School - Based Assessment: the interface between Continuous Assessment (CASS) and the external summative examination at Grade 12 level with special focus on Mathematics and Science

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Dedication

We are guilty of many errors

And many faults

But our worst crime is abandoning the children

Neglecting the fountain of life

Many of the things we need

Can wait,

The child cannot.

Right now is the time his bones are being formed,

His blood is being made

And his senses are being developed.

To him we cannot answer: Tomorrow

His name is today.

(Gabriel Mistral)

To my children

Jeremy, Jared and Santhuri

Abstract

In 2000, the Minister of Education, Professor Kader Asmal announced that all learners exiting the Further Education and Training band as from 2001 must accumulate marks in the subjects offered at Grade 12 through a process of Continuous assessment (CASS) (DoE, 2001d).

Apart from indicating the value of CASS to the external summative component in the ratio of 25% for CASS and 75% for the summative examination, there were and there still is no other policy to regulate the conduct of CASS at Grade 12 level. The situation is worsened by the non-preparation of educators to cope with the challenges of CASS implementation.

This study focuses on the implementation of CASS in Mathematics and Science since there is a body of firm evidence, which indicates that, the results in Mathematics and Science in South Africa is not very good. The TIMSS-R study conducted in 1998/1999 indicates that South African learners performed poorly in Mathematics and Science when compared to other participating countries (Howie, 2001). Since it has been established that continuous assessment conducted in a formative manner in subjects such as Mathematics and Science can lead to improved academic performance (Black & Wiliam, 1998), it is essential that attention be given, and initiatives taken to improve the quality of assessment in these critical subjects.

In the analysis of the 2001 Senior Certificate examination, it became evident that the CASS marks of learners in many instances were not valid (SAFCERT, 2000a). To address the concern of inflated CASS marks, Umalusi resorted to the use of statistical moderation to ensure that the CASS marks do not deviate drastically from the examination marks of learners.

This predominantly quantitative study makes use of surveys to gather data on the problems and challenges experienced by Grade 12 educators in the effective implementation of CASS and the kinds of support provided to educators to strengthen and to sustain the effective implementation of CASS in the classroom.

In addition, the study seeks to examine to what extent the Grade 12 CASS marks are fair, valid and reliable.

Data was collected from a non - random sample of 21 subject advisors and 60 educators of Mathematics, Biology and Physical Science across six provinces namely, Eastern Cape, Northern Cape, Limpopo, KwaZulu - Natal, Gauteng and Mpumalanga and across all locations (rural, township and urban). Individual interviews were also conducted with four experts on CASS from national, provincial and district levels and an official from Umalusi.

It is apt to end this abstract by indicating that, "our education system has been subjected to many far - reaching initiatives which, whilst taken in reaction to concerns about existing practices, have been based on little evidence about their potential to meet those concerns. In the study of formative assessment there can be seen, for once, firm evidence that indicates clearly a direction for change, which could improve standards of learning. Our plea is that national policy will grasp this opportunity and give a lead in this direction" (Black & William, 1998).

List of Key Words

Continuous assessment
Formative assessment
Summative assessment
Educator
Learner
Fairness
Reliability
Validity
Statistical moderation
Portfolio
Assessment criteria

LIST OF ACRONYMS

ABET Adult Basic Education and Training

C2005 Curriculum 2005

CASS Continuous Assessment

CHE Council for Higher Education

DET Department of Education and Training

DoE Department of Education

EDS Educator Development and Support

FET Further Education and Training

FETC Further Education and Training Certificate

HE Higher Education

HG Higher Grade

IEB Independent Examinations Board

IPEC Inter-provincial Examinations Committee

IPO Input - Process - Output

NAPTOSA National Professional Teachers Organisation of South Africa

NCS National Curriculum Statements

NFLP National Forum for Learner Performance

NQF National Qualifications Framework
NGOs Non-Governmental Organisations

OBE Outcomes-Based Education

OBA Outcomes-Based Assessment

PALCs Public Adult Learning Centers

PSD Personal and Social Development

SAFCERT South African Certification Council

SADTU South African Democratic Teachers Union

SAQA South African Qualifications Authority

SASA South African Schools Act

SBA School-Based Assessment

SG Standard Grade

SRN School Register of Needs

UK United Kingdom

WSE Whole School Evaluation