

**PUPILS PERFORMANCE IN CONTINUOUS ASSESSMENT AND  
CUMULATIVE TEST, INHIBITION: RESTRUCTURING OF  
ASSESSMENT METHOD A WAY FORWARD**

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**Abstract**

This study determined the relationship existing between the performance of pupils in Continuous Assessment tests and teacher made Cumulative test. It stressed on some factors that pose inhibition to the performance of pupils due to poor implementation of Continuous Assessment (CA) in the school system. The study is a correlational study guided by three research questions and a hypothesis. The population consists of children (aged 10-12years) in primary 5 in senior primary schools in 10 schools in Umunwoha zone in Owerri West LGEA. The sample consists of 90 pupils from three intact classes, (30 pupils per class) of primary 5 in TTC practicing school Irete. A researcher made test items in mathematics which were duly validated by two experts in measurement and evaluation were used for data collection. The reliability of the instrument was determined using  $K-R20 = 0.73$  Pearsons correlation-coefficient was used to determine their relationship (0.16) where t-test was used to determine the significance of their relationship (2.13). The findings reveal that there is positive relationship between the performance of the pupils in CA and Cumulative test but it is not high; while the relationship is significantly different. Recommendations were made which include that teachers should go for re-training on the implementation for better result.

**Keywords:** Primary education, Assessment, Continuous Assessment, Cumulative test.

Primary education is the bedrock and foundation of learning. It is the first of formal education which opens the way to reading and writing (meaningfully) in the life of a child. It is meant for children aged six to eleven and above. The UBE act

(2004) sees primary school as school which provides a six year basic course of fulltime instruction suitable for pupils between age six years and twelve years. The curriculum and subject matter to be learnt at this stage are graded and specified according to their chronological age and mental ability. Each of the school years is divided into three terms, which has specified subject matters to be accomplished. Formative assessments are done within the term, while at the end of the term, the record of the performance of the child is given to parents as their result. When the performance of a child is satisfactory after each year, he/she is promoted to the next class. Primary six is the final class which is more of revisional in scheme and preparatory for secondary education.

Primary school being very important for quality literacy, the Federal Republic of Nigeria (2004) made it tuition fee and compulsory for all. In the bid to make education what it ought to be, many reforms and commissions had been set up. These reforms range from Universal Primary Education (UPE) (1976) to the Universal Basic Education (UBE) and Education for all (EFA) Global vision (2015); all for the good of the educational system and primary school system in particular. Expressing support for quality primary education, Ibrahim and Rabiu (2015) added that good quality primary education is the foundation for both the intellectual and psychological development of the child and for lifelong learning.

Having seen the primary school and its importance to the development of the child and the society at large, assessment at this level should be qualitative and reliable, while pupils should start as early as in the primary school to be very serious with their studies, even as it is tuition fee. It is most unfortunate that many researchers and individuals alike have observed that the standard of education is falling in our country Nigeria. This fall in standard has many contributing factors which lack of seriousness among the learners and teacher's poor implementation of assessment methods are inclusive.

Assessment is an act of ascertaining the much the learner has been able to grasp from the subject matters he is exposed to. Continuous assessment is one of the major assessment methods. Continuous Assessment (CA) is an assessment method approved by the Federal Ministry of Education in 1977 for assessing the performance of the learner from the Primary to the tertiary level. Ogedengbe and Akinwarere (2015) defined CA as the use of valid and reliable techniques for making judgment about the behavior of a student in the cognitive, affective and psychomotor domain. The introduction of CA was to render assessment school based, stop one short examination and improve evaluation by making assessment cumulative, systematic, and comprehensive and guidance oriented. It is very disheartening that CA is not practiced in the school system the way it is described and defined, rather it has become continuous testing

(CT). Observing this, Gbore, Abe and Adodo (2011) defined CA as a process of collecting and recording marks at various times during a course, so that they can be brought together and summed to obtain a total or cumulative score at the end of the course.

Frowning at what is going on with C A, Abass (2000) added that most candidate continuous Assessment scores may not be the true reflection of their actual ability as the learners might be scored higher than the actual ability. Nwana (2007) says that CA should be comprehensive meaning that other avenues of assessment should be employed apart from paper and pen, such as quizzes, assignments, open book, group assignment etc. They are comprehensive because they assess not only cognitive domain but include affective and psychomotor domains of educational objectives. Today CA is not comprehensive and this has become a very big inhibition.

#### **Other Inhibitions**

Teachers see CA as a routine Friday testing to complete the required assessment records. In many schools, Friday has been set aside as CA day and teachers must put down something for the learners to write. Here the validity of the questions are not guaranteed, as many teachers are not well groomed in item construction. This made Nworgu (2003) to cry out that many teachers do not have sufficient knowledge of test construction mechanism, yet they are required to make several tests every week or month. How

can the objectives of CA be achieved under this condition?

Teachers see CA as one of the columns required for the result of the pupils to be accepted; else you will be seen as unserious teacher. This makes teachers to produce CA results at all cost. Abass (2000) remarked that most candidates CA scores may not be the true reflection of their actual ability as the learners might be scored higher than the actual ability. Most unfortunately is that corrections to these test items are hardly given to the pupils/students by some teachers, and as such they may likely fail the same questions again. The diagnostic functions of CA are relegated to the ground. Why do supervisors come to schools? Many of them come to check records (CA recordings) without emphasis on how teaching and learning is going on (teaching in action) and the accuracy of the instructions. In response, the teacher fills the records with or without test results and present for inspection. Who is to blame?

Pupils also have their own share of the blame in the way they perceive Continuous Assessment and how it is implemented. The pupils see CA as a normal Friday routine exercise and they concentrate on the topics taught that week alone. They read just to pass the CA for the week. Many pupils resort to cramming (crame and pour) and rote learning, not studying for retention and understanding. To pupils CA has become so monotonous that many have lost interest for paper and pen assessment, while failure does not matter much. CA as it is practiced today

has made the pupils unserious with their academics; some have resorted to examination malpractices of different sort to make sure they pass their CA. Some pupils even sacrifice their lunch/snacks to those that will write for them or allow they copy from them if they cannot pay some money. No wonder the standard of education is depreciating hourly and the pupils cannot perform very well in external examinations and centrally set assessment irrespective of their good CA records. This is the crux of the matter. The researchers decided to correlative the performance of the pupils in Continuous Assessment and Cumulative test.

### **Cumulative Test**

A cumulative test is a test constructed to cover all the topics taught within a given period, say term, session or over the period of a course of study. [www.reference.com>education>k.12](http://www.reference.com>education>k.12) saw cumulative examination as one that tests a student on all of the materials since the beginning of the term. Conclusively, Yahoo Answer (2008) states that performance on a cumulative final indicates that the student has successfully retained information as it was covered and has built upon it, which is the goal of most courses. Cumulative test covers a wider content area and therefore is more comprehensive. It principally determines the level of retention of the learner over the learnt items within the stated period. Cumulative test does not encourage rote learning rather it makes for development of good study habit that promotes thinking, retention and understanding.

The findings and recommendations made in this work will be beneficial to teachers, assessors, supervisors and education planners in no small measure. The weakness of the teachers in carrying out CA will be exposed, while the teachers redress their steps to embrace, the correct way of using CA;

To the supervisors, they will find out areas to concentrate more during their supervision and have the interest of the learner at heart.

Finding out the relationship between CA and cumulative test will help item constructors and examination planners to know how to plan for item construction and examination at the primary/secondary levels; it will also expose the authenticity of the CA results schools normally submit

### **Statement of Problem**

Continuous Assessment is one of the approved methods of assessment aimed at exposing the strength and weakness of the learner and provide diagnostic services to the teacher as it affects cognitive, affective and psychomotor domains. It has been observed that CA is not practiced the way it should in our school system and this has negatively affected the study habit and performance of the learner generally. The researchers observed with dismay that many pupils cannot answer some questions correctly after two weeks the topic was taught. Again, their performance in centrally set examinations has been very poor and discouraging, even those

who seem to perform well in class Continuous Assessment tests. This prompted the correlation of the pupils' CA and teacher made cumulative test in mathematics.

### **Research Questions**

The following research questions aided this study:

1. What is the coefficient of correlation between the pupil's performance in Continuous Assessment and cumulative test?
2. What is the mean difference in the performance of the pupils in Continuous Assessment and Cumulative test?
3. What is the modal score of the pupils in CA and Cumulative test?

### **Hypothesis**

The following hypothesis guided this study:

There is no significant difference between the performance of the pupils in Continuous Assessment and Cumulative test ( $p < 0.05$ ).

### **Method**

This work is a correlational study which found the relationship between the pupils performance in Continuous Assessment and Cumulative test.

The population of the study consists of 10 primary schools in Umunwoha zone in Owerri West LGEA of Imo State (senior primary school 4-6). The sample was made up of 90 primary five pupils' three intact classes of 30 pupils each in TTC practicing school Irete.

The researcher used the UBEE curriculum for primary five to teach the pupils for ten weeks. At the end of each week, the researchers set ten item, Continuous Assessment Test (MCT) (pen and paper) and record their scores. At the eleventh week the researchers compiled the whole questions, used 30% of the class to work out the reliability of the test using K-R<sub>20</sub> 73; out of the compiled questions, the researcher picked 40 test items from all the topics to make up the cumulative test. These items were given to two experts in measurement and evaluation for validation. This ensured the content and face validity of the instrument. Their recommended corrections were effected. This was administered to the same 90 pupils in primary five and their scored recorded.

The relationship between the two variables were determined using Pearsons  $r'$ , while t-test was used to determine the level of significance at  $p < 0.05$ . Their mean difference and modal scores were also determined.

### **Results**

RQ: What is the correlation coefficient between the pupils performance in Continuous Assessment.

**Table 1: Analysis of the relationship between pupils' performance in CA and Cumulative test**

Correlated variables	Number of students	Sum of variables values	Sum of squares	Sum of Product	Coefficient of Correlation
Continuous Assessment (x)	90	5922	4145648	2286971	0.16
Cumulative test (y)		4283	2570474		

$$N = 90$$

$$\bar{X} = 65.8$$

$$\bar{Y} = 47.6$$

In answer to RQ1, the table shows the coefficient of correlation between pupils' performance in CA and Cumulative test to be 0.16, this shows that a positive relationship exist between than but it is very low.

**RQII: What is the mean difference in the performance of the pupils in CA and Cumulative test?**

**Table II: The mean difference and model scores**

Variables	No of pupils	Sum of variables values	Mean	Model score	Mean difference
Continuous Assessment	90	5922	65.8	68% (19 pupils)	(65.8 - 47.6)
Cumulative test		4283	47.6	53% (23 pupils)	18.2

The table II is used to answer RQII & III. The mean of the pupils' performance in

CA = 65.8, while in cumulative test it is 47.6. The mean difference is 18.2

**RQIII: What is the modal score of the pupils in CA and in Cumulative test?**

The table shows that the modal scores in CA = 68% while that of cumulative test is 53%. A total number of 19 students scored within the range of 66-70, with their midpoint 68% while 23 pupils scored between 51-55 range with their midpoint as 53%.

**Hypothesis**

**Ho<sub>1</sub>: There is no significant difference between the performance of the pupils in Continuous Assessment and Cumulative test  $p < 0.05$ .**

**Table III: The significance of their relationship using Pearson's t-test.**

Correlated Variables	N	r	t-cal	t-tab	Decision
Continuous Assessment (x)	90	0.16	2.13	1.98	Ho Rejected
Cumulative Test (y)					

**(df 88, 0.05)**

The table shows that calculated t-value is 2.13, while the tabulated t-value is 1.98, meaning that  $t_{cal} > t_{tab}$  ( $2.13 > 1.98$ ).

**Discussion of Findings**

From the analysis of Research questions and hypothesis made, the tables reveal that a positive relationship exist

between the pupils performance in CA and cumulative test  $r=0.16$  but it is very low. It shows that their mean score in CA was 65%, while in cumulative test it reduced to 47.6, showing that they performed poorly, irrespective of the fact that most of the questions were answered during their CA. The mean difference was 18.2%. In the CA, the modal performance was within the range of 66-70, with midpoint of 68%, showing that many performed above average, (while in cumulative test they reduced to 53 modal range).

This shows that their performance range went down much; the hypothesis test shows that the relationship between the pupil's performance in CA and cumulative test is low. Calculated t-test = 2.13, while tabulated t-test was 1.98 at (88 df 0.05) level of significance.  $t_{cal} > t_{tab}$  (2.13 > 1.98). The decision is that the null hypothesis is rejected meaning that the difference in their performance is significant.

### **Conclusion**

Based on the research findings, the following conclusions were drawn. The pupils performance in Continuous Assessment shows that the pupils only learn take the CA test and forget about the concept or topic very easily. Their concentration is very low. They do not read for retention rather for test sake. This does not make room for quality learning, as they cannot retain the learning for a while, how can they apply the learnt ideas in problem solving? The implementation of CA in our school system is not the way it should and it is affecting the study habit

and rate of retention of the learners negatively.

If the learners are studious, they will not fail the questions they had answered once. Any learner who cannot do well in a cumulative test will likely become a drop out, because he cannot cope with the challenges at higher levels of education. Teachers can improve our assessment methods only if they improve their own standard through workshops, conferences, seminars, re-orientation and re-trainings.

### **Recommendation**

Based on the finding of this work, the following recommendations were made:

1. There should be a change of attitude among the teachers on how they perceive Continuous Assessment. They should not assess learners only on cognitive rather Affective and psychomotor assessments should be implemented/encouraged.
2. Scoring of CA should be objective and reliable. Arbitrary award of scores should be avoided as it does not give the true ability of the learner.
3. The supervisors should not make supervision 100% teacher centered, rather it should be 30% centered, 50% learner centered and 20% Administration/environment centered.
4. Item constructors and SUBEB should make sure they set end of term and session exams and maintain high content validity in these examinations so that the best will be got from the children.
5. Children who fail examinations should be allowed to repeat the class until

they are found satisfactory. No concession and compromise should be allowed.

6. Ministry of Education should not rely on the CA scores forwarded to them by teachers because many of them are faulty, rather a comparison of their CA and the cumulative performance should have a more reliable information to give, if not that many teachers are partners in crime in examination malpractices, which affects its reliability of these results.

If these recommendations are adhered to, our assessment in the primary school will be reformed to be more qualitative and meaningful.

### References

- Abass, A.C. (2000) *Practice and Problems of Continuous Assessment*. The Nigerian Teacher Today 8 (182) 9-18.
- Federal Republic of Nigeria (2004) The National Policy on Education; Yaba Lagos NERDC Press.
- Gbore, L.O., Abe, T.O, and Adodo, S.O. (2011) *Skewness and Comparability of School based Continuous Assessment Scores*. Manager's Journal on School Education Technology. (21) September-November (2011).
- Ibrahim, A.Z and Rabi H.M. (2015) *Nigerian Primary Education in the Global Context: option and way forward*. *Journal of Childhood And Primary Education* Vol. 12, No1; page 199-212.
- Nwana (2007) *Textbook on Educational Measurement and Evaluation* Owerri, Boma Way Publishers Nigeria.
- Nworgu, B.G. (2003) *Educational Measurement and Evaluation, Theory and Practices* Nsukka: Universal Trust Publishers.
- Federal Ministry of Education (2005) *Universal Basic Education Act*, and other related matters, UBEC Press.
- [www.reference.com/education/k.12](http://www.reference.com/education/k.12) retrieved as at 16/7/016
- Yahoo Answer (12/10/008) what is cumulative examination. retrieved as at 16/7/016..
- Ogedengbe, E.O and Akinwarere (2016) *Undergraduate Students perception about Continuous Assessment* in Obafemi Awolowo University Ile-Ije Nigeria *ASSEREN Journal of Education* Vol, No1: July 2016 (113-120).