# INNOVATIONS IN ASSESSMENT AND ITS IMPLICATIONS ON OPEN AND DISTANCE EDUCATION (ODE) IN NIGERIA

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#### **ABSTRACT**

Assessment in whatever form remains the only practical and veritable means of judging learning outcome whether in conventional system or ODE mode. In view of the role assessment plays in making decisions that affect people's life, its proper conduct should constantly be given all the attentions it deserves. The technology of assessment must be modern, feasible, effective and result oriented. This paper begins with a brief review of the conventional assessment techniques and practices in Nigeria pointing out some of their inadequacies. It then argues for a review of the existing techniques to enhance quality of learning outcomes. The study identified different types of innovations in assessment and their implications on student learning with particular focus on Open and Distance Education. It also X-rays the assessment innovations and practices employed by National Teachers' Institute as the foremost ODE Institution in Nigeria that is dedicated to teacher training.

#### 1.0 INTRODUCTION

Assessment is a fact finding activity that describes conditions that exist at a particular time. It describe without value judgment, a situation that prevails. Assessment in educational setting therefore describes the progress that students have made towards a given educational goal at a point in time. Nitko (1996) defines assessment as "a process for obtaining information that is use for making decision about students, curricular and

programmes, and educational policies". Thus, the process of assessment leads to the generation and analysis of comprehensive information from teaching, learning, administration, supervision, parenting and other educational services and also supplies feed back to them as well as to policy and decision making at various levels.

Aderinaye & Ojekheta (2004), see assessment "as the process of gathering and collecting information from multiple and diverse sources in order to develop deep understanding of what students know, understand and can do with their knowledge as a result of educational experiences". Harris, D, (1994) also construed assessment to be a systematic basis for making inferences about the learning and development of students. To him, "it is the process of defining, selecting, designing, collection, analyzing, interpreting students learning and development'. Race, P.B.S, & Smith,B.(2005) on the other hand, opined that "assessment is used to determine whether students have demonstrated the level of understanding or abilities that qualify them to move to the next grade or obtain a certificate".

In whatever way it is defined, the outcome of assessment is paramount for placement, diagnostic, selection and recruitment purposes among others. Assessment will forever remain the only veritable tool of judging students' learning outcome whether in conventional system or open distance learning education (ODE).

For effective teaching to take place in the classroom, teachers need to monitor their students' learning through assessment to ensure that there is correlation between what they are expected to learn and what they actually learnt judging from set criteria. Such close monitoring of learning can only be done when valid and reliable feedback is given to the teacher through the use of good assessment tools. Without quality assessment of learning outcomes, teachers would not know whether or not learning is taking place; when to re teach a topic or to proceed to the next or even change teaching method.

In a nutshell, it is a forum for teachers to assess the strength and weaknesses of their presentation strategies and such general competency areas as general classroom pasture and its effect in teaching/learning, student-teacher relationship, etc.

# 2.0 INADEQUACIES OF TRADITIONAL METHODS OF ASSESSMENT

Over the years, methods of teaching and assessment in Nigeria's tertiary institutions have been in the form of rigid patterns of lecturing/teaching and examinations, featuring mostly the use of lecture method supported by the use of handouts with rare involvement of students in teaching/learning encounters. These kinds of rigidity without doubt greeted the assessment techniques with lots of subjectivities and inconsistencies in test/items developments and test administrations, and have created what may be termed as quagmire in the educational sector of the country.

The examination system is noted of being dominated by one-shot examination, mismatch between the curriculum transactions and examinations, overdependence on recall, literal, and regurgitates kinds of examination questions at the expense of continuous, comprehensive examinations that exposes students to higher ranking cognitive order abilities such as application, analysis, synthesis and evaluation. The value

of affective and psychomotor order abilities have not been emphasized enough to generate a combination of intellectual excellence with the right attitudes and skills needed by the nation for sustainable development.

Jimoh, S. (2007) highlighted some inadequacies of our institutional testing as currently practiced which include:

- a) Most (school-based) assessments only focus on recall of information; hardly do they test skills beyond this level.
- b) particularly with the essay type of test and, especially where the teacher has prepared a handout (given or sold to the students), the same answers are produced by candidates who succeeded in memorizing the handouts properly;
- c) the entire spectrum of the syllabus and the competencies which students are expected to acquire are hardly comprehensively covered by the test items, since, in any case, many lecturers just pick on topics to teach at will;
- d) external moderation is no longer done with commitment and dedication as it was in the past as some moderators/ examiners merely "adjust" the borderline cases;
- e) Candidates' continuous assessment scores (which carry 30% or 40% of the marks) are sometimes higher than their scores in the end-of-course final paper), suggesting either that no continuous assessments actually took place or that they were arbitrarily scored.

Frey, P. & ital (2003) observed that "many teacher-made tests which are the most commonly used tools for student assessment have a number of flaws like, low content validity, assessment of mainly lower cognitive objectives and violation of item-writing rule"., to mention but just few.

Given the increasing importance attached to assessing a wider range of competencies (i.e. knowledge, skills, understanding and wider attributes), it is clear that relying on traditional methods is not the appropriate means of responding to an ever-increasing demand to provide relevant, quality and effective assessment, observed Kondo & Rutayuga (2006). So if we must steer students' behaviors towards deeper learning approaches, we need to improve our assessment techniques.

#### 3.0 INNOVATIONS IN ASSESSMENT

Innovation in assessment is used synonymously in this paper with innovative strategies, measures, or techniques of assessment. New technology has made frequent and varied assessment strategies possible in educational system and these include ways of assessing students, teachers and educational programs.

The conventional method of assessing students, that is paper and pencil test as the only method or mode of assessment has been criticized by some educators. Modern assessment techniques should go beyond paper and pencil. This could be achieved by making a judicious selection from among available tools and techniques such as observation schedules, rating scales, interviews, oral communications, interest inventories, anecdotal records etc. Computer-Based Assessment (CBA) also known as Computer-Based Testing (CBT), e-assessment or computerized testing are methods of administering tests and examinations in which responses are electronically recorded and assessed. As the name implies, it makes use of computers or equivalent electronic devices

feature more prominently. It may be a stand-alone system or a part of a virtual learning environment, possibly accessed through the "World Wide Web". Computer-based testing has been in use in some advanced countries and has now gradually found its way into the Nigerian educational scene. Some universities have now adopted it for their semester and post UTME examinations.

Kolo & Oyeneho (2010) identified the following advantages of computer-based testing over the traditional paper - and – pencil testing (PPT):

- ➤ It saves time
- ► It increases delivery
- It has enhanced administration and scoring efficiency
- ➤ It is less expensive
- It provides faster feedback and therefore faster decision making
- It provides for unbiased administration and scoring
- > It guarantees test security
- It is more consistent and reliable
- It covers a wider spectrum of the course content
- It reduces chances of cheating

Assessment should respond to more modern ICT developments. These developments include: on-screen assessment designs, rich media facilities that explore how videos, audio, animation and imaging facilitate assessment and examination supervision strategies; advanced computer-marking techniques that have now been designed to mark candidates' prose, mathematical workings; electronic banking of innumerable examination questions for use when necessary; e-shuffling and reshuffling of examination questions for producing different sets of the same examination or different examination questions.

# 4.0 Implications of innovative assessment on Open & Distance Education (ODE) in Nigeria

# 4.1 Definition of Distance Learning Education

The word distance education, distance learning, open education or open learning are often used inter- changeably.

Latchem & Robinson (2003), define distance education "as an educational process in which teachers and learners are separated in space and/or time for some or all of the time of study and in which the learning materials take over some of the traditional role of the teacher". Falade, A.A (2004) defined it as "a systematically organized form of self study in which students are provided with relevant materials, supervised or tutored by a team of teachers, made possible at a distance by means of media which can cover long distance". Also, Peter (1992) sees distance learning as a method of indirect instruction implying geographical and emotional separation of teachers and students.

In other words, distance education refers to providing instruction through print or electronic communication media to persons engaged in planned learning in a place or time different from that of instructor.

# 4.2 Distance Education in the National Policy on Education (NPE, 1998)

The objectives of distance higher education have been clearly captured by the Nigeria's National policy on education, 1998, thus:

- 1. Provision of functional and remedial higher education for people who prematurely dropped out of higher educational institutions.
- 2. Provision of in service, on-the-job professional training for different groups of workers and professionals to acquire skills.
- 3. Provision of adult citizens with aesthetic, cultural and civic education for public enlightenment.
- 4. Provision of opportunities for refresher course for person engaged in administrative work, teaching and health services.
- 5. Provision of opportunities for further education for those who are anxious to enter higher institutions, but have been denied the opportunities after fulfilling university requirements

# 4.3 Improving Assessment in ODE Institutions Using Modern Technologies

The key objective that is central to any assessment process is feedback or information about how successfully something has been or is been done. In distance learning, study materials usually provide opportunities for self-assessment to learners in differing ways. The value of student self-evaluation in learning process is best understood when students learn to evaluate and monitor their own performance. Any media used in Distance learning must be capable of given adequate self-assessment to students.

Recently also, many educators and researchers have rated online assessment higher than paper-based assessment. (Kegans 1990, Kibby 2003 and Falade 2004). The web-based assessment systems have more potential than paper-based assessment in terms of access and flexibility for both students and teachers.

Pennsylvania State University (2002) identified four basic principles to guide assessment in online distance learning:

- Assessment instrument and activities should be congruent with the learning goals and skills required of the learner through a distance education program
- Assessment and management strategies should be integral parts of the learning experience enabling learner to assess their progress, to identify area of review and to re-establish immediate learning or lesson goals.
- Assessment and measurement strategies should accommodate the special needs characteristics and situation the distance learner.
- Distance learner should be given ample opportunities and accessible method for providing feedback regarding the instructional design of the distance education programme.

ICT has been found to be useful in all spheres of life, ODE assessment practice inclusive and is increasingly becoming a vital tool in planning, preparing, implementing, safeguarding, recording and following up transactions at a more secured, accurate and rapid rate. Its impacts are visible in item generation/item banking, on-line registration and training (of invigilators, supervisors, and examiners), general examination processing and providing back-ups and easing retrieval of data, etc. ICT is gradually sipping into the conduct of examinations, but still largely at a minimal level. A whole range of question types can be used, including menu-driven drag-and-drop questions, interactive maps,

graphs, dashboards and free-text responses. On-line assessment strategies through computer-based assessment programmes can be part of the learning process with students being given guidance on why right or wrong answers are so, and further chances to answer parallel questions until learning is demonstrated. This can be a very cost-effective way of personalizing learning. At the same time, efficient and innovative data management systems can help compile and correlate marks, link them to the learning outcomes in course documentation, map them to quality assurance benchmarks, as well as to professional and subject body requirements, and enables individual student progression to be tracked and recorded.

Innovative assessment techniques must be those that promote independent learning capacity. When learning is totally teacher dependent, students are incapable of critical thinking and lack the resourcefulness needed to solve problems on their own, especially if the teacher's effort is removed. Thus, the removal of teacher's assistance during examinations leaves students to no other option than examination malpractice.

Innovative assessment techniques facilitate timely feedback. Students no longer have to wait endlessly to get feedback from their lecturers. Students now react to feedback very quickly while they were still anxious, curious and there was time for them to act in accordance with feedback they get. Assessment will have little meaning if the performance of its recipients is not made known to them at the right time. All efforts that go into assessment are likely to be wasted and not appreciated if the assessment process is not properly carried out.

In innovative assessment, the process as well as the end-product matter. ODE examinations at the moment concentrates on the product of what candidates produce, no matter the dubious means the product is obtained, sometimes through cheat notes, hired exam mercenaries, memorization, concentration on certain recurrent topics, etc. Serious attention is not paid to the process of obtaining the end product. Innovative assessment should consider process and the product. Process will involve formal and informal means of examination in order to reduce the anxiety and fears experienced during examinations and pave way for diverse and flexibility in assessment. The process will be cumulative, progressive, and patterned- based. The product —oriented assessment should be used to cross-check the authenticity, validity and reliability of the process-based assessment trends.

Innovative assessment should adequately focus on the diverse tasks such as observing, exploring, listening, reacting to situations, reflecting/reasoning, and such other things in cognitive, psychomotor and affective area abilities. Innovative assessment is now regarded as an integral to learning rather than assessment of learning only.

# 5.0 NTI Assessment Practice

The Open Distance Education System (ODE) being an uncommon mode of Education service delivery adopts many evaluation procedures for the purpose of determining the effectiveness of its instructional processes on the learners. It is a known fact that the mode of ODE service delivery lends itself to unfair criticisms due to its uncommon nature. Hence it behooves the operators of this mode of education to explore all it takes to strengthen its evaluation practices in order to ensure sustained quality and best academic practices.

The National Teachers Institute (NTI) is a Distance Education Institution for training teachers. The Institute which is located in Kaduna Northern Nigeria was established in 1976 because of the pressing needs in the country for trained and qualified teaching staff at all levels of the educational system based on Acts No. 7 of 10<sup>th</sup> April, 1978. The four fold objectives of the institute as enunciated by Balogun (1988) were:

- To identify and clarify professional requirement of teachers and teaching.
- To design and mount programmes which achieve the objectives of teacher education.
- To operate and maintain a nationwide programme which must work harmoniously with existing and similar programme.
- To incorporate strategy for change and innovations within its conceptual and operational framework.

In order to achieve these objectives, the institute was charged with providing courses of instruction leading to the development, upgrading and certification of teachers using the distance learning and class model of distance education in all her study centres spread across the country. Students meet at study centres in weekends and holidays, and also use instructional materials delivered by National Teachers' Institute.

Since what is worth doing is worth doing well, NTI has taking measures to improve on the conduct of assessments in her ODE programmes to enhance its quality and credibility. These measures, which could be adopted by other related institution for improve quality service delivery are as follows:

#### 5.1 Course manual

The timely production and distribution of course materials and modules to students have been initiated and sustained by the management till date. This serves to enable the students to study early enough and to be assessment ready. The course manuals are written in a self instructional style by seasoned academics. It is learner friendly and activity base.

### **5.2 Programme schedule**

The programme schedules are strictly followed as planned without interruptions. Hence, students are helped to organize themselves a lot more for the programme. The session begins with on-line registration of courses, orientation/induction of new intakes, facilitation of learning on contact days/weeks, writing of continuous assessments, engaging in teaching practice exercise, project writing, conduct of examinations, result processing and release of results. There are fixed time for each of these activities.

#### **5.3 Communication**

The institute adopts various mode of communication to ensure prompt information dissemination to all students across the centres in the country. The means of circular, emails, mobile phone calls, students hand books, course tutors, Zonal/State Coordinators, Centre Desk Officers (CDOs), FM Radio and Centre Managers etc are often employed. Thus, students are helped to become abreast with issues about their programme and being carried along.

#### 5.4 No end-to-end academic session

The institute at the moment is working painstakingly to discourage the existing end-toend practice in the contact sessions. This practice leaves registration open into examination period. It does not augur well for proper planning and smooth conduct of assessments.

# 5.5 Item generation for assessments

The practice of contracting item generation to certain resource persons outside the course facilitating team has been discouraged. Hence a grass root involvement of the facilitators is being adopted by the Institute. Here items submitted or proposed undergoes several levels of scrutiny by subject specialist internally and are finally submitted to external moderators for the production of examinable items in each course area. Finally questions are typed and sealed confidentially in three options for each course. The required copies are produced in prints by a team of staff of the Examination Unit through a process called security printing. This process makes it impossible for any staff to know which set of questions will be produced.

# 5.6 PROMPT UNIFORM CONTINUOUS ASSESSMENTS

The institute has adopted an action plan for the conduct of prompt uniform continuous assessment in its programmes. There is a fixed time within the contact period for this exercise in all the centres. This is to ensure quality control and best academic practices. Students are entitled to a minimum of two Continuous Assessments and a maximum of four per semester.

# 5.7 CONDUCT OF EXAMINATION AND MONITORING EXERCISE

The Institutes had been able to reduce the number of days it use for conducting examination by ensuring that the conduct takes place when schools were on vacation.. External quality assurance is employed to monitor the conduct of these examinations in addition to earlier measures adopted. The Institute has entrenched a formidable and functional monitoring mechanism. Besides internal administrative monitoring from the Headquarters, Zonal and State offices, there are commissioned quality assurance assessors that monitor all NTI ODE Programmes. The reports submitted by these seasoned educationists have been very useful in enabling the Institute to improve on the quality of assessments in her programmes.

# 5.8 MARKING OF EXAMINATIONS SCRIPTS

The examination scripts are always interchanged across the six geopolitical zones of the country. The process is handled by a team of experienced Chief Examiners. Team leaders, Assistant Team Leader, script officers, Checkers and Vetters. There is always a pre-marking coordination exercise for all officers involve

# 6.0 PROCESSING AND RELEASE OF RESULTS

NTI has devised so many ways to fast track its processing of examinations;

1. Presently admission and registration of students for examinations is now done online, with candidate securing their Admission and registration number instantly. unique permanent registration number concept for every student is adopted, this makes it easier for any student on transfer to still track his/her record.

- Several Scanning Machines and heavy duty Printers were added to the existing ones to ease processing and reduce time wastage. Scanners, Printronix machines, EMS forms and other modern Examination processing devices are used to produce Examination results. Computers were distributed to the NTI Study Centres four staff attached to each Study Centre. This will make for timely submission of data including continuous assessment scores.
- Examination results printouts are usually proof read twice or thrice by experienced team of proof readers so as to correct possible errors.
- 4. The clean copies of the student's results are submitted to the institute's quality assurance team for their scrutiny to ensure that acceptable standards are followed in the entire exercise.
- 5. The results afterwards are presented to the institutes' external moderators in various subject specialties for their professional inputs.
- 6. The observed corrections as advised by the moderators are effected on the results and clean copies are produced for the Board of Studies to make final inputs on the result before release in first semester results. However, for second semester results, the Awards committee is normally convened.
- 7. If there are any issues related to assessment of results after release, such are treated administratively by the relevant departments.
- 8. The institute has a well established data base management system for all students assessment records. This makes it very easy to access any required information on the students for administrative decisions and operations..

#### 7.0 Conclusion

The study focused on the innovation in assessment in distance learning education and it's implication on National Teacher institute (NTI) in Nigeria. It was discovered that the distance learners used only paper-based assessment. In order to achieve the set goals of the institute and to promote greater level of use of modern technology, it is necessary to improve access to ICT both in urban and rural area of Nigeria. Also, there is need to improve learners' computer expertise and get experts tutors who can encourage the learners on the use of the modern media. The Nigeria Government should focus on improving the institute by providing necessary technology and human resources needed for effective learning in the institute to meet the modern day challenges.

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