

## **EDUCATIONAL ACCOUNTABILITY AND TEACHERS' CHALLENGES IN MEASUREMENT AND EVALUATION IN NIGERIA**

**BY**

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### **Abstract**

*Quality education is quite essential for quality workforce of any nation. Educational evaluation is also a task that must be done for quality education as it is used to gauge the quality of input, process and output elements of education. Teachers in recent time are held accountable for the unimpressive performance of students in schools and poor quality of work force in the society. Assessment and evaluation therefore offer teachers the opportunity to give an account of their stewardship. Measurement, evaluation and accountability are therefore interrelated. Accountability places emphasis on the measurement and evaluation of students' learning in which the end product is students' results. There are myriads of problems in educational measurement and evaluation too difficult for teachers to meet in making adequate accountability. This paper therefore highlights the meaning and concept of measurement and evaluation; meaning and concept of accountability; interrelationships among measurement, evaluation and accountability; challenges facing teachers in measurement and evaluation in the context of accountability and the suggested ways to surmount the identified challenges. Some of the suggestions made were: Teachers should be adequately prepared during their training programme on how to match test items to the learning outcome. They should also be trained in modern test theories.*

**Keywords: Educational accountability, Teachers' challenges, Measurement and Evaluation**

### **Introduction**

Education could be described as the process of acquiring adequate and appropriate knowledge, skills, attitudes, values and behaviours by individuals to function optimally as citizens and make useful contribution to the overall development of society. Wood (2010) described education as the key factor in the development of the nation, communities, and individuals with regard to employment opportunities, economic empowerment and social accomplishment. The level of development of any nation depends on the quality of education given to its citizenry. From the above logic, it could be asserted that the quality of education available to Nigerians would determine the attainment of her desire to be one of the developed nations of the world. Education therefore is expected to make an individual a useful and functioning member of the society. Accountability in education is now becoming more imperative in education considering the fact that the society expects much from education because of its huge financial investment and it is a means of improving service delivery and increasing efficiency in education system. At present, there are noticeable poor performances in schools; employers of labour are complaining that graduates are not employable. It seems schools are no longer making the desired noticeable impact in achieving the set objectives of education.

Educational accountability starts with the classroom teachers. Society always believes that teachers should be held accountable for the educational activities in schools. It is expected that teachers should be accountable for the amount their students' learn, knowing their subjects' matter, knowing their students, knowing the factors that influence learning and using sound instructional procedures. However, teachers cannot be held individually accountable for educational activities in schools because the amount of learning that occurs with a particular student or with a given group of students in schools are conglomerates of many factors in the school and out of school system. Some of the factors that can individually and combined influence students' learning in schools are: Students' mental ability (Mangal, 2007); Peer group influence (Mangal, 2007); Entire school staff (Smilansky, 2011); School conditions (Baafi, 2020); Environmental factors (Ramlee, Seri, Saemah, Yusuf, & Rahayu, 2014) and Interaction of in-school and out-of-school factors (Ugulumu, 2016). In a related development, Joshua (2019) posited that teacher constantly find himself struggling or fighting with forces contrary to or beyond him in the classroom, and may end up unable to achieve the lofty objectives of his engagement by the society and his employers, despite his expertise and good intentions. Joshua (2019) further stressed that in a typical classroom, where teaching and learning are expected to take place, there are battles ranging, and these battles are: battle within the learner (learner-related battle); battle within the teacher (teacher-related

battle); battle with or around the content (content-related battle); battle with the processes (process-related battle); battle with the environmental factors (environment-related factors) and battle between teaching and learning (the main battle royal).

Evaluation is so desired in accountability process, since it is also an integral part of education. At present, members of the public are apportioning blames to teachers for the poor performance of students. They are of the view that teachers should be held accountable for all activities in schools most especially the evaluation practices. However, evaluation processes in schools in the same vein can also be influenced by many other factors beyond the control of teachers. There so many challenges facing teachers in educational measurement and evaluation in the context of educational accountability. This paper therefore highlights the meaning and concept of measurement and evaluation; meaning and concept of accountability; interrelationships among measurement, evaluation and accountability, challenges facing teachers in measurement and evaluation in the context of accountability and suggestions to surmount the identified challenges.

## **Literature Review**

### **Concept of Measurement**

Measurement in education could simply be defined as the use of numbers to describe human behaviours. Alonge (2004) defined measurement as the quantitative description of the cognitive, affective and psychomotor domains of human behavior. It involves the assignment of numbers to attributes, objects, events or people according to rules. Bandele (2002) posited that measurement is the process of obtaining qualities representation of the degree of which a trait is reflected and further classified measurement as score, a value, a symbol or a string of scores, value or symbols. Abe (2004) argued that measurement answer questions like how much? If Ayo score 69% in Mathematics, his measurement in terms of performance is 68 over 100. Measurement therefore is a set of rules for assigning numbers to represent objects, traits, attributes or behaviours. Measurement in the teaching-learning process is a process of qualifying the change in behavior of a learner after testing process has been completed. Data obtained from measurement assist the teacher, the learner and even parents or guardians to make decisions about the progress of the learner.

### **Meaning and Concept of Evaluation**

Evaluation is an essential part of education. Education cannot really be said to be transmitted without proper evaluation. Evaluation from an instructional point of view could be described as a systematic process of determining the extent to which instructional objectives are achieved by pupils. Evaluation helps in knowing whether education has been transmitted or not. According to Alkin (1970), evaluation is the process of ascertaining the decisions to be made, selecting related information, collecting and analyzing information in order to report summary data useful to decision makers in selecting among alternatives. Based on Alkin's definition of evaluation, we can deduce that evaluation asks pertinent questions as to why, what, how, to whom, and when the educational diet (teaching-learning process) has been administered. It further enquires whether the teacher's instruction worked and how well. Where the treatment has not worked according to expectation, evaluation demands the reason for failure. Evaluation therefore, demands accountability by asking the vital questions demanded. Under accountability process, the evaluation questions teachers would answer are: has it worked? If the answer is yes, then the follow-up questions: how well, and to what extent? If no, why and what could be done to ensure improvement?

The process of evaluation involves testing and measurement for the collection of essential information that enables an individual to make precise and justifiable judgment (on the past) and predictive decision (on the future) about whatever is being evaluated. The three major areas of concern in educational evaluation are (1) Programme evaluation involving the assessment of the curriculum of instruction; (2) Process evaluation which has to do with assessment of methods and materials used by teachers and learners for teaching and learning; (3) Product Evaluation which concentrates attention on assessment of learning achievement (Anikweze, 2006 as cited in Anikweze, 2018).

### **Meaning and Concept of Accountability**

The word accountability when used in relation to school programme simply means that those who are given responsibility for the operation of the school system, most especially, teachers should be held accountable (answerable) for the learning and development of the students. This includes accepting blames

for the failures as well as praises for the successes. It may also warrant explaining why the failures occurred and what is likely done to correct the situations to prevent future occurrence. Accountability is one of the vital mechanisms put in place towards achieving the goals of educational system and ensuring quality service delivery to the society (Usman, 2016). Hunt (2002) defined accountability as the readiness or preparedness to give an explanation or justification to relevant stakeholders for one's judgments, intentions, accounts and omissions when appropriately called upon to do so. NOUN (2008) defined educational accountability as the answerability to one's actions in the educational system. It is the state of being answerable to the stakeholders in education and accountable for the resources used in education.

Accountability in education is a measure of the extent to which all available resources in a productive system are used for greater efficiency and productivity. It is a means of ensuring stability in the school system in order to increase the professional quality of teachers at all levels. Apart from this, the society expects very much from the school system. In view of the importance of accountability to education, some researchers have attributed the low performance of students in academic pursuit to the problem of accountability. Nakpodia and Okiemute (2011) posited that schools in Nigeria are not making any noticeable impact in achieving the set goals and objectives as well as on the nation's socio-economic development, despite the escalating cost expenditure in education. There is a low relative performance of students from academic assessment in the past years.

NOUN as cited in Usman (2016) identified five classifications of accountability in education as thus:

Product/output accountability. This has to do with the evaluation of teaching effectiveness and the extent to which the teacher achieves the expected outcomes of teaching and classroom interaction.

Input accountability. This has to do with the evaluation of the extent of adequacy of supervision, monitoring, and evaluation of the system's operation.

Process accountability. This has to do with monitoring the pedagogic method required in the instructional process, school administrative procedures and classroom interaction to bring about simplified and effective teaching-learning process situation.

Goal accountability. This has to do with the evaluation of the selection, definition and prioritization of the goals and objectives of education.

Accountability for means and enabling environment. This has to do with the evaluation of the extent to which the general public shows their cooperation in providing the required resources for education as well as creating the right atmosphere for educational pursuit in the state.

Usman (2016) while illustrating who is accountable to whom and for what, posited that accountability starts with the classroom teacher. He is accountable to school administrators for producing student outcomes consistent with the objectives and standards of the instructional program. School administrators are accountable to the school board for developing (or selecting) instructional programmes appropriate for the objectives. School board is accountable to the public for selecting proper goals and objectives for the school programme.

### **Interrelationships among Measurement, Evaluation and Accountability in Education**

Testing is a measurement device and an evaluation procedure. The objective of testing is to provide data, while the central purpose of measurement is to quantify data obtained from testing. Evaluation implies both the process of getting the information, the quantitative information obtained e.g., score, or qualitative information, and then the value judgment or decisions made of the information obtained. In the process of evaluation, teachers are bound to make judgmental statements about what they have observed about the learners and how they visualize the school and the implemented curriculum of instruction (Anikweze, 2018). Such judgments according to Anikweze reflect a value position that will inform future decisions. Thus, for teachers, evaluation in education carries an additional responsibility of being a strategy for accounting for the resources invested by the society in supporting education. In effect, teachers normally held accountable for the performance of the output in schools and in the society in general, as assessed by the observers of those who have consumed the educational diet (Ballard & Bates, 2008). When the performance of the output of schools, that is, the service of the graduates in the society is unimpressive as assessed by the stakeholders, teachers are held accountable. Even in the United States, schools and teachers are being held accountable for students' performance because of the No Child Left Behind (NCLB) ACT (Ballard & Bates, 2008). Assessment and evaluation therefore offer teachers the opportunity to give an account of their stewardship particularly when the assessment is externally conducted. Measurement, evaluation and accountability are therefore interrelated.

**Challenges of Teachers in Measurement and Evaluation in the Context of Education Accountability**

Teaching effectiveness is always equating to students' learning in educational accountability programme. If the specific learning outcomes have been achieved, the teaching could be said to be effective, and if they have not been achieved, the teaching has not been effective. Accountability places emphasis on the measurement and evaluation of students' learning in which the end product is students' results. This may involve the uses of various forms of tests. There are conglomerates of problems in educational measurement and evaluation that cannot make teachers adequately accountable for students' failures or poor academic performances. There are some factors or criteria too difficult for teachers to meet. They are beyond the jurisdiction of teachers. Some of these factors are:

Problem of matching the test to the learning outcome. To provide satisfactory measures of learning growth, test items should be comprehensive enough to provide a reliable measure of each of the specific learning outcomes among students. Standardized tests that are widely used in large scale testing do not meet such criteria talk less of teacher made tests. For classroom teachers to construct test that meet this criteria is still a mirage in Nigeria. Classroom teachers often construct test with relatively few items in each area of measurements.

Problem of measurement achievement gains. Measurement of achievement gain is a necessity to provide a satisfactory measure of learning growth. To measure achievement gain under accountability programme, there should be a pretest to ascertain learners' entry behavior before the instruction, and a posttest to measure learners' level of attainment after the instruction. The difference between the pretest and posttest scores will yield achievement gains. Construction of equivalent tests to measure pretest and posttest is also a very difficult task for teachers to achieve most especially at the classroom level. Measurement of achievement gains by teachers in Nigeria is also a mirage.

Problems of using absolute standard of achievement. The two modes of interpretation of achievement test scores are criterion reference interpretation and norm reference interpretation. In the norm reference interpretation, individuals' performances are compared to the average performance of the class or norm. In criteria reference interpretation, individual's performance is compared to already established criteria or set standard. Norm reference point is always used by classroom teachers in Nigeria (Iweka & Abbotti, 2017), but criterion reference point is always used in standardized tests like WAEC, NECO, JAMB, etc. Criterion reference point is always used in accountability programme. In criterion reference point, both the specific performance to be demonstrated by the students and the acceptable level of proficiency are specified in advance. Setting of absolute standards of performance for each instructional area poses serious challenges for classroom teachers in Nigeria.

Problems bothering on theoretical framework. Two theories that guided the construction of test items in educational measurement and evaluation are classical test theory (CTT) and item response theory (IRT). CTT places emphasis on designing measures that differentiate among individuals at all times. The function of the test here is to assign higher scores to students who possess more aptitude than their counterparts who have less aptitude. In the same vein, test constructed under the guiding principles of IRT aims at estimating a student's location on a vertical scale in relation to anchor points previously set. The crucial issue is not "how many" a student achieved from a domain of tasks, but (how much" he mastered on a dimension representing a trait. IRT is mostly useful in accountability programme. Whereas, most teachers have no knowledge of the modern test theory in test construction (Iweka & Abbotti, 2017). Classroom teachers are only familiar with CTT. Software for the analysis of IRT are very expensive and readily accessible to classroom teachers in Nigeria.

**Suggestions**

To overcome numerous challenges teachers faced in measurement and evaluation in the context of educational accountability, the following suggestions hold promise in overcoming the challenges:

1. Teachers should be adequately prepared during their training programme on how to match test to the learning outcome.
2. Teachers should always consult experts in test and measurement in constructing equivalent tests capable of measuring achievement gains
3. Teachers should be properly trained in specifying specific performance to be demonstrated by the students and the acceptable level of proficiency. They should be competent in setting absolute standards of performance for each instructional area.

4. Teachers should be properly trained in modern test theory. Software package for analyzing IRT should be made available to teachers at affordable price. They should also be properly trained in its practical application.

### **Conclusion**

Quality and functional education is very essential for quality workforce of any nation. Educational evaluation is a *sine qua non* for quality education as it is used to gauge the quality of input, process and output elements of education. There are noticeable poor performances in schools and employers of labour are complaining that graduates are no longer employable. Schools are no longer making the desired noticeable impact in achieving the set objectives of education. Educational evaluation occupies a central position in the vanguard for the re-inventing, re-vigoration and repositioning of the decaying system. Once the evaluation mechanism of any education system is made effective, the true picture of human ability or capability can be obtained. And this in turn will lead to good performance and quality workforce. Teachers are held accountable for the unimpressive performance of students and workforce.

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