

Influence of Syllabus and Past Examination on Assessment Behaviour of Botswana Secondary School Teachers.

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ABSTRACT

Inability of secondary education to attain her curricular goals as a result of poor quality of teachers' classroom assessment practices is a concern to every stakeholder in education. The extent to which teaching, testing and hence learning is not curriculum-driven underlies such inability. But the problem is that assessment, one of the processes of education, does not only drive itself it tends to drive other processes like teaching and also influences adversely the classroom assessment behavior of teachers. This research is concerned with the degree to which it is the syllabus or past public examination questions that drives teaching as well as classroom assessment behavior of Botswana teachers. The study, using survey inferential design, collected and analysed questionnaire data from 342 teachers in 20 randomly selected senior secondary schools in Botswana. A Cronbach alpha analysis of the questionnaire instruments gave a reliability estimate of .948. The SPSS was used to analyse questionnaire data using population-t-tests, to test, at .05 level of significance, all the four hypotheses postulated to guide the study. The study found that teachers in Botswana senior secondary schools (i) rely significantly on the syllabus when preparing tests; (ii) set internal school examinations and classroom tests based on items in past examinations; (iii) teach to the test, but (iv) exhibit significantly desirable assessment behavior. The findings were discussed; implications and recommendations that followed from them were drawn.

Key words: *Quality of teachers assessment practices, validity of public examinations, quality of education, teaching to the syllabus, teaching to the test.*

INTRODUCTION

What the society demands of formal education is embodied in the curriculum developed and validated by her to guide all the processes involved in formal education. It follows then that the process of education is valid to the extent that it is curriculum-driven. Assessment, one of the processes of education, is tasked to determine and improve how well each process of education is ensuring progress towards achieving the aims of education as stipulated in the curriculum. But oftentimes assessment not only drives itself it also drives other essential processes in education. For example, it tends to narrow curriculum content to only that which could be assessed given

teachers' inability to develop valid assessment tools for complex human behavior, and hence to contents that have been measured previously. It therefore distorts the curriculum, hijacks education intention or cheats the society of her intentions. It is the curriculum, not the assessment syllabus that should serve as the criterion in any attempt to assess the validity of education in any society.

Teaching to the test focuses on contents on which items in previous examinations has been developed to assess hence limiting the curriculum to contents and cognitive behaviour that are easily measurable. By teaching to the test, the development of low-order cognitive skills among learners tends to perpetuate itself because given the general inability of public examinations to develop items to measure higher-order cognitive skills, teaching to the test means teaching students for the development of lower order skills as called for in public examinations. For example, according to Jerald (2006):

in mathematics, students who have been drilled only on test-like questions do not have the opportunity to master a particular skill or concept and often cannot correctly answer questions that assess the same skill or concept in a different way. For example, one study found that in a district that relied heavily on item drilling, 83 percent of students selected the correct answer to a multiple choice item written as "87 - 24 =." However, only 66 percent could provide the correct answer to the open ended item "Subtract 24 from 87 (par. 9).

It exaggerates performance at the expense of learning. Implementing a distorted curriculum, that is, assessment-driven syllabus, results in education's inability to develop in the learners all the skills and knowledge deemed essential by the society for growth and development. In Botswana; almost all subjects in the syllabuses show a decline in performance at Grade C or better. Out of a total of 28 senior high schools, only 5 did not show a decline in performance measured with number of candidates obtaining Grade C or better. For example, the total number of candidates with 5 C's or better decreased from 69,827 in 2010 to 65,303 in 2011, a decrease of 6.48%. The proportion of candidates reaching the standard required for Grade C or better in all core subjects decreased by 0.25% from 9.47% in 2010 to 9.22% in 2011 (Botswana Examinations Council, 2011).

Educators and policy makers have realized and acknowledged the critical influence assessment has on teaching and learning and are making efforts to improve the standards and quality of education through assessment (Guskey, 1999). However, they are still struggling to sort through the complexities and implications of assessment for policy and practice. Braun and Kanjee (2006) insinuated that public examinations systems could in fact have negative consequences for the general quality of education if not properly utilized. They however acknowledge that solutions to the problems of quality of education especially in developing nations are varied and complex, and hence cannot be addressed solely through assessment.

Botswana has a history of high stakes assessment with an emphasis on the use of examination results to judge the quality of students and that of schools. Unfortunately, when test results are used in such minimal ways, the end result is that testing drives instruction as well as

what counts as learning, hence narrowing the indicators of effective and efficient education system (Isaacs, 2007). Assessment often times has a negative impact on teaching and learning as it limits student-centered learning. This discourages educational innovation and does little to encourage the use of assessment for refocusing teaching in order to improve the quality of education offered (International Reading Association (IRA), 2005). Similarly, an emphasis on defining school performance in terms of success on national tests and alignment with the national curriculum seems to attract a full range of local initiatives (Ntuane, 2005). Instead of reforming, assessment ends up driving instruction, thus reducing the very stronghold of an education system which is to equip learners with a fuller range of robust skills for future opportunities as they face the changing world and also to meet community development needs. This also means that as much as we want the examinations to be curriculum based, the curriculum also need to be assessed to be up to date with the fast growing needs of the society.

Nenty (2001) elaborated how in a test or examination, each student's ability is pitched against the cognitive demand of the test items. If such cognitive demands are limited to only that which are easily operationalized, then curriculum has been side-tracked and hence the curriculum is distorted. These items then act as stimuli to elicit from the students the cognitive behaviour or ability called for by the course objectives in relation to the subject content. He pointed out that the examinee response to each of the items is a reflection of:(a) how well the desirable specified behaviour has been developed, (b)how well the course content has been taught and understood, (c) examinees cognitive ability, (d) item difficulty, or the level of an item's cognitive demand and (e) other influencing factors, with each having varying impact on the interaction between the testee's ability and the item's cognitive demand. However, the sum of the examinee's item scores hides a lot more than it reveals as it does not reflect these influences (Nenty, 2001).

In formal education the curriculum, as operationalized by the syllabus, takes a centre stage in the processes of teaching, leaning and assessment. Given the intention of education, these processes are valid to the extent that they are syllabus-driven. Because of lack of adequate

assessment in their classrooms. In Figure 1 (Nenty, 2006), the *A* relationships should be strong and highly significant while the *B* and *C* relationships should be weak and random. Teaching and assessment should all look at the curriculum for content and objectives and not at the content of past public examinations. Learners are handicapped when teaching and classroom assessment are examination-driven because they are only exposed to what could be easily measured through high-stake examination items thereby narrowing the curriculum at the wish of

relevant skills teachers oftentimes resort to examination-driven teaching and

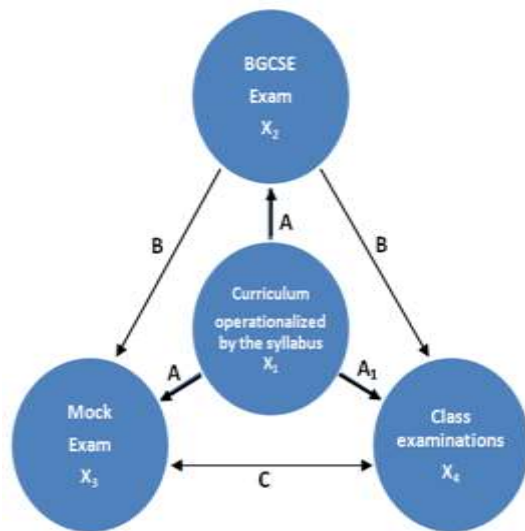


Figure 1. Representation of syllabus-examination relationship (Adopted from Nenty, 2006, p.3)

Rationale for the Study

As highlighted by Kellaghan (2004), examination plays very many crucial roles in secondary education. These include: dictating what is taught in schools, acting as gatekeepers guarding entry into the schools, selecting students during the course of their careers, and providing an evaluation of students when leaving school that is likely to have very important implications for their further education and even their life chances. Quality of education could not be defined without assessment. Forde (2004) defined quality education in Botswana as (i) learner's cognitive development and (ii) the promotion of values and attitudes of responsible citizens. He further point out the need for teachers and researchers to develop assessment tools that enhances quality education in Botswana. In the same vein, Braun and Kanjee (2006) sees assessment policy and practices as being critical to any successful educational improvement strategy. Assessment of teaching and examinations papers are essential to teaching and learning and are needed to monitor, evaluate and improve the quality of education and the system generally. Assessment connects to and informs many aspects of personal, social, economic and political realities, making national-wide public examinations an important component of every nation education system. In addition, large scale assessments are particularly crucial in developing countries like Botswana, where the number of candidates for advancement is usually much greater than the number of places available.

Effective assessment plays a crucial role in driving teaching and learning and by providing highly deliberated feedback to both students and teachers in enhancing quality of education. Research has shown that quality of education is highly affected by assessment practices, and proper utilization of assessment results can boost quality. Assessment should not end at the score attained by the students but should go beyond and use the scores to evaluate the effectiveness and appropriateness of the whole education system for improvement. However,

lack of appropriate analysis and detailed interpretations of assessment results in Africa has rendered such utilization minimal (Nenty, Odili & Munene-Kabanya, 2009).

One of the challenges facing schools is to be major players in producing students that are competent human resources who are qualified enough and equipped with skills necessary to fully and productively participate in the development of the country. Public examinations in Botswana are seen to be unable to assess all and especially high level cognitive skills deemed lucrative and fundamentally necessary for development. Teachers do not seem to know the level to which skills of the cognitive, affective and psychomotor domains of human behaviour are worthwhile for meeting the development needs of our society. They should be trained and be able to impart such skills at a level comparative to their importance. Though the Botswana government employs qualified teachers, the education system still faces criticisms of poor quality graduates who cannot sustain themselves and the society. Therefore skills developed based on what is taught in African secondary school classrooms tend to fall far short of what is necessary for the achievement of the national or millennium goals through education.

Teachers may have changed the way they administer content to students because they are under pressure to produce 'A' students to impress their headmasters so that they should get promoted and get better salaries. He warned that if the issue is not handled properly, Botswana schools will continue to produce quantity and not quality. "We should avoid the idea of only teaching students to pass; rather we should teach them to understand so that they do not become a burden when they progress to other institutions (Lute, 2011). Haynie (1990) confirms this in the United States of America when he found out that teachers were not able to match test items to taxonomic levels and the curriculum. This could be because their training did not enable them to develop such skills or probably because after some time of teaching, teachers were no longer able to identify and apply desired cognitive levels.

The syllabus should be viewed by all teachers as an indispensable part of the whole process of teaching and learning. It should be consulted at all times as it is the one document that contains a clearly defined outline of topics to be covered in a subject, and a comprehensive set of teaching-learning objectives, and even has suggestions on the best ways of not only realizing such objectives, but also testing for the level to which they are being realized through tests and examinations. To satisfy the pressure on teachers to be labelled as best producers and students as good performers, the focus is more on revising of questions from past examination papers than the teaching and learning of what is in the syllabus. This means that those who have passed through secondary school education may lack important but non-measurable skills to sustain their livelihood in the society. Education therefore tends to fail to provide for the needs in the national development plan of Botswana.

Assessment is supposed to evaluate students learning and performance on clearly defined set of curriculum objectives to allow for performance on a clearly defined set of curriculum objectives to allow for performance of the education system to be compared over time (Wiggett, Chilambampani & Mwandila, 2001), in order to pave way for improvement. It is therefore important that we examine the extent to which assessment practices support teaching and

learning especially in the secondary schools since they are being prepared for tertiary education. Thus this study is conceived from the need to assess and determine how the quality of teachers assessment practices affect the validity of public examinations so as to contribute towards the quality of education and educational standards in Botswana.

Theoretical Foundation

According to Brualdi (1999),

two major threats to test validity are worth noting, especially with today's emphasis on high-stakes performance tests. "Construct underrepresentation" indicates that the tasks which are measured in the assessment fail to include important dimensions or facets of the construct. Therefore, the test results are unlikely to reveal a student's true abilities within the construct which was indicated as having been measured by the test (p. 3).

Construct under-representation occurs when "the test is too narrow and fails to include important dimensions or facets of the construct" (Messick, 1989, p.34). In achievement testing given class, school or national examinations, 'construct underrepresentation' implies 'domain underrepresentation' that is, the entire content domain and that of the cognitive behaviour as stipulated in the curriculum are not scientifically represented in the test. Many teachers in Botswana, because of lack of adequate training in assessment or lack of motivation, construct tests that lack domain representation. When they need a test for their students, they either recycle old items from school or public examinations or in the process of test construction they sample those contents for which items could easily be developed to measure. Such test suffers from domain underrepresentation and students' performance on such test results in scores that could not support valid inference as regards their ability.

The cumulative selection of such contents and behaviour, over the years, sometimes comes to be called assessment syllabus (Botswana Examination Council (BEC), 2013). Assessment syllabus is a document that results from the narrowing of the curriculum for the convenience of test construction. According to BEC, the purpose of assessment syllabus is: "to guide schools, teachers and other educational institutions on what will be assessed in the subject area and how the assessment will be carried." (p. 3). Such selection is made from the curriculum developed and validated by the society as that which contains all contents, skills, knowledge and behaviour which learners need to learn, acquire and developed to become productive members of the society. Non-random selection of materials from this domain with which to create an assessable sub-domain overrides the society's intention, renders the resulting assessment instrument invalid, and cove teachers to teach to the test. Assessment syllabus has several adverse influences on teachers' assessment behaviour. With the high-stake nature of public examinations the teachers tend to teach and assess only that called for in the assessment syllabus rather than what is required by the curriculum, and hence teaching to the test.

Final marks can be very superficial, and a number of possible factors can contribute to a student's final mark in an examination including, improper weighting on curriculum content covered, ineffectiveness of instructional methods, specialised coaching through teaching to the

test, etc. (Nenty, 2001; Horn, 2002). To the extent that factors other than those related to the curriculum influence performance outcome to that extent is the test score invalid (Nenty, 2001). A score on an achievement test has meaning only relative to the underlying curriculum. In other words, the understanding is “given the curriculum this is the learners’ level of achievement.” .

Statement of the Problem

Botswana secondary education, as a means of ensuring that learners acquire relevant skills that the society intended them to develop as stipulated in the curriculum, is not achieving its intention. Performance is sustained by what students have learnt, but what they have learnt is not as dictated by the curriculum but by past examinations. The need to do well in public examination tends to override the need to gain desirable skills as stipulated in the curriculum. The urge to satisfy these distorted needs tends to engender unfavourable classroom assessment behavior of teaching to the test among teachers.

Purpose of the Study

The aim of the study is to assess the quality of classroom assessment behaviour of secondary school teachers in Botswana and to determine extent to which they rely on the syllabus or in past examination questions during teaching and assessment in the classroom

Statement of the Research Hypotheses

To contribute solutions to the problem of this study, the following research hypotheses will be tested:

H_{A1}: Teachers in Botswana rely significantly on the syllabus during classroom assessment

H_{A2}: Teachers in Botswana rely significantly on past examination papers when preparing classroom room tests

H_{A3}: Teachers in Botswana rely significantly on past examination question in their teaching

H_{A4}: Teachers in Botswana have significant poor test development behaviour

Review of Related Studies

To Nenty (1997), assessment has offered to “sit beside” a growing child to collect and document valid data with which to ensure valid exploration and identification of potentials, as well as to generate information with which to maximize the results of the human development process. But because of lack of or inadequate training, and very large class sizes, this offer is not embraced by teachers, because of lack of understanding parents do not care about this offer; this offer is not encouraged by school administrators; because of ignorance, this offer is not appreciated by learners; and because of misplaced priority, the government does not support this offer.

To Tsheko (n.d.), what is bothersome is that an examination driven curriculum runs a risk of being narrowed to meet the requirements of the examinations. When this happens, teachers are

forced to “teach to the test” thus leaving out important facets of the curriculum which were meant to provide learners with lifelong education and not just what is examined. This is bound to happen when a single test to measure student learning as in the case of end of level examination in Botswana.

Sturman, Lewis, Morrison, Scott, Smith, Styles, Taggart and Woodthorpe (2005) (in their general survey of teachers 2005 paper), used a 12-page questionnaire containing 20 questions which were sent to teachers’ home addresses at the end of January 2005 and an online version which was made available for these teachers if they so preferred. A total of 4, 184 teachers completed and returned the questionnaire. Analysis was conducted on several different levels as appropriate. Basic analysis comprised frequencies and cross tabulations. More sophisticated analysis was also conducted to analyse responses according to a number of key variables. The findings revealed that the single biggest reward in teaching, as perceived by teachers is the satisfaction of contributing to children development. The main frustrations of teaching are seen to be insufficient time to plan and prepare poor work/life balance, paperwork, and the poor behaviour of some pupils. Teachers generally rate the status of the profession at or below the mid-point of the five-point response scale, indicating medium or low status. In terms of continuing professional development, most teachers want to strengthen and develop their classroom practice in the coming five years. Few see themselves becoming a head teacher in that period or joining the independent sector, though around a quarter envisage taking on management responsibility. Approximately a quarter of teachers with less than ten years’ experience are undecided about whether to stay in the profession in the next five years (Sturman *et al.*, 2005).

Ranku (2001) the author aimed to describe attributions of teacher-designed science tests used in Botswana Junior Secondary Schools. A convenient sample of seven junior secondary schools in Gaborone. Data was collected by administering questionnaires to heads of science departments, and analysis of past papers. Findings showed that 90% of the Heads of the Department’s responded that guidelines for test designing are provided. 67% of them indicated that the guidelines are obtained from the syllabus while 13% said that they follow the format of past examination papers. Four out of seven schools claimed that test moderation was done by consensus while the other three schools did not engage in any form of test moderation. More findings from the study showed that 65% of the Heads of Departments’ agreed that teachers received some form of test designing training during pre-service formation, though 26% of them disagreed on this point. All the Heads of Departments were of the view that teachers use past examination questions to design tests although this accounted for a small proportion of the tests. All schools expressed the view that tests in their departments were mainly to find out whether students had understood content material. From analyzing past papers, the higher order thinking skills were under represented (Analysis 10%, synthesis 0.4% and evaluation 0%). Ranku ends by saying that poor assessment may unfortunately be a depiction of poor instruction.

Influence of Syllabus and Past Examinations on Teaching Behaviour

Past studies show that teachers do sometimes not follow all necessary procedures or principles of teaching as per the syllabus which may have impact in the skills they possess. Rollnick, Manyatsi, Lubben and Bradley (1998), their study showed that teacher's approaches to the teaching of chemistry were related to the kinds of questions used on two past examinations of which most were at the recall level. Given that both O-level teachers and those of junior secondary school teachers did not teach at high levels as required, it was not surprising that over third of students failed Science, particularly Physics and Chemistry during the final examinations of 2001 (Kellaghan, 2002).

In a study carried out by Martin (2003) the relationship between inclusion in the intended curriculum and student achievement in science was not as straightforward as in mathematics. There were several lower performing countries with fewer topics in their curricula-Botswana, South Africa, and Tunisia. The study indicated that just as what students are expected to learn, it is what their teachers choose to teach them. In many cases, teachers need to interpret and adapt the intended curriculum according to their perceptions of the needs, abilities and interests of their students and this evolves into the implemented curriculum. Research has shown that the implemented curriculum, even in highly regulated educational systems is not identical to the intended curriculum. He concluded that the ability of policy makers to make sound judgement about relative strengths and weaknesses of science education in their systems depend on achievements measures being based, as closely as possible, on what students have actually been taught in their systems.

Klein, Hamilton, McCaffrey and Stecher (2000) in their article "what do test scores in Texas tell us?" observe that in the past decade, several states have begun using the results on state-wide tests as the basis for rewarding and sanctioning individual students, teachers, and schools. Although testing and accountability are intended to improve achievement and motivate staff and students, concerns have been raised in both the media and professional literature about possible unintended consequences of the programs. The high stakes testing program in Texas has received much of this attention in part because of the extraordinarily large gains the students in this state have made on its state wide achievement tests, the Texas Assessment of Academic Skills (TAAS). The TAAS tests consist primarily of multiple-choice items, but the writing tests include questions that require written answers. To investigate whether the dramatic mathematics and reading gains on the TAAS represent actual academic progress, these gains were compared to score changes in Texas on another test, the National Assessment of Educational Progress (NAEP).

In all the analyses, including fourth grade mathematics, the gains on the TAAS were several times greater than they were on NAEP. Hence, how much a Texas student's proficiency in reading and math actually improved depends almost entirely on whether the assessment of that student's skill relies on NAEP score (which are based on national content framework) or TAAS scores which are based on tests that are aligned with Texas own content standards and are administered by classroom teacher). The study found out that the use of the scores obtained might encounter a plethora of problems that would undermine the interpretation of the scores

obtained. Some of the problems include the following: (1) students being coached to develop skills that are unique to the specific types of questions that are asked on the state wide exam (i.e., as distinct from what is generally meant by reading, mathematics, or the other subject tested.); (2) narrowing the curriculum to improve score on the state examinations at the expense of other important skills and subjects that are not tested; (3) an increase in the prevalence of activities that substantially reduce the validity of the scores (4) results being biased by various features of the testing program (Klein, Hamilton, McCaffrey & Stecher, 2000).

In developed countries, specifically the United States of America, education policymakers and professionals often use test results for multiple purposes; measuring educator effectiveness and development, connecting assessments and learning, monitoring the educational system, aiding instructional planning, motivating students to perform better, acting as a mechanism to change instructional content, and holding schools and educators accountable. Tests are also used to certify students as having attained specific levels of achievement (NCME, 2013). Detailed analysis of testing results can give very useful feedback that can improve teaching and learning hence the quality of education. For example, analyzing the incorrect answers to test items can give important information on student's preparation and influence of other background factors. Identifying such factors and resolving them would add invaluable benefits toward quality education (Nenty, 2000). Such multiple usage of results is largely absent in Botswana and other developing countries where there are mainly used for placement and selection. This undermines the whole purpose of assessment as a tool for improving quality of education.

In their discussion Sweiry, Crisp, Ahmed and Pollity (2002) showed that teachers sometimes expose students to pass examinations papers as a way of preparing them for the examinations and this obviously affect the validity of the examinations. In their paper presented at the British Educational Research Conference noted that students develop certain expectations relating to examinations and examination questions, based on their experiences of the classroom tests and past examination papers. These expectations in most cases help students to come to the examination prepared for the exam and to cope more efficiently, though they may have not learned any content of value.

METHODOLOGY

The inferential study involved surveying with a questionnaire instrument the views and perceptions of a sample of 342 teachers from 20 randomly selected from 31 senior secondary schools as regards their teaching and test development behaviour, analysing and generalizing the findings to senior secondary school teachers in Botswana. A 6 point-Likert scale questionnaire was developed, and validated, with a Cronbach alpha reliability estimate of .948, was used to measure the perception of teachers regarding level to which they depend on past BEC examination items and on the syllabus when constructing classroom test items as well as the their classroom assessment behaviour. Human cognitive levels as defined by Bloom, Englhart, Furst, Hill, and Krathwohl (1956) rather than the terms themselves were used to operationalize cognitive behaviour to avoid invalid meaning of behavioural terms.

Data Analysis and Interpretation of Results

H₀₁: Teachers in Botswana Senior Secondary Schools do not rely significantly on the syllabus during classroom assessment.

One sample or population t-test analysis was done to test whether teachers set tests basing on the syllabus as presented in Table 1 mean score for the extent to which teachers set test based Table 1

One sample t-Test Analysis of the Extent to which Teachers in Botswana Develop Classroom tests with Reference to the Syllabus (n=342)

Variable	μ	\bar{X}	Std. Deviation	Mean Difference	Std. Error Mean	t	df	p<
Level of reliance on the syllabus during classroom assessment	14.00	18.05	3.21	4.05	0.17	23.36	341	.000

on the syllabus is 18.05 which is higher than the population mean of 14.00 ($\mu = 14.0$). Results from Table 1 show that the null hypothesis is rejected ($t_{(341)} = 23.36, p < .05$). It is concluded that teachers in Botswana senior secondary schools use the syllabus to a significant level during classroom assessment.

H₀₂: Teachers in Botswana senior secondary schools do not rely significantly on past examination papers when preparing school examinations.

A one sample t-test analysis on the extent to which teachers set examinations based on past examinations papers was done (see Table 2).

Table 2

One sample t-Test Analysis of the Extent to which Teachers in Botswana Develop Classroom tests with Reference to Past Examination Questions (n=342)

Variable	μ	\bar{X}	Std. Deviation	Mean Difference	Std. Error Mean	t	df	p<
Level of reliance on past examination papers when developing classroom test	7.00	9.57	1.63	2.57	0.09	29.50	350	.000

The observed mean value of 9.37 was statistically compared to the expected mean of 7.00 and this gave ($t_{(350)} = 29.50, p < .05$). Hence the null hypothesis is rejected. It is concluded that the

teachers in this study to a significant level use past examinations as a basis for preparing classroom and school tests.

H₀₃: Teachers in Botswana rely significantly on past examination question in their teaching

To test this hypothesis, a population t-test analysis was done (see Table 3) on teachers responses to

Table 3

One sample t-Test Analysis of the Extent to which Teachers in Botswana Teach with Reference to Past Examination Questions (n=309)

Variable	μ	\bar{X}	Std. Deviation	Mean Difference	Std. Error Mean	t	df	p<
Level of teaching to the test	21.00	23.89	4.67	2.89	0.27	10.70	308	.000

the nineitems designed to measure the level to which they rely on past examination questions when they are teaching. A t-comparison of their observed mean of 23.89 to the expected mean of 21.00 gave a t-value of 10.70 which was found to be significant at a p-value less than .05. This led to the rejection of the null hypothesis that Botswana teachers do not, to a significant level, teach to previous public examination test items. In other words, Botswana teachers to a significant level teach to the test.

Ho4: Teachers in Botswana, to a significant level, do not exhibit desirable classroom assessment behaviour.

The level of desirability of teachers' classroom assessment behavior was tested for significance by comparing the observed mean of 12.90 to the expected mean of 10.50 through population t-test analysis (see Table 4).

Table 4

Population t-test-on Teachers General Test Development Behaviour (n=325)

Variable	μ	\bar{X}	Std. Deviation	Mean Difference	Std. Error Mean	t	df	p<
Level to which teachers exhibit desirable classroom assessment behaviour	10.50	12.90	2.64	2.40	.15	16.41	324	.000

This resulted in a t-value of 16.41. Given 324 degrees of freedom this value was found to be significant at a level far less than the alpha level of .05. Hence the null hypothesis was rejected

and the alternate hypothesis was retained. In that case, teachers in Botswana senior secondary school have significantly desirable classroom assessment behaviour.

Summary of Findings

Teachers in Botswana senior secondary schools:

- rely significantly on the syllabus during classroom assessment.
- set internal school examinations based on items in past examinations
- teach to the test.
- exhibit significantly desirable assessment behavior

Discussions, Conclusion and Recommendations

From all indications, teachers in Botswana senior secondary schools are guided by contents of previous public examinations in their teaching and test development. They claim to be influenced by syllabus content during classroom assessment and to exhibit desirable assessment behaviour. In other words, they teach and test to the test, but their classroom assessment behaviour, like in questioning and provision of feedback is desirable.

The idea of having assessment syllabus curled out of the curriculum encourages teaching to the test and rids the final examination of validity given the curriculum as the criterion. It is a case of construct underrepresentation which indicates that the tasks which are taught and measured in the classroom and school assessment fail to include important dimensions or facets of the curriculum. Therefore, the test results are unlikely to reveal a student's true abilities within the curriculum which was indicated as having been measured by the test (Brualdi, 1999, p. 3).

Teachers are compelled to “teach to the knowledge and skill represented by a test” (Popham, 2001, p. 1) by the need to have their students do well in public high-stake examination. Significance reliance on the syllabus when they are developing classroom test but set internal tests based on items from previous examination, significantly agree to the fact that they set internal school examinations based on items in past examinations. This in practice goes counter to the professional expectation that the criterion for classroom assessment and examinations should be the curriculum contents. The fact that teachers agree significantly that they use past examinations in the test development explains why most topics that are not included in the final examinations are also not included in the teachers’ tests despite having more weight in the syllabus. Bond (1995) state that many educators and policymakers believe that *what gets assessed is what gets taught* and that the format of assessment influences the format of instruction. Although teachers claim they teach to the syllabus, findings also show that their assessment is more driven by past papers.

The perception of teachers in this study showed that there are from a population that teach significantly more to the syllabus than to the test. The findings that they teach to fulfil the requirements of public examinations have a negative implication for a nation’s human resource development endeavour. Test scores do not make a school great, great teaching does (Berkeley Parents Network, 2003). And also, according to Volante (2004), critics of the practice of teaching to the test hold that:

students who are taught to the test lack a comprehensive and lasting understanding of subject matter; even if it raises test scores – which it fails to do– students may not truly grasp the key concepts of the domain, because teaching to the test centers on rote memorization while excluding the strengthening of creative skills and abstract-thinking ability. Teachers who want to raise test scores, contrarily, must promote deep conceptual understanding of the subject matter (par. 3).

Conclusion

Teaching to the test, which Botswana teachers report they do, is unethical and if attaining quality of education is defined as the extent to which the requirements of the curriculum are met, teaching to the test reduces the quality of Botswana education. Education should proud itself in the intrinsic quality of its product not on the size of score its learners make. Good performance in examinations which is not backed up by quality learning does not augur well to the development of the society. It undercuts the purpose of education and renders classroom and school test invalid given the curriculum as a criterion. The content and skills in the Mock tests portrayed more of the examinations than the syllabus probably because there is replication of past examinations papers than syllabus-based teaching and learning.

Recommendations

- Teacher training institutions should enhance test development skills among their trainees.
- To reduce the tendency to teach and assess to the test, schools should develop and maintain item banks based on the content and instructional objectives of the syllabus. The availability of items from such banks would discourage teachers from using items from past examinations as a source for setting class test and school examinations.
- Since teachers assess to the content of public examinations, it is important that such examinations be developed to cover all the topics and skills in the syllabus to reduce the risk of domain underrepresentation by the examination to which teachers teach.

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