Assessment of learner achievement, a diagnosis for school improvement: A South African perspective

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Key words

School improvement Assessment Outcomes-based education Curriculum

Abstract

Perhaps one of the major turning points in the education system in South Africa was the introduction of outcomes-based education (OBE) in the late nineties. Essentially, the new system requires teachers to change their pedagogical approach to lesson planning, instruction and assessment of learner achievement from a content-based inspired approach to an out-comes driven approach. It is also worth noting that OBE demands more assessment of the progress made by learners in respect of the intended outcomes. Consequently, schools are expected to generate a lot of potentially useful data.

Written from a South African perspective, this paper explores the discourse of school improvement through the lens of classroom assessment. The paper is mainly premised on the assertion that meaningful and sustainable school improvement is largely informed by a set of data that is distinct to the school itself; and that without the requisite collective internal skills, knowledge, competence and ethos the school's rich and unique data may well remain barren.

Inspired by the notion of schools as 'centres of change' (Hopkins, 1998), or schools as 'self-renewing communities' (West, 1998) and the 'inside-out reform approach' (Taylor, et al, 2003), this paper explores the extent to which effective monitoring of learner achievement could be used by schools as a catalyst for institutional improvement.

Introduction

In the main, assessment "...entails making sense of a learner's knowledge, skills and values in a process of direct or indirect human interaction" (Lubisi, 1999:17). Although Lubisi's assertion is seemingly unproblematic, it gets more complex when one starts exploring the method/s or strategies that teachers are expected to use in order to make sense of the learner's acquired knowledge, skills and competence.

This papers explores the link between intended curriculum reform and classroom practices. In the process, the paper makes two interrelated assertions. The first assertion is that the realization of the intended curriculum reform depends on effective assessment of learner achievement; and that effective assessment depends largely on the capacity of teachers to design assessment tasks and to conduct the

assessment of learner achievement in a manner that is deemed to be reliable, valid and fair. In this regard, the paper highlights a few instances which raise some questions about the teachers' s perception of outcomes based assessment and whether they have the requisite capacity to conduct such assessment.

The second assertion made by the paper is that effective classroom practices, in particular, effective assessment of learner achievement is supposed to contribute significantly to school improvement. This assertion is informed in the notion of schools as self-renewing communities or centres of change (West, 1998). What is required in this regard is an internal capacity to use assessment outcomes and other related school-based data in a manner that informs and contributes to school improvement. In other words, "...the collection of school-based data of various kinds for purposes of informing planning and development is seen as a powerful element within each school's strategy (West, 1998:784). Furthermore, "...where schools understand the potential of internally gathered information about progress or difficulties, they are better placed to exploit opportunities and to overcome problems" (1998:773). The main problem, however, is that "...teachers collect considerable information, both artifact and observation based, and portfolios are used in many sites as composites of collections, though not correctly used from year to year to update student progress" (Elkins et al. 2006:8).

So, while the first assertion relates to the capacity of teachers to conduct effective classroom assessment, the second assertion relates to the use of the collected data to inform further planning, thus contributing to school improvement. It must be stressed though that classroom assessment referred to here is not only limited to the prescribed site based assessment tasks but refers broadly to all forms of observations made by the subject teacher in an effort to facilitate effective learning.

This paper is of the view that assessment of learner achievement is not an isolated process. For the purpose of its argument, the paper explores the notion of assessment as part of the interdependent processes of effective teaching and learning, and school improvement. In other words, assessment is not only viewed as "... the most important system for signaling systemic efficiency and accountability" (Muller, 2004:221) but it is also viewed as a catalyst for effective teaching, and thus the improvement of learner achievement and by implication, school improvement.

Background

The discourse of decentralization has always been part of the transformation of the education system in South Africa. Little wonder that it now permeates key education policies which were passed after this country's first non-racial national elections in 1994. In highlighting the predominance of the discourse Sayed (1997:1) is of the view that "...the policy of educational decentralisation is currently the stated policy of most governments and it is the central plank of major international efforts aimed at restructuring education systems". Proponents of decentralization contend that it "...enhances efficiency, effectiveness and quality" (Badat, 1997:4). It is also believed that "...autonomous school decision-making can affect teaching and learning and may thus lead to improved student outcomes" (Mann and Briller, 2008:4). It is important though to note that the desired impact of decentralization or devolution depends mainly on the internal capacity of schools to, for instance, adequately mediate the curriculum and related assessment regime.

The South Africa education system is made up of four tiers of government; namely, central, provincial, local or district and institutional. This paper is mainly focused on the last tier of governance (i.e. institutions)

One should also be mindful that decentralization is not the only bull in the education reform kraal. It is for this reason that the pendulum will continue to swing between the decentralization and centralization extremes in this country and elsewhere.

The National Qualifications Framework (NQF) and Outcomes-Based Education (OBE)

In the South African context, the development of the NQF and the introduction of OBE, implemented in the form of the National Curriculum Statement (NCS) reflects the decentralisation/centralization tension. In its effort to integrate education and training, the NQF is seen as a centralised qualifications framework, although the development of learning programs and the general provision of education and training is devolved to various private and public providers.

As regards OBE, it constitutes a major turning point in the education system in this country as it represents a significant shift from a content based approach to the one inspired by predetermined learning outcomes. Not only is it a learner-centered and activity-based approach to education (DoE, 2003:7) but it also introduced to the community of teachers, concepts like learning programmes, learning outcomes, assessment tasks, assessment standards, assessment strategies, critical outcomes, etc. It is intended that the teachers will show a broad understanding of ... the concepts of outcomes based education and its implications for teaching and learning (DoE, 1997:2).

Similarly, outcomes based assessment is understood as a "...shift from a summative norm-referenced approach to a formative criterion referenced approach" (Combrinck, 2003:52). In order to adequately understand the shift referred to here one needs to remember that "during apartheid era, assessment was solely norm-referenced, summative and aggregative in all but a tiny minority of white and private schools where the individualising thrust of a pedagogy had found receptive clientele amongst the children of the old and emergent middle class" (Muller, 2004:222).

In line with the notion of decentralization, it is more specifically the various sites of teaching and learning which are expected to implement OBE. The success of this implementation is measured in terms of the extent to which the providers' learners can demonstrate acquired knowledge, competencies, skills and values.

The main challenge here is that many generations of teachers who are still part of the current education system graduated from the 'old' pedagogy offered at teachers' training colleges before they were closed down. Most of the teachers referred to here are finding it quite daunting to, as it were unlearn methods and approaches of teaching that they have grown accustomed to for a couple of decades. That they now have to embrace their new roles as classroom facilitators in an OBE classroom is cause for some uncertainty, insecurity and anxiety. Also, the increased responsibility of elaborate assessment requirements, record keeping and general admin work (in the context of huge class sizes) seem to worsen the apprehension.

Challenges in regard to curriculum delivery and assessment of learner achievement.

Having conducted an analysis of the gap between continuous assessment and matriculation examination¹ marks in South African schools, Umalusi² found it 'disturbing' that the gap had in most cases been increasing (Umalusi, 2008:30). What is more worrying about Umalusi's concern is that "...inaccurate continuous assessments were sending the wrong signals to learners and parents throughout the FET³ band, resulting in a large number of under-prepared students entering the matriculation examination" (Umalusi: 2008).

Umalusi's 2009 report on the quality assurance of the National Senior Certificate assessment and examination indicates that the quality of internal moderation of Site Based Assessment (SBA)⁴ was, in the main, superficial and "...lacking in quality and depth" (Umalusi, 2009:16). Umalusi also found that the assessment tasks developed by educators at schools focused mainly on assessing the lower cognitive skills. It is clear that teachers' competence in designing assessment tasks leaves much to be desired. In this regard, the report recommends a "...more intensive training on the management of classroom assessment" (Umalusi, 2009:18).

In its abridged report on the National Senior Certificate examination results, the Department of Education indicated that the results of 56,351 of the 589, 912 candidates who had written the 2008 exams could not be reported because they either missed one or more components of the examination or failed to produce the school-based assessment and hence were not resulted' (2008:8). Although this may point to the inevitable slippages of a high stakes national assessment regime, one has to be mindful that the figure represents young adults with various forms of aspiration.

In an effort to establish why SBA was not serving its purpose of enhancing learning and preparing candidates for the high stakes external examinations' Reyneke, Meyer and Nel (2010) conducted a survey of 'teachers' perceptions of SBA in the Further Education and Training band and the challenges they face with the implementation of the curriculum that calls for drastic changes in assessment practice'. Among other things, the authors found it "... disturbing that participants portrayed a misunderstanding of both the types of assessment and purposes of assessment" (Reyneke, Meyer and Nel, 2010:282). It was apparently not clear to participants as to when they are required to use formative, summative, diagnostic and baseline assessment to assess process or the need for guidance/intervention. This is evidently cause for concern, more so that "... all pedagogical acts are affected by the conceptions teachers have about the act of teaching, the process and purpose of assessment, and the nature of learning" (Brown, 2003:1)

¹ The examination is written at the end of Grade 12, which constitutes an exit point of the Further Education and Training Education band of the National Qualifications Framework (NQF)

² A Quality Council that is mandated by the state to provide quality assurance of education and training provision in levels 1-4 of the NQF.

³ Further Education and Training band. This refers to Grades 10, 11 and 12

⁴ This is also referred to as continuous assessemnt

In reporting on their findings from a research that looked at teacher's perceptions of SBA, Reyneke, et al say that "...while the successful implementation of an outcomes-based approach to teaching, learning and assessment involves the active participation of learners (Botha, 2002:364; Spady, 2005:1), only39.78% of the participants indicated that they involved learners in classroom activities" (2010:281). The point being made here is that "...while policies related to outcomes-based education, languages of instruction and assessment may be well-intentioned, but entrenched assessment practices seem to be hampering the government's effort to transform school education" (Vandeyer & Kilen, 2007:10).

The first exit national examination under the OBE approach was written in 2008. The pass rate was 62,7%, down from 65% in 2007. In commenting on the declined pass rate the then Minister of Education, Mrs. Nalendi Pandor acknowledged "...failings in implementation and interpretation" (DoE, 2008). The Minister seems to be acknowledging that something went wrong in the various classrooms in this country. Notwithstanding the support provided by provincial and district officials, it is essentially individual teachers who are tasked with the huge responsibility of mediating the curriculum, conducting site based assessment and generally preparing learners for the high-stakes national examination.

While some of the challenges referred to here point to systemic gaps, this paper contends that most of them are traceable to classroom activities. It is this paper's contention that the challenges reflect a perception among some teachers of assessment as a process by which teachers and their schools are made to account, a necessary process for making learners accountable for their work, or that it is irrelevant to the work of teachers and the life of learners (Vandeyer and Killen, 2003). These perceptions have a negative impact on the adequacy of teachers' capacity to conduct valid, reliable and fair classroom assessments.

Classroom arrangements (Hopkins and West, 1994)

It is not yet evident that the South African education system has fully recovered from the devastating defiance campaigns of the eighties and early nineties. During this politically volatile period, the biggest teacher union in this country, the South African Democratic Teachers Union (SADTU), blatantly refused to be subjected to classroom inspection or anything that resembled it. This reaction followed what was perceived as the abuse of power by district officials of the department of education. Although classrooms are to a larger degree no longer the 'no-go' areas that they were during the era of defiance, a lot more still needs to be done by schools in order to ensure that teachers are adequately reassured about a collegial interest in 'their' space – the classroom.

It is perhaps apparent that classrooms constitute the school's most fertile space from which to gather value-added information and data. Considering that the main focus of OBE is "...the learner whose learning is driven by assessment that focuses on continuous improvement..." (DoE:2003), and that "...teachers' professional judgement is the main determiner of classroom assessment validity" (Airasian, 2001:18), it is absolutely essential for schools to systematically collect and analyse information and data about their classrooms and schools, and their students' progress (Hopkins, 1998:1044).

Clearly, teachers have to have the requisite skill and competence to collect diagnostic data that will enhance effective learning. As an average of six subject teachers teach the same children in various classrooms, it is of critical importance for the school to generate trends and patterns from the individually

collected data. Put differently, schools have to operate as cohesive units in order for them to make the desired impact on learner achievement. This includes the entrenchment of an internal culture of quality management or ensuring a school driven improvement (Swaffield and McBeath, 2005).

Management arrangements (Hopkins and West, 1994).

Management arrangements relate to the extent to which the school creates an enabling environment for effective teaching and learning, and assessment of learner achievement. Considering that activities intended to facilitate effective teaching and learning are essentially a collective process, if every single subject teacher's capacity at the school was to be sufficiently enhanced to mediate the intended curriculum, including the necessity to conduct reliable, valid and fair assessment of learner achievement, this would undoubtedly have the desired collective impact on the quality of assessment outcomes.

Management arrangements should also ensure that teachers see at all times the bigger picture of assessment. This way, it will be clear to teachers within their various classrooms that assessment does not end at a point of recording or reporting the learners' assessment scores. The availability of internal and external assessment scores should necessitate an in-depth analysis, thereby identifying necessary areas of improvement, plans for further development, including staff and school development. When this approach becomes entrenched as an internal culture, it will lead to what Taylor et al (2003) call the inside out reform approach. This approach to school improvement is not only driven from the school itself but it is informed by classroom information and data that are unique to the school.

School improvement

School improvement is intricately linked to the notion of self evaluation, and effective internal information and data management. "There is general agreement that, without an explicit focus on schools and classrooms, improved learning is very difficult if not impossible to achieve" (Taylor, et al. 2003:5). Improved learning will be made possible by the use of assessment as part of teaching to support and enhance learning (van Aswagen & Dreyer, 2004).

In accordance with Hopkins's (1998) notion of differential growth states and strategies, this paper envisages three types of schools. Each type of school requires appropriate improvement strategies in order for it to move from one level to the other. The effectiveness of schools is determined by key indicators like the quality of assessment outcomes (be they internal or external). Central to the differential growth states is the internal capacity of schools to determine (on the basis of evidence collected from classrooms) their level of efficiency. Equally important is the school's capacity to identify and implement the necessary improvement strategies.

Type 1: Poor performing to moderately effective.

Schools in this category would need to "first focus on institutional functionality before intervention at the classroom level can be effective. (Taylor, et al:2003).

It is also worth noting that schools in this category rely mainly on external support in order for them to make any substantial progress towards school development.

Type 2: This category is made up of schools that are moderately effective. These schools have the capacity to improve on their own. In order for these schools to move to the next level (i.e. effective schools), they need to develop improvement strategies that are sustainable.

Type 3: These are effective schools. The schools do not need external support as they are exposed to new practices and ideas. It is important for these schools to sustain their effectiveness.

References

Aswagen, S., & Dreyer, C. (2004). An analysis of ESC teacher edcators's current assessment practices. Journal of Language Teaching, Vol 38 (1).

Brown, G. (2003). Teachers' instructional conceptions: Assessments' relationship to learning, teaching, curriculum and teacher efficiency: Paper presented at the joint conference of Australian and New Zealand Associations for Research in Education. Auckland, 28 November- 3 December.

Chinapah, V. (2000). With Africa for Africa: Quality education for all. Pretoria: HSRC.

Christie, P. (1987). The right to learn. Johannesburg: Ravan Press.

Christie, P. (1997). Globalization and the curriculum: Proposals for the introduction of Education and Training. In Kellaway, P. Kriss, G. Fataar, A. & Dennis, G. (eds). Education after apartheid: South African Education in transition. Cape Town: University of Cape Town Press.

Combrinck, M. an international comparative perspective on Outcome Based Assessment: Implications for South Africa. Perspectives in Education, Vol 21 91), 2003.

Cuttace, P. (1994). Quality Systems for the performance development cycle of schools. Paper presented for the International Congress for school Effectiveness and Improvement. Melbourne.

Cuttace, P. (1995). Quality Assurance and quality management in education systems. In C.W., Evers and J. D. Chapman (Eds.). Educational administration; an Australian perspective (pp. 296-316). Sydney: Allen & Unwin.

Department of Education of Education (2008) Abridged report on the National Senior Certificate Examination Results. Available at http://www.education.gov.za Accessed on 15 May 2009

Department of Education. (1998). Developmental appraisal system for educators. Pretoria: Government Printers.

Department of Education. (2003). Review of training, resourcing and costs of education in public schools. Pretoria; Government Printers.

Department of Education. (2006). Teachers national awards. Pretoria: Department of Education.

Fleisch, B. (2001). Draft research report on the education zones, Gauteng Department of Education, commissioned by the Joint Education Trust.

Hill, P. (1995). School effectiveness and improvement: present realities and future possibilities. Inaugural professional lecture. University of Melbourne.

Hopkins, D. (1995). Towards effective school improvement. A paper presented at Eight Annual International Congress for school effectiveness and improvement. Leeuwarden: The Netherlands.

Hopkins, D. (1998). A teacher's guide to evaluation in schools. Milton Keynes: Open University Press.

Hopkins, D., & Hams, A. (1997). Understanding the school capacity for development. School Leadership and Management, 17 (3).

Jansen, J.D. (1999). The school curriculum since apartheid: Introduction of politics and policy in the South African transition. Journal of Curriculum Studies, Vol 41, pp. 57-69.

Joyce, B, & Showers, B. (1988). Student achievement through staff development. Harlow: Longman.

Libisi, R.C. (1999). Assessment in education: Perspectives practices and critique. Pietermaritzburg: University of Natal.

Muller, J, (2004) Qualifications and the national Qualifications Framework in South African schooling. In Chisholm, L (ed.) (2004). Changing class, educationand social change in post apartheid South Africa. Pretoria: Human Science Research Council.

Reyneneke, M, Meyer, L and Nel, C. (2010). School-based assessment: the leash needed to keep the poetic 'unruly pack of hounds' effectively in the hunt for learning outcomes. South African Journal of Education. Vol 30: 277-292

Sayed, Y (1997). Redefining the public and private boundaries. Discourse of educational decentralization in post-apartheid South African education. Paper presented at the Oxford Conference of Education and Geo Political College. 11-15 September 1997. New College, Oxford

Stamp, D. (1987). Evaluation of the formation and stability of student teacher attitudes to measurement and evaluation practices. Unpublished editorial thesis, Macquaie. Sydney: Australia. University

Swaffold, S. & Mac Beth, J. school self-evaluation and the role of a critical friend. Cambridge Journal of Education, Vol 35 (2), 2005 pp. 239-252.

Taylor, N, Muller, J & Vingevold, P (2003). Getting schools working. Research and systemic school reform in South Africa.

Taylor, N. (2002). Accountability and support: Improving public schooling in South Africa: A systemic framework. A paper presented at the national Consultation on school development. Department of Education, 29 January 2002.

Umalusi. (2008). Signaling performance. An analysis of continuous assessment and matriculation examination marks in South African Schools. Pretoria: Umalusi.

Umalusi. (2009). Report on the quality assurance of the National Senior Certificate Assessment nd Examination. Pretoria: Umalusi.

Umalusi. (2009). Report on the quality assurance of the national senior certificate assessment and examination. Pretoria: Umalusi

Vandeyer, S. & Killen, R. (2003). Has curriculum reform really changed assessment practices, and what promise does the Revised National Curriculum Statement hold? Perspective in Education, Vol 21, pp. 119-134.