UMALUSI

Council for Quality Assurance in
General and Further Education and Training

Select Committee on Education and Recreation

Report on the Quality Assurance of the National Senior Certificate (NSC) 2015

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Overview

1. Umalusi mandate and regulatory framework
2. Feedback on 2015 Umalusi Quality Assurance of Assessment processes
   - Moderation of question papers
   - Appointment of markers
   - Verification of marking
   - Moderation of school based assessment
   - Statistical moderation of SBA Analysis of DBE 2015 NSC results
   - Standardisation of 2015 NSC results
3. Priorities for 2016

Section17 of the GENFETQA Act

(5) The Council must, with the concurrence of the Director-General and after consultation with the relevant assessment body or education institution, approve the publication of the results of learners if the Council is satisfied that the assessment body or education institution has—

(i) conducted the assessment free from any irregularity that may jeopardise the integrity of the assessment or its outcomes;

(ii) complied with the requirements prescribed by the Council for conducting assessments;

(iii) applied the standards prescribed by the Council which a learner is required to comply with in order to obtain a certificate; and

(iv) complied with every other condition determined by the Council.

Regulatory Framework

Quality Assurance of Assessment

- National Qualification Framework (NQF) Act No. 67 of 2008 Section 27 (h)
- The QC must develop and implement policy and criteria for assessment for the qualifications on its sub-framework.
- The Council must, in respect of quality assurance within its sub-framework, do the following:
  - ✓ develop and implement policy for quality assurance;
  - ✓ ensure the integrity and credibility of quality assurance;
  - ✓ ensure that quality assurance as is necessary for the sub-framework is undertaken;

Framework for Quality Assurance of Assessment

- Evaluation and /or accreditation of assessment bodies;
- Periodic inspection of assessment systems;
- Ongoing monitoring of assessment systems;
- Quality assurance of external examinations through:
- ✓ Moderation of examination question papers, PATs and CATs (Life Orientation)
- ✓ Monitoring and moderation of SBA
- ✓ Monitoring of the conduct, administration and management of assessment and examination processes
- ✓ Moderation of marking
- ✓ Management of concessions and examination irregularities
- ✓ Standardisation of assessment outcomes

Question paper moderation

258 question papers and their marking guidelines moderated

Number of moderations	2014/2015		2015/2016	
	November	Supplementary	November	Supplementary
First Moderation	13%	14%	12%	9%
Second Moderation	67%	64%	66%	69%
Third Moderation	15%	17%	19%	19%
Fourth Moderation	3%	3%	2%	2%
Fifth Moderation	2%	2%	1%	1%

Question Paper Moderation

Areas of Concern

- There were a number of question papers which required more than three external moderations: isiXhosa FAL P1, P2, P3; and Sesotho FAL P3.
- High levels of non-compliance were found in technical aspects 45%, text selection 40%, and marking guidelines 38%, at the first moderation.
- Some examiners experienced problems with the interpretation, analysis and distribution of cognitive levels in accordance with the CAPS requirements, in the following subjects: Agricultural Management Practices P1 & 2; Consumer Studies; Afrikaans HL P1; and IsiXhosa FAL P2.

Marker selection and training

- Umalusi conducted the audit of marker selection and appointment in the 9 Provincial Education Departments (PEDs);
- PEDs used PAM as the basis for selection of markers,
- Enhanced criteria observed in some PED's;
- school pass rate in the subjects ranging from (50%-80%),
- Marker evaluation outcomes,
- Remarking history
- Competency tests in Western Cape

Marker selection and training

Areas of good practice

- General adherence to PAM by most PED's except in Limpopo.
- Transparent and explicit criteria in addition to PAM by most provinces in marker selection is commendable; with the exception of Limpopo and KZN.
- Determination of tolerance range for the various papers nationally facilitated the training.
- All PED's successfully conducted marker training.
- The creation and updating/maintenance of marker databases in some provinces is commendable (MP/ NW).

Marker selection and training

Areas of good practice

- The creation and updating/maintenance of marker databases in some provinces is commendable (MP/ NW).
- The sharing of markers between Northern Cape and Free State to deal with shortages is evidence of good planning.
- Criteria for appointment of Internal Moderators and Chief Markers is performance based (MP).

Marker selection and training

Areas of concern

- There is a lack of clear and transparent national criteria on marker selection in addition to the PAM.
- Deviation from set of criteria due to shortage of markers (IsiXhosa (EC); English FAL (EC, FS,GP); English HL, (FS), Physical Sciences (FS, GP); Mathematics, Isizulu (KZN).
- Some markers did not attend or arrived late for training, but were allowed to mark.
- Incomplete applications accepted without academic transcripts.

Scope of verification of marking

Table 8.1 List of subjects verified and number of provinces monitored

NSC Subjects	
1. Accounting (9)[a] 2. Afrikaans FAL P1 & 2 (9) 3. Agricultural Sciences P1 & 2 (3) 4. Business Studies (9) 5. Computer Applications Technology P1 & 2 (5) 6. Dramatic Arts (5) 7. Economics P1 & 2 (5) 8. English HL P1 & 2 (5) 9. English FAL P1 & 2 (9)	10. Geography P1 & 2 (6) 11. History P1 & 2 (5) 12. Life Sciences P1 & 2 (5) including Vhembe District, Limpopo 13. Mathematical Literacy P1 & 2 (4) 14. Mathematics P1 & 2 (9) 15. Physical Sciences P1 & 2 (7) *Centralised marking* 16. Dance Studies 17. Music P1 & 2

Verification of marking

Areas of good practice

- Training of markers has improved marking in most subjects.
- The establishment and use of tolerance range has made marking more reliable.
- The emphasis on strict internal moderation of scripts has reduced inconsistencies in marking.

Verification of marking

Areas of concern

- Lack of nationally approved textbooks in Dance Studies and Music hampers marking.
- The number of novice and inexperienced markers in some subjects exceeded the 10% norm due to the increase in the number of Grade 12 learners.
- Markers failed to assess opinion/ justification type questions correctly in Mathematical Literacy, this is of serious concern because some of these concerns were reported in 2014.
- Not all markers were able to assess candidates whose language proficiency was equal to home language (Business Studies, Afrikaans, Accounting (Afrikaans scripts).

Verification of marking

Areas of concern

- Markers in some provinces were not sufficiently familiar with all the genres (English FAL).
- Changes were made to the marking guidelines at marking centres without following correct protocols.
- The marking of the practical scripts for blind candidates, was problematic as the software used by blind candidates differs across the country (CAT), and
- The marking of CAT practical paper was done on stand alone computers using the CDs from the schools rather than on networked computers as is done in all the other provinces, (KwaZulu-Natal).

Areas of poor performance

Subjects	Question with poor learner performance in the 2015 NSC examinations
Accounting	Question 1 and Question 5 : Question 1 is based on purely grade 11 work whilst question 5 comprises of both grade11 and 12 work.
Business Studies	Question1, Question 2, Question 3, Question 4, Question 5 and Question 7
Economics	Paper 1: Questions 2, 3 and 6 Paper 2: Questions 2, 3 and 4
Geography	Paper 1: Questions 1, 2 and 4 based on grades 10 and 11 content. Paper 2: Question 3 and Question 4
History	Paper 1: Question 2 (source-based) and Question 5 (essay writing) Paper 2: Question 3 (source-based) and Question 6 (essay writing)

Areas of poor performance

Subjects	Question with poor learner performance in the 2015 NSC examinations
Life Sciences	Paper 1: Question 2, 3 and 4 Paper 2: Question 2
Mathematics	Paper 1: Question 5 (Graphs) and Questions 9, 10 and 11 (Probability)
Mathematical Literacy	Paper 1: Question 2, 3 and 5. Paper 2: Question 3, 4 and 5
Physical Sciences	Paper 1: Question 4 and 11. Paper 2: Question 4, 5 , 7 and 9

Moderation of SBA

Umalusi employs appropriate initiatives for quality assuring the SBA components submitted by different schools with the aim:

- To ascertain comparability of the implementation of assessed curriculum across schools in a subject;
- To assess consistency of marking standards across administered tasks in a subject within the school and across schools in a district, and thus ensure fairness for individual learners and schools;
- To gather information that may be useful for making recommendations for improved practice.

Scope of SBA moderation

Subjects verified in July/August 2015	Subjects verified in October 2015
Accounting	History
Agricultural Technology	Hospitality Studies
Business Studies	Information Technology
Civil Technology	Life Sciences
Consumer Studies	Life Orientation
Design	Mathematical Literacy
Dramatic Arts	Mathematics
Economics	Mechanical Technology
Engineering Graphic and Design	Music
Electrical Technology	Physical Sciences
English FAL	Tourism
Geography	

SBA Moderation

Areas of good practice

- Adequate content coverage in most subjects verified.
- Many teachers' files and evidence of learner performance (ELP) were well presented, neat, dated, organised and indexed – this made moderation relatively easy.
- Evidence of internal moderation observed in most of the teacher and learner files.
- Use of common tasks for capacity building and promoting equivalence of standards.

SBA Moderation

Areas of concern

- Poor quality tasks in about 50% of the subjects verified especially in subjects like Life Orientation and Life Sciences.
- Lack of internal moderation for SBA tasks at all levels in most of the schools sampled.
- The availability of supplies, equipment and tools is a challenge for practical subjects like Consumer Studies and Hospitality Studies.
- Failure to provide analysis grids in some teachers' portfolios indicating the spread and balance of content and cognitive skills required by each task.
- The use of textbooks, recycled DBE question papers and exemplars without adjustment compromises the fairness and reliability of assessment tasks.

Statistical moderation of SBA

(Umalusi directives)

SBA means/averages that are:

- Between 5-10% above the adjusted examination mean/average is accepted as is **(assessment of teachers is acceptable)**
- Less than 5% above the adjusted examination mean/average is brought up to 5% above the adjusted examination mean/average **(assessment of teachers too strict)**
- More than 15% above the adjusted examination mean/average is brought down to 5% above the adjusted mean/average **(assessment of teachers is inflated)**

Statistical moderation of SBA
(Umalusi directives)

SBA means/averages that are:

- Between 11% and 15% above the adjusted mean of the examination mark the marks are scaled down as follows

  - 11% scaled down to 9% (loss of 2%)

  - 12% scaled down to 8% (loss of 4%)

  - 13% scaled down to 7% (loss of 6%)

  - 14% scaled down to 5% (loss of 9%)

  - 15% scaled down to 5% loss of 10%)

No. of schools with more than SBA average that is 15% above the adjusted examination mark average in gateway subjects

Subjects	WC	NC	FS	EC	KZN	MP	LP	GP	NW
Accounting	41	35	28	241	786	114	337	146	60
Business Studies	3	3	6	80	309	48	287	39	4
Economics	10	1	16	118	381	37	88	66	14
English FAL	0	0	2	15	101	2	14	2	0
History	2	9	10	128	260	44	92	40	29
Geography	6	29	22	154	499	87	322	94	121
Life Science	13	5	1	47	212	17	61	30	5
Mathematics	65	50	21	321	1054	115	378	147	49
Mathematical Lit	4	22	3	105	388	32	44	25	11
Physical Science	64	82	16	481	1085	213	584	376	195

* More than 50 centres

Issues that can contribute to inflated SBA marks

- Standard and quality of school based assessment tasks.
- Inability to interpret and use rubrics to distinguish different levels of learner performance,
- Ineffective moderation systems at various levels, (school and districts),
- Lack of feedback to teachers on the quality of school based assessment tasks developed,
- Moderation of learners' work and feedback on the quality of marking and performance,

Recommendations

- Training of teachers in the development of good quality assessment tasks and marking guidelines more especially the development and application of rubrics,
- There must be evidence of moderation of formal assessment tasks at different levels, e.g. district and school level,
- Training of teachers in marking / interpretation of learner responses e.g. set common tasks /paper for a group of schools and conduct group marking session,
- Ensure effective remediation and feedback for the teachers and the learners
- Analyse learner performance and establish why learners perform well in some sections and poorly in other sections
- Use of assessment and examination data to improve teaching and learning

Tracking of directives for compliance / areas of concern 2013-2015

Area of concern	2013	2014	2015	Comment
Non-compliance: QP Moderation Criteria (Technical Aspects, poorly developed marking guidelines, Inappropriate distribution of Cognitive levels)	Yes	Yes	Yes	• Clear guidelines to improve quality of QP's need to be given. • Examiners to respond timeously to identified errors
Quality of SBA Tasks (lack or non-availability of Internal Moderation reports, Analysis grids, Inappropriate distribution of cognitive levels, poor usage of marking rubrics, reliance on previous examination question papers)	Yes	Yes	Yes	• Evidence points to absence or poor internal moderation of SBA tasks, both pre and post moderation. • Teachers need to be trained in the development of SBA tasks as they tend to rely on previous examination question papers
Inflation of marks in SBA tasks, especially in Life Orientation	Yes	Yes	Yes	• Rigorous moderation and strict marking of SBA tasks is required.
Selection, Appointment & Training of Markers(Non-adherence to set criteria including PAM, Poor data capturing): KZN & LP.	Yes	Yes	Yes	• DBE need to closely monitor the process of selection, appointment and training of markers in KZN and LP.

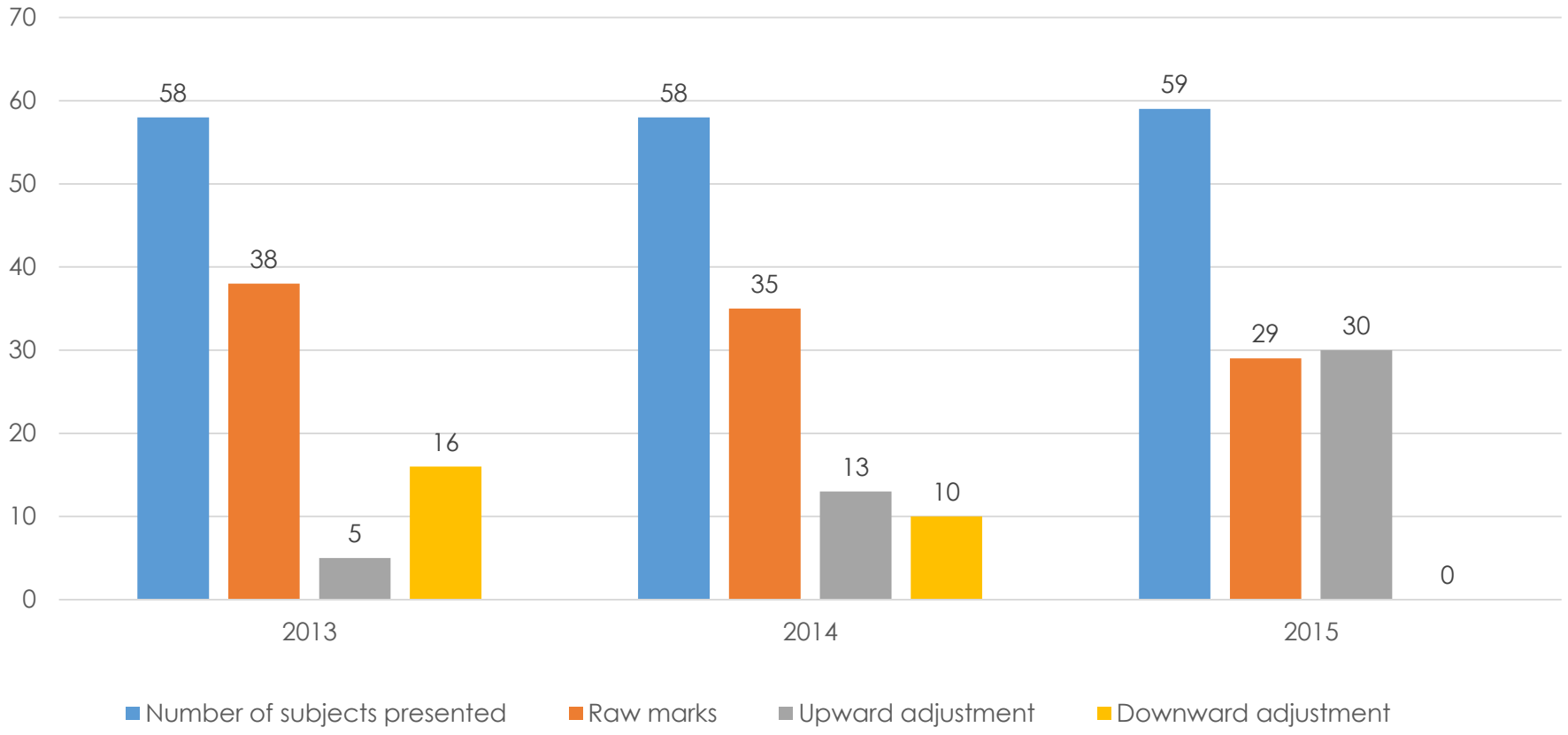
Rationale for Standardisation

- Provision of the GENFETQA Act– Council may adjust raw marks.
- International practice – large scale assessment systems.
- Assumptions – for large scale populations the distribution of aptitude and intelligence does not change appreciably

Why do we standardise results?

- Exams set externally and written by a large number of candidates
  - Moderated by both internal moderators (appointed by Assessment body) and external moderators(appointed by Umalusi) subject experts
- Despite this, variation in the difficulty of exams occurs from year to year.
- The standardisation process aims to reduce the variability of marks from year to year and "limit the 'positive' or 'negative' impact of situations outside the control of the learners e.g. an error in the paper, a mis-reading of the standard required, a change in the quality of the learning or teaching cohort
- Deliver a relatively constant product to the market
  - Universities, colleges and employers

Analysis of DBE NSC standardisation decisions 2013-2015



Input to standardisation decisions

The adjustments adopted on the NSC were informed by an analysis of the following :

- The historical average, computed from raw marks of the previous 5 years
- Pairs analysis: comparing the average marks of candidates in a subject ("anchor subject") with those of the same sets of candidates in other subjects (preferably comparable subjects)
- Qualitative input reports: from external moderators (Umalusi) and Internal moderators (DBE),
- Post examination analysis report: research conducted by Umalusi
- Quantitative input reports: pairs analysis and distribution tables and graphs.

2016 Priorities

- DBE should implement a comprehensive intervention program for progressed learners from an earlier stage than in Grade 12 to ensure positive results of these interventions,
- While raising the standards of examinations is highly commendable; the DBE should ensure that effective teacher development programs are put in place so that teachers will be able to deliver in the classrooms,
- Significant interventions are required to improve the conduct of internal assessments (SBA)including the Practical Assessment Tasks in those subjects with a practical component.
- Review of regulations: to deal with progressed learners, to cater for candidates who write amended Senior Certificate and to address systemic irregularities
- Ensure consistency in the appointment of markers across provinces
- Focus on examination centres with inflated SBA marks

Announcement

- Umalusi is hosting the 42nd IAEA conference in Cape Town
- Date: 21 – 26 August
- **Theme:** *Assessing the achievement of curriculum standards: an ongoing dialogue*
- **Sub themes**
  - Quality vs Quantity: The assessment debate
  - Alignment between curriculum, instruction and assessment
  - How can assessment ensure effective teaching and learning?
  - The art of reporting on learner performance
  - Standardised testing: The controversy
- Registration : Open
- Last day for submission of abstracts: 31 March 2016

THANK YOU