December 2015

Quality Assurance of the 2015 National Senior Certificate (NSC) Examinations and Assessment of the South African Comprehensive Assessment Institute (SACAI)

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 SOUTH AFRICAN COMPREHENSIVE ASSESSMENT INSTITUTE (SACAI)

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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 in 2008) to quality assure all exit-point assessment practices for all registered and accredited assessment bodies, including the South African Comprehensive Assessment Institute (SACAI).

All aspects of the assessment programme have been moderated, verified and quality assured. The purpose of this report is to present the findings reported by Umalusi's external moderators and monitors. The information contained in it serves to inform the Umalusi Council about the processes followed, as well as the areas of good practice and the areas where there is cause for concern. This should place the Council in a position to take an informed decision regarding the standardisation and approval of the results of the National Senior Certificate (NSC) examinations administered and presented by this assessment body, and to provide directives for compliance and/or improvement.

Nine aspects of the SACAI 2015 assessments and examinations have been quality assured and reported on by Umalusi moderators and monitors. These nine aspects form the nine chapters of this report. Each chapter provides summaries and analyses of the findings of the various assessment processes:

- Chapter 1: Moderation of question papers
- Chapter 2: Moderation of School Based Assessment (SBA)
- Chapter 3: Monitoring 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: Status of certification of the NSC 2014/2015

In 2015, the Umalusi moderation of question papers for the SACAI focused on eight organising fields of learning, from which a total of 91 question papers, 46 for the 2015 November and 45 for the March 2016 NSC examinations, were moderated.

Seventeen of the ninety one question papers were approved at first moderation, of these, nine were question papers for the November 2015 examination and eight for the March 2016 examination. The majority of the question papers were approved at the second moderation, which is a positive aspect in this regard, although it is Umalusi's expectation that all papers will be approved at first moderation. Lastly, five papers were approved at the fourth moderation and beyond. The delay in the approval of papers is attributed to a failure to incorporate the external moderators' recommendations. The SACAI examiners and internal moderators should ensure that these recommendations are fully addressed to improve the levels at which question papers are approved.

The next area of quality assurance to be subjected to a moderation process was the School Based Assessment (SBA) undertaken at centres affiliated to the SACAI. Umalusi conducted SBA moderation

in October 2015 on a sample of 13 subjects.

In almost all the subjects sampled, there were centres that were compliant in the conduct and administration of internal assessments. However, adherence to quality standards and appropriate content coverage varied from subject to subject and from centre to centre. For example, it was cited that incorrect assessment tasks were administered in subjects such as Accounting and that there was non-compliance with content coverage in Economics. At one centre, the wrong poems were used for the June English FAL P2 examination, whilst assessment of the wrong content in Mathematical Literacy was also identified.

Impak must be commended for the improvement it has shown over the year. There is an improvement in the cognitive levels of its English FAL papers and in the depth of questioning. The appointment of qualified and experienced markers improved the quality and standard of marking.

The SACAI administered and conducted the writing of NSC examinations nationally during the period 14 October to 27 November 2015. During the same period, Umalusi monitored the writing phase of this examination at 15 centres affiliated to SACAI. SACAI ensured that the chief invigilators and invigilators were well trained. Training of chief invigilators took place in Pretoria, as well as in most other major centres in the country. This training was done by senior personnel of SACAI, and the information was cascaded down to all invigilators at the local centres. In all cases, training focused on the management, conduct and administration of examinations, including the handling of irregularities.

Monitoring of the conduct and administration of the examination by SACAI was found to be lacking. Six of the fourteen centres monitored reported that they had not been visited by SACAI officials to monitor the examination in progress. Since some of these centres were writing the NSC examinations for the first time, this is quite disturbing, as the officials at these centres needed to know whether they were on the right track. However, where monitoring by the assessment body did take place, it was reported that no serious problems were identified.

The monitoring of marking was the second phase conducted by Umalusi monitors and moderators. The marking of candidates' scripts was conducted centrally at the SACAI head office in Garsfontein, Pretoria East. Umalusi visited the SACAI marking centre on 15 November 2015. The Umalusi monitor who visited SACAI used an instrument that had been designed to collect the information required, and conducted interviews with the marking centre manager, made observations and verified evidence provided by SACAI on the conduct of the marking phase of the NSC examination.

The marking venue was SACAI's administration offices and three rooms had been designated as areas for marking: the boardroom, the auditorium and the big hall. Accordingly, the marking centre had the necessary space and facilities to accommodate all the marking personnel. All three rooms had adequate and appropriate furniture, that is, sufficient tables and chairs to accommodate all the markers, and the ablution facilities were adequate and hygienically clean.

Scripts were locked safely in the holding area during the marking guideline discussions. All the scripts were counted at the end of the day and markers were thoroughly checked by security upon leaving to ensure that no scripts left the marking room. The SACAI is to be commended for this effective system.

It was, however, reported that there was no access control at the gate. Cars drove in and out of the marking centre without being searched or having to produce any form of identification. Even though there are security cameras, alarms and fire extinguishers both outside and inside the buildings, the lack of security checks at the gate poses a serious risk to the security of the entire marking process. There was, however, some limited form of verification at the entrance to the marking area.

Markers, as a result of their training, were well informed about what constitutes an irregularity and were also aware of the procedure to be followed in such a case. On spotting an irregularity, markers reported to the chief marker and the necessary forms were completed and referred to the irregularities committee. An irregularities register was kept by the centre manager.

The irregularities committee consisted of the director, the centre manager, the academic manager and the chief marker for the subject. Irregularities were escalated to the irregularities committee as and when they were detected and reported to the centre manager.

The marking guideline discussions also took place at the SACAI head office. These meetings consisted of the panels convened for each subject, which included Umalusi external moderators, as well as internal moderators, chief markers and markers. The meetings, which were hosted by the SACAI, served to standardise the marking guidelines and to incorporate alternative responses into the final marking guidelines before the marking process started. These meetings, as mentioned, included the Umalusi external moderators responsible for the moderation of the SACAI-NSC question papers.

The marking guideline discussions were held for all of the 26 subjects written in November 2015 for the NSC examination. This year, SACAI adopted a staggered marking approach for the first time, in terms of which subjects were divided into two marking sessions, group A and B. Memo discussions were also held on different dates in November 2015.

Generally, the pre-marking guideline discussions for most subjects were led by the SACAI's chief marker of the subject concerned. Fruitful discussions were held for each question, possible answers were debated and consensus reached. Every marker appointed was found to be well prepared for these discussions. In almost all subjects, as a way of applying the approved marking guidelines, markers marked dummy scripts which were moderated by the internal moderators. There was evidence of good marking in the initial stages of the marking process in some of the subjects.

The on-site verification of marking for SACAI was conducted in the 26 NSC subjects that were written for the November 2015 NSC examination. SACAI followed a staggered marking approach in 2015. Umalusi verified all of the 26 NSC subjects that were externally set and administered to candidates in

centres that are affiliated to SACAI.

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

In a few subjects the following was noted:

- The internal moderators were not in attendance in History, Economics and Tourism. However, this was reportedly well managed by the assessment body.
- There were some mark transfer and recording queries in Civil Technology and English FAL, however, in both cases the inaccuracies were spotted and corrected.
- Deviations from the marking guidelines were noted in Afrikaans FAL and English HL, particularly with the marking of open-ended and essay questions. However, the marks awarded to these aspects of the exam did not exceed the tolerance range of 3%.

The Umalusi Assessment Standards Committee made use of pairs analysis, post-examination analysis, and internal and external moderators' and examiners' reports as a basis for the decision-making process. The standardisation meeting for the SACAI took place on 17 December 2015. The adjustments to marks occurred as follows: two subjects were adjusted upward, one downward adjustment was made, and in 24 subjects the raw marks were accepted.

Generally, SACAI is commended for having administered and conducted its second year of the NSC examinations successfully in 2015. It is to be further commended for the smooth running of the examination process, although some aspects relating to the marking of examination scripts need to be improved.

Although there are still some areas that are in need of urgent attention, there are signs of great improvement. Thus the directives for compliance and improvement identified by Umalusi should be addressed in the coming year.

Abbreviations

CAT	Computer Applications Technology
CAPS	Curriculum and Assessment Policy Statements
CEO	Chief Executive Officer
EGD	Engineering Graphics and Design
EAs	Examination Assistant
EM	External Moderator
FAL	First Additional Language
GENFETQA	General and Further Education and Training Quality Assurance
HL	Home Language
IM	Internal Moderator
ID	Identity Document
IT	Information Technology
MCM	Marking Centre Manager
NQF	National Qualification Framework
NSC	National Senior Certificate
P1, P2, P3	Paper 1, Paper 2, Paper 3
SACAI	South African Comprehensive Assessment Institute
SAL	Second Additional Language
SAIC	School Assessment and Irregularities Committee
SAG	Subject Assessment Guidelines
SBA	School Based Assessment
SMS	Short Message Service
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

Umalusi moderates the question papers for the National Senior Certificate (NSC) examination every year. This is done to ensure that private examining boards accredited by Umalusi maintain quality standards in all assessment practices. Trained moderators, who are subject specialists, are deployed for this process. The moderation is conducted to ensure that the examination question papers and the accompanying marking guidelines are correct, fair, valid and reliable; that they have been assessed with rigour; and that they comply with the Curriculum and Assessment Policy Statement, the Umalusi directives for the quality assurance of assessment and the Subject Assessment Guidelines of the South African Comprehensive Assessment Institute (SACAI).

This chapter reports on the external moderation of the examination question papers and marking guidelines for the 2015/2016 National Senior Certificate (NSC) examinations of the South African Comprehensive Assessment Institute (SACAI). The report outlines the total number of examination papers submitted to Umalusi for moderation and the stages of approval. It further summarises the findings obtained with regard to the level of compliance of the overall SACAI examination papers. The report concludes by highlighting areas of good practice, areas of concern and directives for compliance and the improvement of future processes. Where possible, the findings from the 2015 end of year examination and 2016 supplementary question papers are compared to the findings of the previous examination period of 2014 and 2015. This comparison is undertaken in order to assess the levels of the SACAI's compliance with the previous year's directives and also to assist Umalusi in assessing the impact of its quality assurance processes.

1.2 SCOPE AND APPROACH

In 2015, the Umalusi moderation of question papers for the SACAI focused on eight organising fields of learning, from which a total of 91 question papers, 46 for the 2015 November and 45 for the March 2016 NSC examinations were moderated. The fields and subjects are indicated in the following table. Table 1.1 presents the fields of learning into which the papers that were moderated are classified.

Table 1.1: Subjects and fields of the moderated papers

No.	Organising fields of learning	Selected subjects within the fields
1.	Agriculture and Nature Conservation	Agricultural Sciences Accounting; Business Studies;
2.	Business Commerce and Management Studies	Economics Afrikaans Home Language; Afrikaans
3.	Communication Studies and Languages	Additional Language; English First additional Language; English Home Language
4.	Human and Social Studies	Geography; History; Life Orientation; Religion education
5.	Physical Science, Mathematical, Computer and Life Sciences	Life Sciences; Mathematics Literacy; Physical Sciences; Computer Application Technology; Information Technology;
6.	Culture and Arts	Dramatic Arts, Visual Arts
7.	Manufacturing, Engineering, and Technology	Civil Technology; Electrical Technology; Engineering Graphics and Design
8.	Services	Hospitality Studies; Tourism; Consumer Studies

The moderation instrument

The moderation of question papers was conducted using the Umalusi Instrument for the Moderation of Question Papers and Marking Guidelines (2015), shown in Table 1.2 below. The instrument is divided into three parts: A, B and C. Part A focuses on the question paper, Part B on the marking guidelines and Part C captures the overall impression of both the question paper and the marking guideline.

Table 1.2: Summary of the instrument for the 2015 moderation of question papers

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

1.3 SUMMARY OF FINDINGS

The findings have been summarised to capture the levels of compliance at first moderation. Both the overall criteria and the specific indicators are discussed, examples of papers and the levels of compliance are given, areas of good practice and areas of concern are identified and, finally, directives for compliance and improvement are made.

Without claiming any statistical significance, the information addressing the above areas is represented graphically for ease of reading, especially in cases where a large amount of data could not be represented qualitatively.

Papers Approved at each Moderation Level

The SACAI sets and internally moderates its question papers and marking guidelines before submitting them to Umalusi for external moderation. Umalusi expects all examination papers to comply with all the indicators as they apply to each subject area and that, at the point of Umalusi's first moderation, papers are perfect or near perfect following the moderation that would have been conducted within the SACAI internal structures. Umalusi also expects that both the November and the March examination papers meet the same standards.

All examination papers set by the SACAI must be submitted to Umalusi. Figure 1.1 below shows the number of papers approved at each moderation level and compares the total number for the moderation levels of the November 2015 and March 2016 papers.

The moderation exercise took place between the months of April and August 2015 during which 46 question papers for the November 2015 examination and 45 question papers for the March 2016 supplementary examination were moderated. Table 6.1: Number of subjects, markers and scripts as shown in Figure1.1 – were moderated.

Figure 1.1: Total papers approved at each moderation level

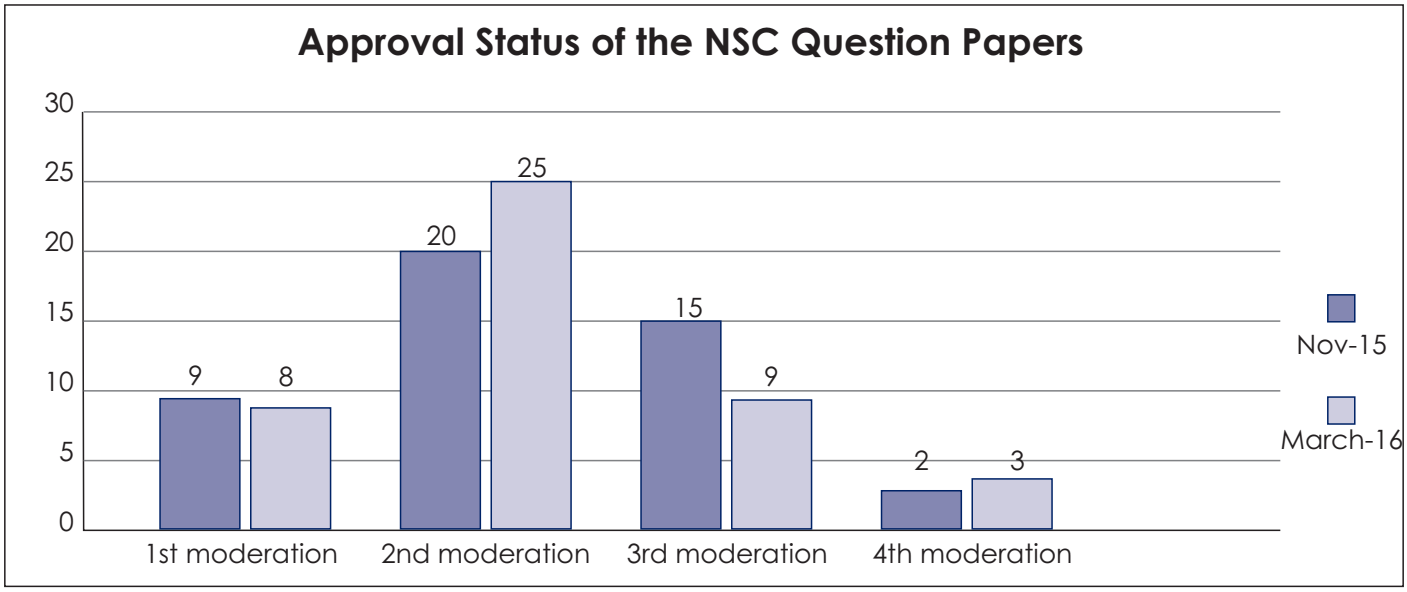


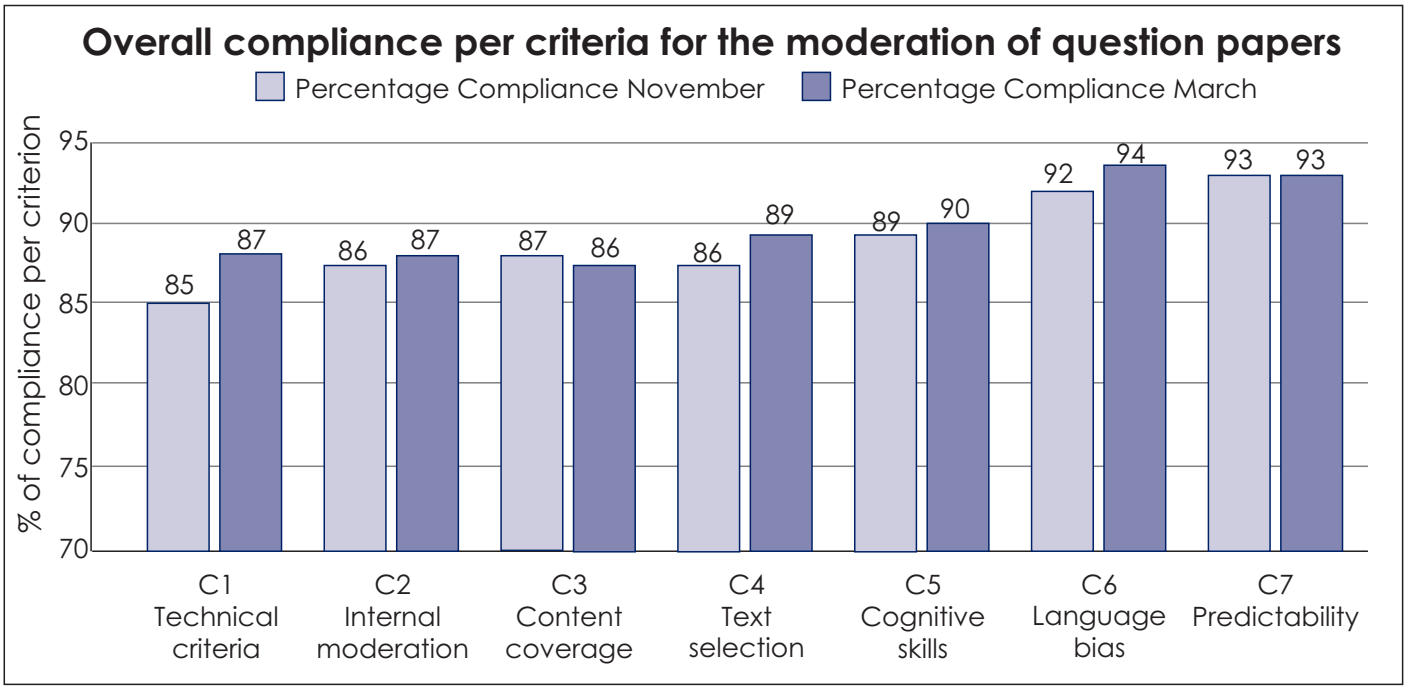
Figure 1.1 above shows that only seventeen of the ninety one question papers were approved at first moderation, of these nine were question papers for the November 2015 examinations and includes the following subjects, Consumer Studies, Dramatic Arts, Electrical Technology, Engineering Graphics and Design P1 and P2, History P1 and P2, Mechanical Technology, and Geography P2; and eight question papers for the March 2016 supplementary examinations for the following subjects: Consumer Studies, Engineering Graphics and Design P1 and P2, Geography P1 and P2, History P1 and P2, Mechanical Technology, and Tourism P1. The majority of the question papers, that is, 45, were approved at the second moderation which is a positive aspect in this regard, although it is Umalusi's expectation that all papers will be approved at first moderation. Lastly, five papers were approved at the fourth moderation and beyond: English HL P1 and P2, Mathematical Literacy P1 and P2, and Civil Technology. The delay in the approval of papers is attributed to a lack of incorporation of the external moderators' recommendations. The SACAI examiners and internal moderators should ensure that these recommendations are fully addressed to improve the approval levels of the question papers.

Comparison of Levels of Compliance per Criterion of the November 2015 and March 2016 Papers

As noted earlier, it is Umalusi's mandate to ensure that papers set for November and March display 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 and that, should there be a problem such as paper leakage with a November paper, the March paper can be used in its place.

In order to assess the level at which this equity was achieved in the SACAI papers, the levels of compliance per criterion between the November 2015 and the March 2016 papers are compared. The overall compliance per criterion shown in Figure 1.2 below is for question paper related criteria only.

Figure 1.2: Compliance levels in the question paper moderation per criteria: November 2015 vs March 2016



The graph shows a high level of comparability between the November 2015 and March 2016 papers. Except for C1, C4 and C6, where a variance of 2 to 3% was found, in the rest of the criteria the variance was either 1% or no variance at all. Criteria 5, 6 and 7 had higher levels of compliance but the rest were all below 90% compliance. Criterion 1 had the lowest compliance percentage. The areas in which this criterion was found to be unsatisfactory are discussed in the next section.

Discussion of Findings of Compliance Levels per Criteria

The following section discusses in detail each of the criteria with a specific focus on the quality indicators that were identified as being unsatisfactory at the first moderation. Each criterion was analysed to determine the strengths and weaknesses of the question papers at first moderation.

Criterion 1: Technical Criteria (C1)

This criterion uses 14 quality indicators to measure what is referred to as the technical aspects of the papers. These include the paper layout, the numbering, and the inclusion of all documents relating to the setting of the question paper. This criterion could be said to measure the face validity of the question papers.

As noted in Figure 1.2, for this criterion compliance was at 85% and 87%, which implies a non-compliance of 15% and 13%, respectively for November 2015 and March 2016 question papers. The15% non-compliance in November 2015 question papers was the highest across all criteria.

An analysis of the specific indicators shows that the indicators relating to the paper format, such as page numbering and time allocation, had the lowest levels of compliance. The areas that were problematic and account for the 15% and 13% non-compliance are those which relate to mark allocation, clarity and ambiguity of instructions, layout of the paper, mark allocation, the quality of diagrams, charts and tables.

In the 2014/2015 examination period, C1 had the highest figures in terms of non-compliance; the same indicators were cited as problematic.

Criterion 2: Internal Moderation (C2)

This criterion uses four indicators which address the quality and relevance of the internal moderation processes. An analysis of the specific indicators shows that the SACAI internal moderation this year was 100% compliant in that all the papers which were moderated by Umalusi showed evidence of internal moderation.

While there was indisputable evidence that internal moderation for all question papers had occurred, in six papers the internal moderator's report was not included. These were Engineering Graphics and Design (P1& P2) for both March 2016 and November 2015, CAT P1 and Consumer

Studies P1. The total of six is noted as a slight improvement on the nine papers that were found to be without the internal moderator's report among the 2014/2015 papers.

While it is commendable that internal moderation is one of SACAI's good practices, it is of concern that 35 papers for November 2015 and March 2016 combined did not meet the satisfaction level for the quality indicator relating to quality of internal moderation. The most common comments from the moderation ranged from internal moderators overlooking aspects such as the appropriate balancing of cognitive levels of questions and the marks allocated for each question; this was the case with Business Studies, Accounting and Mathematical Literacy, all of which did not adhere to the CAPS guidelines.

Criterion 3: Content Coverage (C3)

The purpose of this criterion is to assess whether papers have complied with content coverage as stated in the curriculum and the guidelines prescribed in the policy documents. Five indicators are used to assess compliance for this criterion.

The overall performance for this criterion was 86% and 87% for November 2015 and March 2016 respectively. Nine papers in November and March combined did not satisfy Umalusi's quality indicators at first moderation for both November and March. The papers were Civil Technology P1 (an out-dated grid was used); Life Sciences P2 (the grid did not correspond with the questions); Geography P1 for March (an incomplete grid was submitted) and Religious Studies P1 & P2 (the weighting of questions was not balanced). Failure to satisfy the CAPS requirements for question weighting and appropriate content coverage was also found in papers such as Accounting P1, English HL P2, Mathematical Literacy P2 and Physical Sciences P1. Failure to provide an appropriately weighted grid to comply with the CAPS requirement is a concern.

When compared to the previous year's papers, the performance of the SACAI on this criterion alone shows that all the subjects that were cited as a concern in 2014 (apart from Dramatic Arts) still did not comply with this criterion in 2015.

Criterion 4: Text Selection, Types and Quality of Questions (C4)

This is the longest criterion in the instrument, with a total of 22 indicators. The overall purpose of this criterion is to assess the quality of text selection and question formulation. It raises issues of variety, ambiguity of questions and redundancy, appropriateness, mark allocation, phrasing, word choice and clarity.

The overall compliance was also in the 80th percentile range, with the November 2015 papers scoring lower than the March 2016 papers. This criterion could be said to have a higher non-compliance rating than is acceptable. Overall, non compliance was high at 14% and 11% for November 2015 and March 2016 respectively. When the details were checked to see which papers were affected and of

more concern than others, English HL and Mathematical Literacy were found to be variously non-complaint in at least eight of the 22 indicators in the November 2015 and March 2016 papers. These and others were submitted with some grammatical inaccuracies (Accounting and Business Studies); CAPS non-complaint mark allocation (English HL 2, Mathematical Literacy and Physical Sciences); clarity and ambiguity issues (Accounting, Computer Technology, English HL and Mathematical Literacy); and inaccurate distribution of question difficulty (Economics, English HL 2). The most problematic issue is that many of the questions were found to be vague, ambiguous and cluttered; therefore they did not to have the potential to elicit appropriate responses. This is clearly linked to the gaps which were found in the quality of the marking guidelines, which are discussed later in this report.

Criterion 5: Cognitive Skills (C5)

With only five quality indicators, the purpose of this criterion is to assess whether the cognitive levels in each question are appropriately matched to Bloom's or other taxonomies applicable to the specific subject, and that the questions are on an equal level of difficulty, especially if appearing in one section. The findings from the set of papers that Umalusi moderated are discussed below.

The overall compliance for this criterion alone as indicated in Figure 1.2 was very high at 89% and 90% for November 2015 and March 2016 respectively, giving 11% and 10% non-compliance. In a few subjects such as CAT, English HL, Geography, Hospitality Studies, Life Sciences and Religious Studies, the cognitive levels for each question were not satisfactorily indicated; while in English HL P1, P2 & P3, Life Sciences, Economics and Business Studies, the cognitive levels were not satisfactorily distributed. Most of the papers that failed to comply with this criterion did so because they failed to provide appropriate cognitive distribution.

However, when compared to the 2014 moderation process, an improvement is noted over last years' papers in that most papers did provide an analysis grid. However, the quality of the analysis grid presentation seems to be a challenge for many examiners.

Criterion 6: Language Bias (C6)

This criterion, which uses eight indicators, aims to establish whether the language used is grammatically correct; that the register and level of complexity is at the level of the target candidates; that there are no biases; and that questions accommodate special needs students.

As shown in Figure 1.2, the overall compliance levels for this criterion were very high at 92% and 94% for November 2015 and March 2016 respectively. An analysis of compliance for the specific indicators shows that in two of the indicators, paper compliance was 100%. For example, most the papers were found to be using the correct terminology, and appropriate language and register; and the questions set were amenable to adaptation and modification for special needs students. In two indicators only non-compliance was found to be rather high. Nineteen papers in the November 2015 and March 2016 papers combined were found to contain grammatical errors and bias in language use in terms

of culture, gender, race and politics. Examiners failed to effect grammar and spelling corrections as indicated on the hard copies of question papers (Economics P2, IT, Mathematical Literacy P1& P2).

Criterion 7: Predictability of the Question Paper (C7)

The purpose of this criterion is to assess the level of originality in the papers as proof that questions have not been repeated from the previous three years' examination papers. Only three indicators are used to measure this standard.

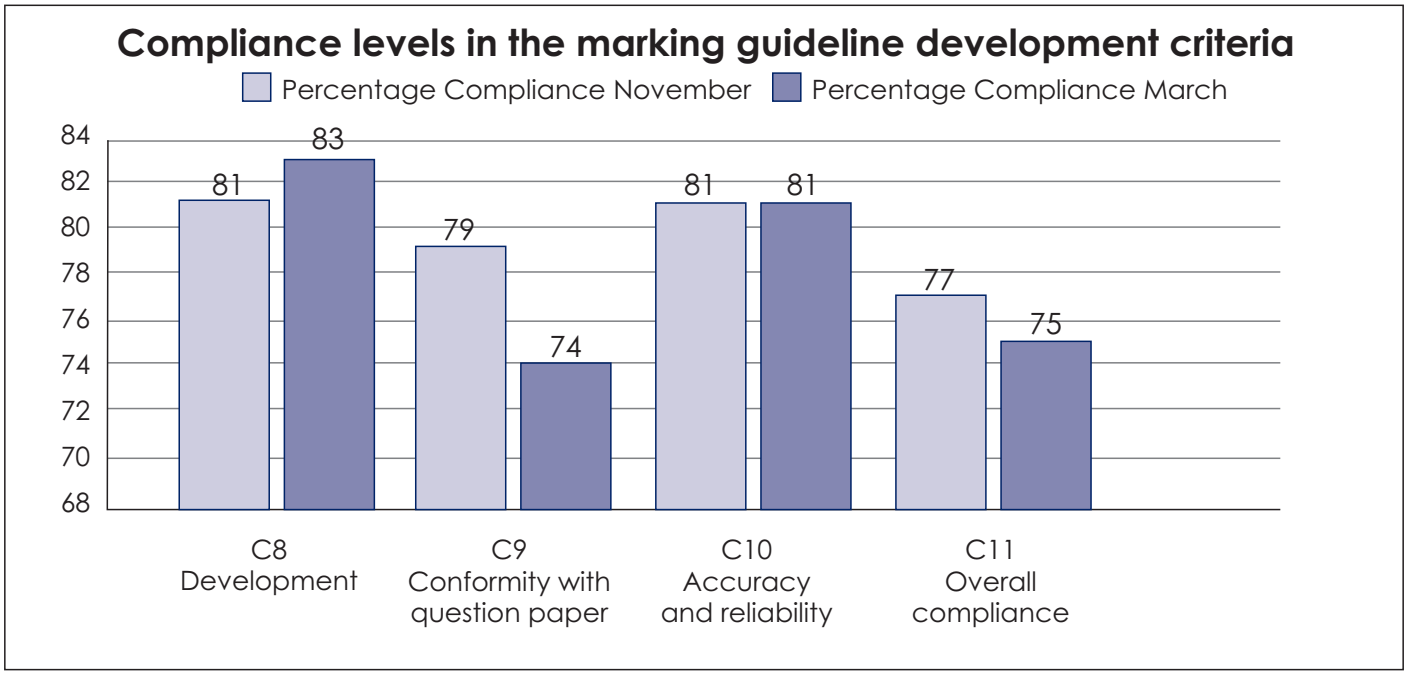
This criterion was the second highest in terms of levels of compliance with an overall compliance of 93% in both sets of examinations; this was not only impressively high but the same standard was maintained across November 2015 and March 2016 in most of the papers. This attests to the SACAI's vigilance in the aspect of equivalence of standards in their papers.

In the few cases of non-compliance that were noted, this was found to be related to the predictability of questions. Some questions overlapped with previous exams (English HL P2); some questions were found to have been taken from a previous assessment; and one question paper was found to lack originality and creativity (Mathematical Literacy P2). The next section discusses the memo-related criteria.

Marking Guideline Development Criteria

The graph in Figure 1.3 compares the percentage levels at which the marking guideline development criteria were complied with between the November 2015 and March 2016 papers. It also shows the overall impression of both the question papers and the marking guidelines for each of the subject areas.

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



The graph (Fig. 1.3) shows that the marking guideline-related criteria were rated at between 74 and 83%, and that the overall rating of the question paper and the marking guideline was 75% in March and 78% in November. The graph also shows that the levels of compliance in the marking guideline-related criteria are lower than the question paper related criteria shown in Figure 1.2. While it is common cause that the marking guidelines are a work in progress pending the marking guideline discussion where the marking guideline is finalised, Umalusi's position is that the quality of the question paper is as good as the marking guideline that accompanies it. Details of where the marking guideline complied and did not comply are discussed below.

Criterion 8: Development of Marking Guidelines (C8)

This criterion uses eight specific indicators. These are used to ascertain that the marking guideline corresponds with the question paper, the marking guideline is accurate, the layout is clear and the marking guideline is complete.

The overall satisfaction level for this criterion for all papers was 81% and 83% for the November 2015 and March 2016 papers respectively (Figure 1.3). An analysis of the specific indicators shows that in two indicators, the papers were 100% satisfactory. Most papers were complete and the accompanying marking guideline clearly laid out. However, in sixteen and eleven papers for November and March respectively, the marking guidelines were found to be inaccurate. The papers which were referred back were Afrikaans FAL P1, P2, P3 (for the correction of numerous inaccuracies – detailed in the actual report); Agriculture P1 & P2, Consumer Studies (for incorrect answers); Life Sciences P1 & P2 (for not stating alternative answers to questions); and Mathematical Literacy (for incomplete answers and questions which were labelled 'unanswerable' to name but two reasons).

Criterion 9: Conformity with Question Paper (C9)

This criterion uses three indicators to ascertain that the marking guidelines conform to the question paper, the responses match the commands in the questions and the marks for each section correspond with the marks in the question paper. The overall satisfaction level for this criterion was the lowest at 79% for November and 74% for March. Although only a few papers were unsatisfactory, these were glaringly so. The papers included Visual Arts and Hospitality, both of which were faulted for a memo that did not correspond with the question paper, as well as Mathematical Literacy and Afrikaans HL to which some corrections had to be made.

Criterion 10: Accuracy and Reliability of the Marking Guidlines (C10)

This criterion uses 12 indicators which measure the accuracy of the marking guidelines in terms of subject matter, clarity of layout, accuracy of mark allocation and whether or not the marks are commensurate with the demands of the question.

The compliance levels for this criterion were higher than Criterion 9, with 81% for both November and March; in two indicators (mark balance and mark spread) there was 100% compliance. However, in terms of total papers, there were slightly more papers that did not satisfy individual indicators. For example, a number of papers (these will not be listed here owing to lack of space) were faulted. For 13 papers the marking guideline was incorrect in terms of subject matter; for 19, the marking guideline had typographical and language errors; for 14, the allocation of marks was not in line with the demands of the question; for 14, the memo did not make allowance for alternative responses.

Criterion 11: Overall Compliance

As the name suggests, this criterion allows the moderator to give the general impression of the paper and its accompanying memorandum. The criterion uses six indicators to assess the question paper's and the marking guideline's overall fairness, reliability and validity; their standard and success in assessing the outcomes of the curriculum; the paper's comparability to past papers and the degree to which it balances skills, knowledge and values as they apply to each of the subject areas.

The preceding discussion of each criterion and the specific indicators highlights the way the overall impression was arrived at. It may be important to show how satisfaction was distributed in terms of actual numbers, totals and percentages.

Table 1.3: Overall compliance in totals and percentages of the November 2015 and March 2016 SACAI question papers and marking guidelines

Criterion	Description of indicator	Total subjects complied: N 91	% non-compliance
11.1	The question paper is in line with the current policy/guideline documents, e.g. NCS and supporting documents.	83	9%
11.2	The question paper is fair, valid and reliable.	68	25%
11.3	The paper as a whole assesses the outcomes of the National Curriculum Statement.	84	8%
11.4	The question paper is of the appropriate standard.	61	33%
11.5	The standard of the question paper compares favourably with previous years' question papers.	65	29%
11.6	There is a balance among the assessment of skills, knowledge, attitudes, values and reasoning.	78	14%

The figures relating to compliance and non-compliance shown in Table 1.3 are evidence that, overall, the SACAI papers were found to be in line with the current policy and curriculum. However, there are areas that still require vigilance on the part of the assessment body in order to improve the quality of its papers. These have been captured in the directives for compliance.

1.4 AREAS OF GOOD PRACTICE

The following areas of good practice were identified:

- The compatibility between the November and March papers is commendable.
- All papers were internally moderated and more examiners had included a moderation report.
- The SACAI has clearly addressed the issue of aligning questions with taxonomies of cognitive levels in most subjects.
- It is noted with pleasure that in many papers 100% compliance levels were observed for specific indicators.

1.5 AREAS OF CONCERN

The following areas of concern were noted:

- The approval of some papers at the third and fourth moderation level. If the SACAI internal moderation process is of good quality, then no papers should have to be moderated up to these levels.
- The weakness of the internal moderation is clearly an area that should concern the SACAI. The high levels of non-compliance with the technical criteria, the non-inclusion of moderation reports in and analysis grids in some subjects, as well as the grammatical errors and ambiguity, are indicators of inadequate internal moderation.
- Whilst all subjects are making use of taxonomies, there is evidence that the meticulous application of these to the actual setting of questions requires attention.
- The fact that subjects such as English Home Language and Mathematical Literacy keep coming up for non-compliance is a concern.

1.6 DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

The SACAI should ensure compliance with the following directives for improvement:

- The subjects for which papers were approved at third and fourth moderation should be investigated to ensure that a repeat of this is avoided in the next examination session.
- The SACAI should consider re-training its internal moderators to refine and improve their editorial and proofreading skills. Such training should draw on Umalusi's expectations of and quality standards for an examination. It is Umalusi's belief that such training could address the high levels of non-compliance in the technical and face validity of the question papers.
- The SACAI should also train its examiners in particular to address the apparent inability to balance cognitive levels across questions in a paper. The training should focus on the application of the cognitive levels for the different taxonomies.

- The subjects such as English Home Language and Mathematical Literacy which keep coming up for non-compliance should be followed up. Umalusi will definitely follow up on this and observe the compliance standards of these papers in the next examination session.

1.7 CONCLUSION

In general, the SACAI question paper moderation conducted by Umalusi was deemed to be successful. All papers for both the November and March examinations were moderated and found to be of an equitable standard, with the majority of papers being approved at the second moderation. As highlighted in the report, high levels of compliance were noted, although there were several areas, such as the internal moderation, which were flagged as requiring SACAI's attention.

Chapter 2

Moderation of School Based Assessment

2.1 INTRODUCTION AND PURPOSE

Assessment in the National Senior Certificate (NSC) comprises of two fundamental components – the School-Based Assessment (SBA) and the external examination – which are compulsory for obtaining the qualification.

SBA is set, marked and graded at school level. The aim of SBA assessment is twofold: to offer learners an alternative chance to demonstrate their competence and often to assess those skills that cannot be assessed through traditional examinations. SBA forms part of the final mark of the NSC in schools. This makes it necessary for Umalusi to put in place measures to standardise internal assessment to ensure uniform standards in this component of the examination. In order to standardise internal assessment, Umalusi has developed policies and directives that define the composition of internal assessment, the respective responsibilities of key role players, the presentation of internal assessment, and moderation procedures.

The South African Comprehensive Assessment Institute (SACAI) is required to present assessment tasks and marks that have been internally quality assured and which reflect the competence of each learner. To manage this process, SACAI quality assures the SBA tasks to ascertain whether they fulfil the Curriculum and Assessment Policy Statement (CAPS) and the Subject Assessment Guidelines (SAGs), as well as Umalusi directives. It is the responsibility of SACAI to ensure that the tasks are quality assured internally for validity, reliability and authenticity at learning centres before they are submitted to Umalusi for external moderation.

This chapter presents the findings of the verification conducted on the SACAI-SBA processes for the pre-selected subjects as indicated in Table 2.1 below. The chapter summarises the findings of the Umalusi external moderators' (EMs) verification of samples of teachers' files and learners' evidence of performance in order to identify areas of good SBA practice, to highlight critical areas for improvement of SBA practice and to make recommendations on how SBA practices can be improved.

2.2 SCOPE AND APPROACH

During November 2015, Umalusi moderated the SACAI-SBA processes, focusing on the teachers' files and the learners' evidence of performance. The external verification occurred at national level, with Umalusi verifying all the prescribed SBA tasks on sampled subjects based on the evidence provided in the teachers' and learners' evidence of performance files.

This report will focus on the quality assurance of the internal assessment system in relation to the following processes and procedures:

- moderation of assessment tasks (where applicable)

- monitoring of the implementation of internal assessment (practical assessment tasks), and
- moderation of evidence of learners' performance and educators' files.

The moderation of the SACAI-SBA was conducted on a sample of 13 subjects listed in Table 2.1 below.

Table 2.1 SBA moderation – subjects sampled

Subject(s)	Total no. of centres verified
1. Accounting	8
2. Afrikaans Home Language	11
3. Business Studies	10
4. Computer Application Technology	6
5. Economics	9
6. English First Additional Language	8
7. Geography	8
8. History	7
9. Life Orientation	7
10. Life Sciences	7
11. Mathematical Literacy	10
12. Mathematics	10
13. Physical Sciences	8

Moderation Instrument

Moderation and verification was conducted using the Umalusi Instrument for the Moderation of School-Based Assessment (SBA). The moderation focused on eight (8) criteria for evaluating the level of compliance per subject for the teachers' files, and three criteria for the verification of learners' files. The criteria are outlined in Table 2.2 below:

Table 2.2: The criteria for the moderation of School Based Assessment

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

2.3 SUMMARY OF FINDINGS

The analysis of the data was conducted according to the subject areas, using the information from the consolidated data for each of the groups of schools. The levels of satisfaction for each of the criteria are discussed below. Where necessary, examples are provided as supporting evidence. This is followed by observations of good practices and areas of concerns. The report concludes with directives for compliance and improvement for the SACAI-SBA.

Curriculum/Content Coverage
This criterion looks at the tasks and the content covered to ascertain whether these are in line with the CAPS prescription and the SAGs.

In most of the subject areas, there were centres that were compliant with SAGs requirements.

The adherence to quality standards and appropriate content coverage varied from subject to subject and from centre to centre. For example, it was reported that in some schools the assessment task was incorrect but the content was still in line with the CAPS requirement (Accounting); there was non-compliance with content coverage (Economics); one centre used the wrong poems for the June examination P2 (English FAL); and the assessment of the wrong content (Mathematical Literacy) also occurred.

In Mathematics, it was also found that the topics on probability were under-assessed across most centres. In the Physical Sciences, some centres had used the 2012 Department of Basic Education (DBE) final examination paper for their preliminary examination paper, which had many topics that are not in the CAPS syllabus. In all the other subjects the content was appropriately CAPS aligned.

Cognitive Demands of Tasks and Level of Difficulty
This criterion focuses on whether the tasks and examination papers set for SBA adhere to the prescribed guidelines as set out in the CAPS and the SACAI-SAGs. In order to demonstrate compliance, each subject is expected to submit an analysis grid as supporting evidence for the analysis of the cognitive levels.

The overall impression is that very few centres included the analysis grid in their files. With the exception of History, Life Sciences and Mathematics, where the balance of the cognitive levels was found to be appropriate, in all the other subjects, and almost universally in all the centres, the weighting, spread, interpretation and application of the cognitive levels constituted a major problem.

Quality of Marking of Tasks
This aspect of the moderation instrument assesses the reliability, validity and accuracy of the marking tools. The criterion examines compliance with the marking guidelines and the actual marking of the learners' submissions and the recording of marks.

This aspect of the SACAI - SBA assessment practices was found to be as challenging for most centres as the issues related to cognitive demands discussed above. Except for History, Geography, Life Sciences and to a large degree Mathematical Literacy and Accounting, which were found to be handling this aspect very well by presenting well-formulated marking guidelines and marking meticulously, an array of problems were identified in all the other subject areas.

Internal Moderation

This criterion aims to ascertain whether the pre-moderation of tasks and the post moderation of marking of learners' work has been conducted. The moderation should ideally be conducted according to moderation criteria and a report should be provided. Moderation should happen internally at the school, as well as at regional and national levels, and reports should be provided.

The findings reveal that in most subjects, very little moderation takes place at centre level and, added to this, feedback to learners is either non-existent or poor. An added concern, related to the process of internal moderation, is that the copying of assessment tasks from other centres, without critical analysis and the elimination of obvious mistakes and editing, should be discouraged.

Learners' Performance

The performance of learners varied from one subject to another. The following critical aspects should be noted:

- Plagiarism was detected in Accounting and at some centres tasks were missing.
- Performance in Afrikaans displayed average and above average marks and very few failures.
- The moderator for Business Studies noted that following the SBA classification, the final SBA mark achieved by the sampled school could be classified as poor to moderate.
- Learner performance in Economics varied from poor to above average. Learners' responses were often characterised by poor spelling, poor grammar and sloppy sentence construction. Learners responded satisfactorily to lower cognitive demands in the tests and examinations; however, they struggled to respond appropriately to data response questions, short questions and essay-type questions.
- In English FAL, tasks were missing from some of the learners' files or did not comply with the CAPS. Many of the learners were unable to deal with higher order questions and, in most cases, there was no constructive feedback given to learners.
- In Geography, learner performance was generally average to weak. Learners struggled to interpret the assessment tasks correctly. The learners were not able to respond to all the aspects (at different levels of difficulty) that were set in the tasks. There was no evidence of corrections.
- In History, learners' evidence was submitted in files that were, in most cases, well organised. Learners interpreted the tasks correctly, although many struggled with the interpretation of sources and with constructing a good argument.
- In Life Orientation, some learner tasks were incomplete. At Impak, the rubric was not explained to the learners.
- In Life Sciences, both learners' and teachers' files were well organised and neatly presented and all the schools moderated complied with the requirements of types and range of assessment, as well as with the inclusion of evidence for Terms 1, 2 and 3. Learners require a little more feedback than is

currently being given.

- In Mathematical Literacy, most learners performed well in the data handling and maps and plans questions, while questions on finance and measurement were poorly answered. Probability questions were also not well answered.
- In Mathematics, there were only two or three candidates, so it was hard to assess the learners' performance. In general, there was a good correlation between the candidates' knowledge, or lack thereof, and their marks.
- Lastly, in Physical Sciences, learner performance varied from school to school and also within schools. Learner performance was therefore in keeping with the subject as offered by the other examining bodies.

2.4 AREAS OF GOOD PRACTICE

The following areas of good practice were noted:

- Business Studies provision of common templates/tools to schools/centres for pre-moderation and post-moderation is a good innovation. All the schools/centres were also provided with an arch lever file with clear indexes for the filing of teacher and learner evidence.
- As observed in English FAL, IMPAK must be commended for the improvement it has shown over the year. There is an improvement on the cognitive levels of its papers and in the depth of questioning.
- The consistent application of marking guidelines by markers improved the quality of marking.

2.5 AREAS OF CONCERN

Four key issues emerged as areas of concern:

- **Internal moderation:** This is a major issue in that all the other problems listed below such as correct use of rubrics, mark allocation, correct content, and feedback to learners are linked to internal moderation. If the moderation is poor or non-existent, it leads to poor educational results.
- **Feedback to learners:** This is linked to moderation, in that where the moderation had been done, the feedback was satisfactory; however, feedback needs to be constructive and not merely the awarding of a mark.
- **Cognitive levels:** This is an area in which many moderators suggested training be given for a number of schools/centres.
- **Alignment of tasks and content to the prescribed curriculum:** In a few cases content was incorrect or not aligned with the CAPS. This is another issue that can be alleviated if moderation takes place and is effective.

2.6 DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

In order to improve SACAI should address the following issues:

- The poor internal moderation must be improved across the different levels.
- Learners must be given constructive feedback.
- Cognitive levels must be infused and incorporated in assessment.
- The setting of appropriate tasks/tests/exams must be aligned to the prescribed curriculum.

2.7 CONCLUSION

In terms of SBA practices, the report shows wide and varying standards in the different subject areas, the different regions and the different learning centres of the SACAI. Accordingly, an overall observation cannot adequately summarise the practices. While it could be said that the technical aspects, such as providing Umalusi with the required documents, are generally well-managed, specific processes such as internal moderation, feedback to learners, and alignment of tasks and content to the prescribed curriculum compromised the quality standards at a number of the learning centres that were moderated.

Chapter 3

Monitoring the State of Readiness

3.1 INTRODUCTION

UMALUSI, Council for Quality Assurance in General and Further Education and Training Council, is mandated by the National Qualifications Framework (NQF) Act to develop and implement policy and criteria for the assessment of the qualifications on its sub-framework. Furthermore, section 17 of the General Further Education and Training Quality Act (GENFETQA), 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 protect and uphold the integrity of all their assessment processes, including the examinations, at all times.

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

The South African Comprehensive Assessment Institute (SACAI) is a private assessment body that has applied for accreditation to Umalusi to conduct, administer and manage the National Senior Certificate (NSC) examination. It has therefore become incumbent of Umalusi to verify SACAI's level of readiness to administer examinations that will be free from irregularities that might jeopardise the integrity of the NSC. Therefore, this chapter reports on the findings of the Umalusi monitoring process with regard to SACAI's level of readiness to administer the October/November 2015 NSC examinations.

3.2 SCOPE AND APPROACH

In order to verify the maintenance of standards and adherence to applicable policies and regulations, Umalusi provided SACAI with a self-evaluation instrument to complete and submit to Umalusi. Umalusi then visited the SACAI head office and a sample of 14 of its registered examination centres to verify the information provided in the self-evaluation instrument. This instrument focuses on critical areas that give an indication of SACAI's state of readiness to administer examinations. These critical areas include

- appropriate policy development and implementation
- availability and utilisation of suitable systems, processes and procedures
- management plans for assessment, moderation and monitoring
- appointment and training of relevant personnel
- adequacy of resources
- safety and security of examination material.

3.3 SUMMARY OF FINDINGS

Strategic Management Issues

SACAI 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 other stakeholders. The key personnel are responsible for the following broad areas: the management of the examinations; material development; editorial matters and training; and coordination of School Based Assessment (SBA). Furthermore, the legal services at their disposal are used when required especially in the management of irregularities. 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 for printing, packing and distributing the examination material. Adequate provision was made in SACAI's annual budget for conducting the October/November 2015 NSC examinations. Expenditure is managed thorough planning, strict discipline and monitoring, as indicated in the Audit Report of the 2013/14 financial year. There is adequate infrastructure and equipment for managing the examinations and SACAI has excellent infrastructure, including its own server, and electronic information system and network.

Management Plan for the Conduct and Administration of the Examinations

A detailed management plan for conducting, managing and administering the October/November 2015 NSC examinations was found to be in place that also catered for the March 2016 NSC supplementary examination. This management plan is monitored in weekly reporting and project meetings where more thorough planning and reporting is done. The plan highlights all the processes that are in place for conducting, managing and administering the examinations with accompanying timelines; for example, the registration of examination centres and candidates, which was already complete at the time of the Umalusi's visit. The monitoring and moderation of SBA was also complete. According to the management plan, the printing of examination material was complete and this was also verified by Umalusi; however, the distribution was scheduled for 12 October 2015.

Registration of Candidates and Examination Centres

Registration of candidates had been completed and there was a notable increase in the number of candidates enrolled for the October/November 2015 NSC examinations as compared to 2014. However, this registration process tends to become delayed as SACAI implements a two-phase registration process (which is done electronically) to ensure that the information captured on the system is accurate and also that only candidates who comply with the requirements are registered. At the time of Umalusi's verification visit, candidates' admission letters had been sent to the centres, checked, signed off and returned to SACAI.

The candidates had also been placed at the examination/assessment centres and the personal timetables were in the process of being finalised. Most of the SACAI candidates are part-time candidates and must have complied with all Grade 11 promotion requirements. A distinction is also

drawn between first-time candidates and repeaters. Repeaters are given the option to use their previous SBA marks (if they are still valid) or to re-do the SBA.

SACAI registered 1 604 candidates for the 2015 academic year with 8 947 subject entries across 41 subjects. The subject structures were presented to Umalusi for verification. A policy on the registration of immigrant candidates is in place and has been implemented. Nineteen immigrant candidates had been registered with proper documentation being verified. In addition, SACAI had registered a total of thirty two candidates in Namibia and Botswana. Arrangements had been made with the IEB to have the candidates in Namibia write at two of the IEB centres, one in Windhoek and one in Walvis Bay, and those from Botswana would be writing in South Africa.

Subject changes at the Grade 10 and 11 levels are approved by the heads of the centres, while those at Grade 12 level are approved by the CEO of SACAI. The closing date for subject change applications is 31 January of every year. There were candidates who had registered more than seven subjects and their report cards were submitted with the registration documents as proof that the subjects had been offered in the previous Grades. SACAI has processes and procedures in place to govern, verify and approve concessions of all types. Concessions were granted to 141 candidates for the October/November 2015 NSC examination.

SACAI registered 98 examination centres in 2015 which is an increase on the 64 centres registered in 2014. These centres are all situated inside the borders of South Africa and have been subjected to four rounds of audits/monitoring by SACAI. The first round is conducted early in the year when the applications for registration as centres are being assessed and the second one takes place in September in the form of pre-examination monitoring. The third audit is conducted in October a day after the delivery of examination material to the centre and the last one takes place during the writing of examinations.

The findings with regard to these centres at the time of Umalusi's visit were generally positive although in some cases follow-up visits had to be made by SACAI. Security was found to be a major issue and some centres had to be forced to have proper or bigger safes installed. Furthermore, it was found that there was in some cases a degree of ignorance as far as the provision and preparation of computers was concerned. SACAI was strict in demanding that specialists or recognised service providers be used to do the necessary preparations. Of those examination centres that were monitored by Umalusi, it was found that two centres would be administering the NSC examinations for the first time. Although all examination centres monitored by Umalusi had received examination permits from SACAI, five centres had still not yet issued the relevant examination permits to the candidates.

Moderation of School-Based Assessments

The management and administration of SBA is guided by the relevant policy which has been prepared and implemented by SACAI. Newly registered centres and those that experienced challenges in the previous year were visited early in the year and given proper guidance. All centres

are expected to submit their teacher files for an early moderation at the beginning of the second term. In this way, shortcomings are detected early enough to be able to intervene and offer appropriate support. Furthermore, centres whose materials generated negative feedback from the moderators were required to re-submit their materials a month later.

The remaining challenge with SBA is the standard of the work which is not always what it should be as far as both quality and academic standard is concerned. Many teachers appear not to be as competent as they should be. SACAI has conducted training at centres and has for this reason made teacher and learner support guidelines available. Verification of SBA is completed three times a year in an attempt to ensure that all SBA requirements have been met by all candidates.

Printing, Packaging and Distribution of Examination Materials

Prior to printing, question papers are stored in a strong-room fitted with a surveillance camera. Before the mass printing starts, the question papers are signed off by the examination panel. Thereafter proofs are printed and if these are found to be error-free, the mass printing starts. The printing and packing is done in-house by a service provider who has been contracted for a number of years. The rooms in which the printing and packing are done are fitted with armed response alarm systems and there are surveillance cameras. All the people who are involved or interact with the examination material have signed confidentiality agreements.

A back-up generator kicks in automatically when there is a power breakdown, which means that the IT system with all the computers and printers is not affected and continues functioning without interruption. A back-up printer is also on standby. The printing was completed as scheduled and the packing process was close to completion at the time of Umalusi's visit. Printed question papers are packed in security bags and these are packed into crates locked with a steel bar and combination lock. All the bags are bar-coded and every crate has a unique number. The materials were scheduled to be loaded on 9 October 2015 for delivery to the centres on 12 October 2015.

The distribution was done by the service provider who does the printing and packing and who also has a courier service. All the vehicles are equipped with tracking devices and their movements are monitored throughout the delivery process. The centres had already been informed that they had to be ready to receive the materials on 12 October 2015 and that they would be informed by Short Message Service (SMS) of the time of delivery. Some of the nearby centres were to collect their materials at the SACAI offices on the same date. The chief invigilators have to acknowledge receipt by completing and returning a prescribed form to SACAI. Monitoring of accurate delivery of question papers in done by SACAI on the following day.

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. At all centres monitored, examination material was to be stored in safes located in the offices of the chief invigilators. 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. After the writing of examinations, answer scripts would be sealed into secure plastic bags or boxes and be kept in secured storage until collected according to schedule by the courier service vans for return to the assessment body. Collection slips would be signed as proof that the answer scripts were collected from the centre. The centre which collected the question papers from SACAI would also deliver the answer scripts back to SACAI after writing.

Appointment and Training of Invigilators and Monitors

SACAI appointed heads of institutions of approved and registered examination centres as Chief Invigilators (CI), except in cases where it was regarded as appropriate to appoint another person in that position. It was made compulsory for all chief invigilators to attend training, which was offered in Pretoria, Durban and Cape Town. During training, the service contract for the appointment of the chief invigilators was worked through in detail and after the training each chief invigilator had to identify him/herself by Identity Document (ID) and sign the service contract in the presence of a SACAI official. The chief invigilators were also required to appoint and train invigilators at centre level. The document "Instructions for Invigilation" was used for the training of the monitors. At the centres monitored, it was verified that three chief invigilators did not have their formal letters of appointment from SACAI. Training of invigilators and their appointment had not yet been completed at six centres. None of the centres monitored by Umalusi would be using the services of external invigilators and the drafting of the invigilation timetable was still in progress at some centres.

The Examination Rooms

Only three out of the 14 examination centres visited were able to confirm that the audit for the conduct of 2015 NSC examinations had been conducted by SACAI. The three centres did so by producing audit reports with recent dates. Four centres indicated that the relevant audit was conducted by the assessment body but no reports had been left at the school. One centre reported that it was last audited in 2014.

Facilities to be used by examination centres for the writing of the 2015 NSC examinations ranged from classrooms, school halls, church halls and neighbourhood centres, for example a tourist centre. Upon inspection, monitors observed that examination rooms at the centres visited, including furniture, were suitable and adequate to accommodate the number of registered candidates during the writing of examinations. It was also noticed that water supply, electricity and ablution facilities were not a challenge at any of the centres.

Of the 14 examination centres visited, 11 offered Computer Applications Technology (CAT). There were enough computers at the respective computer centres except one centre that reported that CAT final examinations would be written in a small hall adapted into a computer centre and that laptops would be hired for the writing of examinations. One other centre had only five computers although nine candidates had been registered; as a result, the computer examinations had to be written in two sessions.

At another centre, CAT examinations were to be conducted at a neighbouring computer centre

where the usual computer teaching and learning was facilitated. Computers were in working order at all the centres visited. Apart from one centre, the relevant examination centres had back-up generators in case of a power failure.

The Management of Irregularities

SACAI has a policy for the management of irregularities and provides an overview of the types of irregularity, instructions to the chief invigilators on how to 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. SACAI has a standing committee which is tasked with irregularities. The committee is chaired by the SACAI CEO, the coordinators of support services and material development serve as members and the coordinator of administration serves as committee clerk. Minutes are kept of the meetings of this committee.

No school assessment and irregularities committees (SAIC) had been established at seven out of the 14 examination centres visited. Where SAICs were in place, it was evident that meetings were not held owing to the fact that no minutes were made available as evidence in this regard.

Selection of Markers and Marking Centres

The policy on marking outlines the criteria for the selection and appointment of markers. The criteria include relevant qualifications, experience as a teacher of the subject, success achieved as a teacher, marking experience and language proficiency. For the 2015 NSC examinations, SACAI had appointed 82 markers, 35 chief markers, 28 internal moderators and 20 examination assistants. It should be noted that SACAI does not appoint senior markers or deputy chief markers given the low numbers of candidates enrolled per subject.

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 sessions for training and are furthermore given on-task training and their marking is closely monitored by the chief invigilator. The marking of candidates' scripts is done at the SACAI head office. These premises comply with the security measures required and provide adequate and necessary infrastructure and facilities.

Capturing of Marks and Certification

SACAI uses an electronic examination management system when dealing with learner records which starts from registration up to and including the results and certification processes. A double capturing method is implemented in all cases. All processes in this regard are informed by available policy. Regular tests are done and the programme administrator is on standby throughout the year to ensure system efficiency. The certification module places heavy reliance on the service provider; this poses inherent risks relating to the availability of the service provider and the security of data.

3.4 AREAS OF GOOD PRACTICE

- SACAI has a detailed management plan in place for the conduct, management and administration of the October/November 2015 examinations.
- At the time of Umalusi's visit, the registering of candidates and related processes had been completed.
- The examination centres monitored were found to have good facilities for writing the examinations.

3.5 AREAS OF CONCERN

The following areas of concern were noted during the monitoring visits, and need to be addressed:
There is over-reliance on the IT service provider for the processing of data which has to be submitted to Umalusi for the resulting standardisation/statistical moderation/certification/results processes.

3.6 DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

The certification module of the computer system needs to be enhanced to permit the processing of certification/results requests by the assessment body without the intervention of the service provider.

3.7 CONCLUSION

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

Chapter 4

Monitoring of Writing

4.1 INTRODUCTION

The South African Comprehensive Assessment Institute (SACAI) administered and conducted the writing of National Senior Certificate (NSC) examinations nationally during the period 14 October to 27 November 2015. During the same period, Umalusi monitored the writing phase of this examination. The fundamental purpose of monitoring this examination was to establish whether the examination was conducted in compliance with the prescripts on the management and administration of examinations. Secondly, the monitoring was intended to establish whether the overall integrity and credibility of the examination was compromised or not. Thus, this report provides insight into the conduct of the said national examination as administered by SACAI. The report will further reflect on the areas for improvement as well as areas of good practice in the writing of the NSC examination as administered by SACAI. Furthermore, directives for compliance will be presented for all identified shortcomings.

4.2 SCOPE AND APPROACH

Umalusi monitored 15 SACAI examination centres in eight of the nine provinces of South Africa. In monitoring the examinations, Umalusi monitors used a monitoring instrument which had been designed to collect the information required. Thereafter a report on each examination centre was compiled based on the information obtained from the interviews, observations and verification of evidence conducted during the monitoring visits. The monitoring instrument focused on the following key issues in the conduct, management and administration of examinations:

- the appointment of key examination personnel, including chief invigilators and invigilators
- the measures taken to ensure the safekeeping of the question papers, answer scripts and any other examination material
- the processes related to the management of irregularities, and
- the condition of the examination rooms and facilities.

4.3 SUMMARY OF FINDINGS

A summary of the findings pertaining to the examination centres monitored by Umalusi are discussed under each criterion in detail below. In this report, words 'school' and 'examination centre' will be used interchangeably.

Delivery and Storage of Examination Material

The delivery and storage of examination material varied. In Gauteng, examination material was collected by the chief invigilators from the SACAI office in Pretoria and taken to the centre where it was stored. In other provinces, examination material was sent to the centre by courier contracted by SACAI. Question papers that were received were kept sealed at all times and their details recorded. Once delivered, the material was stored in a safe or a strong room at the centre, and the chief invigilator kept the key to the room or safe.

At one centre in KwaZulu-Natal, examination material was delivered to the chief invigilator's private home in two lockable boxes with a secret code on the lock which was only provided by SACAI on the day of writing. At all centres, the exam material was secured in sealed plastic bags locked in crates using a combination lock, only to be opened when the code for the lock was sent via email or SMS to the chief invigilator. Security at the centres was tight with burglar guards, a strong room, an alarm system and fire extinguishers at most of these centres. Some also have surveillance cameras and access control to the venue.

Training of Invigilators

It is evident that SACAI ensured that the chief invigilators and invigilators were well trained. Training of chief invigilators took place in Pretoria, as well as in most other major centres in the country. This training was done by senior personnel of SACAI, and the information was cascaded down to all invigilators at the local centres. In all cases, training focused on the management and conduct, procedures and administration of examinations, including the handling of irregularities.

Chief invigilators and invigilators were all appointed in writing by SACAI. Most centres appointed community members as invigilators. At one centre, SACAI appointed a new chief invigilator at a very late stage owing to suspected irregularities concerning the original appointee. However, the substitute chief invigilator was not properly trained and was still waiting for a letter of appointment. At three centres, letters of appointment could not be produced, although there was clear evidence of invigilator training.

Preparations for Writing and the Examination Venues

Most centres had put up directions to the examination rooms, even where computer-related subjects were written. The examination rooms were conducive to the writing of examinations with regard to cleanliness, ample lightning, pleasant temperature and good ventilation. In all centres, there were sufficient tables and chairs for all the candidates with ample space between tables. Desks were spaced according to regulations, that is, at least one metre apart, although at one centre the computers had no divisions between them.

All centres had clocks for displaying the time. There was no material that could have been of assistance to the learners in any of the exam venues monitored. Except for one venue, all the relevant examination information was written on the board in the venue, clearly visible to all, and the candidates were told to refer to the information when completing the cover page of their answer scripts.

A seating plan was displayed on the outside of the door of the examination room. This plan was drawn up in chronological order according to candidates' student number and candidates were seated according to the seating plan. No centre reported that anybody who wrote could not be positively identified. IDs and permits were checked and verified in most venues outside or inside the venue before the start of the session.

At all centres monitored, candidates with special concessions for extra time had their concessions

pasted on their desks and were given 10 minutes per hour as per regulation. During one session, a scribe was used to record a candidate's answers. All the candidates at the various centres were correctly registered for the subject written. The use of an attendance register for invigilators differed at the various centres, but they were nevertheless signed at all centres. In some centres, there was no specific attendance register, but an attendance record was kept in the chief invigilator's diary and finalised on completion of the exams for remuneration purposes.

Although the majority of the centres had examination files, some of them did not have all the necessary documents. Most of the files observed were exceptionally neat with all the relevant information displayed in different compartments in the file. At all the examination centres, invigilators were vigilant and attentive and moved around the venue. Candidates who completed writing before the scheduled time were not allowed to leave the examination room before an hour had elapsed or during the last 15 minutes.

Throughout, candidates were asked to leave their cell phones with their other possessions at designated places where they could not interfere with the writing process. The no-cell phone-rule was repeated when the rules were read out and the consequences were explained. At all centres, the chief invigilator (or his delegate) opened question papers after two candidates (if possible) had inspected the packages and signed the verification list. Most (10) centres made use of name tags for invigilators.

Time Management

The key issue of time management was very well handled in the vast majority of the venues. Since all the activities were generally executed on time, candidates had all the time allocated per subject to answer the question paper. Candidates were usually seated 30 minutes before the start of the session so that all the necessary preliminary steps could be done in time.

The checking of question papers for technical accuracy, page numbering and correctness was in most cases done by the chief invigilator, after which the candidates were given the 10 minutes for reading through the paper. With a few exceptions, this procedure took place daily at all the venues. Only three exceptions were reported where papers were not checked for technical accuracy, whilst at two other centres the rules were not read out to the candidate(s) and at one centre reading time of 15 minutes was allowed.

Checking the Immediate Environment

It was pleasing to note that the majority of reports from monitors mentioned that the toilets and close surroundings were very clean, with very limited noise (if any) close to the exam venue. In general, the ablution blocks were cleaned regularly and checked daily by invigilators for exam-related material in order to prevent any irregularities from occurring. It was, however, reported at two centres that toilets were not checked by invigilators.

Activities during Writing

Invigilators were mobile, supportive, attentive and ready to perform their duties in a professional manner. They did not answer any questions regarding the subject matter and, in most cases, the cover page of the answer book was checked before completing the attendance register to see whether all particulars were accurate and complete. Most centres requested candidates to sign the attendance register when they had finished writing and their scripts were then collected.

In cases where candidates wanted to leave the examination venue to use the toilets, they were escorted by an invigilator of the same gender. The procedure followed when a candidate finished early and wanted to leave the examination room varied from centre to centre within the limits as per the regulations. Many centres allowed candidates to leave early, but not during the first hour or the last fifteen minutes of the session. In such cases, candidates raised their hands and their scripts were collected from them after they had signed the attendance register, after which they could leave.

The scripts were collected in numerical order as per the mark sheet. At only one centre was it reported that the candidates were allowed to leave as per regulation, but they were asked to leave their answer scripts on their desks for collection at the end of the session. It was quite disturbing to note that during four visits, an erratum in question papers was conveyed to candidates to take note of. In three centres, the erratum was photocopied and handed out to each candidate. At the other centre, it was only a spelling error that was reported and read out to candidates by the chief invigilator. The monitor at this same centre picked up a few other spelling errors, but this did not compromise the contents or validity of the paper in question.

Packaging and Transmission of Answer Scripts

Generally, the examination room was used to count and pack the candidates' answer scripts. The chief invigilator and at least one other invigilator were usually present for the counting and packaging of the scripts. The mark sheet was used to package the scripts, and the number of scripts and number of candidates present correlated in all cases. SACAI supplied plastic wrappers and the scripts were placed and sealed in these containers and stored in the strong room until they were collected by the courier. All the relevant documents were completed before the envelopes were sealed. Dispatch forms were not completed, but they were put on top of the sealed bag to be completed and signed when the courier came to collect the scripts.

For the computer-related subjects, a special container provided by the SACAI was used to seal the flash disks. With the exception of one centre, situational reports were completed for each session of the examination and copies sent to SACAI. At one centre, there was no mark sheet for inclusion with the answers scripts, whilst at another centre a daily situational report was not completed.

Monitoring by the Assessment Body

It was reported that six of the fourteen centres monitored, that they had not been visited by SACAI officials to monitor the examination in progress. Since some of these centres were writing the NSC examinations for the first time, this is quite disturbing, as the officials at these centres needed to know whether they were on the right track. Where monitoring by the assessment body did take place, it was reported that no serious problems were identified.

Irregularities

No serious irregularities were identified in the centres that were monitored. A few administrative irregularities were identified by Umalusi monitors during monitoring visits, while a few others were identified and reported by SACAI to Umalusi. Most of these irregularities were of a technical nature, and none was serious enough to cast a shadow over the credibility of the examinations.

Irregularities Reported by SACAI to Umalusi:

- Technical irregularity: Information Technology: One candidate did not save his/her work, lost all their data and had to restart at 11:00; candidate was not allowed any extra time.
- Allegations that the chief invigilator issued dictionaries to the candidates during the writing of Afrikaans HL P2 at two centres.

4.4 AREAS OF GOOD PRACTICE

It is pleasing to note that monitors overall reported very positively on their respective monitoring sessions, and the following positive remarks were made by the majority:

- Proper security for the storing and handling of examination material.
- Proper training occurred as invigilation teams were conversant with and complied with most examination regulations.
- The overall impression was that the venues were generally quiet, clean and conducive to the writing of examinations.
- With a few exceptions, the chief invigilators went through most of the rules of the examinations prior to the start of the session.
- Well-structured and comprehensive exam files were available at most centres.

4.5 AREAS OF CONCERN

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

- A letter of authority delegation in the absence of the chief invigilator was not always available.
- It is irregular to allow candidates without ID or a letter of admission to sit for the examination, as this poses a huge risk of impersonation, especially in view of the fact that SACAI caters for part-time and home scholars.
- Checking of question papers for technical accuracy was not consistently done across the centres monitored.

4.6 DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

The following directives are made with respect to the conduct of the NSC examinations as administered by SACAI:

- An authority delegation in case of the absence of the chief invigilator should be available.
- It is mandatory for part-time candidates to produce IDs and full-time candidates to produce letters of admission to the examination. Therefore, SACAI must ensure that this forms part of its invigilator training and the rules and regulations for candidates.

- It is imperative that question papers be checked prior to the start of a session for technical mistakes in order to avoid the discussion of errata while candidates are writing the examination.

4.7 CONCLUSION

Based on the reports received from Umalusi monitors nationally, it can be concluded that the examinations under the supervision of SACAI in the country were generally conducted in such a manner that would not compromise the integrity, validity or credibility of the SACAI October/November 2015 NSC examinations.

Chapter 5

Monitoring of Marking

5.1 INTRODUCTION AND PURPOSE

Following the writing of National Senior Certificate (NSC) examinations at centres registered with SACAI, the marking of candidates' scripts was arranged by SACAI. This marking process was monitored by Umalusi, in order to ascertain the credibility of the conduct, administration and management of the marking process. Therefore, this chapter presents the findings on the way the marking phase was conducted and to what extent SACAI observed the appropriate regulations pertaining to the management of examinations. Furthermore, this chapter gives a brief account of SACAI's plans for marking, the state of the marking centre, the security at the marking centre, the training of marking personnel, the marking procedure, the monitoring of marking, the handling of irregularities, as well as the quality assurance procedures and reports. Areas of concern and areas for improvement, as well as directives for compliance and improvement, will be presented.

5.2 SCOPE AND APPROACH

The marking of candidates' scripts was conducted centrally at the SACAI head office in Garsfontein, Pretoria East. Umalusi visited the SACAI marking centre on 15 November 2015. The Umalusi monitor who visited SACAI used an instrument that had been designed to collect the information required, and conducted interviews with the marking centre manager, made observations and verified evidence provided by SACAI on the conduct of the marking phase of the NSC examination.

5.3 SUMMARY OF FINDINGS

The summary of the findings highlights the way in which the SACAI marking centre was managed in relation to Umalusi's seven criteria, for the monitoring of the conduct and management of the marking phase of the examination. Further details on each criterion in relation to the level of compliance are presented in the sections that follow below.

Planning for Marking

The SACAI's marking centre has a detailed management plan in place. According to the plan, SACAI follows a centralised model divided into two phases of marking. The first phase was conducted from 12 November to 18 November 2015 and the second phase from 26 November to 30 November 2015. SACAI has a comprehensive policy that supports its marking model.

In terms of the centralised model, every script is marked, moderated and captured at the marking centre. This increases the effectiveness of the implementation of the plan, as well as the security of the entire process, as there is no transporting of scripts involved. In order to ensure that markers do not mark the scripts of their own students, SACAI appointed external markers only and no one from their own centres.

Marking Centres

The marking venue was SACAI's administration offices. Three rooms were designated as areas used for marking. These were the boardroom, the auditorium and the big hall. The marking centre had the necessary space and facilities to accommodate all the marking personnel. All three rooms had adequate and appropriate furniture, that is, sufficient tables and chairs to accommodate all the markers. The ablution facilities were adequate and very clean.

The operational times for marking were from 07:00 to 19:00 daily. All the marking staff signed a daily attendance register at the security point. Markers were only provided with lunch, tea/coffee, juice and the special diet. Accommodation was only provided for two Computer Applications Technology (CAT) markers from Bethlehem.

Security

There was no access control at the gate. Cars drove in and out of the marking centre without any form of car searching or identification. Even though there are security cameras, alarms and fire extinguishers both outside and inside the buildings, the lack of security checks at the gate poses a serious risk to the security of the entire marking process. There was, however, some limited form of verification at the entrance to the marking area.

Scripts were locked safely in the holding area during the memorandum discussions. All the scripts were counted at the end of the day and markers were thoroughly checked by security upon leaving to ensure that no scripts left the marking room. SACAI is to be commended for this effective system.

Markers were generally not allowed to mark outside the marking room. However, on the day of monitoring by Umalusi officials, two markers were seen marking in the foyer of the centre in an enclosed area within the marking venue. The reason given was that the marking room was extremely hot as the air conditioner was not working. As mentioned earlier, all marking processes were done at the venue, and therefore no transport was required.

The centre manager was able to provide documented evidence of the flow of scripts at the marking centre. On arrival, scripts were scanned and then locked in the holding area. During marking, all scripts were handed to the chief marker for counting and kept in the marking room. They were then sorted according to the average, the poor and the good for moderation by Umalusi. Finally, they were reconciled in the marking room and moved back to the holding area. A comprehensive list of chief markers, markers, internal moderators and examination assistants was verified.

Training of Marking Personnel

Evidence of training of marking personnel was verified at the marking venue. The markers were trained by the centre manager and the chief markers on 12 November 2015. The centre manager focused on the marking process whilst the chief marker dealt with the handling of irregularities.

Handling of Irregularities

Markers, as a result of their training, were well informed about what constitutes an irregularity. They were also aware of the procedure to be followed in the case of an irregularity. Markers reported to the chief marker and the necessary forms were completed and referred to the irregularities committee. The irregularities register was kept by the centre manager.

The irregularities committee consisted of the director, the centre manager, the academic manager and the chief marker for the subject. Irregularities were escalated to the irregularities committee as and when they were detected and reported to the centre manager.

Two cases of copying were reported at the time of monitoring by the Umalusi officials. Two candidates had the same answers for Life Sciences and Mathematics respectively. One examination centre was reported to have a suspected mass irregularity, as there were cancellations of one answer in all answer scripts from the centre for the English Literature paper. This was presented to the monitors who advised that the matter should be referred to the irregularities committee for further investigation.

Quality Assurance Procedures

The examination assistants (EAs) are responsible for the quality assurance of the marking of the entire script, allocation of a total to each question, capturing of marks per sub-question, correctness of the sub-totals, totals and the final total, correct transfer of marks to the cover and transfer of marks to the mark sheet. Should a mark sheet be lost, it can be replaced because the system can generate a new one. SACAI used a double capturing system at the SACAI capturing unit.

Reports

Both the chief marker and the internal moderator used a standard template to complete a qualitative report which was submitted to the centre manager. The markers did not complete qualitative reports but they did contribute to the chief marker's report. SACAI uses these reports for standardisation meetings and to inform the centres of future preparations.

5.4 AREAS OF GOOD PRACTICE

The SACAI is commended for the following:

- The centralised marking centre worked very well for the marking of the NSC scripts.
- The centre manager was well trained and managed the marking centre with distinction.
- The marking centre had adequate resources and facilities.

5.5 AREAS OF CONCERN

The following is highlighted as an area of concern:

The lack of security checks at the gate is a risk to security at the marking centre.

5.6 DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

The security at the gate needs to be improved and proper searches should be conducted to ensure the safety of examination-related material.

5.7 CONCLUSION

Notwithstanding the area of concern mentioned above, SACAI has demonstrated the ability to manage the marking of the NSC successfully. The availability and implementation of assessment and examination policies and processes resulted in an efficient marking process.

Chapter 6

Marking Guidelines

6.1 INTRODUCTION AND PURPOSE

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

The marking guideline discussions took place at the South African Comprehensive Assessment Institute (SACAI) head office in Garsfontein. The marking guideline discussion meetings consisted of the panels convened for each subject, which included Umalusi external moderators (EMs), internal moderators (IMs), chief markers (CMs) and markers. The meetings, which were hosted by SACAI, served to standardise the marking guideline and to incorporate alternative responses into the final marking guidelines before the marking process started. These meetings, as mentioned, included the Umalusi EMs responsible for the moderation of the SACAI - NSC question papers.

Umalusi requires the various assessment bodies to make quality preparations prior to the marking process. Accordingly, the measures taken by SACAI to assure this quality saw chief markers and internal moderators pre-marking scripts prior to the marking guideline discussion meetings. Subsequently, rigorous and thoughtful discussions of the marking guideline were conducted in the presence of the Umalusi EMs.

6.2 SCOPE AND APPROACH

The marking guideline discussion were held for 26 subjects written in October/November 2015 NSC examinations. This year, SACAI adopted a staggered marking approach for the first time, in terms of which subjects were divided into two marking sessions, Groups A and B. Memo discussion were also held on different dates in November 2015.

In terms of the SACAI management plan for the marking process, the marking guideline discussion meeting for each of the groups started with a pre-marking session attended by the chief markers (CMs) and internal moderators (IMs) prior to the commencement of the marking guideline discussions. This was done to ensure that they familiarised themselves with the possible responses that learners might give to the various questions and, very importantly, to prepare thoroughly for the marking guideline discussion meetings.

Umalusi EMs participated in and guided these marking guideline discussions meetings together with the CMs and IMs in all in the subject areas, as shown in Table 6.1 below.

Table 6.1: Number of subjects, markers and scripts

GROUP A	Markers	No. of scripts	GROUP B	Markers	No. of scripts
English FAL	10	1728	Physical Sciences	7	762
English HL	11	1845	History	2	202
Afrikaans EAT	8	1608	Geography	6	602
Afrikaans HT	9	1665	Dramatic Arts	2	59
Business Studies	5	597	Visual Arts	2	176
Mathematics	7	1174	Economics	3	246
Mathematical Literacy	12	1716	Religious Studies	2	50
Computer Application Technology	9	906	Agricultural Sciences	2	152
			Mechanical Technology	2	50
Information Technology	2	82	Hospitality Studies	2	264
Life Sciences	6	860	Electrical Technology	2	17
Accounting	2	96	Civil Technology	2	27
Tourism	4	488	Engineering Graphic Design	4	238
Consumer Studies	2	65			

In terms of the SACAI approach, one day was allocated for the marking guideline discussions, which encompassed the following activities:

- Pre-marking took place over a full day, and was the responsibility of the CMs and IMs. It should be noted that the pre-marking was planned for the CMs and IMs.
- Three days were allocated to all subjects for the actual marking of scripts.
- Marking guidelines were discussed over a day with the first session designated for training. During this time, each subject was represented by the chief marker, IM and markers, with the Umalusi EM playing a crucial role in ensuring that the discussion were focused and where there was disagreement, he/she guided the discussion and ultimately approved the marking guideline.
- It should be noted that subjects with a small enrolment were represented either by a CM and an IM, or an IM and a marker.
- Dummy marking was conducted across all subjects and the markers appointed had to be trained to mark using the dummy script. A week prior to the commencement of the marking process, each marker received a pack consisting of a question paper, a memo and a script. A second training pack was issued at the marking centre as a way of reinforcing the decisions taken after the memo discussions meetings.

6.3 SUMMARY OF THE FINDINGS

This section reports on the findings arising from the marking guideline discussion for each of the SACAI papers moderated by Umalusi according to the moderation instrument for the marking guideline discussion, as indicated below:

Pre-marking guideline discussion

- Pre-marking guideline discussions were held in all subjects sampled, and were led by the SACAI's CM, except in Economics P1 &P2; Mathematics P1 &P2; Agricultural Sciences.
- Though pre-marking guideline discussions did not occur in Economics, IT, Mathematics, Life Sciences, CAT and Agricultural Sciences, IMs and CMs came prepared to the marking venue with pre-marked scripts.
- Fruitful discussions were held for each question, possible answers were debated and consensus reached. Every marker appointed was well prepared prior to the discussions with the exception of Economics P1 & P2 where the internal moderator was absent.
- The marking guideline discussion took place with the examining panel, and the IMs and EMs, and it was noted that there was very little to add and thus not much discussion was necessary (Accounting).

Process and Procedure

- Detailed and fruitful discussions were held to increase the markers' ability to mark interpretively with insight in most subjects.
- The CM and IM led the discussions on each question of each paper with a particular focus on the questions identified as being potentially problematic in most subjects.
- The panel was very interactive and consultative throughout the discussions; no serious discrepancies were detected during the discussion (Business Studies).
- The discussions were full of rigour which helped in the finalisation of the marking guidlines (Dramatic Arts, Hospitality Studies, Civil Engineering Accounting and IT); - more emphasis and clarity was provided on method marking and how it should be applied (Accounting and IT).
- All relevant alternatives were added to the memorandum and clarified in most subjects verified.
- The discussion focussed on the following: findings from the pre-marking, the theoretical framework for marking, the nature of source-based work, the structure of paragraph questions, and the assessment of essay questions, adapting the source-based marking guidelines and adapting the
- essay marking guidelines (History P1 & P2).
- Discussions were done question by question and alternative responses were discussed
- (Mathematical Literacy P1 & P2 and Physical Sciences P1 & P2).
- Separate meetings were held for Papers 1 & P2, memoranda were discussed question by question, and acceptable alternative answers were included in the memo (Mathematics P1 &P2).
- A presentation on quality marking was made; inputs from all participants enhanced the approach to marking problematic questions (CAT P1 &P2).
- Discussion occurred on how to award method marks, and the discussion on how to interpret learners' responses was rigorous (IT).

Training

- Sufficient time was made available for training in most subjects except for Tourism and Agricultural Sciences; however, little training really occurred and actual marking started immediately. Moderation of scripts helped to hone markers for the marking process (Life Sciences P1 & P2)
- In most subjects dummy scripts were marked by markers and were moderated by the IM as a way

to apply the approved marking guidelines.

- There was evidence of good marking in the initial stages of the marking process (English HL P1, P2 & P3); and clear guidelines were provided in cases where questions needed clarifying (English FAL P1, P2 &P3).
- The marking guideline discussion focussed on confirming correctness and providing alternative answers. All final decisions reached were the result of consensus and where consensus could not be reached, the EM took the final decision in most subjects.
- The concept of tolerance range was discussed and explained, and a tolerance range of four marks was arrived at (Mathematics Literacy P1 & P2).
- The memo was well developed and no additions or serious amendments were made; the marking guidelines were finally signed off and used for marking the learner scripts (IT, EGD).

6.4 AREAS OF GOOD PRACTICE

- Marking guideline discussion meetings were well attended and chaired by CMs or the IMs acting as critical participants and adjudicators in the process.
- The preparations made for the marking guideline discussion were impressive. Most marking personnel received the marking material prior to the date of the meeting and so were able to familiarise themselves with the marking process.
- Adequate training was conducted and the marking of dummy scripts was pleasing (English HL; FAL and Afrikaans FAL).
- The examining team for Accounting, Information Technology and Engineering Graphics and Design are to be commended for developing marking guidelines that needed little or no amendments during the memo discussions.

6.5 AREAS OF CONCERN

- The withdrawal of senior marking personnel from the marking guideline discussions is seen as a crucial area of concern and is perceived as undermining the Umalusi processes.
- No marking guideline discussions occurred in Agricultural Sciences P1 & P2, Information Technology, Religious Education, Hospitality Studies, Mathematics P1 & P2, Mathematical Literacy P1 & P2, Life Sciences P1 & P2, Economics P1 & P2.

Processes and Procedures

- Minimal enforcement in dealing with pre-marking across different levels of marking personnel. Pre-marking was not a prerequisite for the marking process, although SACAI did attempt to enforce this for all markers but at a very late stage, hence it was problematic in some subjects.
- The fact that not all representatives who attended the marking guideline discussion had access to the sample scripts at the time is worrisome (Economics).
- For Economics the IM was absent for both papers.

Training

Although the training of markers did take place, the time allocated to this in certain subjects such as Tourism, Life Sciences and Agricultural Sciences was insufficient. The marking team should be exposed to the whole question paper in order to be able to mark any section of the paper competently.

6.6 DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

- The training of markers is an area that needs improvement and the time allocated for this crucial aspect of the marking process should be increased. Markers have to be trained rigorously so as to improve the standard and quality of marking across all subjects.
- The withdrawal of senior marking personnel from the SACAI marking process in order to serve in the marking processes of other assessment bodies must be managed strictly and firmly. Clearly, this is an area that has the potential to compromise all marking processes and plans that have been put in place. SACAI must put measures in place to eliminate this conduct completely as it is a serious risk to the system at large. A binding contract is therefore considered to be necessary in this regard.
- Pre-marking should be a prerequisite for marking and all the markers and other personnel involved need to comply with this requirement.

6.7 CONCLUSION

As noted in the report, the SACAI held marking guideline discussions in some, but not all, papers. Although the process was well manged in some subjects, there were a number of papers where procedures were either incomplete or not aligned to Umalusi standards, the SACAI making guideline discussion processes as a whole was unsatisfactory. Umalusi has issued a number of directives in this regard, with which the SACAI should comply.

Chapter 7

Verification of Marking

7.1 INTRODUCTION AND PURPOSE

Verification of marking is one of the quality assurance processes that Umalusi embarks on to ensure that marking is conducted fairly and that there is consistency in the application of the marking guidelines in all subjects and papers.

This quality assurance process was conducted at the SACAI offices at Garsfontein on the 13–15 and 27–29 November 2015.

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

7.2 SCOPE AND APPROACH

The on-site verification of marking for SACAI was conducted in 26 NSC subjects that were written for the November 2015 NSC examination. SACAI followed a staggered marking approach in 2015, in terms of which subjects were divided into group A or B, as was the case with the marking guideline discussion meeting for the same subject.

Umalusi verified 26 NSC subjects that were externally set and administered to candidates in centres that are affiliated to SACAI.

The marking of examination answer scripts for all SACAI papers commenced on the day after the discussion of the marking guidelines. The external moderators conducted the verification of marking consistently, in line with the criteria contained in the verification of marking instrument. The criteria outlined below were used by the external moderators to verify the marking:

- Part A: Adherence to marking guidelines
- Part B: Quality and standard of marking
- Part C: Candidates' performance

7.3 SUMMARY OF FINDINGS

Adherence to Marking Guidelines

In all the papers, the marking guidelines were generally adhered to. In 11 papers, adjustments to the marking guidelines were reported. These were Accounting, Civil Technology, Consumer Studies,

Dramatic Arts, Engineering Graphics and Design, Electrical Technology, Hospitality Studies, Physical science (P1 & P2) and Religious Studies (P1 & P2).

Quality and Standard of Marking

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

In a few subjects the following was noted:

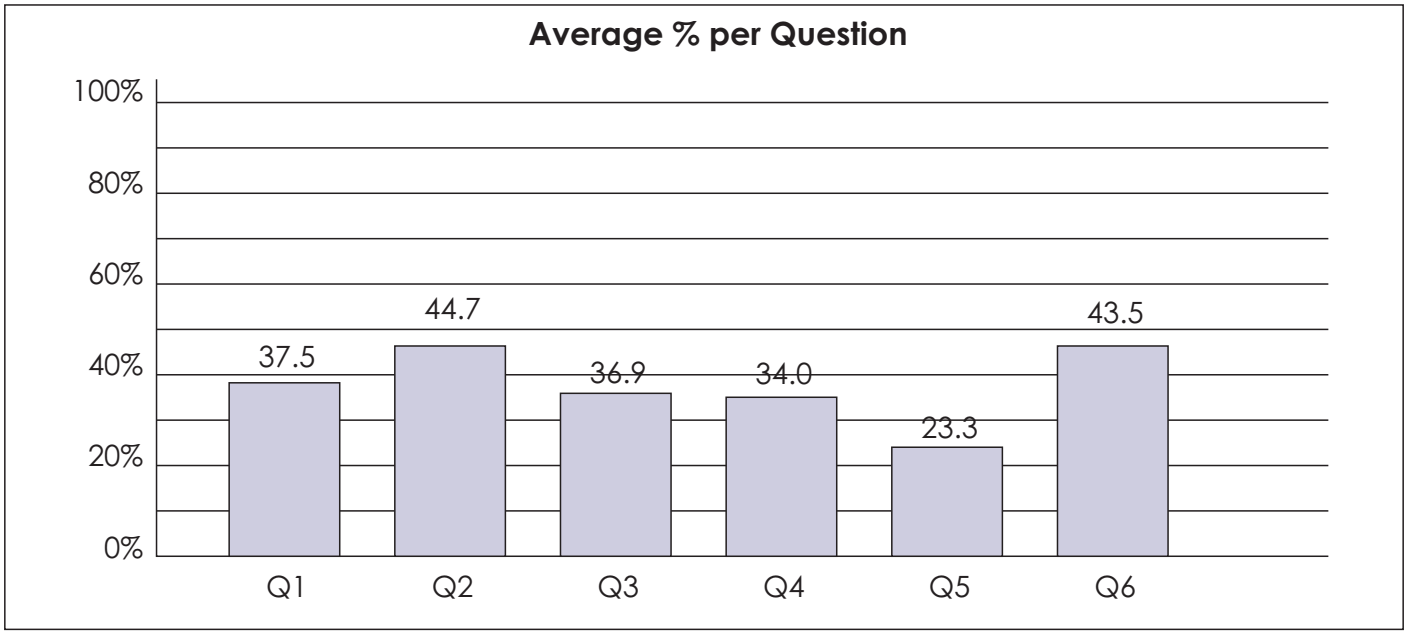
- The internal moderators were not in attendance in History, Economics and Tourism. However, this was reportedly well managed by the assessment body.
- There were some mark transfer and recording queries in Civil Technology and English FAL. However, in both cases the inaccuracies were spotted and corrected.
- Deviations from the marking guidelines were noted in Afrikaans FAL and English HL, particularly with the marking of open-ended and essay questions. However, the marks awarded to these aspects of the exam did not exceed the tolerance range of 3%.

Candidates' Performance

The performance of learners as presented below is sampled from the 11 gateway subjects. The general learner performance in these subjects ranged from very poor to good. In some questions candidates scored as low as 0% and as high as 77% (Geography). The majority of candidates scored within the range of 30 to 50%.

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

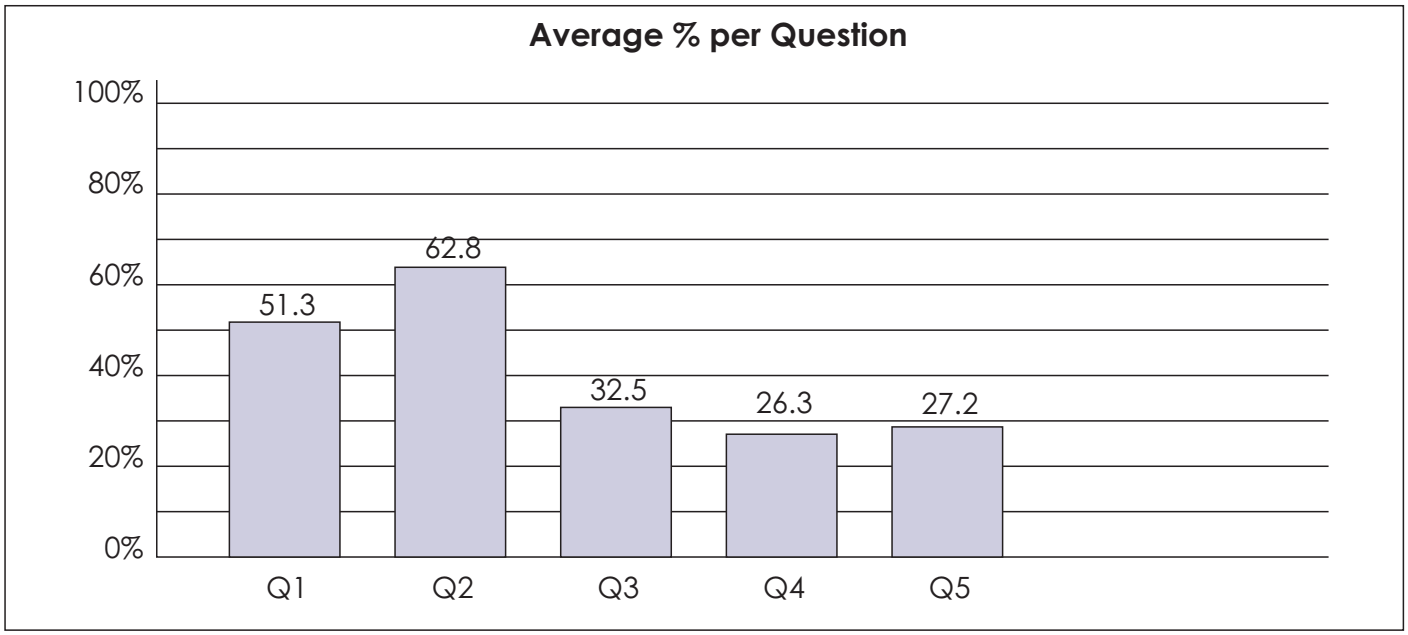
Figure 7.1 Average performance of candidates for Accounting



The graph in Figure 7.1 above is based on a sample of 100 Accounting scripts.

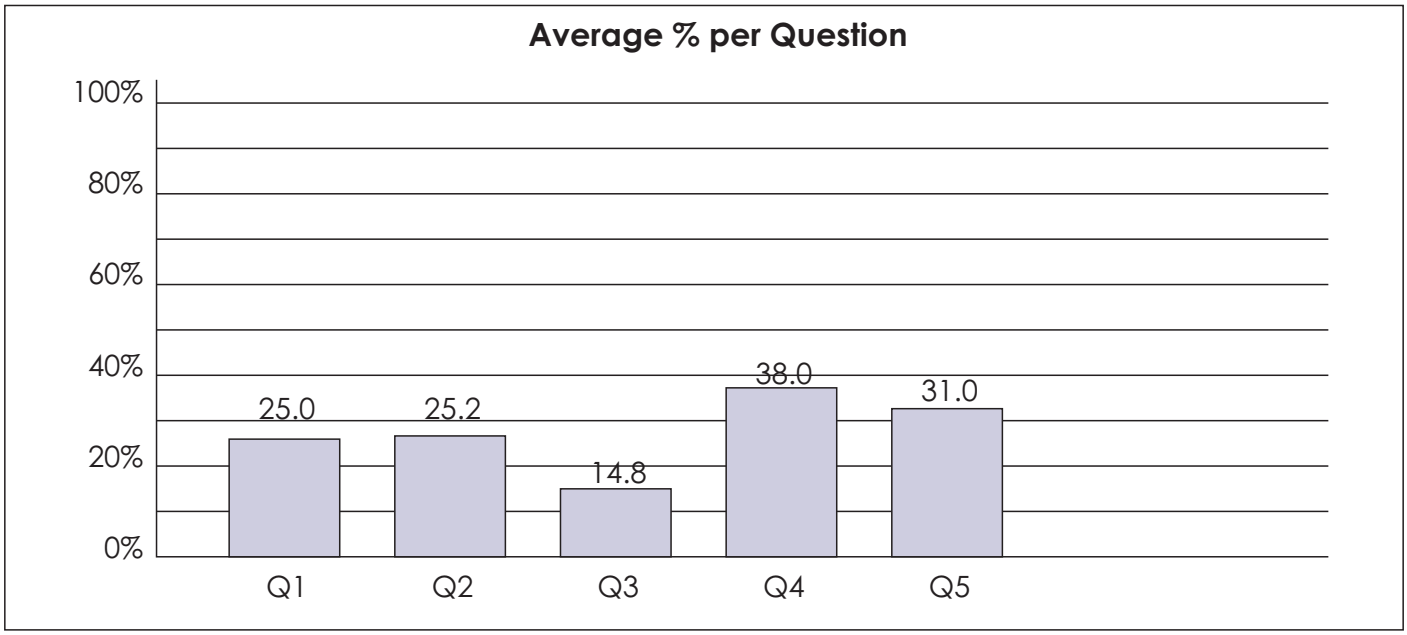
The candidates struggled with most of the questions in the paper, as depicted on the graph above. Question 1, which focused on reconciliations and VAT, was poorly performed. This is a topic covered in Grade 11 which is expected to be easier for all candidates; the average of 37.5% achieved on this question is not satisfactory. Question 2, which focused on stock valuations, seems to be the topic in which candidates performed better as compared to all other sections of the paper; however, the 44.7 average percentage achieved in this question could be improved. Questions 3 and 4, which covered the manufacturing section and financial statements respectively, were not attempted as well as expected. These are the sections of which the general expectation is that candidates should excel, given that the work covered in these sections is a build-up of work already studied in earlier grades. In question 5, which covered the cash flow statement sections, 23.3% was achieved, this being the worst performed section. Question 5 is a section which contains higher-order questions; however, if candidates are properly prepared they can perform just as well. Question 6, which focused on budgets, was fairly attempted, although a better average could still be achieved for this topic as it is started in Grade 11.

Figure 7.2 Average performance of candidates for Afrikaans HL P1



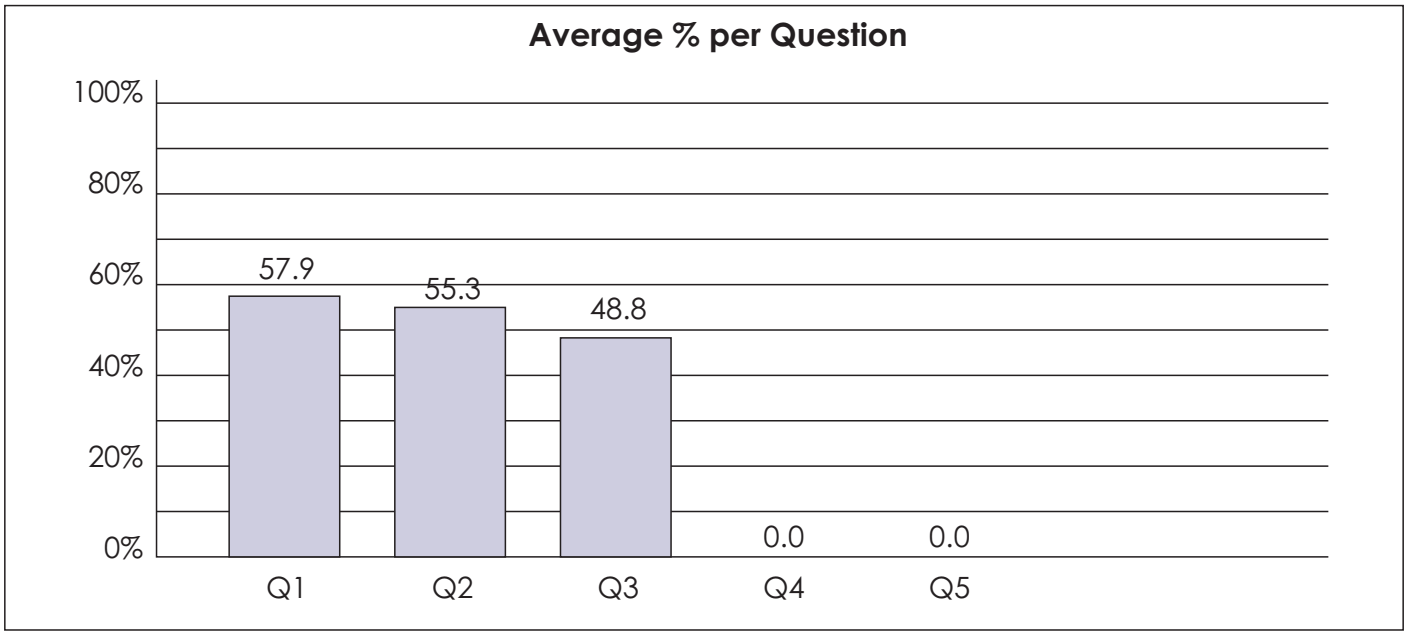
The averages indicated in Figure 7.2 above are based on a sample of 39 Afrikaans HL P1 scripts. There was a good distribution of scripts, with marks ranging from 18 to 72%. In between there was a relatively fair distribution of marks. Section C is traditionally a difficult section. It is understood that candidates are traditionally either not taught grammar or do not prepare well for it.

Figure 7.3 Average performance of candidates for Afrikaans HL P2



The averages indicated In Figure 7.3 above are based on a sample of 50 Afrikaans HL P2 scripts. The marks achieved by the candidates represent their competencies adequately. Paper 2 provided ample opportunities for candidates to display their knowledge and skills in a fair, valid and reliable manner.

Figure 7.4 Average performance of candidates for Afrikaans P3

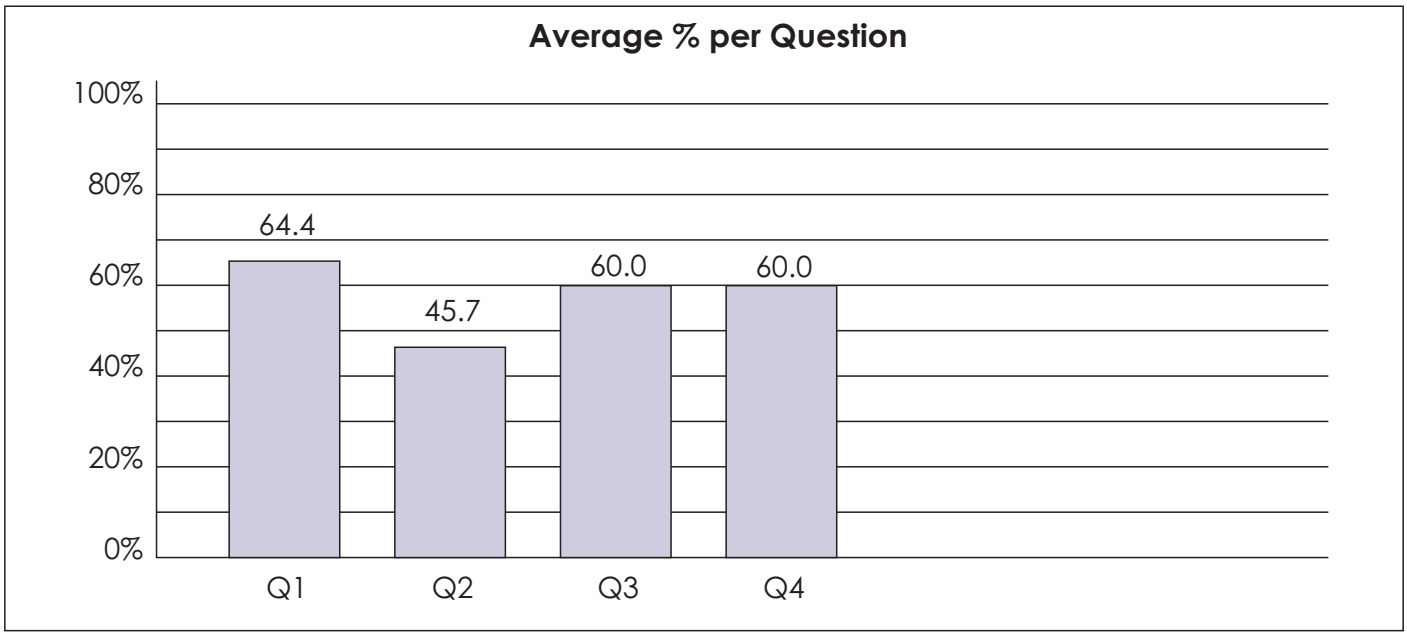


The averages for Afrikaans P3 indicated in Figure 7.4 are based on a sample of 34 scripts.

The marks reflect to a large extent the real competencies displayed by candidates and should be regarded as realistic within the context of a paper which assessed creative writing responses. Candidates were given ample room to express themselves creatively within the range of topics that

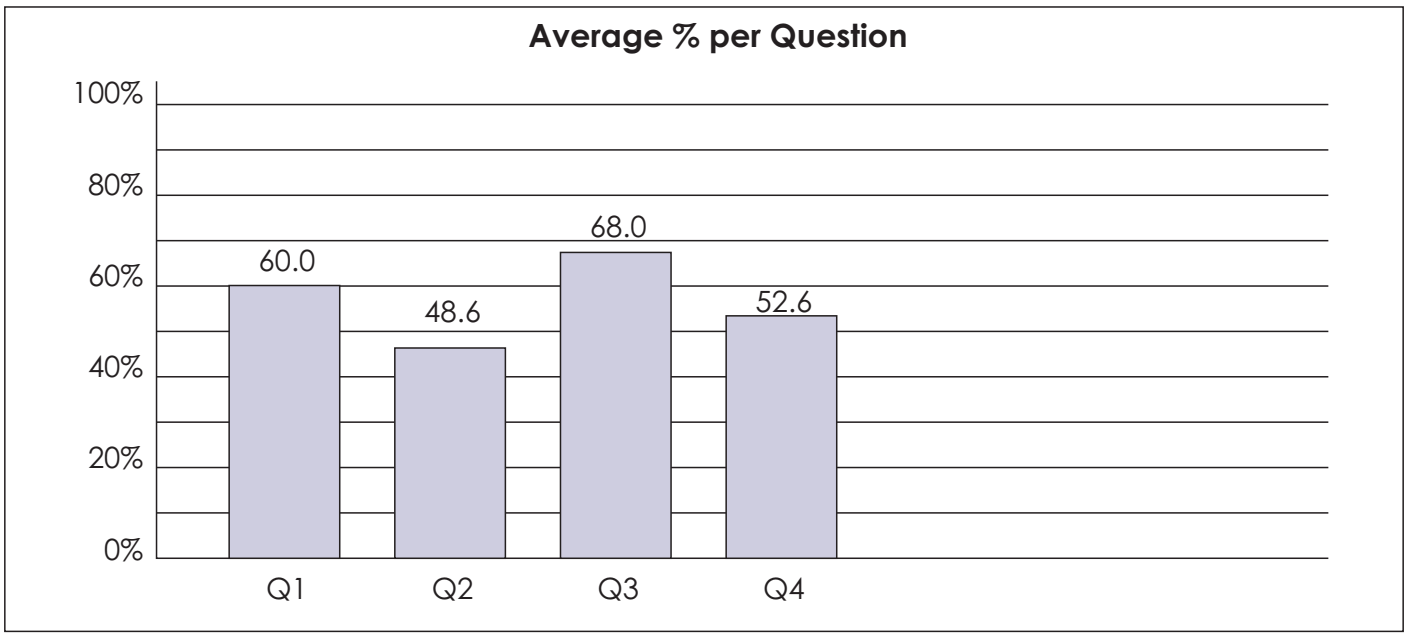
were offered in Section A, and the 0% on Question 4 and 5 might suggest that most candidates opted for write the first three questions.

Figure 7.5 Average performance of candidates for Agricultural Sciences P1



The averages Agricultural Sciences P1 indicated in Figure 7.5 above are based on a sample of five scripts. The candidates performed well in questions 1 (64.4%), 3 and 4 (which obtained 60% respectively. This signals an improved performance compared to 2014. The performance graph is normal in terms of learner performance distribution. Candidates struggled with question 2 on animal nutrition.

Figure 7.6 Average performance of candidates for Agricultural Sciences P2



The averages for Agricultural Sciences P2 indicated in Figure 7.6 above are based on a sample of five scripts.

The candidates performed well in questions 1 (60%) and 3 (68%), with an average percentage score of 52.6 in question 4. This signals an improved performance compared to 2014, which is encouraging considering the growing number of candidates registering for the subject.

Figure 7.7 Average performance of candidates for English FAL P1

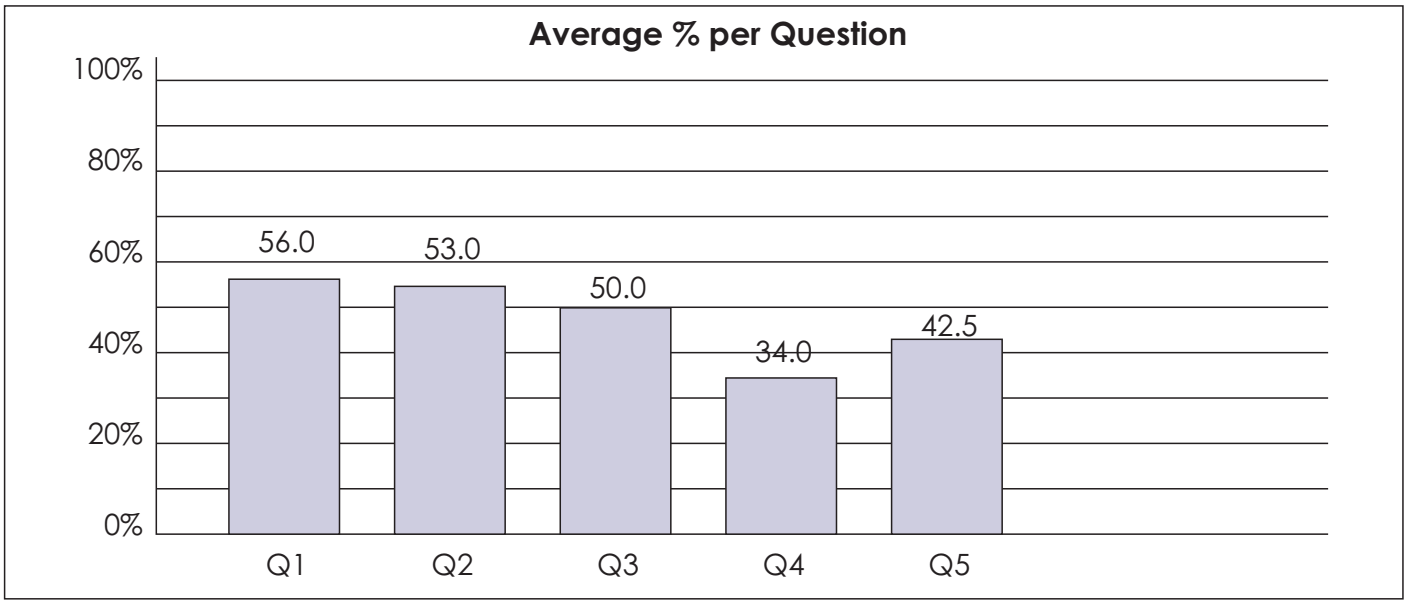


Figure 7.7 above is based on a sample of 20 English FAL P1 scripts. Generally, the candidates coped adequately with the paper, although problems were identified in certain sections. In questions 4 and 5 (analysing cartoons and language/editing, respectively), the responses from the candidates were very poor. In some cases, the responses to the comprehension were very weak. This could be because of a lack of reading and understanding skills.

It was found that many candidates registered with Impak experienced problems answering comprehension, summary and advertising questions. It is clear from many answers that candidates lacked the understanding needed to interpret the questions.

Figure 7.8 Average performance of candidates for English FAL P2

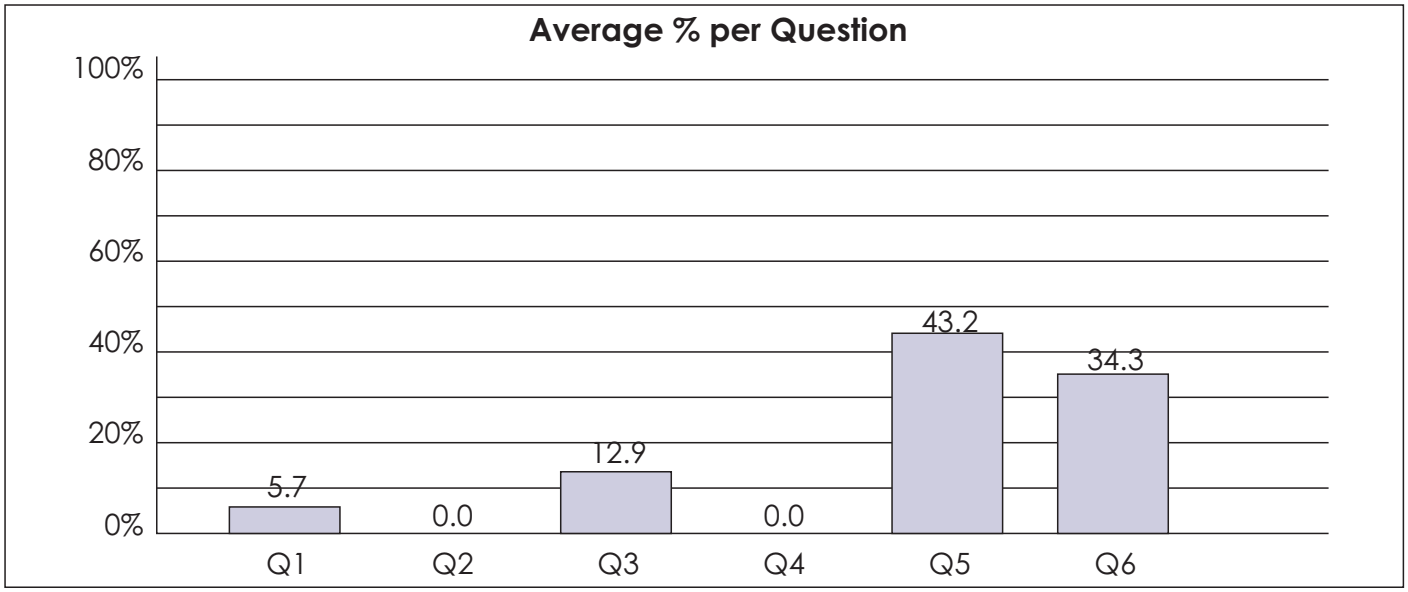


Figure 7.8 above is based on a sample of 10 English FAL P2 scripts. Although the paper was fair and there was a balanced spread of questions, it appeared that many candidates retold the stories where possible, and did not answer the questions posed. There was a vast range of marks from very low to acceptably high. It was clear that a number of candidates did not read/understand their set works. It is difficult to prove, but the candidates who did extremely badly might have been home scholars. The poetry section was not answered well and it became evident that there the teaching of poetry skills is lacking. The short stories also proved problematic for many candidates, as they obviously did not understand many of the questions and merely retold the story.

Figure 7.9 Average performance of candidates for English FAL P3

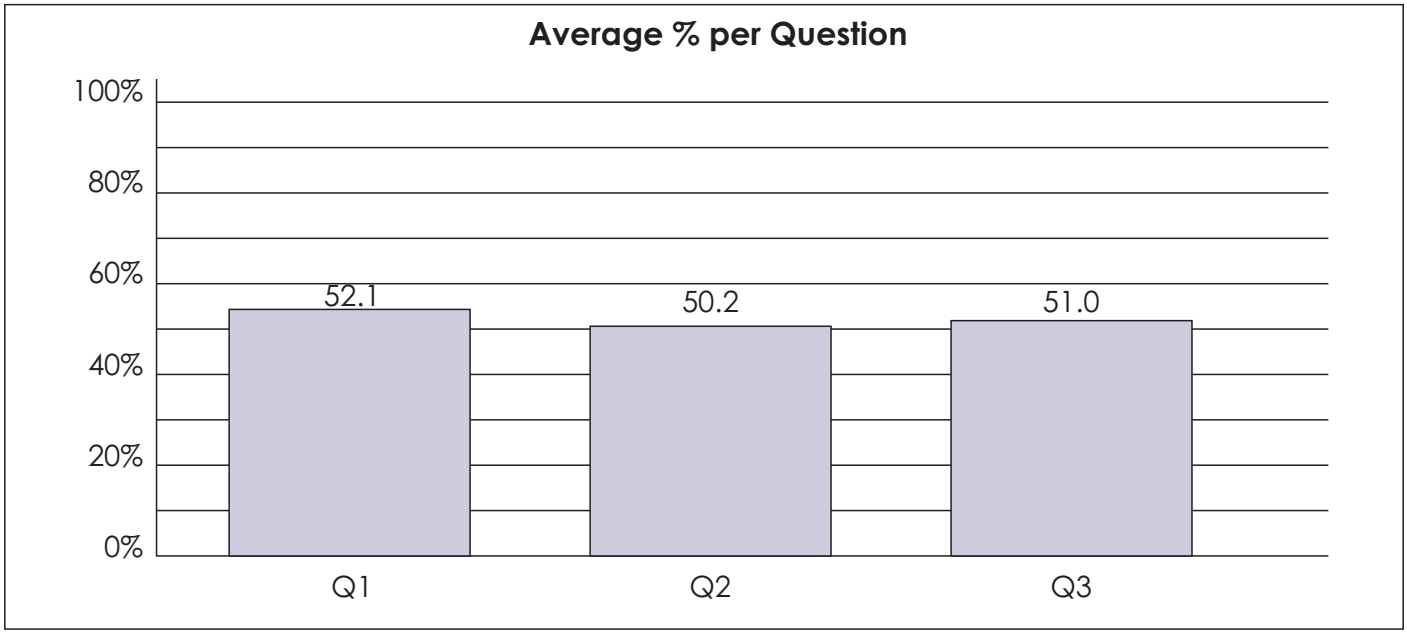


Figure 7.9 above is based on a sample of 20 English FAL P3 scripts. Based on the sample of scripts marked, it was clear that in Section A (creative essay: Q1) there were some interesting interpretations of topics. Sections B (Q2) and C (Q3) required writing skills and it was clear that, in some cases, candidates lacked the required skills relating to the format of the various topics. In most cases, where marks were lost, it was because of incorrect format, poor language usage and a clear lack of sentence structure and paragraphing.

Figure 7.10 Average performance of candidates for Business Studies

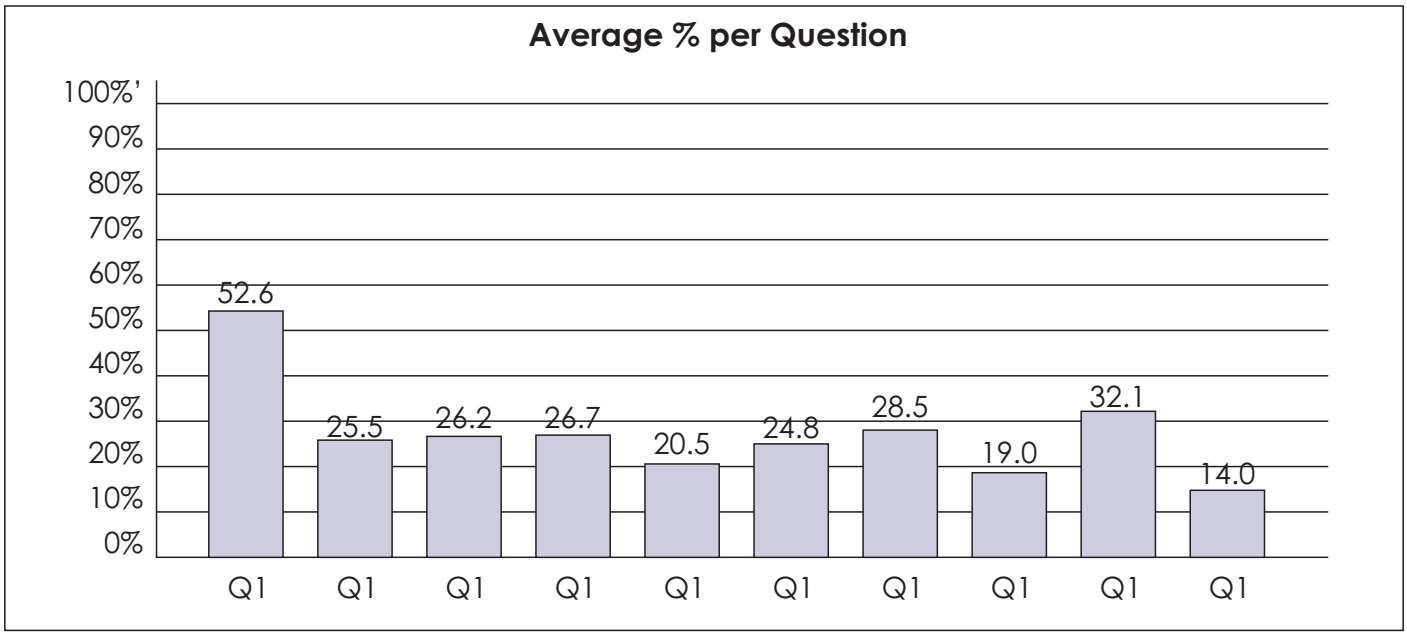


Figure 7.10 above is based on a sample of 100 Business Studies scripts. Learner performance was poor in all sections of the question paper. Although an average of 52% was scored in question 1 Section A, learners struggled with question 1.1 (multiple-choice questions) where they had to choose one correct answer from options A to D. However, they were able to make up for this in questions 1.2 (choosing the correct word) and 1.3 (choosing the correct term).

In Section B, performance was below average as learners struggled to choose the right combinations of topics/questions to answer. Questions 2 (business environments) and 5 (business operations) were least attempted by candidates, 41 and 40 respectively out of 100 learners. Both these main topics had recent legislation as a central focus point. Additionally, in Section C the majority of candidates opted to answer question 7 (business environment) and question 9 (business roles) rather than questions 8 and 10 which were least answered.

However, these questions were of equal difficulty. Strangely enough, learners scored higher on average in Section C (essays) compared to Section B (paragraph-type questions). The majority of learners used vague and generic statements instead of factual content when answering a particular topic or sub-topic. The performance in Section C could have been much better if learners were taught the right approach to writing an essay, for example methods and techniques (LASO).

Learners excelled in direct questions (lower cognitive demand) such as 2.4 ("name Porter's 5 forces") but struggled with middle and higher-order questions where application of knowledge was required, for example 4.4 "explain the steps in conflict resolution" (learners could list them but could not explain them); or 6.4 "evaluate the impact of capital" (no learner was able to answer this question correctly). Overall, learners performed poorly in this question paper with 62% receiving a level 1 rating. Allocating part marks for vague expressions/responses (one tick instead of two) somehow alleviated the crisis in terms of total failure.

Figure 7.11 Average performance of candidates for Consumer Studies P1

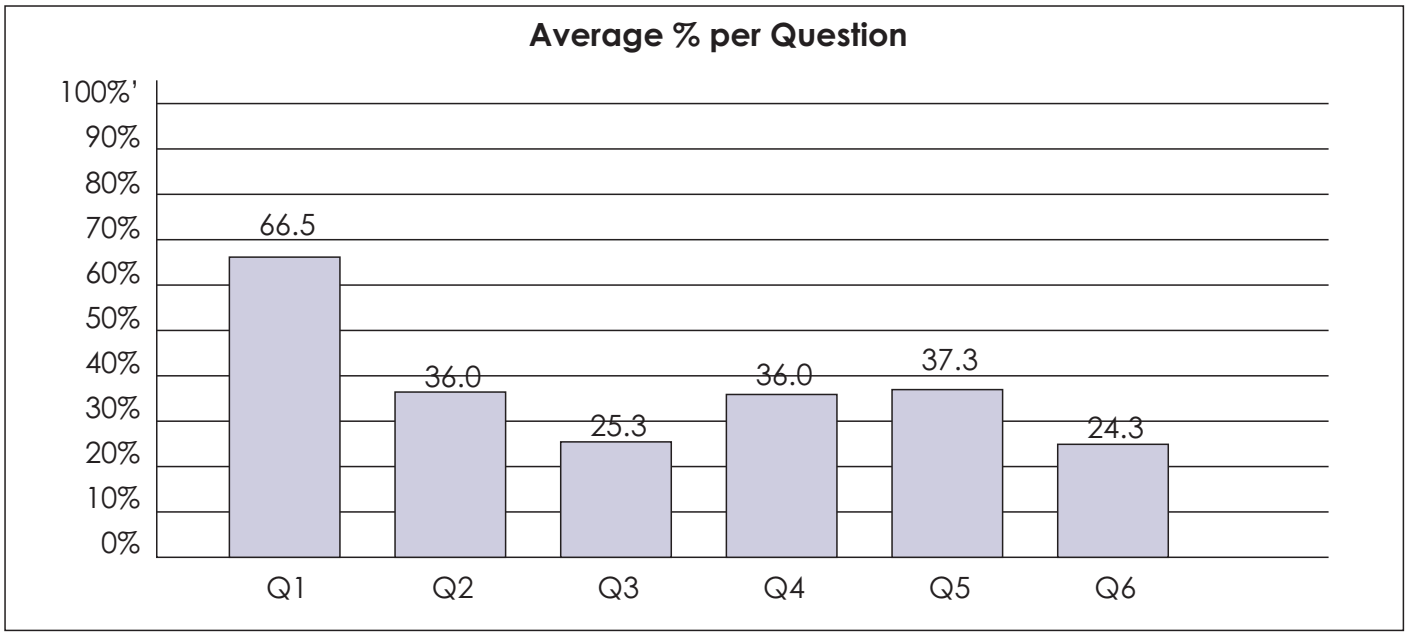


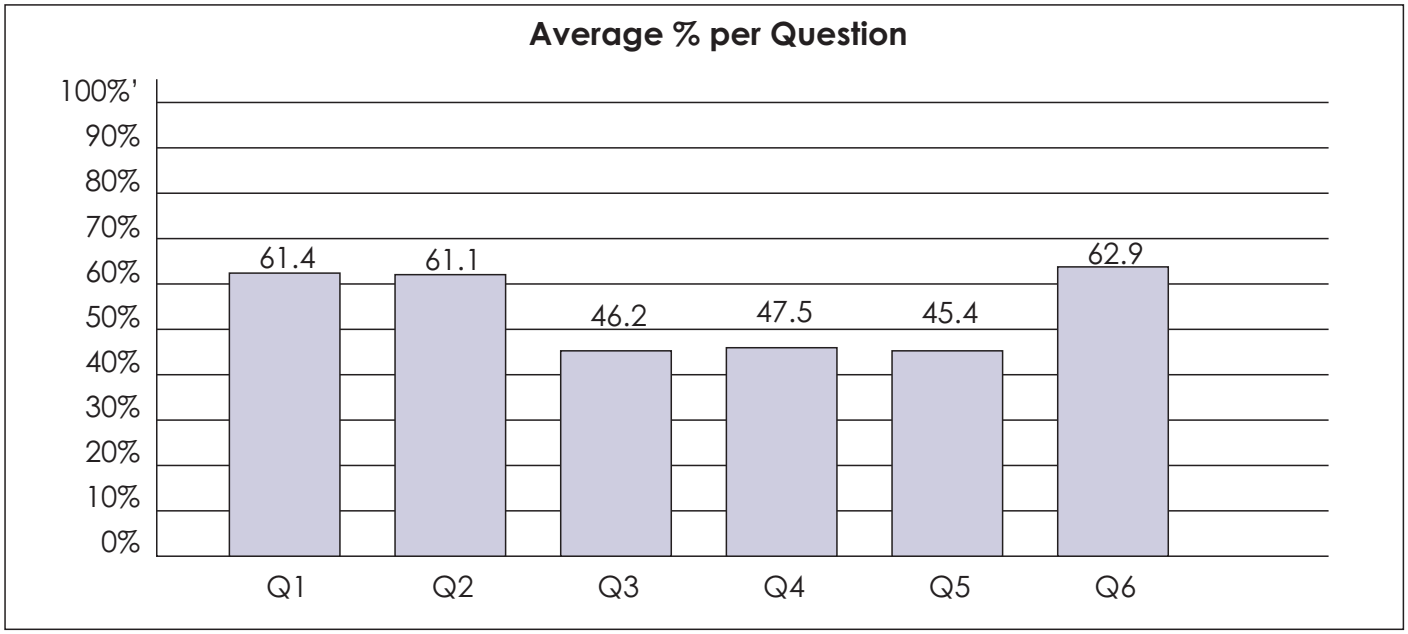
Figure 7.11 above reflects the overall performance for the ten candidates in Consumer Studies P1 whose scripts were analysed and verified. The average performance in question 1 (short questions) reflected a good average of 66.5%. High performing candidates achieved an average of above 70% for the short questions. In questions 2 to 6, the long questions, the performance in all the sections was poor, ranging from 25.3 to 37.3 average for the candidates that were moderated and verified. Question 1.1 reflected the best performance in question 1. Most candidates were unable to answer question 1.2.4. Questions 1.4 (financial options for housing) and 1.6 (efficient production of marketable products) reflected an overall poor to below average performance.

In question 2 (the consumer), the stronger candidates were able to achieve an average of 55%, and the rest of the lower performing candidates achieved a below average performance of 31%. Questions 2.1 (terminology) and 2.2 (excise taxes) were poorly answered, with a lack of basic knowledge of the content being reflected (level 3 – evaluating question). Candidates were found to lack skills and did not know how to approach questions where evaluation was required. In question 3 (food and nutrition), candidates struggled to deal with the required responses and performance was poor. Stronger candidates achieved an average of 40% and the rest of the candidates performed with averages ranging between 23 and 40%. A lack of basic knowledge was reflected in the responses for 3.1 (gluten intolerance), 3.2 (HDL-cholesterol) and 3.3.2 (anaemia). In question 3.5 (level 3 – analysing question), candidates lacked the skill to analyse the given statement and did not know how to approach this type of response, which required substantiating evidence to validate the argument.

In question 4 (clothing), the stronger candidates were able to achieve an average of 60% and the rest of the lower performing candidates achieved a below average to average performance of 33, that is, 60%. Responses to this question reflected better knowledge of and insight into the content. In question 5 (housing), the best average overall was achieved from the selected sample. Performance

in this question ranged from 23 to 53% in the sample that was selected for verification. A lack of basic knowledge was reflected in the responses for 5.1.5 (body corporate) and 5.2 (terminology).

Figure 7.12 Average performance of candidates for Dramatic Arts



The averages discussed here are based on a sample of 28 Dramatic Arts scripts. The candidates seemed to have difficulty in questions 3, 4 and 5. This can be seen in the scores attained for these questions in comparison with performance in the other questions, with the scores for these questions being 46.2%, 47.5% and 45.4%, respectively. The majority of candidates performed much better in questions 1, 2 and 6, with the average being above 60%. The scores for these questions were 61.4%, 61.1% and 62.9% respectively. The questions with scaffolding revealed better results. Essay questions involving discursive thinking and lateral application evidently show weaker results. The performance of 10 candidates out of the 28 sampled fell into the L4–L5 range.

Figure 7.13 Average performance of candidates for Economics P1

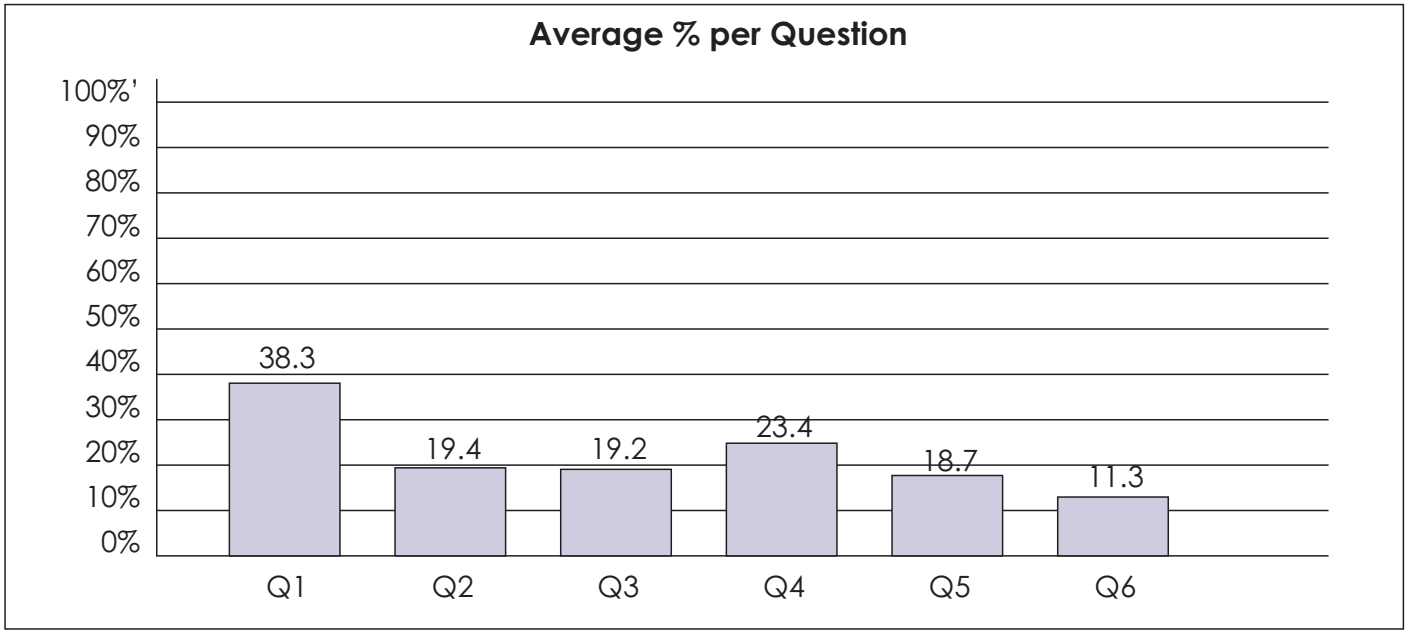


Figure 7.13 above shows that the candidates' overall performance in Economics P1 was below average. The candidates struggled to deal with the responses required for questions 2, 3 and 4 in Section B. Scores for these questions were far below average at 17.9%, 20.1% and 23.8%, respectively. The majority of the candidates also performed poorly in questions 5 and 6 in Section C of the paper, with scores of 17.4% and 11.3%, respectively, with a few candidates not even attempting to answer these questions. The overall performance in question 1 (Section A) was below average at 38.2%. Of the 40 candidates sampled, only two performed in the L4–L7 range.

Figure 7.14 Average performance of candidates for Economics P2

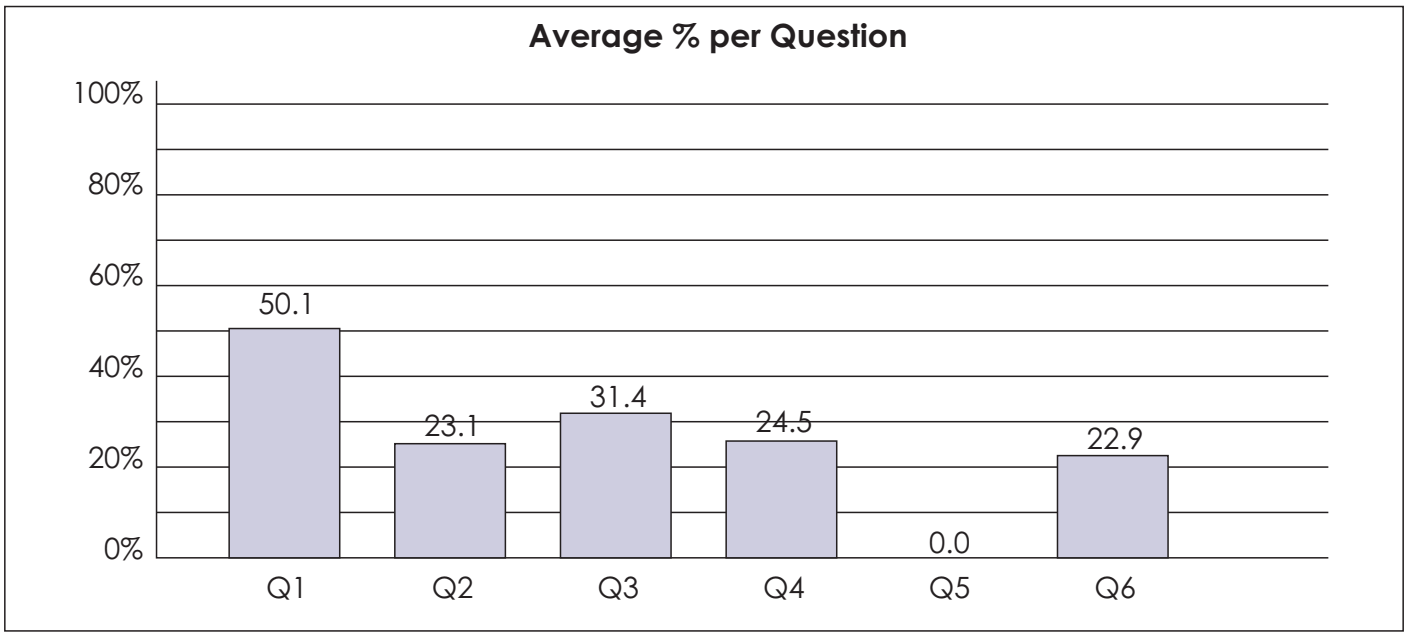


Figure 7.14 depicts the average marks obtained per question for the sample of Economics P2 scripts verified and indicates that the candidates' overall performance (with a few exceptions) was below average. The candidates struggled to respond appropriately to questions 2, 3 and 4 in Section B, with the scores for these questions being below average at 23.1%, 31.4% and 24.5%, respectively. Candidates who attempted question 6 of Section C performed below average at 22.9%. The overall performance in question 1 (Section A) was an average of 50.1%. The performance of only five out of 40 candidates sampled was in the L4–L7 range. The nine candidates who attempted question 5 scored zero for this question.

The answer scripts of the majority of the candidates were once again characterised by lack of current Economics knowledge, poor spelling and grammar, sloppy sentence construction, irrelevance, and unsubstantiated arguments. A major concern was the inability of candidates to use standard Economics vocabulary in their responses.

Figure 7.15 Average performance of candidates for Geography P1

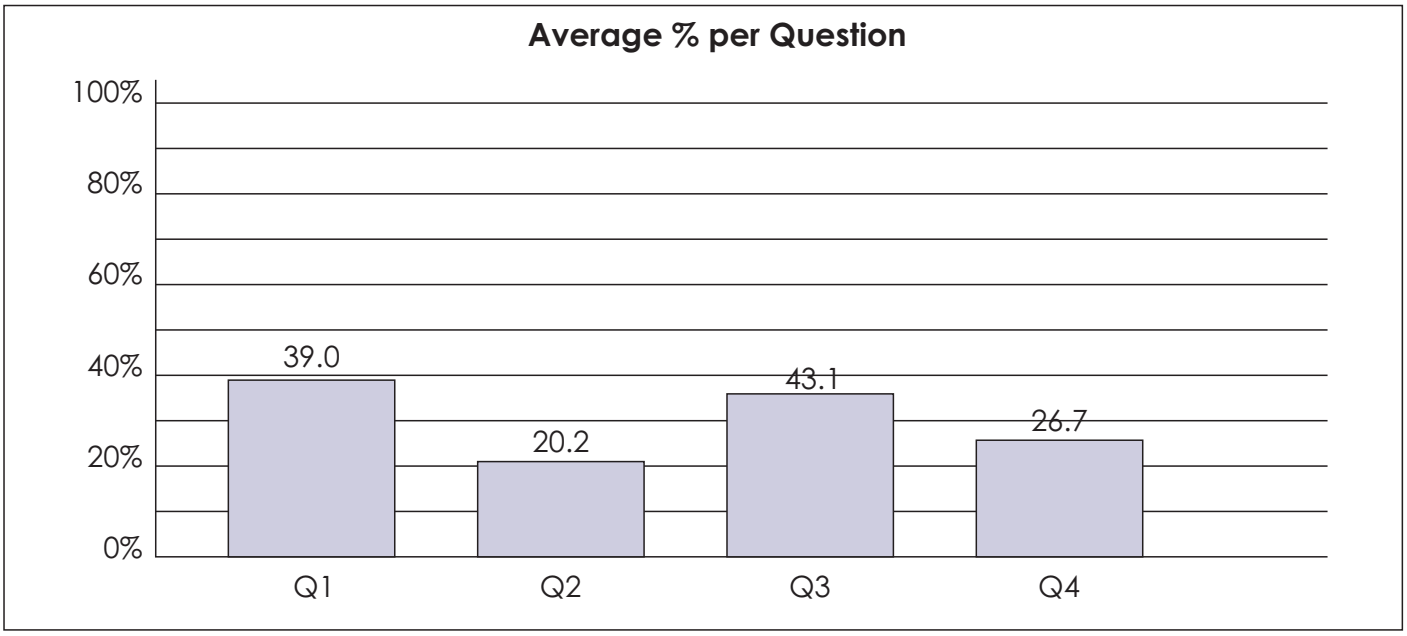


Figure 7.15 above shows candidates' overall performance in Geography P1, as verified by a sample of 22 scripts. The sample moderated/verified indicated that the candidates' overall performance was below average. The candidates struggled to respond appropriately to the application questions; that is, the middle/higher order cognitive level questions in P1. Results per question were inconsistent: questions 1 – 39%; 2 – 20.2%; 3 – 43.1%; and 4 – 26.7%.

The candidates struggled in particular to deal with the required responses for question 2 in Section A and question 4 in Section B. The scores for these questions were far below average at 20.2% and 26.7% respectively. Question 1 in Section A yielded 39% and question 3 in Section B also produced a slightly better average of 43.1%. The majority of the candidates performed poorly in the paragraph questions in Paper 1, especially those in questions 2 and 4. No candidate attained a level 6 or 7 result. Four out of 22 sampled attained level 1.

Figure 7.16 Average performance of candidates for Geography P2

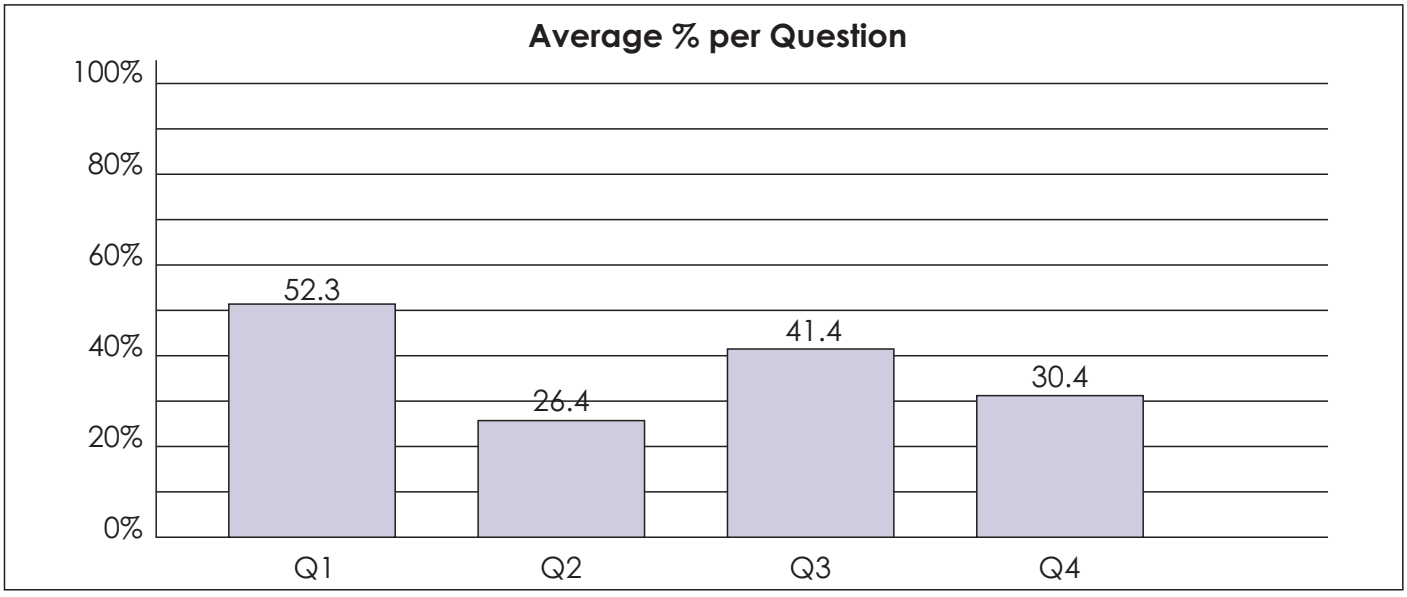
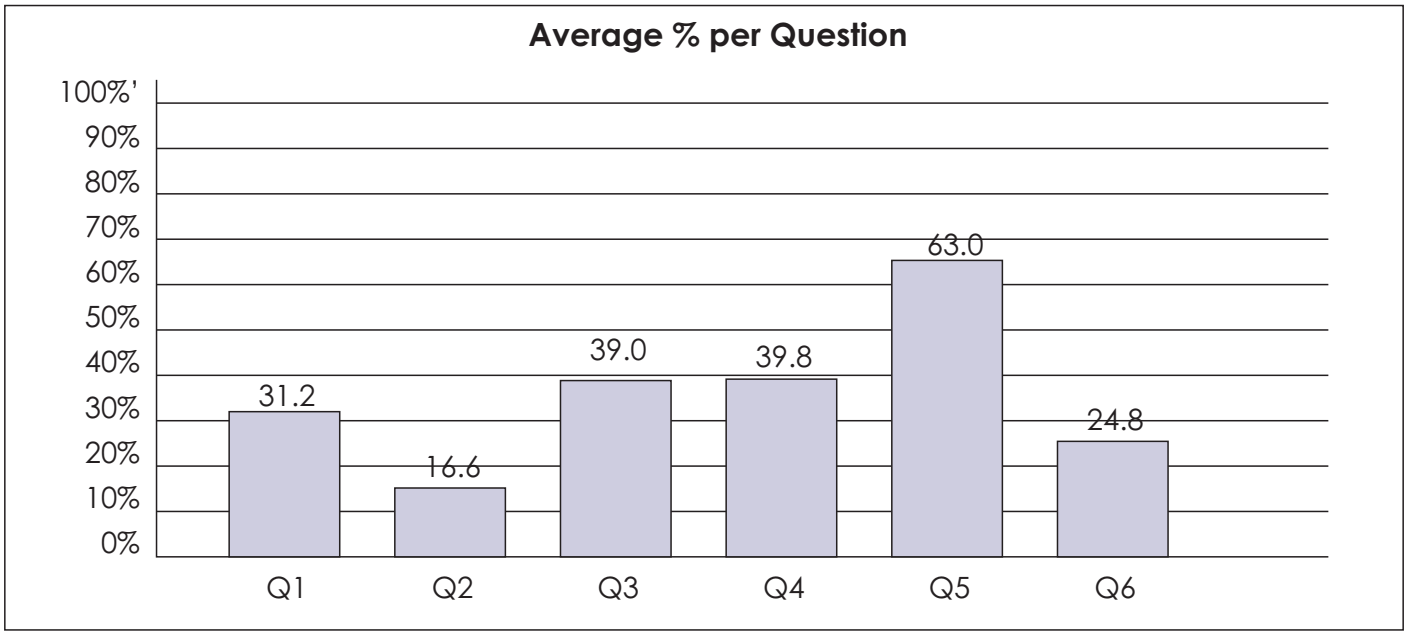


Figure 7.16 depicts the sample of scripts moderated/verified for Geography P2 and indicates candidates' overall performance. The candidates struggled to respond appropriately to question 2 especially and question 4. The scores for these questions were below average at 26.4% and 30.4% respectively. The multiple choice questions contained in question 1 yielded the expected best average of 52%. Calculations for question 2 produced a poor average of 26.4%. Question 3, although challenging to mark because of the interpretive nature of the questions, yielded a passing average of 41.4%. Question 4 on GIS, frequently weak, also produced a passing average albeit low – 30.4%. No candidate attained a level 7 result, although two attained level 6 results and nine level 1.

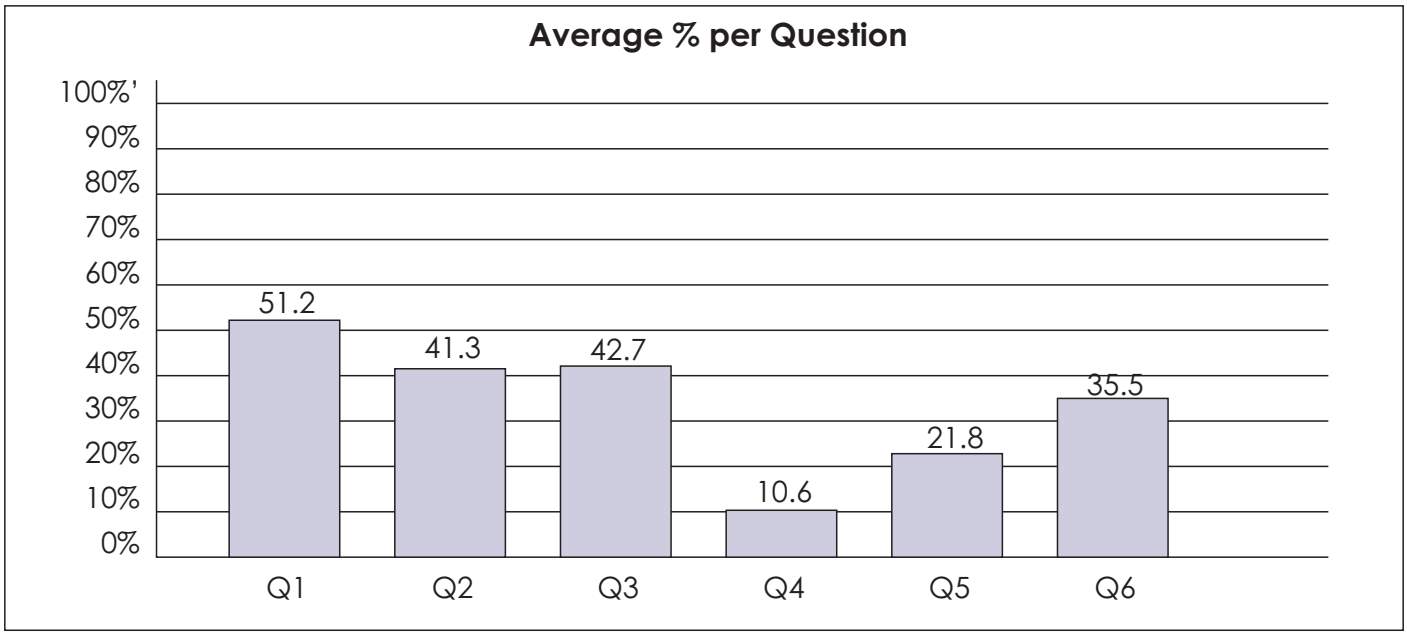
The answer scripts of the majority of the candidates were characterised by a lack of application of geographical skills and techniques.

Figure 7.17 Average performance of candidates for History P1



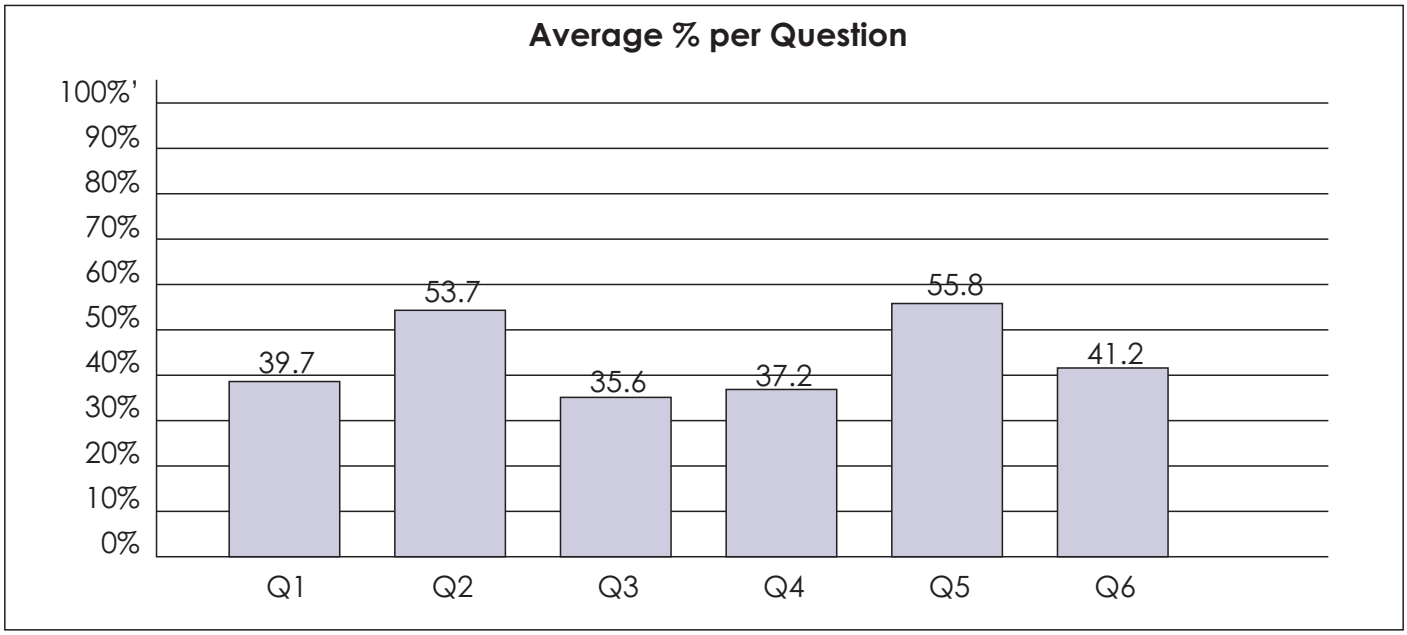
The averages discussed for History P1 are based on a sample of 20 scripts. The candidates struggled to deal with the responses required for all the questions except question 5. The scores for questions 1, 2, 3, 4 and 6 were below average at 31.2%, 16.6%, 39.0% 39.8% and 24.8%, respectively. The majority of the candidates performed poorly in the source-based section of the paper; that is, questions 1 to 3. Few candidates could answer the essay questions properly. The overall performance in Paper 1 was below average at 32.7%.

Figure 7.18 Average performance of candidates for History P2



The averages discussed for History P2 are based on a sample of 20 scripts. The candidates struggled to deal with the required responses to all the questions except question 1. The scores for questions 2 and 3 were averaged at 41.3% and 42.7%, respectively, but the scores for questions 4, 5 and 6 were below average at 10.6%, 21.8% and 35.5%, respectively. The majority of the candidates performed poorly in the essay section of the paper; that is, questions 4 to 6. Very few candidates could develop a line of argument in the essays. The overall performance in Paper 2 was below average at 37.7%.

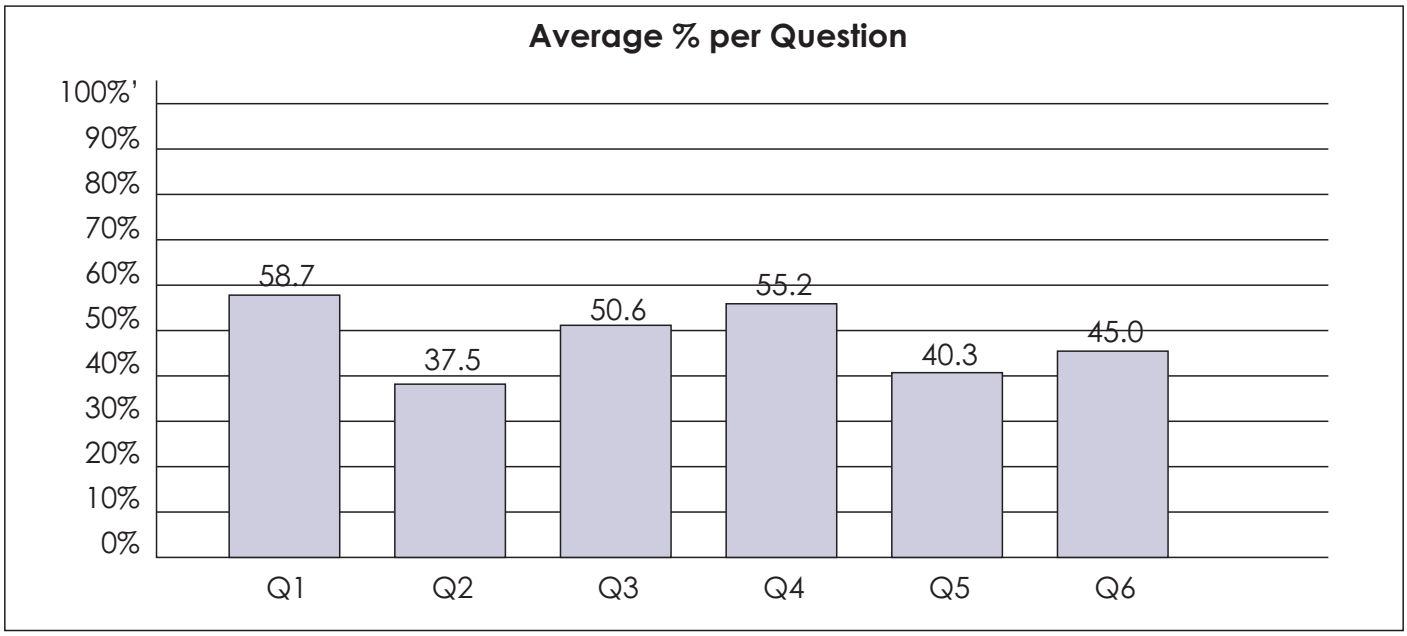
Figure 7.19 Average performance of candidates for Hospitality Studies P1



The averages discussed for Hospitality Studies P1 are based on a sample of 45 scripts. The candidates struggled to deal with the required responses for questions 3 and 4 in Section C. The scores for these questions were below average at 35.6% and 37.2%, respectively. The majority of the candidates also

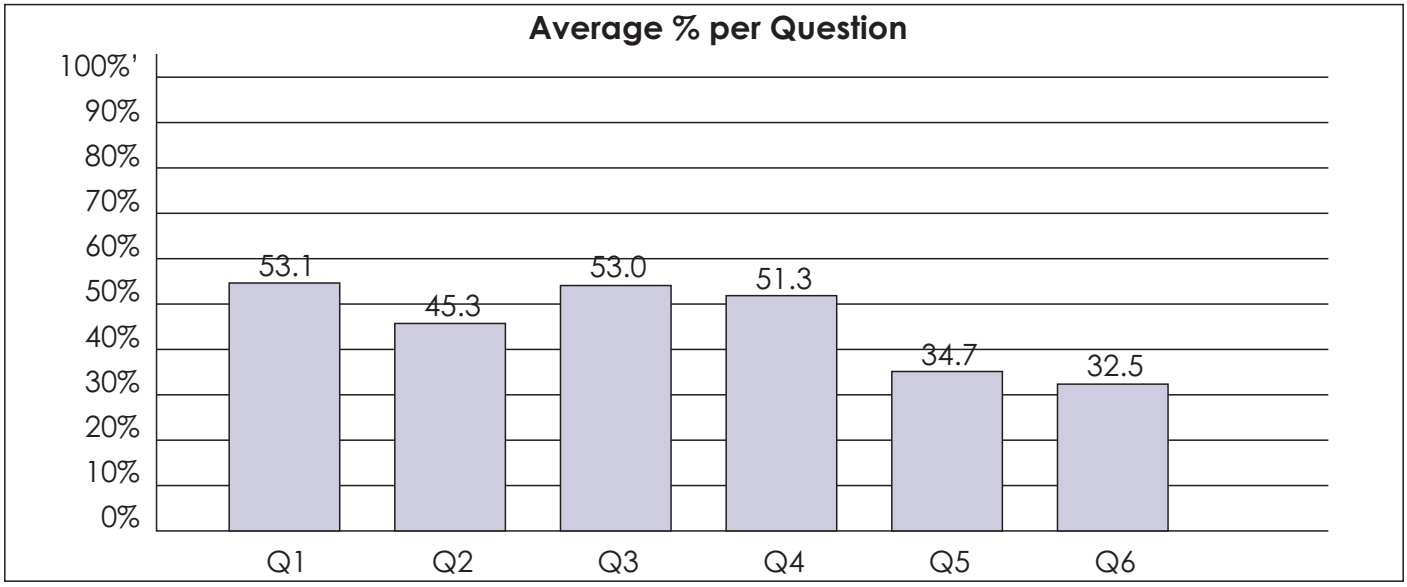
performed moderately poorly in questions 1 (Section A) and 6 (Section D) of the paper, with scores of 49.7% and 41.2%, respectively. The performance in questions 2 (Section B) and 5 (Section D) was average at 53.7% and 55.8%.

Figure 7.20 Average performance of candidates for Life Science P1



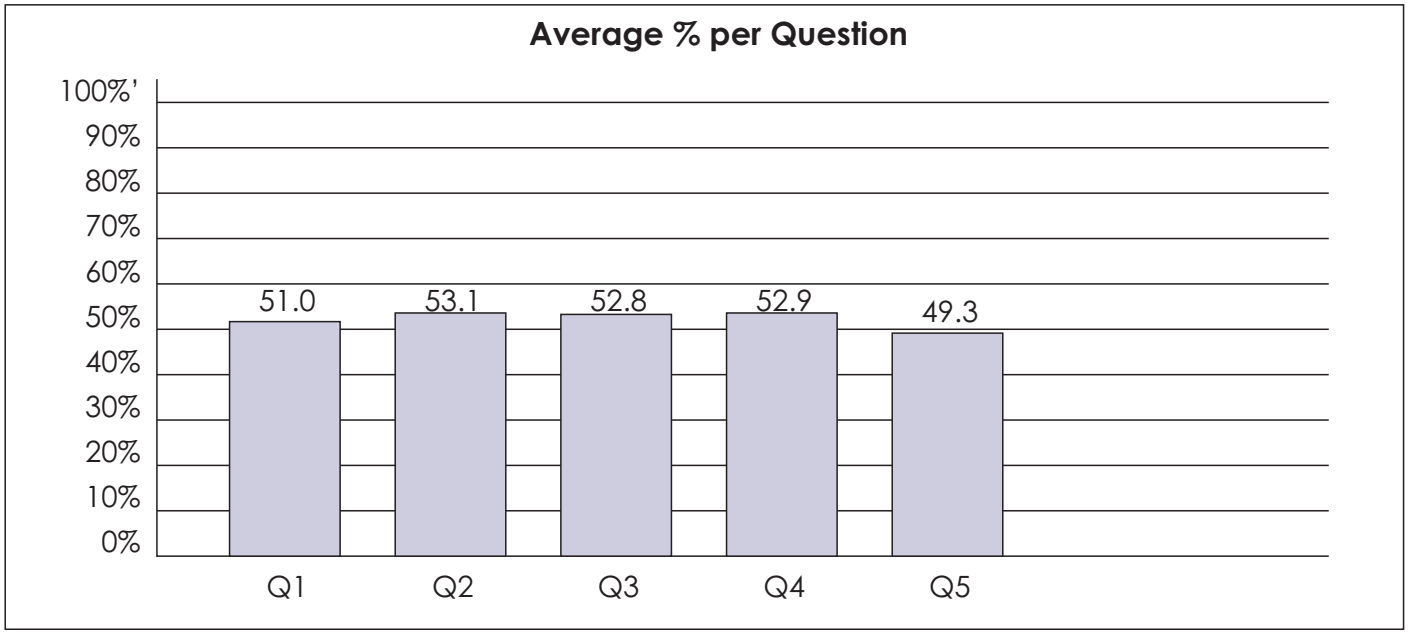
The averages discussed for Life Sciences P1 are based on a sample of 21 scripts. According to Figure 7.20, candidates generally did well in this paper as there was no question that had an average performance below 35%. Performance was good in question 1, with an average of 59% and the highest mark was 42 out of 50 marks. This was, however, an objective question requiring a one-word answer. Candidates did not do well in question 2, where the average performance was 36% and the mean was 11 for a 30-mark question. This question contained data response questions where candidates had to interpret diagrams in order to answer the questions and this seemed to be a challenge.

Figure 7.21 Average performance of candidates for Life Sciences P2



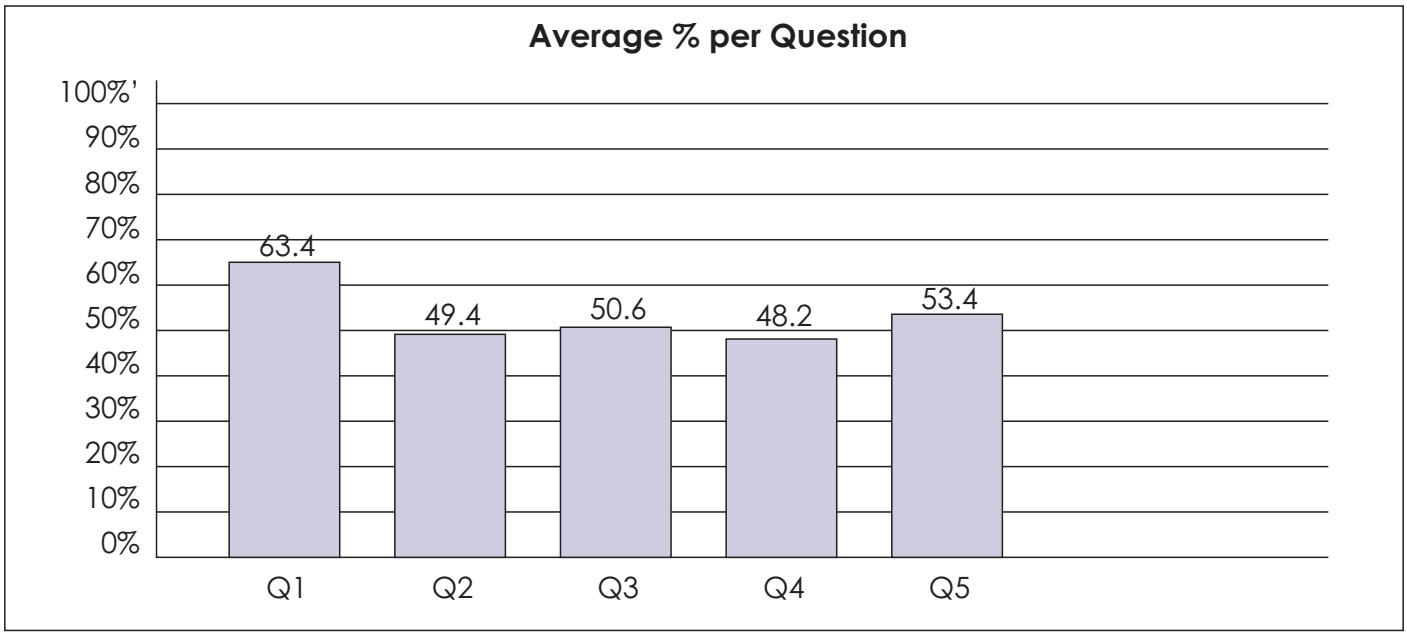
The averages discussed for Life Sciences P2 are based on a sample of 20 scripts. Performance in this paper was average. According to Figure 7.23 above, none of the questions had an average performance below 30%, although, overall, performance was better in Paper 1 than in Paper 2. Questions that had an average percentage of above 50% were question 1 (53%), question 3 (53%) and question 4 (51%). Candidates did not do well in questions 5 and 6, with an average performance of 35% and 33% respectively. The mean was 7 out of 20 marks for both questions. This was an essay question.

Figure 7.22 Average performance of candidates for Mathematical Literacy P1



The averages discussed Mathematical Literacy P1 are based on a sample of 20 scripts. Candidates performed consistently throughout all five questions in Paper 1, achieving an overall average of 51.2%. However, it was found that question 5 was the worst answered question with candidates achieving an average of 49.3%, as shown in the graph above. Question 5 in Paper 1 was the only question that contained an integration of topics. This question also contained the topic dealing with probability questions, which many students found challenging. Also worth noting is that question 1, in which candidates achieved an average of 51%, was another question that many candidates struggled with, as it dealt with the topic of Finance. Candidates failed to interpret and analyse the question correctly.

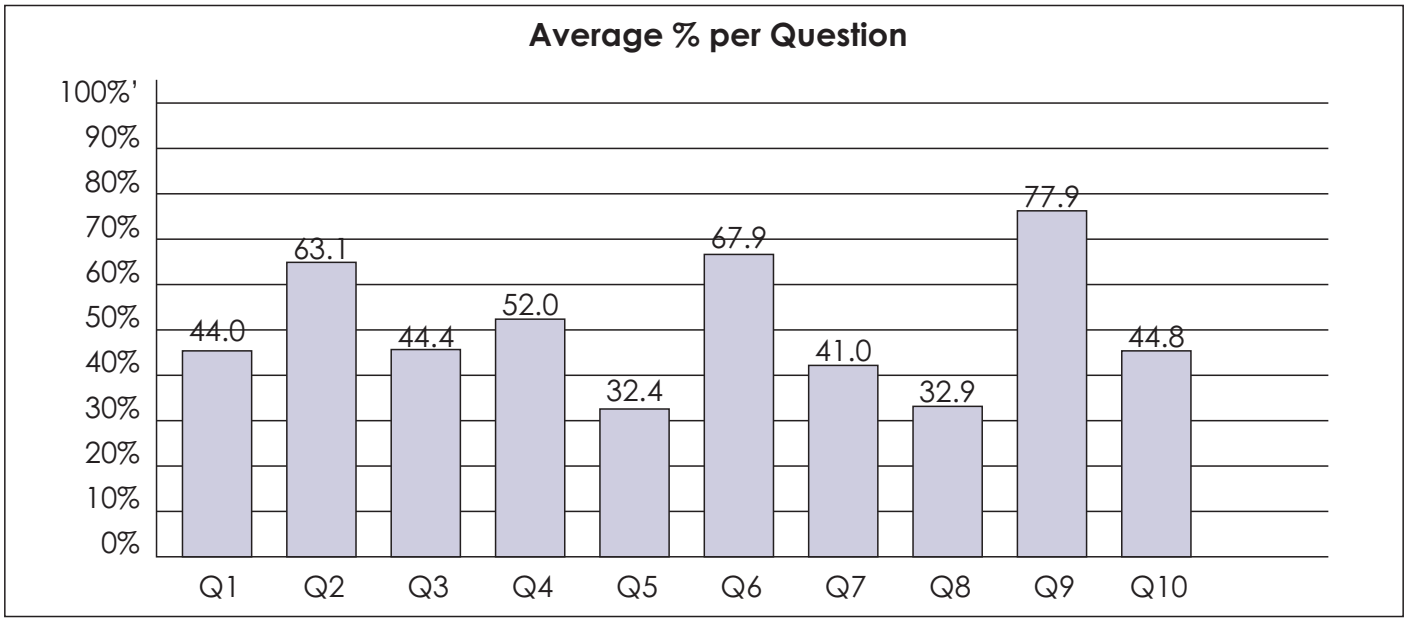
Figure 7.23 Average performance of candidates for Mathematical Literacy P2



The averages discussed for Mathematical Literacy P2 are based on a sample of two scripts.

Question 1 was well answered as reflected by the average of 63.4% achieved by most candidates. This average was well above the overall average of 53.2% achieved for this paper. Unlike Paper 1, where the first four questions were based on a single topic, in Paper 2 all questions were integrated. This provided candidates with an opportunity to score better marks in each question, as the questions are not restricted to a single topic. Question 2 had candidates achieving an average of 49.4%. This question contained a majority of questions based on the topic Space, Shape and Measurement, and presented problems for many candidates. Question 4, in which an average of 48.2% was achieved by most candidates, contained predominantly data handling questions and was also problematic for many candidates. Candidates failed to analyse questions 2 and 4 correctly. Also worth noting is the fact that many candidates failed to provide meaningful justifications for opinion-driven questions. Most candidates struggled with the higher-order questions, namely, cognitive level 4 type questions.

Figure 7.24 Average performance of candidates for Physical Sciences P1



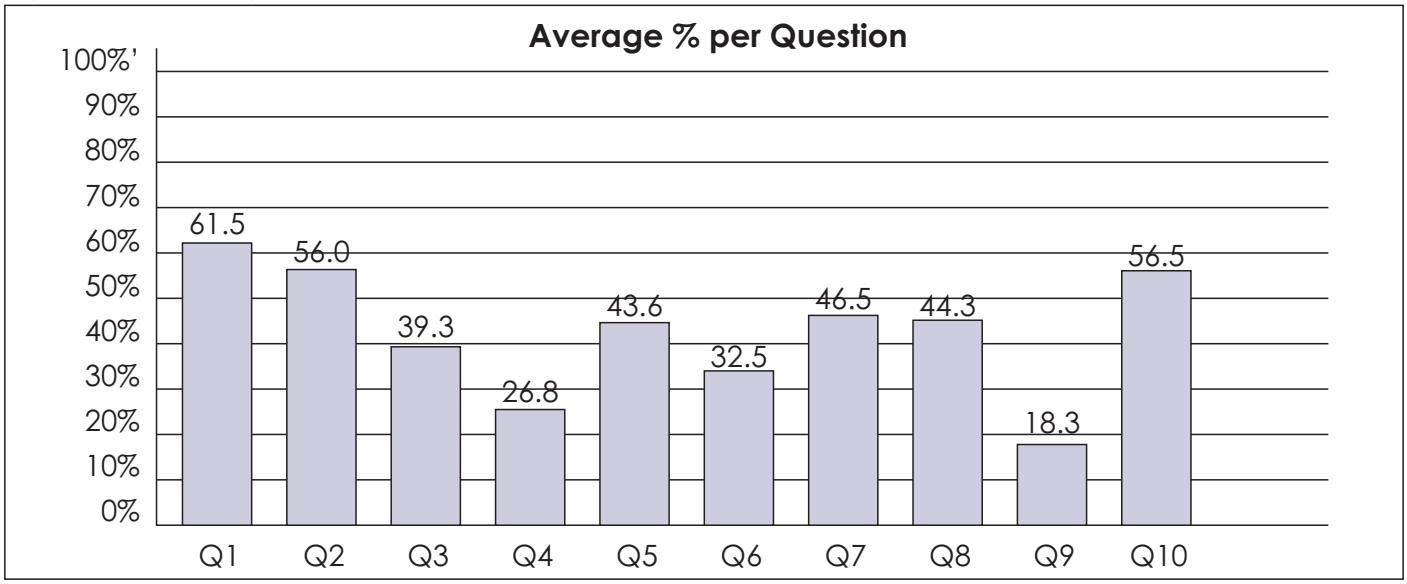
The averages discussed for Physical Sciences P1 are based on a sample of 20 scripts.

The sample moderated/verified indicated that the candidates' overall performance (with a few exceptions) was below average. The candidates struggled to respond appropriately to the middle/higher-order cognitive level questions in Paper 1.

The majority of the candidates performed poorly in the explanation questions in Paper 1, and the calculation questions in the work-energy problems. The overall performance in questions 5 and 8 of Paper 1 was poor.

The answer scripts of the majority of the candidates were once again characterised by a lack of current Physical Sciences knowledge; poor explanations and descriptions, lack of problem-solving knowledge and an inability to recognise familiar situations.

Figure 7.25 Average performance of candidates for Physical Sciences P2



The averages discussed below for Physical Sciences P1 are based on a sample of 20 scripts.

The marks for Paper 2 were lower than those for Paper 1. Most of the candidates were doing home-schooling where the emphasis in the notes tends to be more on Physics content and the "teachers"/tutors are not well qualified in the subject matter. Questions 3.2, 3.3, and 4.3 – the ability to apply theory into words was lacking; question 5 – applications on graphs were very weak; question 6 – Kc problems still a major concern; question 9 – very weak and theory not learnt; however, questions 1, 2, 7 and 10 were fairly well answered by candidates.

The sample moderated/verified indicated that the candidates' overall performance (with a few exceptions) was below average. The candidates struggled to respond appropriately to the middle/higher-order cognitive level questions in both papers. The majority of the candidates performed poorly in the explanation questions in Paper 2, and the calculation questions in the work-energy problems. The overall performance in questions 4 and 9 of Paper 2 was poor.

7.4 AREAS OF GOOD PRACTICE

The following areas of good practice were noted:

- Marking was found to be fair, valid and reliable. No candidates were advantaged or disadvantaged during the marking process. This may be attributed to the consistent application of the marking guidelines and the continuous interaction between the chief markers and markers (Physical Sciences).
- The answer scripts were moderated by both the chief marker and the internal moderator. The standard of internal moderation was very good. Where variances in marks allocated occurred, these were within the agreed tolerance range. The scope of internal moderation was good, with
- The variance between of 2% and 4% across the randomly selected sample that was subjected to external moderation/verification.
- Some discrepancies were evident in the allocation of marks by the markers, chief marker and internal moderators; however, the few deviations that were found were not large enough to impact on the candidates' final performance (Mathematical Literacy).
- In Agricultural Sciences, moderators observed improvements in learners' performance in comparison with the previous year.

The level of marking has improved due to the consistent application of the marking guidelines.

7.5 AREAS OF CONCERN

The following areas of concern should be noted:

- In the language subjects such as Afrikaans HL and English FAL, moderators noted specially that candidates' low grammatical proficiency was negatively affecting their performance.
- In English FAL in particular, it was noted that candidates were erratic in adhering to the prescribed length for essays.
- In a number of subjects, the responses to higher-order questions in which candidates are required to evaluate, offer an opinion and use critical thinking indicated that candidates were struggling and this was a major factor contributing to poor answers. The subjects in which moderators noted this concern included Accounting, Business Studies, Consumer studies, Dramatic Arts, Afrikaans HL and Physical Sciences.

7.6 DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

While some of these directives may be concerned more with classroom practices and teaching in general, the SACAI should reinforce the following with their schools:

- Teaching and classroom instruction should focus on developing learners' higher-order thinking skills.
- Learners' grammar competence levels should be honed if the SACAI learner performance is to move beyond the average, as seen in most of the papers.

7.7 CONCLUSION

The verification of marking for SACAI for the October/November 2015 NSC examination was a smooth and uneventful process. Based on the sample of scripts verified by Umalusi, it can be concluded that the overall performance of the candidates was average. With the exception of Geography P1 and Physical Sciences P1, in which a 70% pass rate was obtained, the majority of the candidates struggled to achieve this grade bracket. Questions which require higher-order thinking, critical reasoning and knowledge application have been identified as a challenge for candidates and this will require the SACAI's urgent attention. However, Umalusi is generally satisfied with the professional manner in which the SACAI conducted the marking process.

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 we deliver a relatively constant product to the market.

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

8.2 SCOPE AND APPROACH

SACAI presented a total of 27 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 SACAI offices.

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

8.3 SUMMARY OF FINDINGS

Development of Historical Averages

The subject structures were verified and approved. The Umalusi directives and requirements documents stipulate that examination results data for the past three to five years is required for calculating historical averages. Thus, the historical averages were not calculated as this is only the second year that SACAI has administered the NSC examination.

Capturing of Marks

The monitoring of the capturing of marks for the October/November 2015 NSC examination marks was conducted at the SACAI Garsfontein offices. The system administrators gave a description of the capturing process, and a sample of the mark sheets was verified. Subsequently, a description of the security system in use for the examination materials was provided and verified.

The verifiers also checked that the data capturing rooms were appropriate for the purpose. In addition, the captured marks were verified against the mark sheets, and the alignment between the two was evidenced.

Electronic Data Sets and Standardisation Booklets

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

Standardisation

The qualitative input reports were presented by Umalusi staff and the external moderators. The reports focused on the moderation process, the standard and quality of the question papers, the marking guideline discussions and the verification of marking. Thus, the Assessment Standards Committee was guided by both qualitative input reports and quantitative reports in the form of pair's analysis and standardisation principles in determining the adjustments per subject.

Standardisation Decisions

The decisions for the SACAI October/November 2015 examinations outlined in Table 8.2 below were informed by the 2014 data but heavily relied on the pairs analysis, internal moderators and external moderators reports.

Table 8.2: Standardisation decisions for the NSC

Description	Total
Number of learning areas presented	27
Raw marks	24
Adjusted (mainly upwards)	2
Adjusted (mainly downwards)	0
Scaled downward	1
Number of learning areas standardised	**27**

Post-standardisation

The assessment body was required to submit the adjusted data sets as per the agreed standardisation decisions. These were confirmed after a few verifications and adjustments were approved after rectifying the differences.

8.4 AREAS OF GOOD PRACTICE

- Accountability measures were in place as one administrator was responsible for controlling the movement of mark sheets within the capturing teams, and good supervision of data capturers was observed.

- The capturing room was conducive for the purpose, allowing data capturers' sufficient space to conduct their duties. The SACAI is to be commended on the excellent security features in the capturing area.
- SACAI's adherence to policy in the submission of data sets and standardisation booklets is commendable.

8.5 AREAS OF CONCERN

- The absence of a centre management file at the capturing venue; in addition, the fact that all documents were printed during the visit was a waste of time.
- The absence of appointment letters for permanent staff for the capturing process poses a security risk for the SACAI. The lack of name tags for the data capturers is an area of concern as it also presents a security risk.

8.6 DIRECTIVES FOR COMPLIANCE AND IMPROVEMENT

- There should be a management file available at the capturing venue containing all the necessary official documents in order to ensure that the verification is conducted easily, for example, the capturers' signed declaration, organograms, and the like.
- All officials involved in the capturing process must be trained and evidence of training should be presented during the verification visit.

8.7 CONCLUSION

The SACAI submitted 27 subjects for the standardisation process of which 24 subjects were accepted as raw marks, which is a good sign of a small but maturing system. All verification processes went smoothly with fewer resubmissions.

Chapter 9

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

9.1 BACKGROUND

Umalusi ensures adherence to the 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 November 2008.

Through its founding Act, Umalusi is also responsible for the certification of learner achievements in South Africa 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 South African Comprehensive Assessment Institute (SACAI).

This process has a number of different steps, which commence with the registration of the candidate and proceed to the writing of the examination. After the candidate has written the examinations, which are administered by the assessment body, the examination scripts are marked, the marks are processed and, after quality assurance has been carried out by Umalusi, the candidates are presented with individual statements of results. These documents are preliminary documents outlining the outcomes of the examination, which 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 did not qualify 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 – the 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 standardised 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 a 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 through a funding agreement with the Department of Basic Education.

9.2 STATUS OF CERTIFICATION FOR SACAI

The SACAI piloted the writing of the NSC in 2014 for the first time. When assessing the state of readiness for the 2015 examinations, it was found that although the assessment body had certified the 2014 cohort of learners, there were issues surrounding the certification module. This module is not fully functional in supporting the certification function of the assessment body, as the assessment body is reliant on the information technology service provider for many of the certification functions. This will need to be addressed by the assessment body in the future.

The assessment body certified the 2014 learners and included those learners who were registered to write the supplementary examination. This has meant that a second certificate had to be issued to the candidates as a re-issue. This is problematic, as it is not always easy to recover the issued certificates. It also leads to unnecessary expense. The table 9.1 below provides the statistical data for the November 2014 certification data.

Table 9.1 Statistical certification data for 2014/11 cohort of learners

Assessment body	SACAI 2014/11	SACAI 2015/03
Total registered	1258	17
Full time	0	0
Part time	935	17
Repeaters	323	0
Pass	549	4
Fail	657	13
Withdrawn	52	0
Bachelor's	155	0
Diploma	282	0
Higher certificate	112	4
NSC	0	0
Endorsed	0	0
Endorsed pass	0	0
Immigrants	27	0
Immigrants pass	15	0
Pass condonation	34	1
Irregularities	0	0

Table 9.2 below gives an indication of the types of certificate issued to SACAI for the period 2014/11/28 to 2015/11/30:

Table 9.2 Types of certificates issued

SACAI	
First issue: Subject Statement	575
First issue: NSC Bachelor's Degree	144
First issue: NSC Diploma	266
First issue: NSC Higher Certificate	108
Replacement NSC Bachelor's Degree (Change of status)	11
Replacement NSC Diploma (Change of status)	15
Replacement NSC Higher Certificate (Change of status)	8
Reissue Subject Statement (Correction)	31
Reissue NSC Bachelor's Degree (Correction)	5
Reissue NSC Diploma (Correction)	15
Reissue NSC Higher Certificate (Correction)	19

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