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CLASSROOM ASSESSMENT IN SOUTH AFRICA – WHERE TO FROM HERE

Abstract

In South Africa from 2001 onwards, a candidate had to meet the requirements of a classroom assessment component, called Continuous Assessment (CASS) now School Based Assessment (SBA) and a written examination to obtain a Senior Certificate

Research and analysis of the classroom component by the South African Certification Council (SAFCERT), now Umalusi, found that the SBA component was not valid and reliable. This resulted in the introduction of statistical moderation of the classroom component using the external examination as the benchmark by SAFCERT i.e. the mean of CASS marks per centre per subject was adjusted to a mean of 5 % above the mean of the written examination mark

This paper suggests that CASS/SBA should be more clearly defined and its purpose clearly specified to inform implementation. Improved reliability and validity of CASS/SBA implementation will most likely result in a review of Umalusi's statistical moderation approach and lead to the development of alternate moderation processes. The paper also suggests other possible ways to improve the validity and reliability of CASS/SBA as a summative assessment component, which would include alternate methods of moderation of CASS/SBA.

1. INTRODUCTION

In 2001, the Minister of Education announced that a candidate had to meet the requirements of a classroom assessment component, called Continuous Assessment (CASS) now School Based Assessment (SBA) and a written examination to obtain a Senior Certificate replaced called the National Senior Certificate (NSC). The policy in which that accompanied this announcement also stated that the CASS component should have a weighting of at least 25% of the final examination mark. Implementation of SBA followed very shortly after the actual announcement. This left the various provincial education departments very little time to prepare for implementation in terms of instituting systems and structures to meet this new challenge. (Singh T, 2004: 2) The above announcement had its roots in the change in South African education to Outcomes Based Education (OBE) introduced in South Africa in 1998.

After the first year of introducing SBA, the national and provincial departments of education came to the realisation that the implementation of SBA was problematic. The South African Certification Council (SAFCERT), now Umalusi found that the majority of schools had SBA marks that were 20% and more above the adjusted examination marks in most subjects. (Singh T, 2004: 2)

SAFCERT reported that the nature of tasks and standard of SBA differed from school to school and also across provincial departments of education. There was also no uniformity in the way learners were assessed.

Based on the above it was evident that the SBA marks could not be regarded as reliable. Umalusi (ex SAFCERT) therefore introduced measures to reduce the impact of inflated SBA marks on the final examination mark of a candidate. This resulted in the introduction of statistical moderation of the classroom component using the external examination as the benchmark by SAFCERT i.e. the mean of SBA marks per centre per subject was adjusted to a mean of 5% above the mean of the written examination mark. (Singh T, 2004: 2) The unreliability of the SBA marks have been supported annually by Umalusi external moderators' reports as reported in Umalusi's annual reports on the quality assurance of examinations.

The introduction of statistical moderation by Umalusi has been met by severe criticism, as it was perceived to subvert the assessment decisions of the educator in the classroom. Umalusi relaxed the conditions for statistical moderation by introducing a 5 to 10% tolerance range of the SBA mean per centre above the examination mean of that same centre as well as a gradual reduction of 11% above to 9%, 12% to 8%, 13% to 7%, 14% to 6%, and 15% to 5% above the examination mean of a centre.

1.2 Conceptual Framework

1.2.1 OBE and OBA

To fully comprehend this paper it would be useful to look at the changes brought about through the implementation of OBE. South Africa had to make a paradigm shift from traditional content driven education to OBE. Traditional education was driven by a specific curriculum and a content specific syllabus and the emphasis being on rote learning. Spady (1994) refers to "Outcomes Based Education as clearly focusing and organising everything in the education system around what is essential for all students to be able to do successfully at the end of their learning experiences. This means starting with a clear picture of what is important for students to be able to do, then organising the curriculum, instruction and assessment to make sure that learning ultimately happens." De Boer and van den Berg (2000) relate to it as follows:

"It is important that institutions should be prepared for the changes, not because legislation requires it, but also to position themselves with regard to the diversity of the students coming from a learning society which has caused great differences in terms of their needs and levels of preparedness. This emphasises the paradigm shift from the traditional education curriculum, with its focus on a teacher-centred, one directional transmission of knowledge. In this way the new approach towards curriculum with the focus on outcomes-based education becomes the norm." They also state that assessment

should be a continuous activity based on the assessment of knowledge, skills, and adherence to specific processes as well as the achievement of outcomes. This means that students should get continuous feedback on their progress towards achieving learning outcomes.

1.2.2 Research on SBA in South Africa

There has been quite a lot of research conducted on SBA in South Africa. Research included:

- looking at educators understanding of the premises and principles of OBE,
- challenges on teaching, educators'
- conceptions and practice of SBA and
- even selected papers like 'The Curse of CASS'

The major conclusion from these research exercises is the fact that educators understanding of OBE has not improved and is still lacking. The challenges that the rapid implementation of OBE brought is remaining and this has brought about a negative attitude towards this approach by many educators.

The rest of this paper will briefly look at the possible reasons for the unreliability of the SBA marks covering the following aspects:

- Teachers knowledge and understanding of classroom assessment
- Support structures and systems including assessment policies/guidelines
- Quality assurance of SBA by Assessment Bodies

It will also look at the statistical moderation as applied by Umalusi and alternate moderation practices.

Lastly, it suggests other possible ways to improve the validity and reliability of CASS/SBA as a summative assessment component that would include alternate methods of moderation of CASS/SBA.

2. CURRENT CLASSROOM ASSESSMENT PRACTICES IN SOUTH AFRICA

The implementation of SBA is guided by what is prescribed by the various Subject Assessment Guidelines (SAGs). The Directives on Internal Assessment issued by Umalusi further supplement this. The most important directive pertains to the internal moderation of SBA by Assessment Bodies and requires at least three levels of moderation. The three levels are:

- Moderation at School level – Done by a moderator at school that could be a Senior Educator or the Head of Department for a particular subject. This however is not always possible as there is sometimes only one educator at schools able to teach a particular subject. Educators are supposed to be supported by Subject Advisors from district offices but unfortunately one subject advisor in some districts have to support up to 50 schools. Individual support to educators is very limited as these subject advisors have to resort to group workshops.
- Moderation at District Level – Normally conducted by Subject Advisors, who as explained earlier has to support large numbers of educators and schools. Their heavy workload also makes it difficult for them to attend to their own professional development, and lastly
- Moderation at Provincial Head Office level – Head Office Subject Specialist assisted by Subject Advisors. Financial resources have hindered acquiring enough Subject specialists.

Due to the above constraints, moderation at these levels normally takes the form of a check-box exercise with very little feedback to educators.

2.1 Knowledge and understanding of Classroom assessment

Ramaroko NJ (2007) in his research conducted towards his Masters degree in Education focused on educators' understanding of Outcomes-Based Education (OBE) and the impact it has on their classroom assessment. He discovered the following:

- Educators have undergone workshops to implement OBE for the past 10 years

- In the early stages of implementing OBE educators had very little understanding of implanting OBE
- Due to their lack of understanding of OBE, educators were very resistant to changing from direct instruction to an alternate method of instruction.
- The results of his investigation revealed that educators still have little understanding of OBE premises and principles and do not accommodate these premises and principles in their classroom practice

Saloshna Vandeyar and Roy Killen in their article in the South African Journal of Education Vol. 27(1) 2007 entitled “Educators' conceptions and practice of classroom assessment in post-apartheid South Africa” states the following:

“The educators' approaches to assessment were clearly influenced by their backgrounds, and their capacity to accommodate the cultural and linguistic diversity in their classrooms was severely limited by their own language abilities.” and also “An analysis of the assessment practices of these educators revealed several common factors:

- educators' struggles with outcomes-based assessment;
- educators' unwillingness to accommodate linguistically and culturally diverse learners; and
- educators' strong, but not necessarily helpful, conceptions of assessment.”

Vandeyar and Killen’s research was conducted on a very small sample of three educators from schools from well resourced to poorly resourced schools and cannot therefore be regarded as being representative of all educators in South Africa. Their findings are however consistent with what was found by Ramaroko NJ (2007) and Singh T, 2004.

2.2 Comparison of SBA marks vs. actual examination marks of candidates.

A comparison of Comparison of SBA marks vs. adjusted examination marks in on province for 2009 shows the following:

Difference between the SBA means and the adjusted examination mean per subject offering

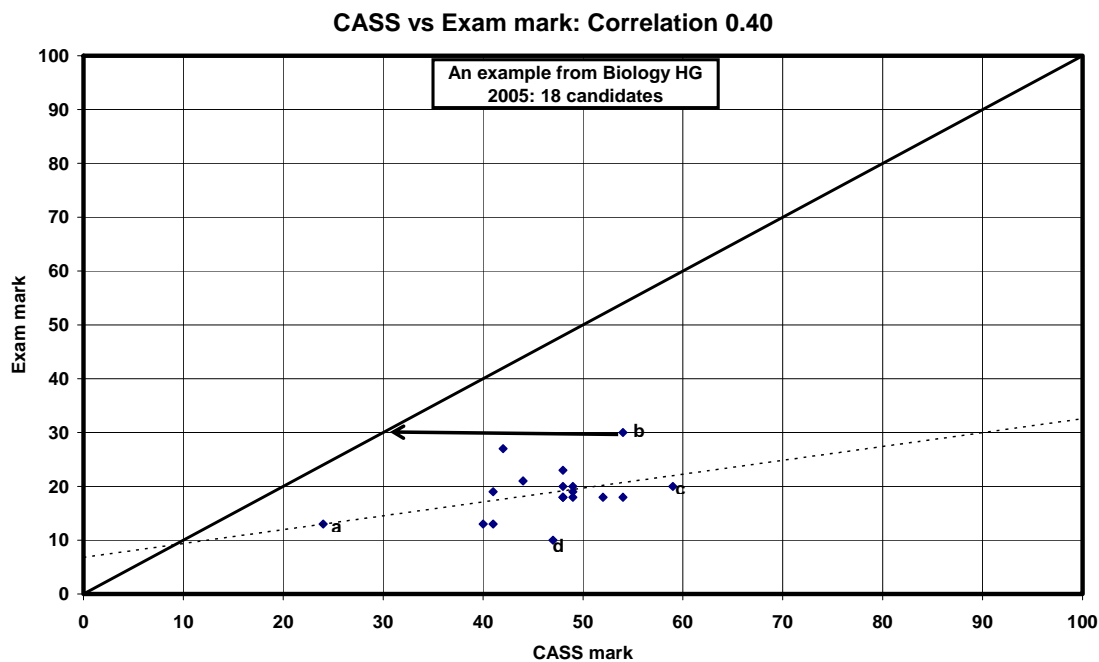
Difference	No of subject offerings	%
Greater than 15% above the exam mean	2132	32.4
Between 10 and 15% above the exam mean	890	13.5
Between 5 and 10% above the exam mean	1019	15.5
Less than 5% above the exam mean	2540	38.6

The above statistics compares favourably with the other provinces’ results. It also shows that only 15.5% of subject offerings’ SBA means fall within Umalusi’s set tolerance range of between 5 and 10% above the examination mean.

Prof Servaas van der Bergh and Debra Shepherd in their final report to Umalusi entitled: Signalling Performance: An analysis of continuous assessment and matriculation examination marks in South

African Schools goes further and states that these inflated marks gives students wrong signals that could influence their learning strategies. The extract below from this report highlights this aspect.

Figure 1



“Figure 1 shows a school where the correlation between the CASS and the examination mark was only 0.40. The 18 candidates from this school all performed better in the CASS than in the examination, reflected in all observations being located to the right of the diagonal. If CASS marks were the same as examination marks, all the candidates would have been on the diagonal. But CASS marks exceeded examination marks considerably: The arrow shows that, for Candidate b, the CASS mark should have been 24 marks (percentage points) lower to have corresponded with his/her examination mark. ... Candidate a would indeed have had the correct information, in terms of knowing that his/her prospects for passing Biology HG were very poor. But though all candidates except Candidate a achieved between 40% and 60% in CASS, the best performer in the examination was Candidate b, who achieved only 30% despite a CASS mark of 54%. Candidate c, the best performer in CASS with almost 60%, would have been completely misled, since his/her examination marks was only 20%. Candidate d would also have been misled about relative performance, i.e. what mark to expect in the examination compared to his/her classmates.”

3. VERIFICATION REPORT BY UMALUSI ON THE IMPLEMENTATION AND QUALITY ASSURANCE OF SBA BY ASSESSMENT BODIES

Umalusi in its quality assurance of Assessment and Examinations used the following criteria and reported as follows in their Report on the Quality Assurance of the National Senior Certificate Assessment and Examination 2009.

(i) Compliance with policy and guidelines

Generally, all assessment bodies were found to have complied with this aspect, and are to be commended on their efforts in implementing the National Curriculum Statement (NCS) policy, the SAG, and related policy documents. (Authors comment: This was the first year that the assessment bodies complied with this aspect)

(ii) Training of educators on SBA implementation

The moderators' reports indicated that the assessment bodies expended much effort to support, guide, and inform educators on the implementation of the current 2008/9 NSC SAG through training sessions or workshops and circulars across districts. However, these were often once off training sessions and were not sufficient to train educators on how to competently manage SBA. In view of this, Umalusi recommends that educators receive more intensive training on the management of classroom assessment.

(iii) Monitoring SBA implementation

The monitoring of the implementation of SBA at the cluster and district levels was reported as one area that all assessment bodies prioritised in 2009. Provincial coordinators conducted monitoring visits to ensure that SBA was conducted. The monitoring visits however failed to address pertinent issues relating to the development of good SBA tasks.

(iv) Quality and standard of internal moderation

There are clear indications that most of the assessment bodies conducted a compliance check (audit) and did not moderate the standard of SBA at the school, cluster, and district levels.

(v) Quality and standard of assessment tasks

Cognitive demand:

Generally, most of the set tasks were pitched at an acceptable standard especially where exemplars and 2008 final examination papers were used, but for internally set tasks it was noted that the majority of tasks were pitched at a very low standard. However, some positive comments relating to cognitive demand was noted in some subjects:

(vi) Learner performance

The findings across the subjects moderated in 2009 clearly indicate that the overall learner performance in the SBA component varied from average to below average; in only very few instances was the performance good to exceptionally good. It was also found that the majority of learners performed poorly in the September 2009 trial examinations and term control tasks, especially for those subjects where the 2008 examination papers and exemplars were used. These papers were clearly of a more appropriate standard.

It is worth noting that the majority of learners responded very well to tasks that were at the lower cognitive levels, whilst poor responses were found to questions that demanded middle and higher cognitive level responses, e.g., data response, problem-solving, and long answer questions. Generally, learners performed extremely poorly in the trial papers.

Based on the above report, which is generally accepted by the various provincial departments of education as well as the national department of education we can come to the following conclusions regarding the implementation of SBA in South Africa for the National Senior Certificate.

- a) Development and dissemination of policies and guideline document has improved.
- b) Educator support in the form of training, monitoring, internal moderation has been inadequate.
- c) Educators' knowledge and ability to set appropriate classroom assessment tasks that reflect the cognitive challenge described for the external examination is not at the required standard.
- d) Policies and guideline documents do not provide sufficient guidance and instruction to educators to set appropriate assessment tasks.

With reference to d) above, we can look at the following extracts from the Assessment Guidelines for Accounting and Economics to see the lack of guidance it provides regarding the setting of tasks.

Programme of Assessment for Grade 12

The Programme of Assessment for Accounting in Grade 12 consists of seven tasks, which are internally assessed. Of the seven tasks, two are examinations and two are tests. This example of a Programme of Assessment suggests that the remaining three tasks take on the form of a report, a project, and a presentation.

It further provides an example of a programme of assessment. These examples only shows which Learning Outcomes (LOs) and which method of assessment should be applied e.g. Project etc..

The Programme of Assessment for Economics in Grade 12 comprises seven tasks that are internally assessed. Of the seven tasks, two tasks are examinations and two are tests. The remaining three tasks can be an assignment, a project, and an investigation. It also provides an example of a programme of assessment. These examples only show which Learning Outcomes (LOs) and which method of assessment should be applied e.g. Project etc...

Cognitive challenges in relation to the setting of examination papers are defined in the Subject Assessment Guidelines but not in relation to setting of assessment task for classroom assessment. This one of the reasons why Umalusi moderators found that most of the assessment tasks were set at the lower levels. Educators have to use their own discretion and the result is that the standard of tasks varies from school to school and even within a school where more than one educator offers, the same subject and grade.

4. UMALUSI'S STATISTICAL MODERATION OF SBA

The requirements for the statistical moderation process by Umalusi are as follows:

4.1 Standardisation of examination marks

The standardisation process is the first process to ensure that the results obtained by candidates are fair, valid, and reliable. The process will also ensure an equivalence of the standard of the qualification across:

- Years
- Subjects
- Examination authorities

This is achieved by considering:

- Historical trends in the performance of candidates using a 5 year average.
- Pairs Analysis - Pairs Analysis (comparisons) is done between an Anchor Subject and all other Subjects. The average percentage which a certain group of Candidates receive for a Subject (the Anchor Subject) is compared to the average percentage the same group of Candidates received for another Subject.
- Reports from Examiners, moderators and chief markers.

The result of this process is an adjusted examination mark where adjustments are affected. Where no adjustments are applied, the adjusted mark is the original raw mark of the candidate.

4.2 The adjusted marks are used as the basis to apply the statistical moderation process and is applied as follows:

4.2.1 Eight or more candidates offering the subject at an assessment centre

- a) All SBA marks will be statistically moderated per subject, per centre to a mean according to the formula listed below and to a standard deviation that is the same as that of the adjusted

examination mark, provided the SBA standard deviation is not both below 5% and less than three quarters of the standard deviation of the adjusted examination mark. SBA means of a centre that are:

- Between 5 – 10% above the adjusted examination mean will be accepted as is.
- Less than 5% above the adjusted examination mean must be brought up to 5% above the adjusted examination mean.
- More than 15% above the adjusted examination mean must be brought down to 5% above the adjusted mean.
- Between 11% and 15% above the adjusted mean of the examination mark will be scaled down as follows:
 - 11% scaled down to 9%
 - 12% scaled down to 8%
 - 13% scaled down to 7%
 - 14% scaled down to 6%
 - 15% scaled down to 5%

4.2.2 Less than eight candidates offering the subject

If there are less than eight candidates offering the subject, the mean of the SBA mark is adjusted.

4.2.3 Other principles applicable to the adjustment of SBA scores

(a) Small Standard deviations (Deviations of less than 5%)

- i. When the standard deviation of SBA is very small, it is an indication that the assessor was not really able to distinguish the abilities of the candidates. The continuous assessment marks will be ignored if their standard deviation is less than 5% and also less than three quarters of the exam standard deviation. These candidates will be compensated by 1.25%.
- ii. When the standard deviation of the examination marks is less than 5% and also less than the SBA standard deviation only the mean of the SBA mark will be adjusted.

(b) The adjustment of SBA marks limited to 50% of the mark obtained by the candidate.

It must be noted that the above processes and formulae results in a transformed SBA mark for the candidate but does not affect his/her ranking in SBA.

5. ALTERNATE METHODS OF MODERATION

The other method of moderation is generally referred to as social moderation which relies heavily on the judgement of moderation and includes consensus moderation and external moderation by external moderators. This method of moderation is very time consuming and requires a very high level of subject and assessment expertise. The question then arises whether in a massified assessment system in South Africa and with the lack of knowledge and skills in the educator corp, this method of moderation is viable. Another alternate method would be to use a combination of social and statistical moderation where sampled external moderators judgement would be used as the benchmark for statistical moderation.

The last possible method would be to use the average performance of standardised SBA tasks as a benchmark to statistically moderate SBA.

6. THE WAY FORWARD

- 6.1 Policies and guideline documents must provide adequate guidance and instruction to educators to set appropriate assessment tasks and Policy revision should include:
 - 6.1.1 The establishment of Standardised SBA Tasks, which would facilitate the establishment of common standards for Assessment Tasks. These tasks would help educators in the development of Teacher Constructed Assessment Tasks. Standardised SBA Tasks should be provided to educators together with Scoring guidelines, background material, the rationale for each task and guidance as to methodology for implementation. The Standardised SBA tasks should be the only tasks used to be included in the final promotion marks of candidates.
 - 6.1.2 A Clear purpose statement of SBA, which should include Standardised SBA Tasks and Teacher Constructed Assessment Tasks. Educators should clearly know the purpose of why they are conducting SBA.
 - 6.1.3 Educator training should be conducted on an ongoing process and not as a once off session of two weeks. At the end of training educators should be assessed on the setting of appropriate tasks as well as their conduct and scoring of the tasks set in a real classroom setting. Only after educators are found to be competent should they be allowed to conduct Teacher Constructed SBA Tasks that then can be included in the final promotion marks of candidates as the case for 6.1.1 regarding Standardised SBA Tasks.
- 6.2 Monitoring and Internal Moderation of SBA
 - 6.2.1 Assessment Bodies should conduct monitoring exercises on regular intervals to ensure that educators comply with the requirements for SBA. This should not just be a tick-box exercise but should look at critical phases of implementation.
 - 6.2.2 Internal Moderation should be conducted on regular intervals and not just at the end of the year with constructive feedback to educators.
- 6.3 The relationship between SBA and the external examination should be clearly defined in policy. It should be clearly stated that the standard of assessment for the external examination must be the same standard that is applied in SBA especially with regards to cognitive challenge of tasks or questions. This would help to avoid educators providing wrong signals to students through inflated SBA marks. Policy developers must also clearly identify which content should be the same in both components leading to the final promotion mark and which is not but also define the rationale for the difference where content is not the same.

7. CONCLUSION

To improve the standard of SBA in South Africa is not going to happen overnight. It will have to start with the revision of all policies taking into consideration the way forward described above. The introduction of Standardised SBA Tasks is vital to ensure consistency in standards of assessment. Training of educators to implement the Standardised SBA tasks as well as Teacher Constructed Assessment Tasks must be done over a period of time and not just as a one or two week training exercise.

Lastly, Assessment Bodies must seriously look at acquiring the necessary capacity to fully support educators. This would include the necessary human resources and subject expertise in SBA.

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