

**QUALITY EDUCATIONAL TESTING/ASSESSMENT: A VITAL
CONSIDERATION IN ENHANCING SUSTAINABLE DEVELOPMENT IN
NIGERIA**

USMAN MOHAMMED

FEDERAL COLLEGE OF EDUCATION, JAMA'ARE, BAUCHI STATE

EZEKIEL OLUBAYO OJO, Ph.D.

DEPARTMENT OF EDUCATIONAL FOUNDATIONS, FACULTY OF
EDUCATION, UNIVERSITY OF JOS

&

YUSUF A. MUSTAPHA

FACULTY OF EDUCATION, UNIVERSITY OF JOS, NIGERIA

Abstract

Sustainable Development Goals (SDGs) were put in place and adopted by all member nations of the United Nations (UN) in 2015 in order to provide a shared blueprint for peace and prosperity for people and the planet, now and into the future. The engine that will drive the attainment of these SDGs is education; The extent to which the education of any nation is put in the front burner is an indication of the extent to which that nation wants to be seen as a progressive and developed. The paper defined some key words in educational measurement and evaluation and also x-rayed some important Issues in Quality Assurance in Assessment in Nigeria. The role of educational test/assessment in teaching and learning is undoubtedly an enormous one. A key consideration in the paper was looking at the role of educational test/assessment in teaching and learning as a way of ensuring the attainment of the SDGs.

Key words: Sustainable development goals, Quality assurance; Educational assessment; Evaluation; Testing

Introduction

Sustainable Development Goals (SDGs) were put in place and adopted by all member nations of the United Nations (UN) in 2015 in order to provide a shared blueprint for peace and prosperity for people and the planet, now and into the future. The engine that will drive the attainment of these SDGs is education; whether we consider the economy or the current challenges of security, education is the medium through which the lofty dreams of growing Nigeria's economy and boosting its security. The extent to which the education of any nation is put in the front burner is an indication of the extent to which that nation wants to be seen as a progressive and developed country. The last two decades has thrown up serious challenges in the area of economy and security in Nigeria and even now, these challenges look daunting so much that the government is committing so much resources to addressing the challenges.

The role of educational test/assessment in teaching and learning is undoubtedly an

enormous one. We cannot talk of education at all levels without reference to educational testing, measurement, assessment and evaluation, it is quite impossible. These four related concepts are important considerations in teaching and learning the world-over. This is simply because they are the medium for determining quality of teaching and learning which also determines the progress that can be made in enhancing any country's sustainable development. The term assessment will be used to represent testing, measurement, assessment and evaluation in this presentation. Educational assessment should be *Valid, Objective* and *Reliable* among other characteristics. Genuine quality assessment will produce citizens that are well trained, that can drive development in the country and put the country on a sound footing so that it can achieve its SDG goals and objectives.

Quality assurance in educational assessment is a necessary factor in the assessment process; it determines the extent to which a country's educational goals and objective are attained. There should be no debate on the need for assuring quality in the teaching/learning process. For a developing country like Nigeria, the need to be concerned about enhancement of SDGs through quality assurance in educational assessment cannot be relegated to the background. To this extent, what should be of concern is how to assure quality in educational assessment so as to boost Nigeria's education, economy and security and enhance the SDGs in Nigeria.

Quality is simply defined as fitness for purpose (Okebukola, 2002). This definition implies that quality in assessment could be regarded as the ability of testing/assessment procedures to fulfill the aims and objectives of education. Ojerinde (1997) sees quality in education as relating to factors such as well articulated national goals, well planned curriculum at all levels, adequate assessment procedure and instruments, capacity for processing examination data and utilization of assessment outcomes. The 2030 Agenda for Sustainable Development that was adopted by all United Nations (UN) member States in 2015 provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs) which are an urgent call for action by all countries- developed and developing- in a global partnership.

The UN's Department of Economic and Social Affairs marked out 17 key areas for sustainable development and these include: No poverty; Zero hunger; Good health and well-being; Quality education; Gender equality; Clean water and sanitation; Affordable and clean energy; Decent work and economic growth; and Industry, innovation and infrastructure. Others are Reduced inequalities; Sustainable cities and communities; Responsible consumption and production; Climate action; Life below water; Life on land; Peace, justice and strong institutions; and Partnership for the goals.

The role of education in attaining and sustaining these laudable goals can never be underrated. While education will provide the basis for Nigeria meeting up the target for the goals and sustaining it, quality assurance in educational testing/assessment will provide the necessary monitoring for the education that will help meet up the target.

Imperatives of Quality Assurance in Educational Assessment

The need for quality assurance in educational assessment cannot be overemphasized. In this regard, Mustapha (2009) asserted that quality assurance in assessment should be a major task for every country and which requires collective action by institutions at all levels and government agencies along with scholars and researchers in the field of assessment and evaluation. Without quality assurance in educational assessment, the aims and goals for which schools are established cannot be achieved. Not only this, teaching and learning in our institutions may become exercise in futility. If it is important to assess the attainment of goals and objectives stated in the curriculum, then, of more importance is the issue of how qualitative the processes involved is and how these qualities can be enhanced and sustained.

It is important to document at this point that, testing and examination by teachers, lecturers, examination bodies and all those concerned with the business of assessment are expected to guarantee the quality of educational assessment in terms of competences, skills and attributes. Indicators of quality that usually come to mind in this regard are validity, reliability, objectivity, usability and interpretability. While validity is the extent to which results of test are put into relevant use, reliability is the extent to which tests are consistent in measuring what they ought to measure. In recent years, the issue of differential functioning of items of tests has also been included in the indicators with a general shift from classical test theory to item response theory and the generalizability theory. The issue here, the, is how adequate are our present conceptions of validity and reliability especially?

In another interesting dimension, Nwana (1997) added two terms to some of the factors that threaten quality assurance of assessment in education. The terms are credibility and civility. According to him, credibility enquires whether the eventual recipients and users of the results of assessment place a value on the results (i.e., the grades) obtained from the awarding institutions. Civility on the other hand enquires whether or not the persons being assessed are in such condition as to give their best without hindrances and encumbrances in the attributes being assessed. An examination, in which students are treated in physically uncondusive environment for example, can be said to lack civility.

Issues in Quality Assurance in Assessment in Nigeria

Efforts that will guarantee quality testing/assessment at the primary, secondary and tertiary levels in Nigeria include but are not limited to:

Group Testing/Examination

Students are tested/examined in groups and multitude of groups with the attendant issues and problems with such mode of examination. Group testing is a situation where students (ranging from a few to hundreds) are seated in one or more halls) and are tested in various schools' subjects/courses. With the exponential growth in population in Nigeria especially from the late 70s, group testing has become so important and prominent such that it has become the usual norm. Group testing is used for both internal school/college and external examination, it is the mode that is mostly employed for classification and certification of students at all levels of education in Nigeria. An advantage of this mode of

testing is its ability to be used for testing large population of students within a short time. Notable disadvantage of group testing/examination is its susceptibility to cheating and lowering of validity and reliability of test and testing situations.

Effective Use of the Continuous Assessment System

Officially, continuous assessment (CA) is defined as a mechanism whereby the final grading of students in the cognitive, affective and psychomotor domains of behavior takes account in a systematic way of all their performances during a given period of schooling. Such an assessment involves the use of a variety of evaluation techniques for the purpose of guiding and improving teaching and learning and performance of the students (FME, 1989). The use of the CA system of assessment is for all levels of education. However, a number of constraints such as inadequate number of teachers and trained examination officers, poor laboratory facilities and other learning materials, lack of textbooks, misinformation about continuous assessment and general lukewarm attitude to stakeholders, among many others, have not made any significant effect on the purpose of introducing CA to mitigate the one-shot do-or-die terminal/yearly assessment. The CA system is supposed to be a device for curbing examination misconduct but from the reality or ground, it is most disheartening that CA is now mostly fraught with so much malpractice. For most institutions of learning in Nigeria, the systematic, comprehensive, cumulative and guidance-oriented features of CA have been either discarded or pushed to the back burner.

Non-reliance on only Assessment in the Cognitive Domain

Assessment at all levels of education is supposed to be comprehensive – taking care of all aspects of the development of the child – cognitive, affective, psychomotor domains. Cognitive deals with the intellectual side of learning and is the most commonly considered domain, affective includes objectives relating to interest, attitude and values relating to learning facts and information. Psychomotor focuses on motor skills and actions that have to do with physical coordination. Attention to the affective and psychomotor domains of learning is almost totally absent in our schools and institutions. Over-reliance on assessment in the cognitive domain has been the bane of assessment in Nigeria (Mustapha, 2001). Sedlacek (2004), for example, posited that non-cognitive measures of adjustment, motivation, and perception are strong production of success particularly for the under-represented minority students. Attention to the affective and psychomotor domains of learning is almost totally absent in our schools. The use of this assessment technique in Nigeria educational system has been misleading in the sense that students and parents have the impression that all that matters in the institutions are to obtain a certificate at the end of a course (Jebson, 2023).

Emphasis on Soft skills Assessment

Closely related to the issue of over dependence of assessment in the cognitive domain is lack of attention to soft skills assessment in schools and institutions of learning in Nigeria. “Soft skill are personal attributes that describe an individuals' ability to interact with others, it is a term that is often associated with a person's cluster of personality traits, social norms, personal habits, friendliness and leadership” (Mustapha, 2016, p. 74). Consideration of students' soft skills is important because many of the soft skill ate tied to

an individual's personality rather than any form of training and also because performance of students in the hard skills can always be explained and justified by whatever teachers find out with regards to their soft skills. Measuring documenting students' soft skills will require the use of instruments such as interview schedule, observation schedule, questionnaire, projective techniques, anecdotal records, rating scales, personality inventories and sociometric technique. Unfortunately, putting these instruments in place and using them are problems our teachers have to grapple with.

Quality Testing and Assessment

There is the need to improve seriously on the quality of teachers' tests/examinations and testing/examination situations. Good quality test administration, quality scoring/marking of scripts, quality processing of results of tests/examinations and internal and external moderation of results are at their lowest, for example. There is the need to guarantee the quality of assessment instruments be it assignment, test, end of term/year examinations and including instruments for measurement of soft skills. The practice of reusing old examination items and papers is not helping the system but making schools assessment to lack validity. Current realities need to be taken into consideration when planning tests and examinations.

Serious consideration needs to be made of the use and application of theories of testing. The theories- Classical test theory (CTT), Item-Response theory (IRT) and the Generalizability theory (G-theory) all have roles and contribution to practice of testing and assessment. Consequently, every teacher in Nigeria should be made to compulsorily go through the teacher-training programme in this regard. A few years ago, this policy was introduced but its implementation never saw the light of the day.

Employment of Variety of Assessment Procedure

The paper and pencil type of assessment is usually what is in vogue in our institutions of learning. Teachers mostly employ the use of assignment or test/examination items/papers which usually involve the students cramming and regurgitating facts and information. Open book assessment, authentic assessment, portfolio assessment, individual and group projects, multitude assessment among others are rarely featured in our schools' assessment. There is the need to reconsider what we do currently in our assessment.

Modern trend in assessment in the world-over has moved from a singular high-stake examination to a system of multiple assessments. Multiple assessment systems are designed to incorporate formative and summative components of assessment and appear to be more rigorous and engaging than other modes of assessment such as paper and pencil assessment. Nigeria's CA system is closely related to this in theory, probably, not in practice. As it is, multiple assessment systems are usually put in place to assess more complex application of learning using current technological innovations. According to Hidden Curriculum (2014), while such technologies may not be found in most educational institutions in Africa, multiple assessments have begun to gain popularity in classroom because they provide teachers with resources for more formative assessment.

Team Teaching and Team Testing/Assessment

Team teaching and team assessment is predominantly absent in our primary and secondary

schools in Nigeria. In the case of higher institutions, team teaching and team assessment are usually featured when population of students/candidates is excessively large, not necessarily because it will afford the students the opportunity to learn from and be assessed by more than one individual. Team assessment enhances validity, reliability and objectivity of assessment procedure. In team teaching, two or more teachers are assigned different aspects of the topic/curricular to handle; while for team assessment, items of tests/examinations are either shared among two or more assessors or assessors are made to score/grade same items of a test/examination and the final score or grade therein is resolved by finding the average. When team assessment is employed, the subjectivity associated with scoring/grading of tests/examination are reduced to the barest minimum.

Consideration of Factors in Students' Performance in Tests/Examinations

To what extent do teachers consider whether or not their pupils/students possess the necessary study habits and test taking skills that will enable them maximize their performance/achievement in tests/examinations? Do they consider the extent to which anxiety in tests/examinations can affect performance/achievement of their students? Do teachers give adequate and timely feedback to students, parents, other teachers and stakeholders concerned with the business of education? Personal experiences have revealed that study habits, anxiety in examinations and possession of reasonable level of test taking skills all have effects on performance/achievement of students in school subjects/courses. Also, attitude to school subjects/courses, attitude to other students/learners and attitude to school environment and self-concept of students/pupils have all been found to affect performance/achievement of students in tests/examinations (Mustapha, 2016). These factors are often neglected not only because teachers do not want to consider them, but because teachers themselves are mostly not aware of their importance or do not possess such.

Use of Analysis of Responses of Students to Items of Tests/Examinations

Consideration of- and post-analysis of results and responses of students/pupils to items of test/examinations for subsequent improvement are hardly done by teachers in Nigeria. Responses of students/pupils to items of test/examinations can be important pointers to the motive behind such responses but teachers and institutions usually do not see the need to conduct an x-ray of such responses of students. One lofty advantage of multiple-choice test for example, is its amenability to further analysis. What this implies is that from responses and result of multiple-choice tests especially, most difficult item(s), easiest item(s), item(s) that have no impact, effectiveness of distracter(s) and even “deadwoods” among item(s) and distracter(s) can all be determined from responses of testees to item(s) of tests/examinations and results. When diagnosis of results of tests/examinations are done, subsequent tests/examinations can be improved upon with the attendant improvement in performance/achievement of students/pupils.

Conclusion

Nigeria cannot be left behind with regards to the attainment of the SDGs, it will be disastrous to remain aloof as far as putting in place processes and strategies to achieve the goals of the SDGs is concerned. Our current economic woes and security challenges are so daunting that no meaningful development can take place in any other sector if they are not

addressed. Consequently, a second look must be made on our educational system especially our current system of assessment. Enhancing our educational assessment procedures will help reduce the overemphasis that is placed on certificate at the expense of functionality.

References

- Federal Ministry of Education (1989). *Guidelines on implementation of 6-3-3-4 education system*. Lagos: Government Press.
- Hidden Curriculum (2014, August 26). Assessment. In S. Abbott (Ed.), *the glossary of education reform*. Retrieved from <http://edglossary.org/hidden-curriculum>.
- Jebson, S. R. (2023). Utilizing multiple measures of assessment and Nigerian universities admission system. *ASSEREN Journal of Education*, 8(1), 1 – 12.
- Mustapha, A.Y. & Dakur, A.W. (2001). Problems and challenges of assessment in the affective domain: Implications for the classroom teacher. *Journal of Educational Issues*, 1(1), 60-67.
- Mustapha, A. Y. (2009). Strategies of quality assurance in educational assessment in Nigeria. *Journal of Curriculum Organisation of Nigeria*, 12(3), 10 – 17.
- Mustapha, A. Y. (2016). Challenges in soft skills assessment. *Interdisciplinary Studies and Perspectives on Society and Development in Nigeria (volume III)*, Education, Humanities and Media, Festschrift in Honour of Professor W. B. Qurix, 73 – 85.
- Nwana, O. C. (1997) Credibility and civility in educational assessment: The Nigerian experience. In *Quality Assurance in Educational Assessment AEAA, 15th Annual Conference Proceedings*. Kaduna: JAMB, NABTEB, MBEM and NTI.
- Okebukola, P. (2002). *The state of university education in Nigeria*. Abuja: NUC.
- Ojerinde, D. (1997). Striving for quality in educational assessment under the gifted education program in Nigeria: National Board for Educational Measurement (NBEM) Experience. *Proceedings of the 15th Annual Conference of the Association for Educational Assessment in Africa on Quality Assurance in Education Assessment* held in Abuja in September 21st to 27th.
- Sedlacek, W. E. (2004). *Beyond the big test: Non cognitive assessment in higher education*. San Francisco, CA: Jossey – Bass.