

Challenging Factors in Educational Assessment in Nigerian Secondary Schools

O. Adikwu, A.D.E. Obinne and A. O. Amali

Department of Educational Foundation and General Studies,
University of Agriculture, Makurdi

ABSTRACT--- *In reaction to the apparent declining rate of educational standard in Nigeria, this paper examined the various factors that result into this abysmal performance resulting into crisis in educational assessment. These include ethical and legal issues, problems associated with continuous assessment, assessment techniques, environment situation, poor funding and the validity and reliability of assessment instruments. In view of these problems, recommendations were made to ameliorate the problems which include training of teachers in test construction, administration, scoring, grading and interpretation of results, conducive environment and proper funding of the education sector.*

1. INTRODUCTION

Education is generally regarded as a necessary and pre-requisite for national development. According to Ibrahim (2008) in Adikwu and Akem (2011) education is central to socio-economic and technological advancement and it is worth while self-sustaining and self-generating process of positive transformation of modern society. Education is not just about literacy and numeracy. It is also about value orientation. It is central to socio-economic and technological advancement and it is worthwhile self-sustaining and self-generating process of positive transformation of modern society. Education is not just about literacy and numeracy. It is also about value orientation (Ibrahim 2008: 293).

It might not be an overstatement to say that education is life and life is education. This is why learning ceases only when life equally ceases. As long as life goes on, learning continues irrespective of the form it takes. It is generally claimed in society that the strongest weapon against poverty is qualitative education. Education should help in nation building and advance economic prosperity. Fafunwa (1969) opines that education is the greatest hope of a nation, particularly for a developing country such as Nigeria. This statement is relevant today as ever before. Thus a nation's developmental indices cannot be far away from her educational development. Due to this importance of education in issues of national development, there is the need for assessment in the educational institutions especially in the secondary school.

Assessment can be seen as the process of measuring behaviour and using the result obtained in taking decisions (Emaikwu, 2011). Assessment involves the collection of information about the child's knowledge, skills and attitudes as well as judgment, interpretation and action taken. Educational assessment is used to measure academic progress. It is used to identify the different skills and concepts that individual students have learned throughout the year. The purpose is to allow educators to reflect back on the impact they have made on students. Teachers use this information to plan ahead by determining which set of instructions and materials are the most appropriate for their students. It is also beneficial for parents to see how well their children have progressed in the classroom. It is in realization of this importance of education that the authors deemed it necessary to examine the challenging factors in Educational assessment in Nigerian secondary schools.

However, this very important aspect of education is today in Nigeria riddled with a lot of crisis that makes it very difficult for proper conduct of assessment. Tyler (1949) opines that one important concern in any meaningful curriculum development and implementations exercise is the determination of the extent to which the intended learning outcomes are achieved. Gronlund (1976) observed that evaluation is an integral part of teaching/learning process. Thus evaluation has been placed highly among the activities of schools.

Unfortunately, there is a general consensus that the standard of education has been declining in Nigeria. Performance in public examinations such as West African Examinations Council (WAEC) and National Examinations Council (NECO) Senior Secondary School Certificate Examination (SSCE) has continued to be greeted with disappointment by the public. This has resulted to a lot of crisis in the school assessment system.

It is true that measurement of ability is often characterized by many inherent problems which include ethical and legal issues in assessment, problems associated with continuous assessment, assessment techniques, environmental factors, values attached to assessment results, validity and reliability of assessment instruments. This paper sets out to examine these factors which are endemic to crisis in educational assessment and proffer possible solutions to the crisis.

2. ETHICAL AND LEGAL ISSUES IN ASSESSMENT

The word ethics used in our discussion refers to a system of moral principles, rules, rights and wrong in human conduct or moral principles which determine the rightness or wrongness of particular acts of activities.

Gronlund and Linn (1991) viewed professional ethics as the general principles of right and wrong conduct as applied to the specific problem of a profession. This pre-supposes that every profession is bound to have written code of conduct which members must observe, failure of which must cost such members the loss of their membership and practice of the profession.

According to Linn (1996) ethics are essentially a question of morality and it plays a very important role in a given society. It is governed by norms which have both moral and legal implications.

In educational assessment which include test construction and administration, ethics are the laid down principles guiding the conduct of examination which includes correct conduct and behaviour of both examinees and examiners adhering strictly to the rules, regulations, expectations and code of conduct laid down for testing.

A code of ethics define procedures that a profession, by its own consent imposes upon itself, it also define those acts members should attempt to avoid in fulfilling their obligations to the public. Therefore, deliberate violators of a code can lead to professional misconduct and to dismissal and loss of employment in the profession.

The following are the four ethics that will be considered:

- Test confidentiality/publication
- Test interpretation
- Test Security
- Test Administration

Test Confidentiality/Publication

The fundamental question under test confidentiality is who should have access to test results?

Many considerations may influence the answer. Among them are the security of test content, the hazards of misunderstanding the scores and the need for various persons to know the result.

The security of the test, whether in the school system, court or in employment settings, at any time a test is to be administered, the individual should be informed at the time of testing regarding the purpose of the test, how the result will be used and their availability to institutional personnel who have a legitimate need for them. But unfortunately, it is very common for teachers to come to the class and announce “impromptu” test to students without prior knowledge of the students. This has often met serious resistance from the students thus causing chaos and anarchy in the classrooms. The main aim of such teachers is to use the test as a punitive measure. Also after the test, teacher display the scores of the students without regard to confidentiality, thus causing emotional and psychological stress on the part of low achievers. Denga in Adikwu and Akem (2013) noted that the teacher should recognize the psychological effects of test results and use third person singular to interpret it.

Test Interpretation

The inability of classroom teachers to grade and interpret test scores is a serious problem facing assessment results in the school system. This is largely due to their incompetence in item construction, administration, scoring and interpretation. This result in misunderstanding of the result by both the students and parents. Ubani (1991) pointed out that classroom teachers are in the best position to evaluate their students, since they are the one that teach these students but unfortunately due to their in competencies in item construction they are greatly inefficient in carrying out this vital assignment.

Test Security

Tests are instruments that determine the future career of students, as such their dissemination is restricted to only professionals with technical competence to use them.

Unfortunately, teachers take gratification to do the wishes of students, parents and the general public thus flouting the essence of test security. Many teachers according to Denga in Adikwu and Akem (2013) use this as a cheap way of getting friends and to win cheaper popularity from parents and students. This practice is unethical, illegal and should be avoided.

Test Administration

Teachers are guilty of giving hints to pupils who asks about individual items and also warning students to do their best because of the importance of the test. These threats of failure from teachers have resulted in serious cases of examination misconduct in both internal and external examinations.

Furthermore, considering the prevalence of cheating in examination, it is obvious that many teachers do not take their proctoring responsibility seriously enough. We have seen many teachers in public schools as well as colleges who define proctoring as “being present in the room”. These teachers are physically present but spend their time reading novels, writing a letter or grading papers, thus allowing students to cheat in examination. Such assessment results are not the true academic status of the students.

3. CONTINUOUS ASSESSMENT PROBLEMS

In as much as the introduction of continuous assessment in the education system (FGN, 1981) is one of the laudable and fundamental innovative practices introduced by the policy, it has some problems hindering the implementation. The demand for frequent testing in schools as stipulated by continuous assessment practices, the emphasis on cumulative test scores in the face of gross inadequacies resulting from inexperienced and ill-preparedness on the part of the teachers who implement the policy leave much to be desired. The ways in which teacher-made-test which form the bedrock of the present continuous assessment in schools are conducted poses threat to the maintenance of standards in educational system. The lack of standardization and inaccurate interpretation of test results are some of the assessment problems which teachers in schools have to contend with in the implementation of the continuous assessment. The teachers work load is more than doubled and just at the same time students population is rising in every class.

Furthermore, most of our schools still operate the traditional assessment practice of the last century. This involves assessing students with the sole aim of preparing them for examinations. The emphasis is placed on obtaining high marks without general regard to understanding or acquisition of skills to apply the concepts learnt in solving real life problems. Over emphasis is placed on paper and pencil assessment. Even then, the dominant practice is to concentrate on assessing the ability of the student to reproduce facts. Very little attention is given to the higher mental task “thinking and application”. This leads to decrease in the ability to apply the knowledge in real life situation, to analyze the information, to synthesize the new information based on what was learnt and to evaluate the outcome of the knowledge applied. Assessment is mainly carried out after teaching is completed (i.e. the assessment is summative). There ought to be assessment during the course of instruction (i.e. formative assessment). Also the affective and the psychomotor domains are neglected in the traditional assessment.

Student achievement suffers because these once-a-year tests are incapable of providing teachers with the moment-to-moment and day-to-day information about student achievement that they need to make crucial instructional decisions. Teachers must rely on effective assessment to do this. The problem is that teachers are unable to gather or effectively use dependable information on student achievement each day because of slim resources which are not enough to train teachers to create and conduct appropriate classroom assessment. As a direct result of these chronic, longstanding problems, our classroom assessment systems remain in constant crisis and student suffer the consequences.

Test Theory

Assessment in school currently is heavily dependent on classical test theory which is characterized by innumerable shortcomings. Hemberton and Cook (1998) maintained that in classical test theory apart from the need to increase the number of test items, it equally makes demand for item parameters and characteristics for samples of persons. They argued that one of the shortcomings of classical test theory is that the values of classical item parameters (item difficulty and item discrimination) are not invariant across groups of examinees that differ in ability. This means that classical item statistics are only useful in test construction for examinee in which the test statistic were obtained.

Another shortcoming is that comparison of examinees on ability measured by a set of test items comprising a test are limited to situation where examinees are administered the same test items. Moreover, classical testing technique provides no basis for determining what a particular examinee might do when confronted with a test item, such information is necessary. If a test designer desires to predict test score characteristic in one or more population of examinees or to design tests with particular characteristics for certain population of examinees (Gilford, 1978 in Emaikwu, 2007). Thus it is folly to build our assessment on the assumption that test will have the same effect on all students. It will not. Some students approach the test with a strong personal academic history and an expectation to success, others approach them with a personal history and expectation of very painful failure. Some come to slay the dragon, while others expect to be devoured by it. For these and other reasons, psychometric experts have been investigating and developing more appropriate theories of mental measurement, such as partial credit model, tailored testing, test item banking, item response theory, multiple matrix sampling model, nominal response model and graded response model.

It is important to note that since teachers do not focus on formative assessment, it has the effect of not correcting the mistakes that students make in learning. For this reason, they may form many wrong concepts which are not detected in time. Since students are not given prompt feedback on the progress they are making in learning, they will not be able to plan for their learning and this could lead to lack of motivation to learn.

4. TEACHER-MADE-TEST

Evidence from the work of Ubani (1991) on specialized training of teachers, Ihegbu, Anyanwu, Nwagu and Uzoamaka in Adikwu (2005) in Physics, Chemistry, Geography and Economics respectively, showed that teacher made tests developed and used for continuous assessment of students at the secondary school level are deficient in the most important quality expected of all achievement tests which is content validity. The teachers who participated in the cited studies were found to lack or failed to demonstrate the basic competencies in test construction and validation. The teachers rather select and test their students on few of the contents and objectives of their classroom instruction. The result of such exercise is that the students who concentrated their learning on contents and objectives outside the tested few receive lower grade than they deserve. This implies that the scores and grades assigned to the students on the basis

of their performance on Teacher-Made-Test in most cases misrepresent the achievement status of the students in the subjects.

It has been observed that teacher made tests has been criticized for their characteristic short comings because they are not standardized (Nwagu, 2003). They are characterized by low quality because there is no item analysis, no pretest, no norms, no set standards, no specific instruction on its administration and scoring. It is characterized by an individual who does not follow protocol.

Also the poor quality teacher made test could account for the poor performance of students in school subjects. According to WAEC Chief Examiner's report for May/June (1998:74) candidates performance was generally poor due to:

- Poor preparation for the examination
- Poor coverage of the syllabus
- Inadequate knowledge of the subject.

As a result of this state of affairs, we are faced with the danger that students progress may be mismeasured, day to day, in classrooms across the country. This means that all the critically important day to day instructional decision made by students, teachers and parents may be based on misinformation about students success. The result is the misdiagnosis of students needs, student's misunderstanding of their own ability to learn, miscommunication to parents and others about student progress and virtually no effective assessment for learning in classrooms. The extremely harmful consequences on student learning are obvious.

Environment

Student's success has received considerable attention in educational literature, leading to an understanding that a positively sustained climatic environment promotes students academic achievement (Klim, 2013). The conduct of the public examinations such as West African Senior Secondary Certificate Examination (WASSCE), National Examination Council (NECO) examinations in Nigeria in 2013 have been marked by challenges, threats, injuries and deaths occasioned by the force of rising socio-political and religious climatic change. The trauma that attended the conduct of the school examination in Northern states in 2013 would remain indelible. For example, the conduct of May/June 2013 NECO examination was marked by bloody violence as Boko Haram made a bloody return to Damaturu on 16th June, 2013 attacking a school and killing students and two teachers of Government Day Secondary School (Duku, 2013). In a similar vein, on 17th June, 2013 gun men stormed Ansarudeen Private Primary and Secondary School at Jajeri in Maiduguri and opened fire on students shortly after the commencement of the National Examinations Council (NECO) Examination and nine of the students were shot dead with many others injured. Also, on Wednesday 18th June, 2013 sect members stormed Innovative Secondary School, a private outfit in customs area of Maiduguri, the state capital of Borno State, killing four teachers and two students during NECO examination (Moyosore, 2013). Aliyu (2013) reported in the Nation Newspaper of 29th June, 2013 that about 209 government schools were destroyed by the insurgents, costing an estimated ₦2.5 billion only in Yobe State. In Borno State, over 100 schools have been completely burnt to ashes. It was another bloody weekend in Yobe State on 6th July, 2013 as gun men attacked a secondary school and killed forty two students and a teacher (Alli, 2013). The sect leader on 14th July, 2013 threatened to burn down more schools and kill more teachers. This recurring incidence is a threat to assessment of students ability.

The conduct of examination in this part of the country was characterized by fear and anxiety on the part of examiners and examinees as a result of coordinated attacks and hence it can be inferred that many examinees who participated in the examination may not exhibit their optimum ability due to excessive anxiety. Also the activities of the insurgents destroyed students files, school computers examination scripts and records by fire. This action is a terrible setback to the school authorities and students who may want their transcripts for further studies.

5. FUNDING

The neglect of funding in education is pathetic for a nation that wants to grow. Attention has been drawn by Academic Staff Union of Universities (ASUU) specifically to how the funding of education at all levels has continue to decline and how of this little funds made available to the sector, a greater percentage is either stolen or devoted totally to non-essential things. It is noted that between 1995 and 2008 there has been decline in budgetary allocation from 2.5% in 2001 to 6.1%, 4.23% and 4.56% in 2002, 2003 and 2004 respectively. Compared to other sectors the funding has not appreciably gone up since 2005.

The struggle over these matters have distracted academicians from their primary assignments of teaching, research, supervision and are made to dissipate energy confronting official neglect and wrong headed policy. This explains to a great extent the spate of seemingly endless strike since 1981 for a better academic environment. This situation greatly affects the output of teachers in teaching including assessment of their students in various subjects. For the would be secondary school teachers are trained at the various universities faculty/colleges of education by lecturers in these universities where this strike is persistent. There is therefore the need to give serious attention to funding of education to enhance optimum performance.

6. RECOMMENDATIONS

In view of the dire consequences of this assessment challenges in the secondary schools, the following recommendations are made:

1. Teachers should inform students of the date and time of test before the test and not to use test as a punitive measure but as a means of revealing the latent ability of the examinee. This will eliminate the crisis arising from impromptu test.
2. Teachers should avoid taking gratification to please students, parents and general public for this is unethical and illegal.
3. Assessment competence for teachers be developed by measurement and evaluation experts. The teachers are to be trained to choose and develop proper assessment methods; to administer, score and interpret assessment results, to connect those results to specific decisions, to assign grades appropriately and to communicate effectively about student assessment. This training will enable the teachers to construct valid, reliable and standardized instrument in order to provide basis for comparability of standards.
4. Instruction on how students learn and how learning can be assessed should be a major component of teacher pre-service and professional development programme. This training should be linked to actual experience in classroom in assessing and interpreting the development of student competence.
5. Teachers should focus on formative evaluation which is usually undertaken during the process of the course of study. The feedback information that is received from such evaluation is used to determine the type of changes needed before completion of the course in order to achieve the desired objective. It is conducted to monitor the instructional process to determine whether learning is taking place as hitherto planned. The major concern of formative evaluation in the classroom is to provide continued feedback to both the teacher and the students about how they are going on in the teaching-learning situation. The purpose of this type of evaluation is to improve students learning through provision of constructive feedback and remedial instruction. This quality is devoid of the traditional system of assessment which is one short examination.
6. To minimize cheating, a variety of procedures could be used varying from absolute procedure like presenting a photo identity card at the test centre, sign an affidavit affirming they are who they are to more simple methods like using alternative seats, having equivalent forms, scrambling the items-immensely result in a decrease in cheating. The single most effective method to eliminate, discourage and/or cheating is careful proctoring.
7. In order to overcome the shortcomings of classical test theory, it is recommended that appropriate theories of mental measurement such as partial credit model, tailored testing, multiple matrix sampling model and test item banking and item response should be used in assessment of students achievement in schools.
8. Measurement and evaluation experts should construct measurement instruments to enable the teachers to have access to pre-validated and standardized tests to use for their classroom assessment in order to eliminate the problems associated with teacher-made-tests. This will also relieve teachers of the burden of test construction.
9. There is the need for conducive environment in order to effectively estimate the examinees mental ability. Thus unfavourable environment full of chaos and instability generates tension and stress on the examinees and examiners will result to non-composure and consequent poor performance in the examination. Government should therefore quickly intervene to bring the Boko Haram insurgence to a halt.

7. CONCLUSION

At the secondary school level, the child acquires most of his skills and attitudes which are identified by assessment. This shows that assessment plays a very vital role in the process of educating a child particularly at the secondary school level. However, this very important aspect of teaching and learning process (assessment) has been characterized by many inherent problems as identified.

The authors in identifying these problems proffered possible solutions which if followed help in ameliorating and avoiding crisis in assessment at a large extent of these challenges is what is what the education system in Nigeria needs to be able to advance in technology and socio-economic development.

8. REFERENCES

- Adikwu, O. & Akem, J. A. (2013). "Test anxiety. A factor influencing students' academic achievement in secondary schools". In *African Journal of Arts, Science and Educational Issues (AJASEI)* 1 (1) Pp. 42 – 50.
- Adikwu, O. (2005). "Development and Standardized of Achievement Test in Geography for Senior Secondary Schools in Benue State". Unpublished Doctoral Thesis, Department of Science Education, University of Nigeria Nsukka.

- Aliyu, A. (2013, June 29). Boko Haram burns 209 schools in Yobe State. *The Nation*, p. 16, Retrieved from the nation on line net/.
- Alli, Y. (2013, June 8). Northern Governors Panel table 22-action plan to stop Boko Haram. *The Nation*, P. 14. Retrieved from <http://www.thenationonlinengnet/>.
- Duku, J. (2013, June 19). Boko Haram kills seven students, two teachers. *The Nation* P. 16. Retrieved from <http://www.nationonlinenet>.
- Emaikwu, S. O. (2011). *Fundamental of Test, Measurement and Evalaution with psychometric Theories*. Makurdi: Selfers Academic Press.
- Emaikwu, S. O. (2007). “Innovations in the measurement of Ability in the 21st century: The lessons from partial credit model and tailored testing” in Adejoh, M. J. & Iji, C. O. (Ed).
- Fafunwa, A. B. (1969). The purpose of teacher education in Adaralegbe, A. (ed). *A philosophy for Nigerian Education: Report of the National Curriculum Conference*. 8 – 12 September, Ibadan: Heinemann Educational Books.
- Federal Government of Nigeria (1981). *National Policy on Education*.
- Gronlund, N. E. (1976). *Measurement and Evaluation in Teaching*. New York: Macmillian Publishing Company.
- Gronlund, N. E. & Linn, R. L. (1991). *Measurement and Evaluation in Teaching (6th ed) New York: Macmillian Publishers*.
- Hembleton, R. K. & Cook, L. (1998). Latent trait models and their use in analysis of educational test data. *Journal of Educational Measurement* 14(3) 75 – 96.
- Klim, M. H. (2011). The effect of school climate change on student success in a fifth and six grade school. Masters degree dissertation of the University of Malaysia.
- Linn, R. L. (1996). *Promoting examination ethics, a challenge of collective responsibility*. Federal Ministry of Education. Potomac Books Ltd.
- Moyosore, S. (2013, June 5). Boko Haram: WAEC to engage slain staffer’s widows. *Tribune*, P. 17. Retrieved from <http://www.tribuneonlinenet/>.
- Nwagwu, E. K. N. (2003). “Evaluation of Achievement” in Nworgu, B. G. (ed). *Educational Measurement and Evaluation. Theory and practice* (revised edition) University Trust Publishers, Nsukka. Pp. 84 – 101.
- Tyler, R. W. (1949). *Basic Principles of Curriculum and Instruction*, Chicago and London: The University of Chicago Press.
- Ubani, C. O. (1991). “Effect of Specialized Training of Teachers on Students’ Performance”. Unpublished Doctoral Thesis, Faculty of Education, Unievrstity of Jos, Jos, Nigeria.
- WAEC (1998). Chief Examiners Report p. 74.