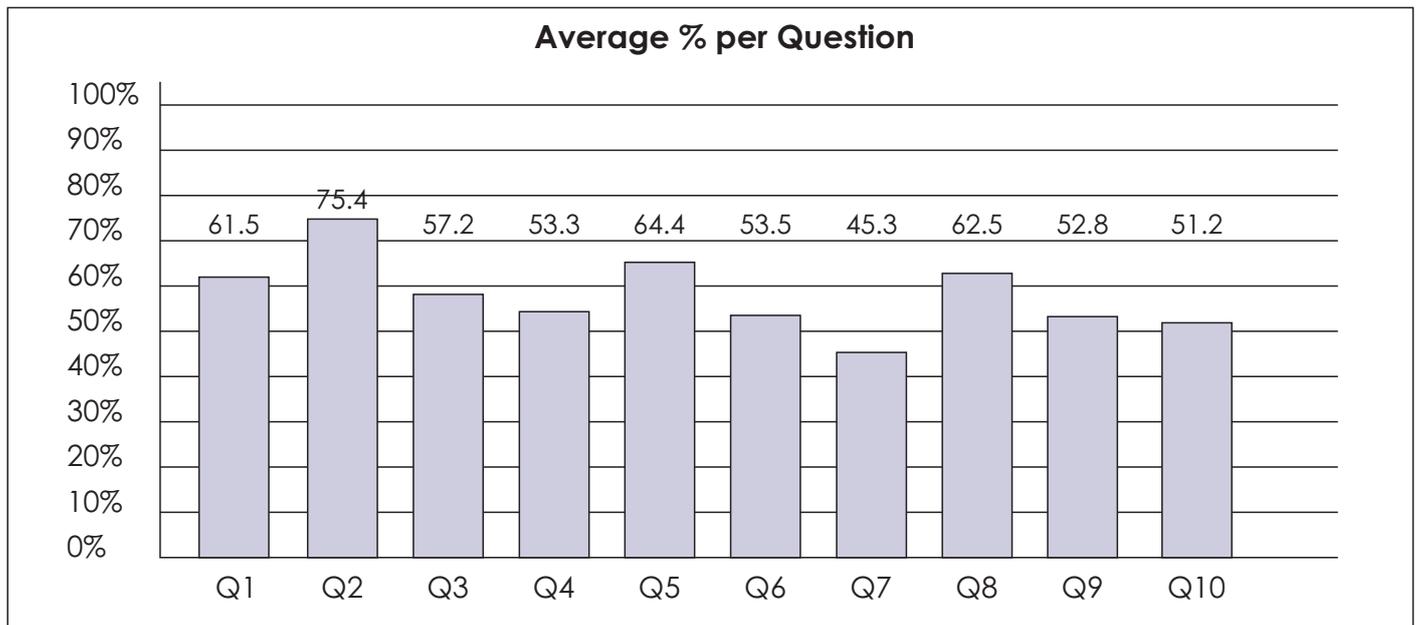
*Figure 7.2 Accounting P2*
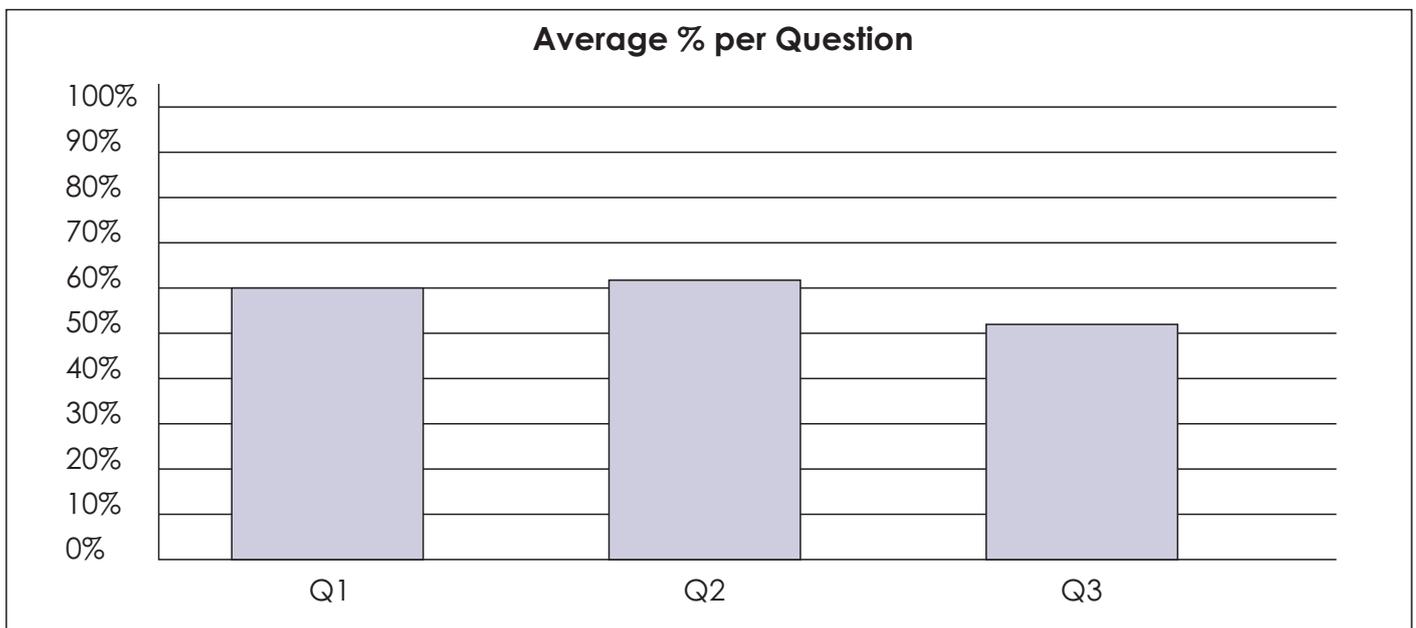


Candidates performed well in general, with the mark distribution falling within L3 and L7 in most cases. Question 3 on asset management was found to be challenging for candidates, as depicted by the graph. This question was a higher-order question that focused mainly on stock systems. In particular, candidates experienced difficulties with the comparison of the FIFO method and the weighted average method and their associated calculations.

Question 1 for 20 marks, which covered reconciliations, was found to be well answered in general; this section was mainly based on Grade 11 work which candidates would have known from the previous grade and all the questions were on a moderate level of difficulty.

Question 2 for 50 marks, which covered the analysis of published financial statements, was found to be the best answered of all the questions. This question was based on a real-life company and candidates were expected to interpret the published financial statements to answer the sub-questions. The sub-questions included both lower-order and higher-order questions.

*Figure 7.3 Afrikaans FAL P1*



**Average % per Question**

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 |
|----|----|----|----|----|----|----|----|----|----|
| 61.5 | 75.4 | 57.2 | 53.3 | 64.4 | 53.5 | 45.3 | 62.5 | 52.8 | 51.2 |

## Section A: Comprehension

This section of the paper contained three questions. Question 1 covered the reading text and counted 13 marks. In question 2, the questions were based on a short newspaper article (7 marks) and question 3 contained questions on a visual text (10 marks).

Candidates managed to answer most of the questions in question 1, but the higher order questions (1.4 and 1.9) remain stumbling blocks for candidates who could not read well with understanding. Most of the candidates did well in question 2, except for 2.3 and 2.6, where candidates did not interpret the questions correctly. It was found that candidates did not read the questions carefully. In comparison to questions 1 and 3, candidates answered question 2 better, probably because there was less reading material and the questions were mostly application level questions. Candidates still find the interpretation of visuals difficult (question 3).

In Section A candidates with a poor command of vocabulary struggled. Some did not know basic words and therefore did not understand the texts and could not express themselves when answering the questions.

## Section B: Summary (Question 4)

The text linked well with the candidates' world (excuses for not being on time for oral exams). Those who read the text carefully and carried out the instructions did very well.

## Section C: Poetry

Questions 5 and 6 were on prepared poems. Candidates performed well in question 5. In question 6 some candidates found 6.2 difficult and confused literal and figurative meaning. In 6.4 they did not give the quotation as asked but wrote "reël 27".

In question 7, the unseen poem, the average and below average candidates could not answer the questions – again a lack of vocabulary.
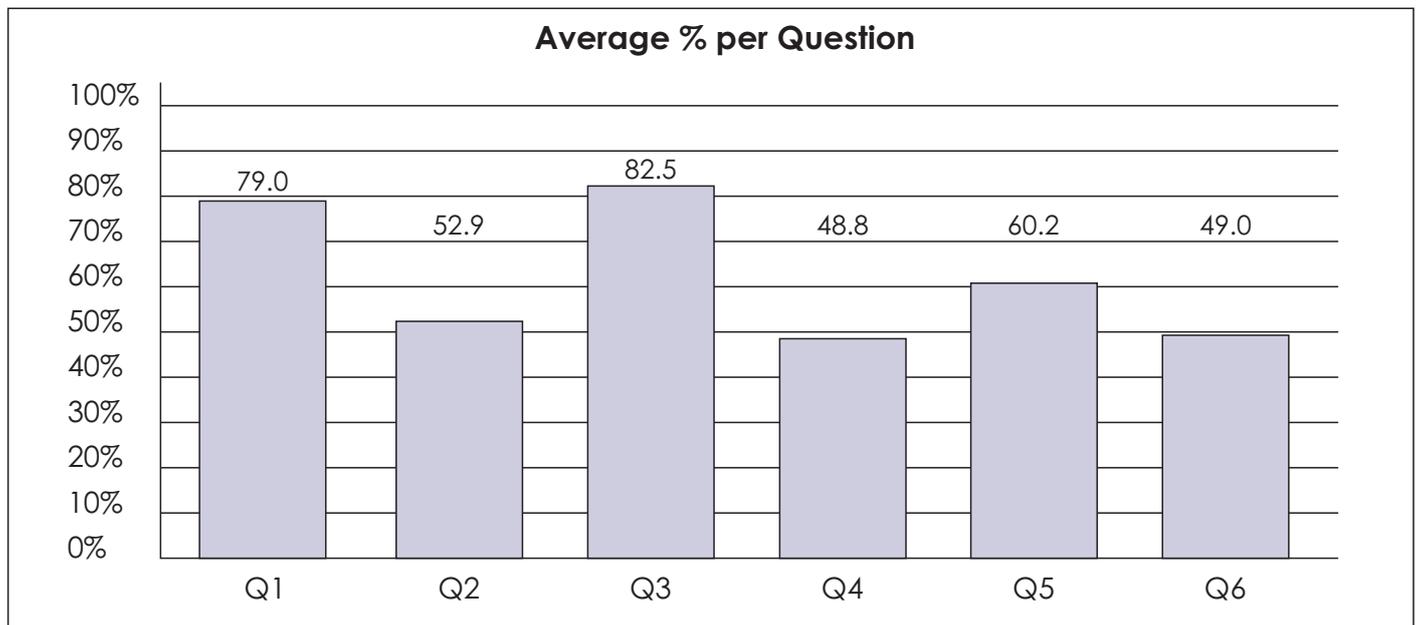
## Section D: Grammar

Three sub-questions were set in this section. In question 8, sentence structures were assessed for 12 marks and the candidates performed well. Candidates found question 9 (word structures) challenging. Here they did not do as well, probably because spelling counts. Question 10 tested communicative skills. The context was provided by a cartoon and various language functions were assessed. It was again clear that a lack of vocabulary hindered the candidates in expressing the answers in Afrikaans.

*Figure 7.4 Afrikaans FAL P2*
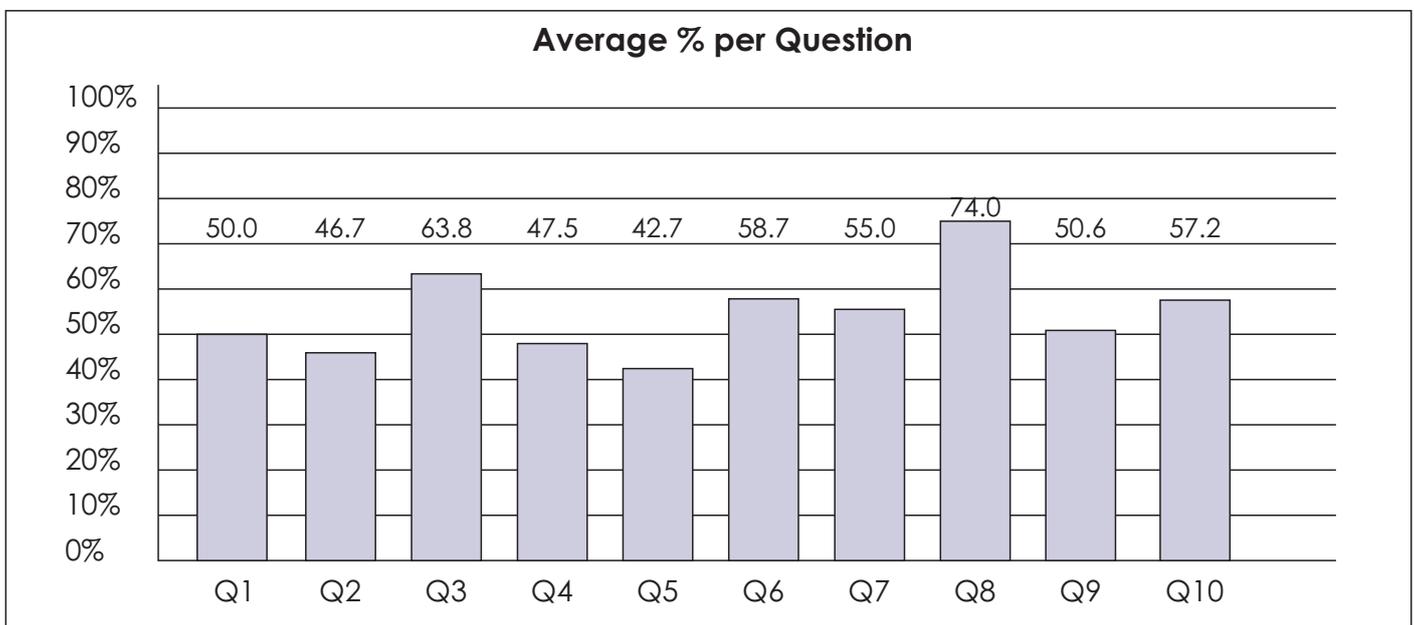


In this paper questions were set on two novels. Candidates had to answer four questions on the novel of their choice. Real effort was made to use the same format and style of questioning to ensure that the questions on both novels were on par. No sections of P2 stood out as problematic or too challenging and no one specific question was answered much better or much worse than others. In questions 1 and 5 (short questions/recall type with some interpretation and extraction), candidates succeeded well in presenting only the required information, e.g. when only the name of place/character was required – only the name was given or when a short explanation was needed, only this was presented. Questions 2 and 6 (one paragraph question and three 2-mark questions) tested both recall and higher-order thinking. These questions were well managed by the candidates; however, they should be careful not to use English words in their answers. Questions 3 and 7 (10-mark dialogue question: students were expected to respond in "first person/character") were fair. Candidates had to answer in the first person and those who knew their work answered well. In questions 4 and 8 (essay-type questions on the prescribed literature), candidates did better in question 8, probably because the book is easier and the characters not so intricate. In questions 9 and 10 (transactional writing), the candidates' competency in Afrikaans determined the level of performance.

*Figure 7.5 Business Studies P1*

**Average % per Question**

| Question | Average % |
|----------|-----------|
| Q1 | 79.0 |
| Q2 | 52.9 |
| Q3 | 82.5 |
| Q4 | 48.8 |
| Q5 | 60.2 |
| Q6 | 49.0 |

Learners performed exceptionally well in the multiple choice and "missing word" questions, averaging 80%. In Tue/False questions (Q2) the average was in the 50s as many learners failed to provide the correct term. In the other questions the marks ranged from 11 to 43 with a maximum of 50.

In question 3.8 some learners gave transformational leadership style as the answer. This answer was discussed with the examiner/internal moderator and was subsequently accepted.

Appropriate strategies could not be identified generally for each scenario in question 4.2, especially 4.2.1 on sell-by dates. In question 4.3 many learners could not identify the technique that can be applied to improve the quality of performance but did have suitable answers in their discussion. Question 4.4 – learners' confused "excess clause" with "subrogation"; question 4.6 – many learners failed to list the possible three elements of marketing communication in the policy for Famous Brands; question 5.2 – some difficulty arose in linking the appropriate acts to the scenarios; question 5.3.1 – some learners confused the cognitive verb as an explanation was required; question 6.1.2 – the aims of the Skills Development Act were confused with the application of the Act; question 6.1.3 – some learners could not motivate whether 'empowerment and talent management' could be a strength or an opportunity.

*Figure 7.6 Business Studies P2*

**Average % per Question**
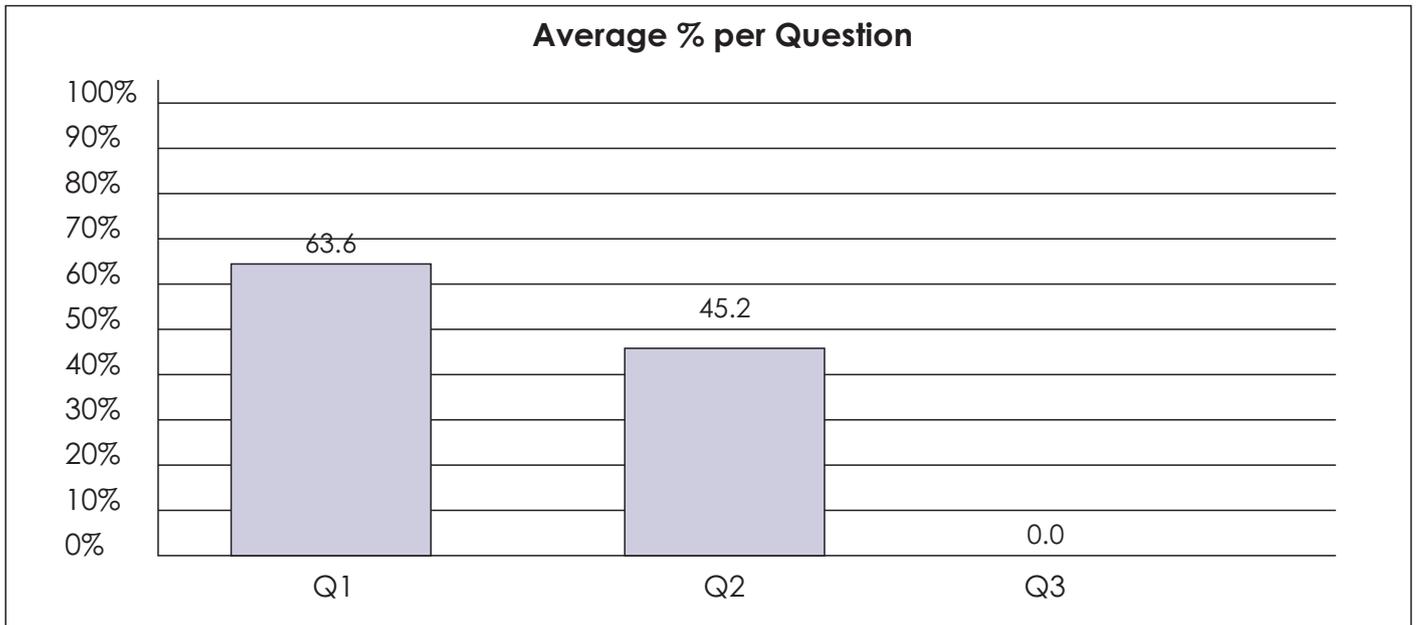


Generally, learners had difficulty in analysing, interpreting and responding favourably to the questions posed. Question 1 focused on assessing the impact of the external environment on marketing using models, but some learners' responses were too broad, focusing on contents (first part). In the second part, learners discussed the 7 Ps with scant attention being given to the development of strategies. Question 2 was generally not well answered. The focus was on explaining the topics selected for training, and providing recommendations on ways to deal with current and future problems. Some merely explained the topics.

*Figure 7.7 CAT P1*
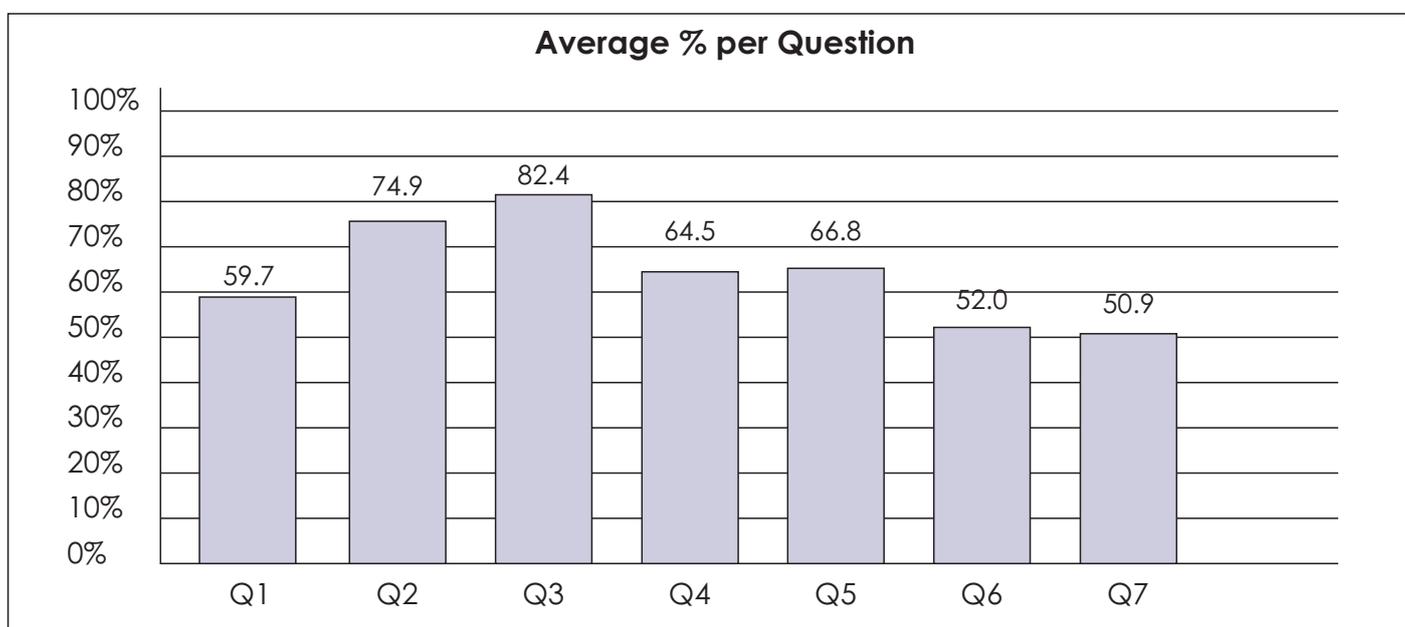
**Average % per Question**
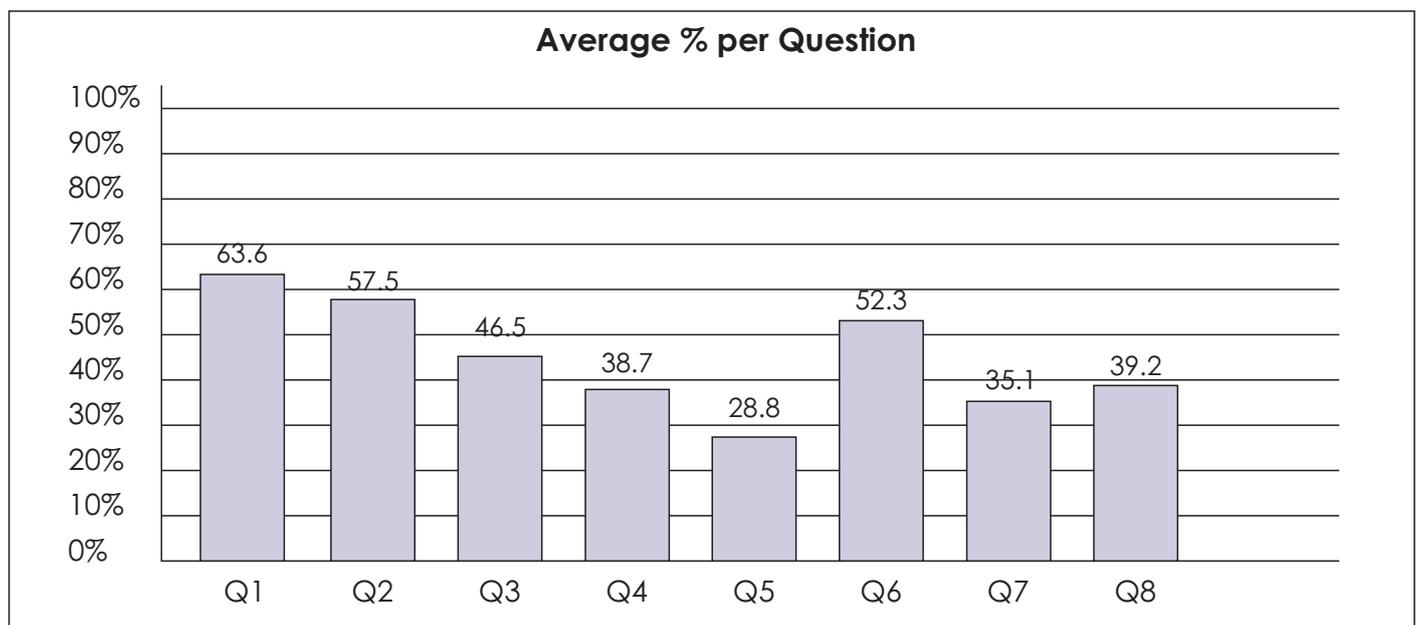
The marking of a total of 39 candidates' scripts was verified.

The highest mark was 101 (67, 3%) while the lowest mark was 16 (10, 7%).

Candidates performed better than the average for the question paper on questions 1, 2, 3 and 6, with question 1 being the best answered, which is probably to be expected as it comprised matching items and the understanding of acronyms.

The questions that were answered worst were questions 4, 5, 7 and 8, with question 5 being the worst of the entire paper. Question 5 dealt with the management of information and was pitched at a higher-order level.
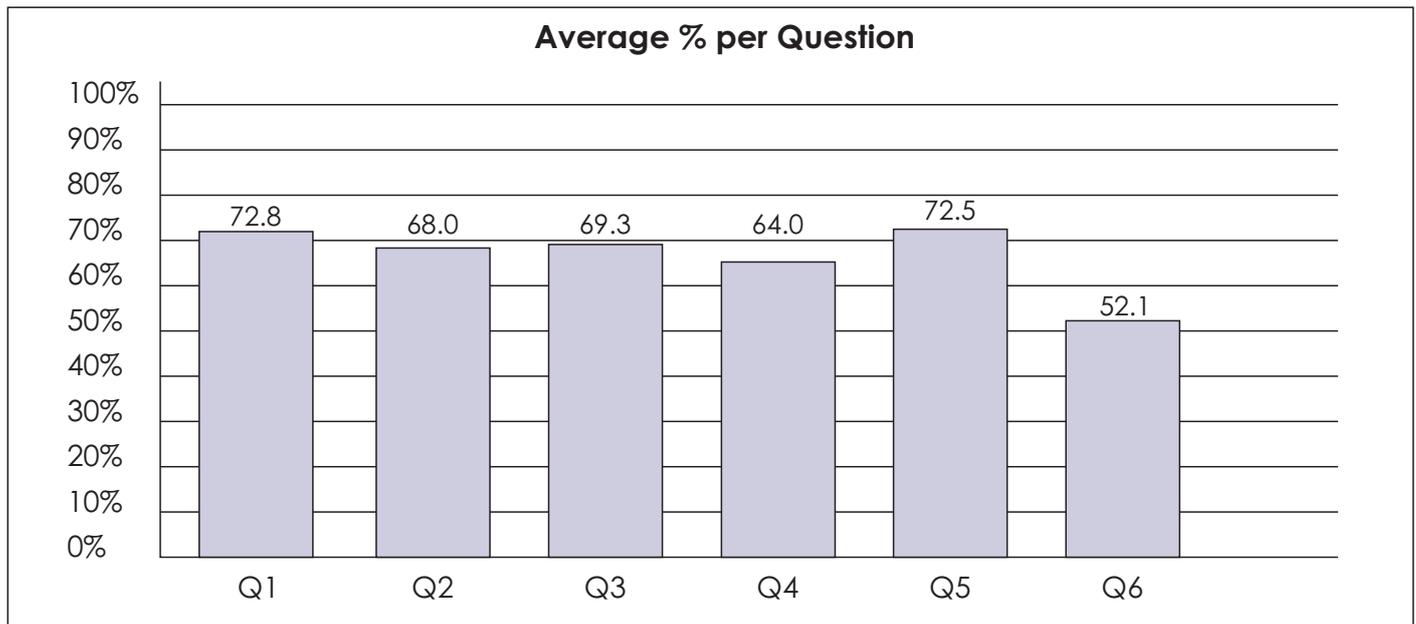
*Figure 7.8 CAT P2*



The marking of a total of 18 candidates' scripts was verified. To this number the results of a further 60 candidates marked by the chief marker were added to the spreadsheet. The highest mark was 170 (94, 4%), while the lowest mark was 6 (3, 3%). The average percentage of the sample for the November 2015 practical paper was 63, 1%.

Candidates performed better than the average for the question paper on questions 2, 3, 4 and 5, which were questions on word-processing which most candidates found reasonably easy to answer. Question 5 included questions on spreadsheets. Question 3 was the best answered with candidates scoring on average 82, 4%.
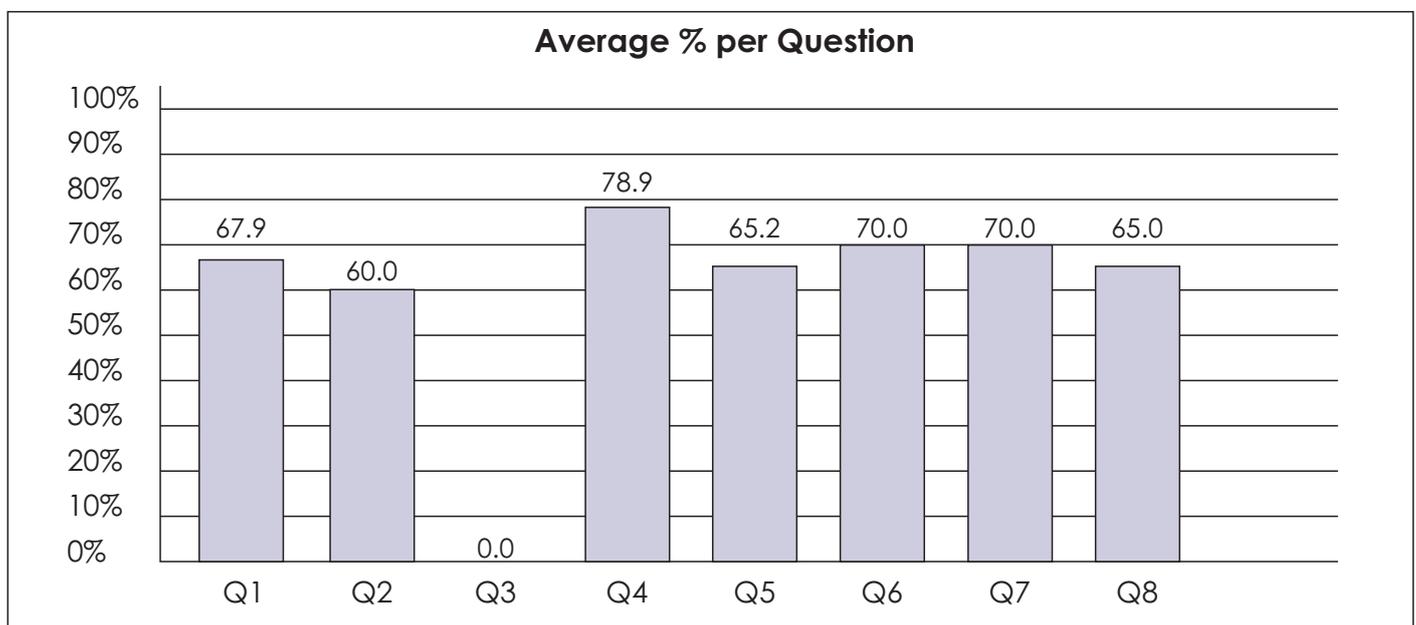
The worst answered questions, those below the average for the paper, were questions 1, 6 and 7. Strangely enough, question 1 would normally be considered a reasonably easy entry-level question. Question 6 was on databases and Question 7 was on HTML coding, both of which many candidates found more challenging. Question 7 was the question with the lowest average score.

*Figure 7.9 English HL P1*

**Average % per Question**

| Question | Average % |
|----------|-----------|
| Q1 | 72.8 |
| Q2 | 68.0 |
| Q3 | 69.3 |
| Q4 | 64.0 |
| Q5 | 72.5 |
| Q6 | 52.1 |

From individual scripts a fair distribution of marks from 35 to 98% was identified. It was clear that most of the candidates' marks fell into the range of 45 to 72%. In general, it can be stated that candidates found the paper to be fairly accessible and manageable. Question 3 and 4 – candidates performed reasonably well in the seen and unseen poetry questions. Learners were able to interpret and access the questions, averaging between 64 and 67% for these questions. The open-ended questions which required evaluation, analysing and synthesising were challenging for weaker candidates; however, many did manage comfortably to obtain at least 50 to 65%. Candidates struggled with the grammar questions, especially in cases where they were required to identify and then to provide an explanation for the grammatical error.

*Figure 7.10 English HL P2*

**Average % per Question**

| Question | Average % |
|----------|-----------|
| Q1 | 67.9 |
| Q2 | 60.0 |
| Q3 | 0.0 |
| Q4 | 78.9 |
| Q5 | 65.2 |
| Q6 | 70.0 |
| Q7 | 70.0 |
| Q8 | 65.0 |

Individual scripts were identified from eight centres and verified. A fair distribution of marks was found, that is, from 39 to 95%. Of the 24 packs of scripts submitted by the assessment body for verification, it was clear that most of the candidates' marks fell into the range of 40 to 75%. The better candidates obtained over 70% for this paper. In general, it can be stated that candidates found the paper to be fairly accessible and manageable. Both written and visual texts were relevant and familiar to the experiences of candidates, thus making the paper accessible.

Section A: Literature essays – Graphically, this section is represented by questions 1, 2, 3, 4, and 5. Question 1 comprised the compulsory drama question; questions 2.1 and 2.2 were choice questions on one novel represented by questions 2 and 3 on the graph; questions 3.1 and 3.2 were choice questions on the second novel, represented by questions 4 and 5 on the graph.

Since 2014, the assessment body has eliminated the need for a plan to be completed for the mini essay where a total of 5 marks was allocated specifically for the candidates' reflection of the planning. This decision opened up the opportunity for critical and evaluative thinking for the better candidates; for the weaker candidates, who did not bother to plan, there was no focus and direction in the essay and inevitably fair to satisfactory essays were then produced.

Section B: Transactional writing – Graphically, this section is represented by questions 6, 7 and 8. Question 4 was a compulsory question represented by question 6 on the graph, where candidates had to choose to do either questions 5.1 or 5.2 represented by questions 7 and 8 on the graph. Candidates did well in this section; they understood the demands and focus of the questions and were able to link the visuals to the questions and respond in an intuitive and mature fashion. Candidates also demonstrated good knowledge of the format and structure of the selected transactional writing pieces. The compulsory transaction question represented as Q6 on the graph appealed to all candidates due to the age-appropriateness and relevance of the content in the stimulus. Most candidates whose scripts were verified obtained 14/20 for this question. Question 5.1 (represented as Q7 on the graph) was the more popular choice for candidates especially because of the relevant and current events on the #FeesMustFall campaign on social media. Generally, the candidates who performed poorly showed a lack of sound and critical knowledge of texts, displayed poor interpretation, and were unable to write in acceptable, appropriate language. Candidates' answers determined the cognitive level at which they responded; all topics were accessible to all candidates but candidates differed in their approach to and construction of their responses. These were accurately assessed by using the rubrics provided.

*Figure 7.11 Geography P1*

**Average % per Question**

| | Q1 | Q2 | Q3 |
|---|---|---|---|
| Average % | 58.0 | 61.9 | 52.5 |
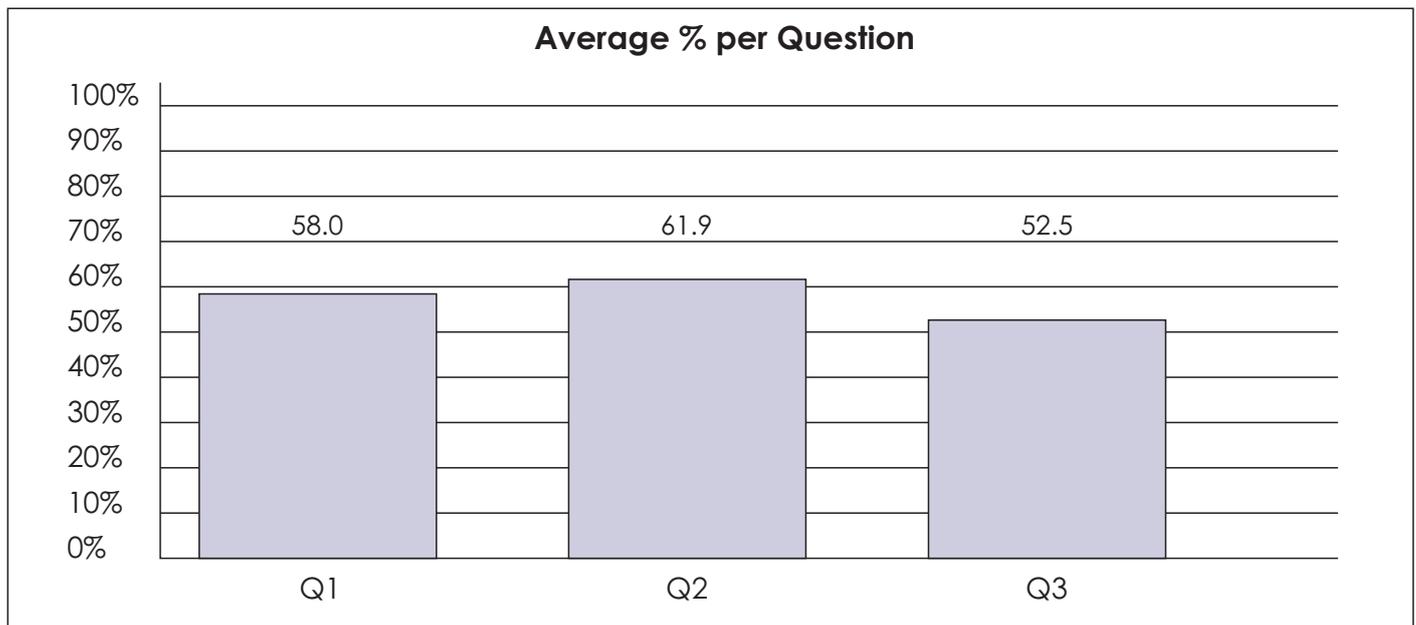
The performance of learners shows that the paper was balanced. A majority of the students did not have difficulty responding to questions of high-order cognitive demand. All three compulsory questions had a performance level of above 50%. For question 1 the average was 58%, with some scores above 78%. This question was more comprehensive since the learner was expected to integrate all the sections taught in the classroom. In question 2, the average was 61,9%, and it was the best answered question. Learners seem to have grounded knowledge of climate and weather and geomorphology and were able to illustrate and label diagrams where they were required to do so. Performance in question 3 was the lowest of the paper, with an average of 52.5%. The learners' knowledge of rural and urban settlements and the economic geography of South Africa was weak compared to the other knowledge tested.

*Figure 7.12 Geography P2*

**Average % per Question**

| | Q1 | Q2 | Q3 | Q4 |
|---|---|---|---|---|
| Average % | 58.0 | 57.4 | 65.0 | 70.8 |
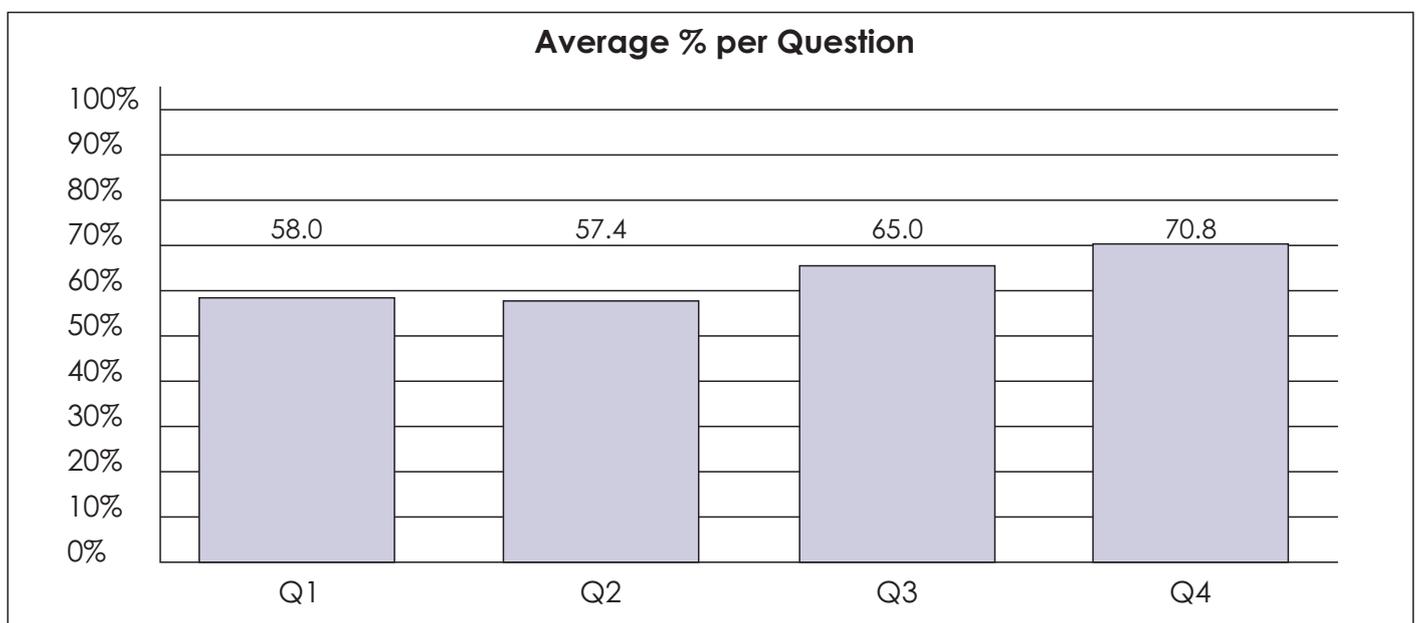
Based on the sample of 30 scripts moderated, the performance of the learners indicates that the paper was fair. The questions required learners to display geographical skills and techniques by using both the topographic and orthophoto maps. The average for question 1 was 58% with the majority of candidates getting marks in the sub-questions assessing atlas use and map orientation (1.1.1–1.1.5). The average for question 2 was 57, 4%; learners were expected to integrate their knowledge of theory on climate and drainage. The average for question 3 was 65%. Candidates performed well in this question; an indication of their grounded ability to integrate knowledge of rural and urban settlements and GIS with the topographic map and the photograph. The average for question 4 was 70, 8% and most learners excelled by scoring the total mark in this question. Their theory knowledge of economic activities was good.
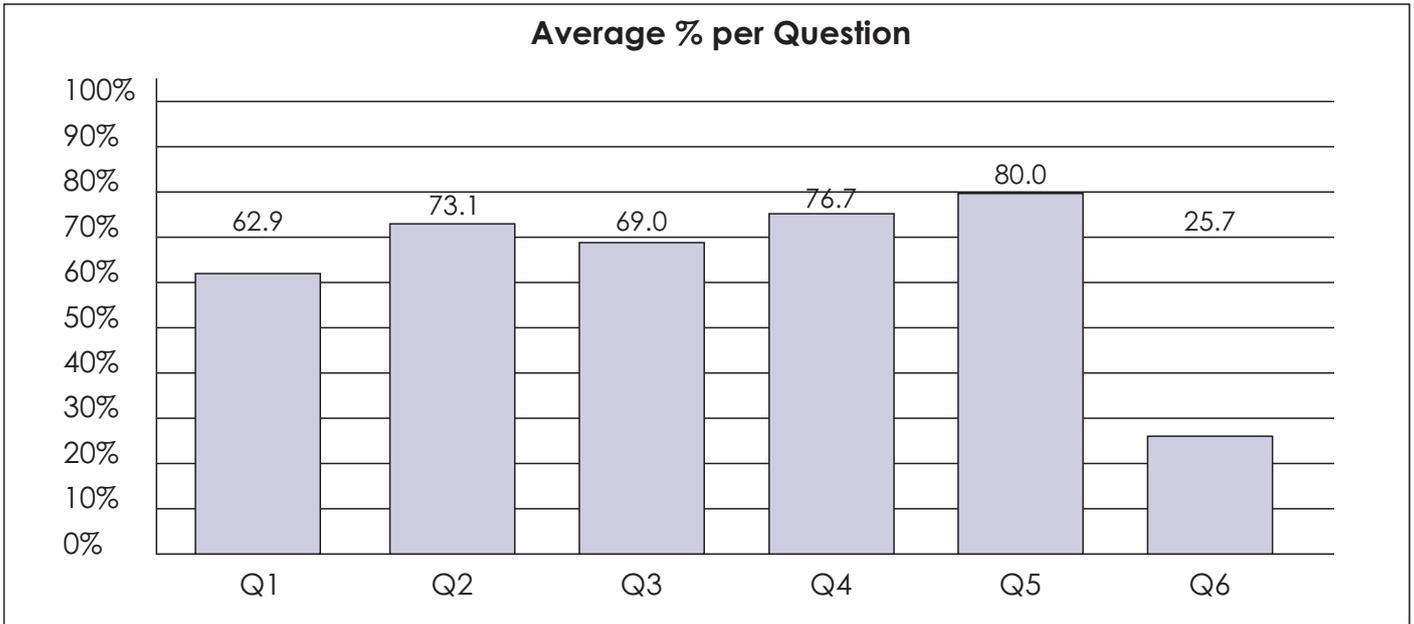
*Figure 7.13 History P1*
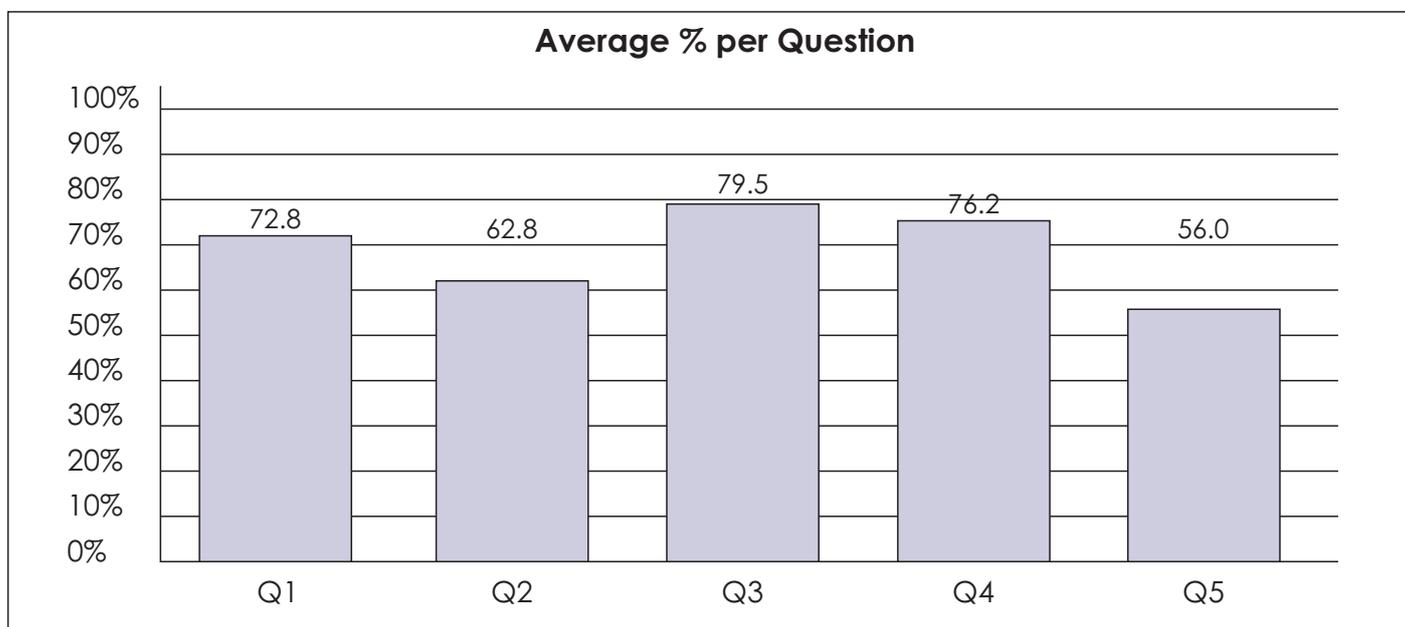


All the questions in this paper were compulsory. Section A, question 3 (20 marks) was set on a current issue in the media (which enabled the candidates to link issues between past and the present). Based on the sample of scripts verified, the candidates fared very well in this question, with an average of 79, 5%. It should also be noted that questions 1 to 3 required a broad historical understanding, while focusing on specific historical skills, including analysis, evaluation of written and visual sources and engaging issues of reliability and usefulness.

The candidates also did very well in Section B: Source-based questions (90 marks), with an average of 76.2%. Questions were based on several sources from one or more of the prescribed themes. Most questions required lower-order cognitive skills, e.g. knowledge and comprehension.

However, Section C, Source-based essay (50 marks), was more challenging for the leaners; they could only achieve an average of 56%. Here, the students were required to apply their acquired knowledge and skills to answer the essay which had to be developed from the source-based questions of Section B.

*Figure 7.14 History P2*

**Average % per Question**



Bar chart showing average percentages per question:
- Q1: 62.9
- Q2: 73.1
- Q3: 69.0
- Q4: 76.7
- Q5: 80.0
- Q6: 25.7

Scripts selected from various centres showed that most questions obtained above-average marks, that is, 72, 2%. Of the selected scripts, one candidate scored 100%. Candidates were mostly able to address the requirements of the questions to an extent. Question 3 and 5 were the most popular questions and students who attempted them scored an average of 69% and 80% respectively.

*Figure 7.15 Mathematical Literacy P1*

**Average % per Question**



Bar chart showing average percentages per question for Q1 through Q5.
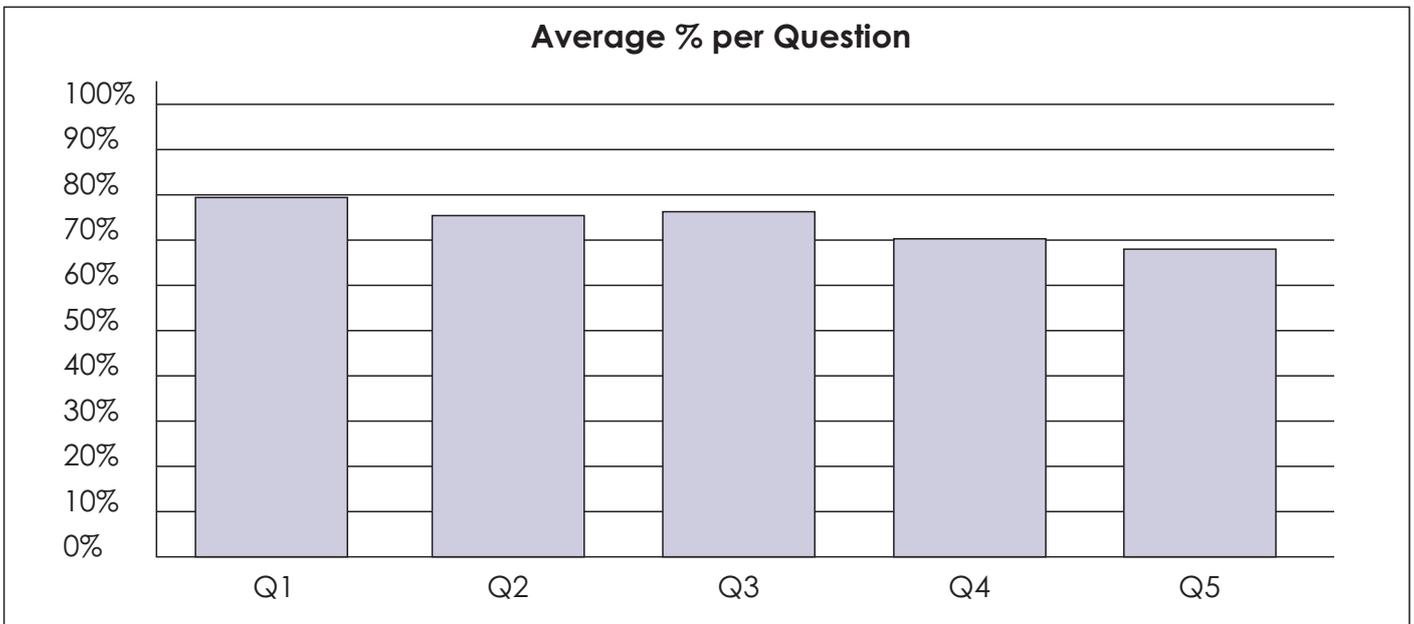
Candidates' performance in P1 was generally good according to expected norms. Candidates' performed with consistency in all questions as is evident in the graph. However, a few candidates struggled with question 5. This question is usually an integrated question where various topics are assessed. It was noted that some candidates found the finance questions in question 5 a challenge. It was also noted that cognitive level 3 questions presented a challenge to some candidates. The
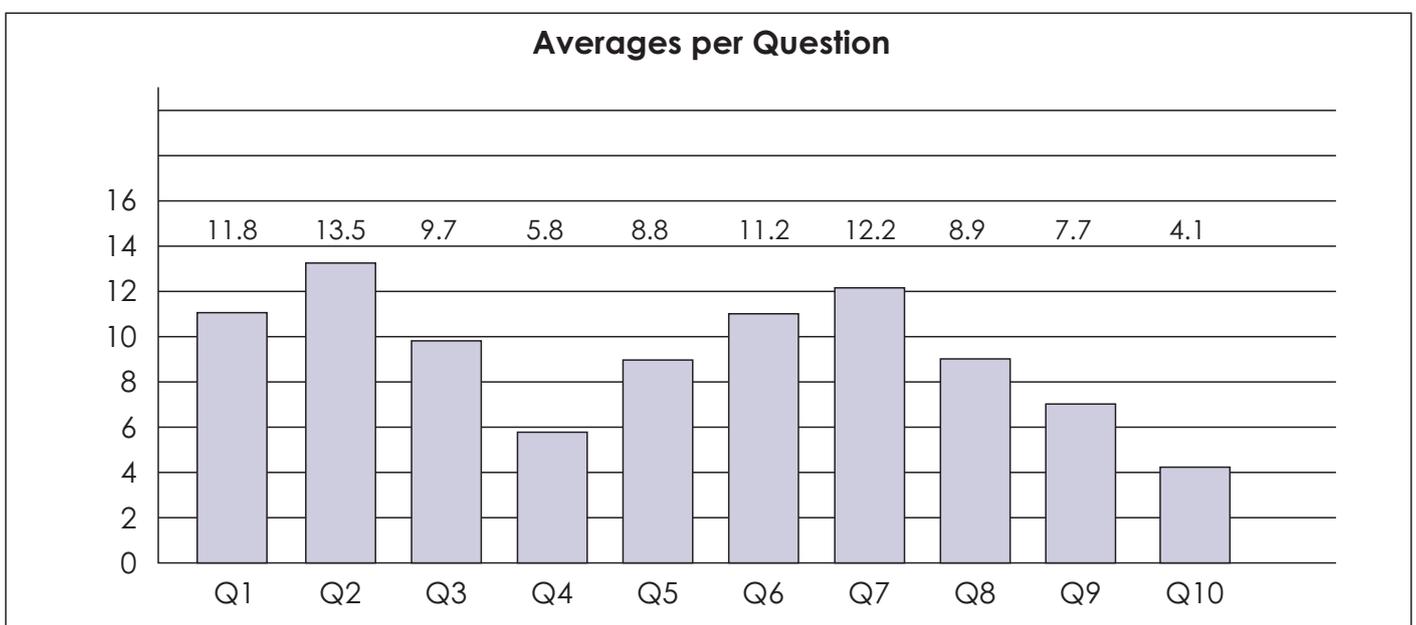
overall average for this paper was once again within expectations, that is, 75%.

*Figure 7.16 Mathematical Literacy P2*

**Average % per Question**
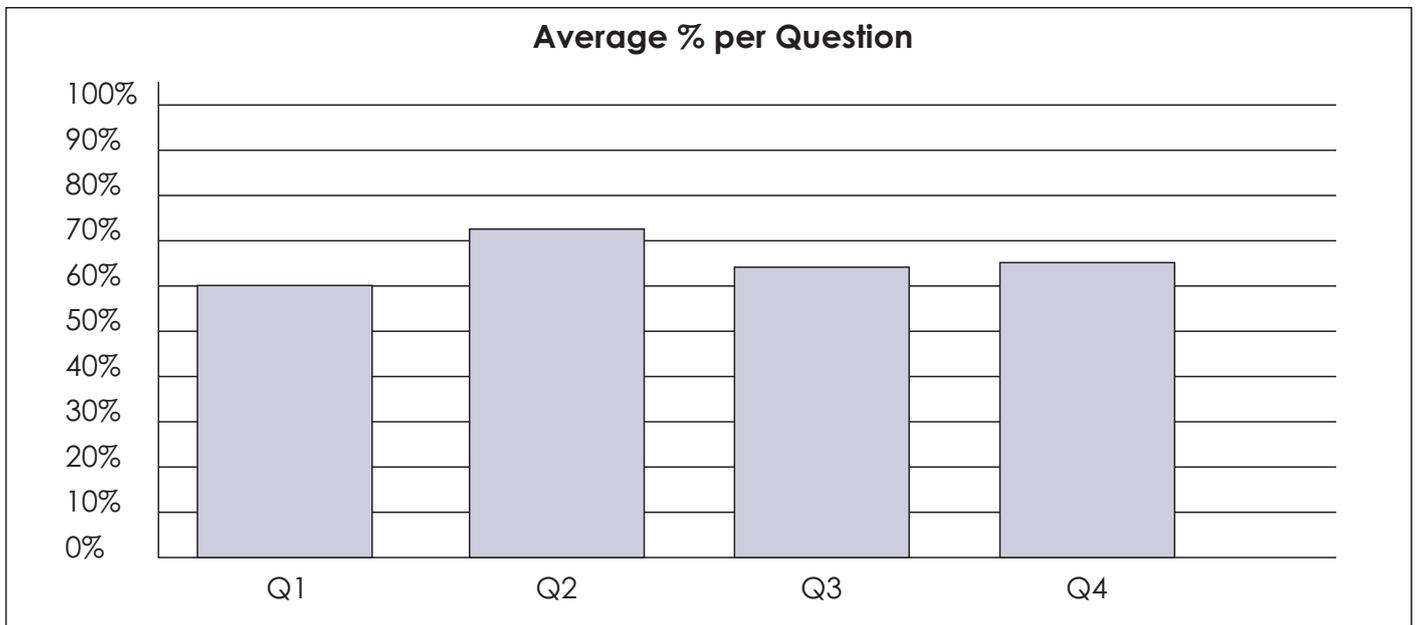


Historically, candidates' performance in P2 is not as good as P1, as the cognitive demands of this paper are greater. Unlike P1, which has 60% cognitive level 1, 35% level 2, and 5% level 3-type questions, and no level 4 questions, P2 has more higher-order questions with no level 1-type questions. P2 is made up of 25% level 2; 35% level 3 and 40% level 4 type questions. Since this paper is more of an applications paper, performance in this paper was lower than that of P1. Once again, candidates performed according to expectations, achieving a 65% average. Question 1, which contained mainly finance topic questions, was poorly answered by some candidates. Some candidates also found the question on maps and plans, question 3, a bit challenging.
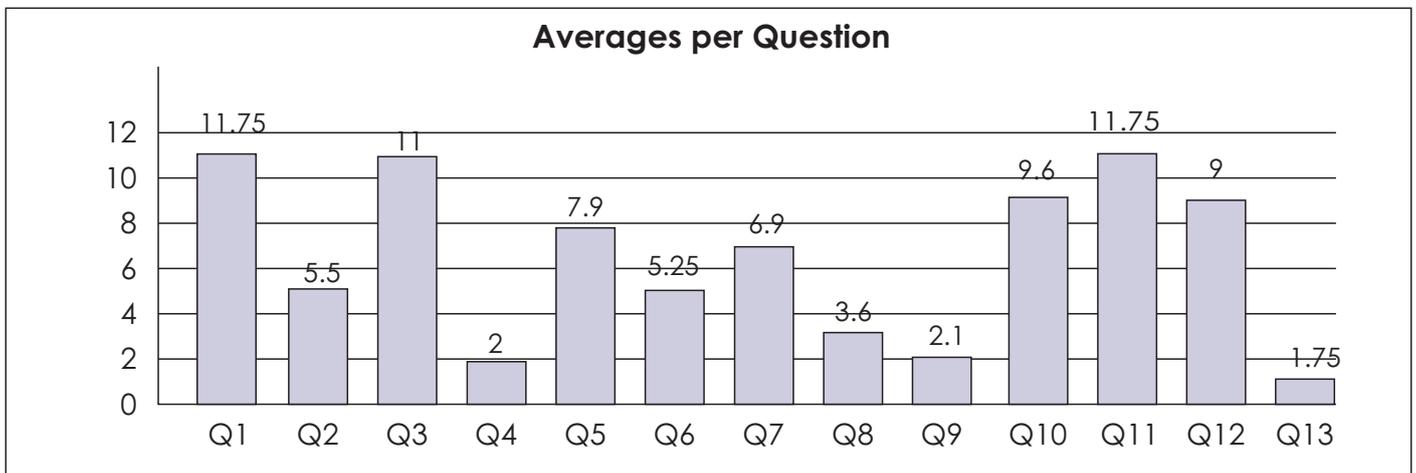
*7.17 Mathematics P1*

**Averages per Question**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 11.8 | 13.5 | 9.7 | 5.8 | 8.8 | 11.2 | 12.2 | 8.9 | 7.7 | 4.1 |

The average marks of the ten scripts examined in each of the 42 sub-questions in the paper are given in the above graph. My cognitive assessment of the questions that were answered poorly are indicated in parenthesis in the discussion below. The predictions were quite accurate, accept in the case of the following:
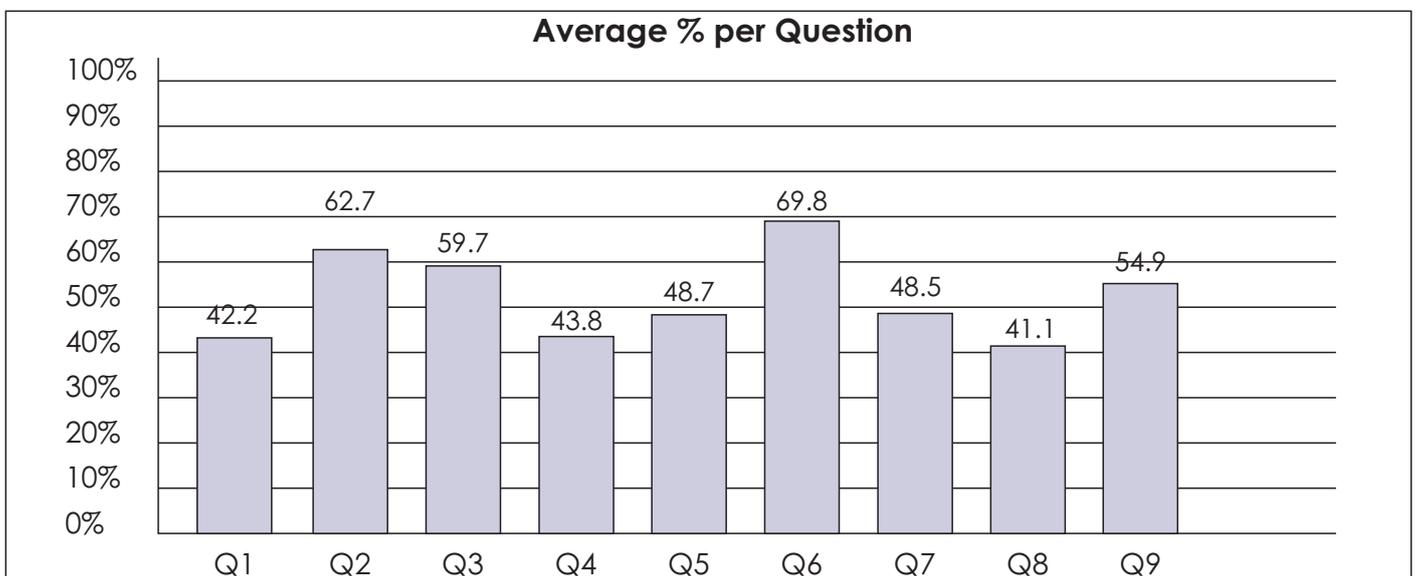
- Question 1c1 (RM): I classified this question, which involved finding the roots of a quadratic equation, as routine medium. Surprisingly, the average mark was 30%.
- Question 9b2 & 9b3: These questions involved a Venn diagram, a section of probability that is not at all conceptually demanding. The average obtained was 20%. I infer that the section was not taught well.
- Question 3c: This question asks for a certain fraction to be expressed as a percentage. The average mark was 20%. A good example of how poor teaching at GET affects Grade 12 results.

*Figure 7.18 Mathematics P2*

**Averages per Question**

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
| 11.75 | 5.5 | 11 | 2 | 7.9 | 5.25 | 6.9 | 3.6 | 2.1 | 9.6 | 11.75 | 9 | 1.75 |

Marking of paper 2 problematic, the marking team tended to be too generous. In spite of our cognitive assessment, paper 2 may have been more demanding than what we predicted. The sample scripts selected showed that candidates struggled with question 2, 4, 6, 8, 9 and 13 in this paper.

*Figure 7.19 Physical Sciences P1*

**Average % per Question**

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 |
|----|----|----|----|----|----|----|----|----|
| 42.2 | 62.7 | 59.7 | 43.8 | 48.7 | 69.8 | 48.5 | 41.1 | 54.9 |

Learners did well in question 6 where all the cognitive levels were represented, but 79% of the questions were lower and middle-order questions. The average mark in this question was 69, 8%. Learners seemed to have mastered "fields" very well. Twenty per cent of the learners whose marks were recorded got full marks in this question. Question 8 was the worst answered question. The average mark in this question was 41, 1 %. Although this question contained lower and middle order questions, learners struggled with the explanatory type of question (question 8.1.3) and were not able to apply the theory learnt in class to real-life situations (question 8.3.2).

*Figure 7.20 Physical Sciences P2*
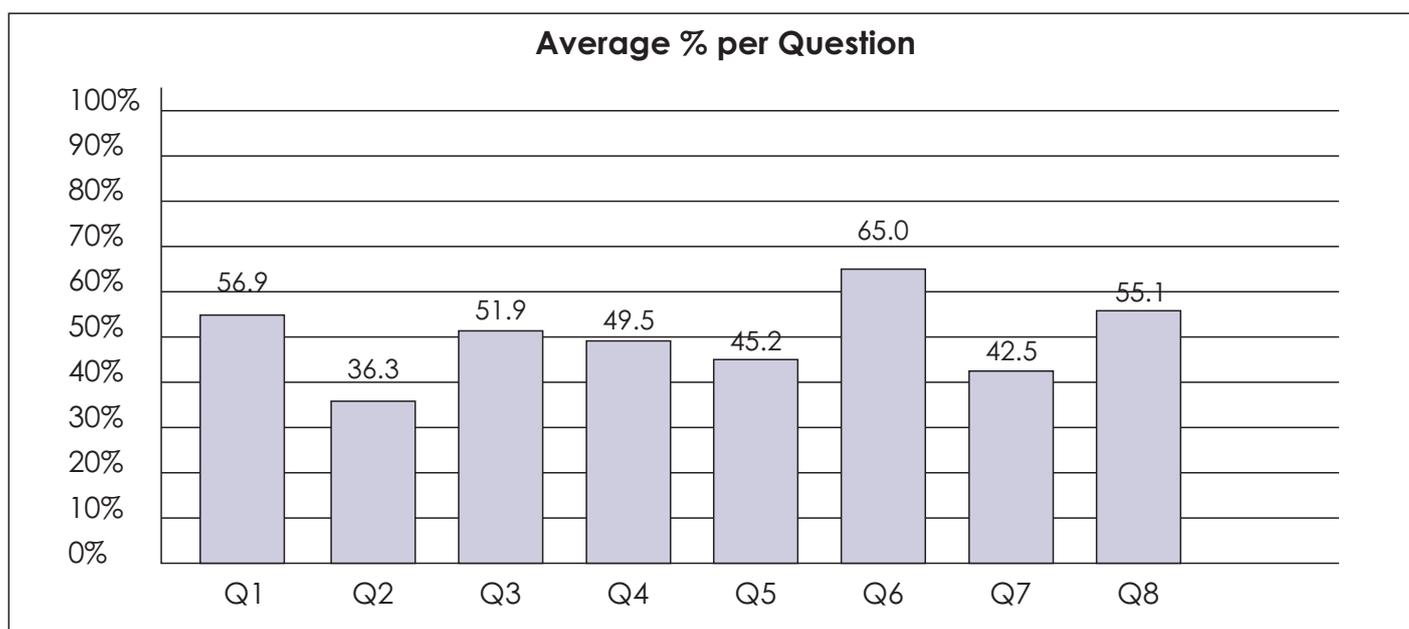


The discrimination and difficulty indices in question 8 indicated that it was a very good average item, but surprisingly learners' performance was the worst in this question. Question 6 was a very good and easy item; this was proven by the fact that learners performed best in this question.

The questions that were easy to moderate were questions 1 (examined multiple-choice questions examined all the content areas- cognitive demands ranged from level 1-4); 2 (examined chemical bonding- cognitive demands ranged from level 1-2); 6 (examined the galvanic cell – here cognitive demand ranged from level 1 to level 2) and 8 (examined organic chemistry – here cognitive demand ranged from level 1 to level 3). Performance was best in question 6, where the average mark was 13 out of 20; question 1, where the average mark was 13,4 out of 20; and question 8, where the average mark was 18,7 out of 34; hence performance was above the mean, which was 50,1% for these questions. The reason for this performance is that cognitive demand at level 1 and 2 was dominant in these questions.

However, performance was lowest in question 2 which examined Grade 11 content, and below average in questions 3, 4, 5 and 7 because cognitive demand at levels 3 and 4 was covered in these questions.

## 7.4    AREAS OF GOOD PRACTICE

- The findings as reflected in Figure 7.1 are evidence of the meticulous way in which the IEB conducts its marking process. The marking process could not be faulted, except in Business Studies where the moderator was not fully satisfied with the details of the marking guideline.

## 7.5    AREAS OF CONCERN

- In a number of the papers, even though internal moderation was lauded, the evidence of where and how it happened was problematic.
- The awarding of marks was not very clear, as in the case of the Accounting.

## 7.6    DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

The IEB must have a clear procedure for the way in which
- marks are awarded
- moderation is conducted , so that this process is clear and  transparent.

## 7.7    CONCLUSION

For the 2015 NSC examinations, Umalusi was able to deploy its moderators to all the IEB marking centres. From the findings it can be concluded that, apart from Business Studies where the marking guideline was unsatisfactory, the marking memo in all subjects was adhered to 100%, the marking standards were acceptable and the internal moderation was very good. Based on the sampled scripts, the overall learner performance was far above average, with candidates attaining marks as high as the 80% range. Candidates who performed poorly lacked the skills needed to engage critically with the content and were unable to use appropriate language.

# Chapter 8

## Standardisation and Resulting

### 8.1    INTRODUCTION AND PURPOSE

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

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

Various processes are involved in standardisation to ensure it is carried out accurately, including the verification of subject structures, electronic data booklets and development norms, as well as the approval of adjustments.

### 8.2    SCOPE AND APPROACH

The IEB presented a total of 62 subjects for statistical moderation in the November 2015 National Senior Certificate (NSC) examinations. The verification of mark capturing was carried out by Umalusi at the IEB offices.

This section summarises the verification of the standardisation and resulting system, the areas of good practice and the areas of concern, as well as giving directives for improvement.

### 8.3    SUMMARY OF FINDINGS

**Development of Historical Averages**

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

**Capturing of Marks**

Monitoring was conducted at the IEB offices. Umalusi personnel verified the availability and implementation of guidelines or procedural documents used for the authentication of mark sheets, the capturing of examination marks, the appointment and training of data capturers, the

management of capturing centres and the security systems for the examination materials.

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

**Electronic Data Sets and Standardisation Booklets**

The electronic data sets were verified before the final standardisation booklets were printed and were approved without moderations. The following data sets were verified and approved after several moderations: the statistics distribution, the raw mark distribution and the graphs per subject, paying particular attention to different colours and raw mark adjustments.

**Pre-Standardisation and Standardisation**

The qualitative input reports consisted of the external moderators' reports, the internal moderators' reports, post-examination analysis reports, the historical averages, pairs analysis and the previous years' statistical distribution per subject, as well as the standardisation principles used in determining the adjustments per subject.

**Standardisation Decisions**

The decisions for the standardisation of the November 2015 National Senior Certificate examination listed in Table 8.1 below were informed by the historical average, the external and internal moderators reports, pairs analysis and previous subject statistics.

*Table 8.1: List of the standardisation decisions made for the 2015 NSC examinations*

| Description | Total |
|---|---|
| Number of learning areas presented | 64 |
| Raw marks | 52 |
| Adjusted (mainly upwards) | 12 |
| Adjusted (mainly downwards) | none |
| Subjects not standardised | none |
| **Number of learning areas standardised:** | **64** |

**Post Standardisation**

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

## 8.4    AREAS OF GOOD PRACTICE

- The IEB use a "double capture" method for entering the marks in the system, as per requirements.
- The IEB security of mark sheets is commendable.
- The detailed process/procedure in place for the capturing of marks is highly commendable.
- The checking of the sub-totals was also good

## 8.5    AREAS OF CONCERN

- None

## 8.6    DIRECTIVES FOR COMPLIANCE

- None

# Chapter 9

## The Status of Certification of the National Senior Certificate, 2014/2015

### 9.1  INTRODUCTION

Umalusi ensures adherence to policies and regulations promulgated by the Minister of Basic Education and Training for the National Senior Certificate (NSC), a qualification which was written by the first cohort of learners in 2008/11.

In South Africa, Umalusi, through its founding Act, is also responsible for the certification of learner achievements for qualifications registered on the General and Further Education and Training Sub-framework of the National Qualifications Framework (NQF), which include the NSC. Certification is the culmination of an examination process conducted by an assessment body, in this instance the Independent Examination Board (IEB).

This process includes a number of different steps, commencing with the registration of the candidate and proceeding to the writing of the examination. After the candidate has written the examinations, which have been administered by the assessment body, the examination scripts are marked, the marks are processed and, after quality assurance by Umalusi, candidates are presented with individual statements of results, which are preliminary documents outlining the outcomes of the examination. These documents are issued by the assessment body. The statement of results is, in due course, replaced by the final document, namely, the certificate issued by Umalusi.

In order to give further effect to its certification mandate, Umalusi must ensure that certification data is valid and reliable, and that it has been submitted in the format prescribed by the Council. Umalusi has, therefore, published directives for certification that must be adhered to by all assessment bodies when submitting candidate data for the certification of a specific examination.

The assessment bodies must ensure that all records of candidates who have registered for the NSC examination and those qualifying for a subject statement or the full NSC, in a specific examination cycle, are submitted to Umalusi for certification. The datasets must also include the records of those candidates who have not qualified for a certificate, such as the records of candidates who withdrew from the course/qualification (candidates who registered to write examinations, but did not write any subjects) and those candidates who failed all subjects (candidates who wrote the examination, but could not pass any subject).

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

When the data for certification has been submitted to Umalusi, it is compared to the quality-assured resulting data. Should there be any discrepancies between the quality-assured data and that submitted for certification, the assessment body is required to submit an explanation and/or

supporting documentation to confirm that the discrepancy is not as a result of an error or data anomaly which may have crept in. Umalusi is currently only charging private assessment bodies certification fees. The certification fees of public schools are funded by a funding agreement with the Department of Basic Education.

## 9.2    CURRENT STATUS OF CERTIFICATION

The IEB is fully accredited by Umalusi as a private assessment body to conduct the NSC examinations. Table 9.1: Certification data for the November 2014 and March 2015 NSC examinations.

The following are the statistics for the certification of the 2014/11 cohort of learners, including the supplementary examination:

| | IEB 2014/11 | IEB 2015/03 |
|---|---|---|
| Total registered | 10879 | 256 |
| Full time | 9791 | 244 |
| Part time | 933 | 10 |
| Repeaters | 155 | 2 |
| | | |
| Pass | 9725 | 226 |
| Fail | 1128 | 30 |
| Withdrawn | 26 | 0 |
| | | |
| Bachelor's | 8538 | 143 |
| Diploma | 1059 | 70 |
| Higher certificate | 128 | 13 |
| NSC | 0 | 0 |
| | | |
| Endorsed | 0 | 0 |
| Endorsed pass | 0 | 0 |
| Immigrants | 539 | 11 |
| Immigrant pass | 483 | 9 |
| | | |
| Pass condonation | 40 | 4 |
| Irregularities | 0 | 0 |

The table below gives an indication of the types of certificates issued to IEB for the period 2014/11/28 to 2015/11/30

| First issue: Subject Statement | 1130 |
| First issue: NSC Bachelor's Degree | 8660 |
| First issue: NSC Diploma | 1123 |
| First issue: NSC Higher Certificate | 138 |
| Replacement NSC Bachelor's Degree (change of status) | 47 |
| Replacement NSC Diploma (change of status) | 25 |
| Replacement NSC Higher Certificate (change of status) | 17 |
| Replacement Subject Statement (lost) | 1 |
| Replacement NSC Bachelor's Degree (lost) | 252 |
| Replacement NSC Diploma (lost) | 46 |
| Replacement NSC Higher Certificate (lost) | 9 |
| Re-issue NSC Bachelor's Degree (correction) | 9 |
| Re-issue NSC Diploma (correction) | 3 |
| Re-issue NSC (correction) | 1 |

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