

Continuous Assessment Mode of Evaluation in Universal Basic Education Programme: Issues of Teacher Quality in Assessment and Record-Keeping

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Abstract

This is a report of a study which investigated the approaches teachers use in carrying out Continuous Assessment evaluation at the primary and upper Basic Education Levels (i.e Primary and Junior Secondary Schools) in Nsukka Education Zone. A documentary research design was adopted in looking into teachers' Continuous Assessment booklets. A total of 106 (one hundred and six) primary schools, and 15 (fifteen) junior secondary schools were used. No sample was drawn since the entire population of schools in the respective levels were used in the study. Instrument used for data collection was an Interview Schedule. Results showed, amongst others, that teachers at both levels of the Basic education seriously abuse the CAM of evaluation. At the lower basic level, teachers adopt only two out of 7 common CAM of evaluation recommended by government. At the Upper Basic education, teachers adopt as many as 14 (fourteen) different CAM of evaluation. It was also discovered that each school adopted what ever CAM of evaluation that is pleasing to teachers. These have very low relationships with that recommended by Government. Some recommendations were made based on the findings.

Introduction

The Federal Government of Nigeria, in 1984 introduced the 6-3-3-4 system of education which incorporated continuous assessment of learning outcomes, at all levels of the educational system. This policy was made with the aim of replacing the one-shot, summative evaluation that was then in practice in the system at the end of each school year. These one-shot summative results were then collected and cumulatively used for the promotion of students to higher classes and in some cases used for the eventual certification of the students at the end of their programmes of education. External public examinations like the First School Leaving Certificate Examination (FSLCE), the Junior Secondary School Certificate Examination (JSSCE), School West African Examination Councils Examinations (WAEC) are usually graded and students awarded certificates or promoted to the higher classes based on these one-shot summative examinations were emphasized, prior to 1984 until the Continuous Assessment Mode (CAM) of evaluation was eventually introduced in Nigeria schools. Scores obtained from the bi-weekly or monthly tests administered by teachers to students were usually not incorporated in the final grading and certification of the students at the end of programme. In the same vein, tests administered by teachers in schools then, assessed principally only the cognitive domain, to the neglect of the psychomotor and affective domain of educational objectives as desired in the CAM of evaluation. The CAM of evaluation was therefore introduced in primary and secondary schools so that some of these short-comings in assessment, evaluation and certification of students, will either be eradicated or reduced drastically. Ipaye, as cited in Nworgu (2006:24), defined Continuous Assessment (CA) as:

“a process that deliberately allows for periodic assessment of a pupil through out the course, and which take into consideration the extent to which the goals or targets of learning are being attained. These are done on a cumulative basis so that the performances of a pupil can be judged effectively, through this process”.

Hoste and Bloom (2003) also defined Continuous Assessment (CA) as the systematic collection of marks or grades over a period of time and their aggregation into a final grade. The Hand Book on Continuous Assessment which was released by the Federal Ministry of Education, Science and Technology, (1985) defined CA. as:

A mechanism whereby the final grading of a student in cognitive, affective and psychomotor domains of behaviour takes into account, in a systematic way of all the pupil's performances during a given period of schooling;

such an assessment involves the use of a great variety of modes of evaluation for the purpose of guiding and improving learning or performance of the students.

In the Hand Book, CA is characterized as being systematic; comprehensive and cumulative. It is systematic since it uses an operational plan that shows the type of assessment to be conducted in the cognitive, affective and psychomotor domains. It is comprehensive, not only because it takes into account the evaluation of all aspects of the learners' behaviours in the three dimensions, but also because it takes into account hierarchies of educational objectives associated with each of the domains. The cumulative nature of CA is based on the fact that at any point in time, any new decision taken on a student's learning outcomes, takes into account, in a progressive manner, all other previous decisions.

Continuous Assessment is also guidance oriented, since students are given opportunities of making appropriate career decisions based on the results they obtain from their Continuous Assessment Cumulative records. As a result, those that are technically talented are advised to pursue technically based careers; those for science or arts are also advised appropriately (FRN, 2004).

The diagnostic nature of CA is based on the fact that it helps in the continuous monitoring of students' ability levels, his strengths and weaknesses with regards to contents of course, possible causes of weakness in content and their possible remedies. Continuous Assessment is prognostic due to the fact that information obtained from them can be used in predicting how well a learner can perform if exposed to similar tasks or even on completely different tasks in future.

Based on the earlier work by the researcher Ugwuja (2008), it was found that in 2004, teachers gave only 2 tests per subject per term, instead of 8 (eight) test per subject per term. They gave only 72 instead of 144 tests. The researcher also found that the number of assessments (tests) given by teachers at the primary school level of Universal Basic Education, differ significantly from the observed, 72 as against 144. At the Lower Basic Education (Primary 1 – 3) Teachers at this level use principally completion objective type test items. Such items as:

- i. Complete the following using the correct answer from the options given. The Governor of Enugu State is _____ (Peter Obi; Alhaji Shehu Musa Yaradua, Sulivan Chime).
- ii. Identify the names of the following objects. Here some drawings are made and students are asked to name them.

Some other findings the researcher observed, are that most teachers do not use any defined instructions for the testees to use – No time frame for completing given tests.

At the Middle Basic Education Level (Primary 4-6)

1. At this level, teachers do not assess the students on each of the six subjects at a time rather, they call the test "General Papers" and then ask about 14-15 questions on each.
2. No instructions are stipulated at all. No time etc.
3. The items are also principally completion objective test items.
4. Each of the six subjects that makes up the "General Paper" has 14-15 items such objective test items are of the form:
 - (a) **Social Studies:** A nuclear family is a social institution made up of ----- and ----- and children.
 - (b) A brother to your father is called ----- (uncle, niece, father, mother)
 - (c) **Religious Instructions:** Jesus Christ was born in ----- (Nigeria, Bethlehem, USA)
5. Only mathematics and English language are assessed as single subjects, but no definite "instructions" are given.
6. Teachers teach other subjects not stipulated for them at this level. They teach such subjects as (a) Agricultural Science; (b) Home Economics (c) Health Science. These subjects are included in the "General Papers" given together as assessment.

Following is a table showing the federal government of Nigeria recommended mode of evaluation at the upper Basic education level for possible comparisons in order to discover the degree of correlation.

Table 2: Federal Governments recommended modes of evaluation in upper basic level (JSS I, II, III and SS Levels)

S/N	Subjects Offered	CAM for 1 st Term and Mid Term Test	CAM for 2 nd Term and Mid Term Test, end of Term	CAM for 3 rd Term and Mid Term Test and end of year Exam
	All subjects all subjects offered in SS offered in JSS schools	1 st test – 10 mid term – 20 assignment 15 project – 15 end of term 40	The same as in 1 st term	The same as in 1 st term, (end of year exam)
1	English language			
2	Mathematics			
3	Igbo language or any order major Nig. Language			
4	Social studies and citizenship education			
5	Religious instrument			
6	Health/ physical education			
7	French language			
8	Integrated science			
9	Introduction teaching pre vocational subjects			
10	Fine and applied			
11	Agriculture			
12	Home economic			
13	Business education			
	SSS I – III			
1	English language			
2	Mathematics			
3	A major Nigeria language			
4	Boil/chemistry physics or health science			
5	One or all of literature in English, history, geography, CRK			
6	Avocation subject			
7	Fifteen (15) other vocational electives and 16 (sixteen) non-vocational electives			

Please see table 3 for details
 Source: NPE (2004)

Problems of the Study

The problem of this study, put as questions are:

1. To what extent are the CA given by teachers in the different subject areas at the primary education level (Primary 1-6) in agreement with those assessment modes recommended by the government of the state through the State's Primary Education Board?
2. To what extent are the CA modes operated by teachers at the Upper Basic Education Programme (JSS – I-III) in agreement with what the government recommended?
3. To what extent are CA modes homogeneous at the primary and upper basic education programme respectively, for meaningful achievement of the universal objectives of the Basic Education Programme levels?
4. To what degree are the observed and expected frequencies in the CA given to students by teacher at the primary and upper basic education programmes in agreement with what government recommended?

Purpose of the Study

The general purpose of this study is to find out the extent to which teachers at primary and upper basic education programmes show good quality by (i) keeping to the recommended number frequency of Continuous Assessment in order to achieve the primary objectives of the universal basic education programme; and (ii)

assessing students in correct ways (iii) assessing them in the correct number of subjects.

- If there are different types of CAM of evaluation adopted by teachers in school, at the lower and upper basic education programmes.

Specifically, the purposes of this study are to find out:

- If there are significant difference(s) (if any) in the CAM practices at the primary and upper basic education programmes for purposes of meaningful usage in decision making goals at both levels, based on the type that government recommended.
- If there are any significant difference(s) between the observed and expected number of continuous assessments given to students by teachers at the respective levels of the Universal Basic education programme.
- If the teachers use correct assessment ways to assess
- If the teachers teach students the subjects recommended.

Research Questions

The following Research Questions guided the study:

1. What are the different types of CAM of evaluation practiced in primary and Upper Basic (JSS I-III) education programmes of schools?
2. Are there significant differences between the CAM practices at the primary and upper basic education programmes for purposes of meaningful usage in decision making goals at both levels basic on the types that government recommended?
3. Are there any significant difference between the observed and expected number of assessment given to students at the two basic education levels?
4. Are teachers using the correct assessment modes ways in assessing students?
5. Do teachers teach students the subject actually recommended by government?

Research Hypotheses

The following hypotheses were formulated to guide the study:

1. There is no significant difference between the observed and expected number of tests given to the students by teachers at each of the levels of the Basic Education programme.
2. There is significant correlation between CAM of evaluation commonly adopted by teachers at the two respective levels of primary and upper Basic Education Programmes and those actually recommended by the government for adoption.

Methodology

A descriptive survey research design was used for investigating teachers' continuous assessment practices as documented in the continuous assessment record books. The use of the continuous assessment record books was informed by the fact that they form reliable sources for identifying the continuous assessment practices of teachers.

The area of study was Old Nsukka Education Zone comprising of 106 Public Primary Basic Education Schools and 15 (fifteen) Upper Basic Junior Secondary Schools. No sample was drawn since the total of 106 primary schools and 15 (fifteen) upper basic JSS Schools were considered adequate for collecting the data of the study. Instrument used for data collection were from an interview schedule and a questionnaires. The questionnaire and interview schedule sought such information from respondents (Head Mistresses and Principals) of the primary and Upper Basic Education Levels. Teachers were required to assemble their respective CAM of evaluation cumulative record booklets. Questions sought included: Name of schools: location of school (state); rank of respondents; type of CAM in schools; whether CAM is in agreement with those recommended by the Federal Ministry of Education to state primary education boards for the primary Basic and Upper basic education programmes for adoption, and reasons for non-compliance, if any.

The questionnaire and Interview schedule were validated by three experts, two in measurement and evaluation and one in educational foundations, all in University of Nigeria, Nsukka. The instruments were trial tested in other primary and upper basic education levels in Obollo Afor education zone, which is not part of the zone being studied in this work. The instrument were found to have a reliability of 0.78, using Cronbach's Coefficient Alpha since the instrument is multiply scored. Data collected were analyzed using frequencies, means, and standard deviations. The chi-square goodness of fit test statistic was used in finding the result of hypotheses one 1, while the Pearson product moment correlation coefficient was used for testing hypothesis 2.

Results of the Study

Result of Research Question 1

Research question 1 sought information on the types of CAM of evaluation practiced at the primary and Upper Basic (JSS) levels of education in schools in the Local Government Area. Answers to this research question can be seen from tables 3 and 4 respectively.

Table 3: The Summary of CAM of Evaluation in Primary 1-6 Basic in Schools in the Local Government as against those Recommended by Government.

Type one Recommended by Government	30% in 3 Tests (First Summary)	10% (Mid-Term)	30% in 3 Tests (2 nd Summary)	30% in (End of Term or Year Exam)	100% (Total)
Type two as practiced by teachers	30% just one test	30% 2 nd test (just one)	None	40% end of term or year exam	100% (Total)

Result shown in table 3 shows that there are two commonly used CAM of evaluation in the primary school i.e 30%, 30% before end of term or year (i.e 12 in six subjects). This is against the 8 (eight) CAM of evaluation in each subject area as recommended by government which makes it an expected total of 48 (fort eight) tests.

Table 4: Types of CAM of Evaluation Commonly Practiced by Teachers in Upper Basis (JSS I-III) Schools in the Local Government

Schools	CAM (%)	Total (%)	Interpretations
1	10, 20, 10, 60	100	One text, midterm test, one project, end of term exam
2	10, 10, 10, 70	100	One test, midterm test, assignment or project, end of term exam
3	10, 10, 20, 60	100	One text, one project, midterm test, end of term exam
4	10, 20, 70	100	Project, midterm, end of term exam
5	20, 30, 50	100	Two tests, midterm, end of term
6	15, 35, 50	100	Class test midterm, end of term
7	10, 10, 30, 50	100	One test, project or assignment midterm end of term exam
8	10, 20, 10, 60	100	One test, projector assignment midterm end of term exam
9	100, 100, 100, 100, 100, 100 (UN Sec. School)	600/6 = 100	5 best test results, and end of term exam at 100% each pupils' score obtained by average
10	30, 30, 40	100	3 tests, midterm, end of term exam
11	20, 20, 60, (College)	100	2 class exercises, midterm, end of term exam
12	10, 90	100	One test, end term exam
13	10, 10, 80	100	One test, midterm test, end of term exam
14	10, 10, 5, 5, 70	100	First test, midterm test, second test, project and end term exam
15	100, 100, 100, 100, 100	100	Suggested mode of evaluation to be commonly used schools in Nigeria

From this Table, the type of CAM carried in all the 15 schools sampled differed. None is similar to the other in sequence. Records of CAM of evaluation are also very irregular and these are the ones most commonly observed in teachers record booklets.

From Table 3 it can be seen that there are a total of 14 (fourteen) different CAM of evaluation in Upper Basic Education Programmes in schools in the Local Government Area.

Results of Research Question 2 can also be seen in table 4. Results obtained show that at the Primary level, the observed and expected number of tests to be given by the teachers are 72 (seventy two) as against 144 tests.

Result of Research Question 3

This sought information on the extent of internal homogeneity of CAM of evaluation at the primary education levels. Results obtained show that there is a significant difference in their respective mean values, when all the CAM in the schools are respectively averaged.

Result of Research Question No. 4

Results obtained show that there is a significant inverse correlation of -0.77 when the CAM practiced in the schools are correlated with the CAM recommended by government. This obviously indicates that teachers are flouting government directives in the schools.

There are a total of 14 (fourteen) different CAM of evaluation parities by teachers indicating absolute lack of homogeneity amongst the modes. Results from table 5 also shows that 2 (two) of the assessment modes correlate highly with those recommended by government. These are 0.7 and 0.87 for serial numbers 6 and 9 respectively. Some made medium relationship $r = 0.69$ for serial numbers 7 and 10. All others have very low relationships indicating lack of uniformity and homogeneity.

Table 5: Continuous Assessment Modes of Evaluation and their Correlation Coefficients with a Hypothetical Criterion-Referenced Continuous Assessment Mode of Evaluation Measure and Extent of Prediction and Shortfalls between the Various Continuous Assessment Modes and the Criterion-Referenced Measure

School	CAM of Evaluation	Total Percentage	Mean Values	Standard Deviation	Correlation Coefficient	Degrees of Prediction r^2 (%)	Degrees of Shortfall $1 - r^2$ (%)
1	10, 10, 20, 60	100	25	20.6	R = 0.2	4	96
2	10, 10, 10, 70	100	25	25.9	R = 0.09	1	99
3	10, 10, 20, 60	100	25	20.6	R = 0.4	16	84
4	20, 10, 70	100	33.3	26.2	R = 0.25	6	94
5	20, 30, 50	100	33.3	12.5	R = 0.59	35	65
6	15, 35, 50	100	33.3	14.3	R = 0.70	49	51
7	10, 10, 30, 50	100	25	16.6	R = 0.69	48	52
8	100, 100, 100, 100, 100, 100	100	(UNN Sec. Sch.)	0	-		
9	30, 30, 40	100	33.3	4.7	R = 0.87	76	24
10	10, 90	100	50	40	R = 0.69	48	52
11	10, 10, 80	100	33.3	32.9	R = 0.16	3	97
12	10, 10, 5, 5, 70	100	20	25.3	R = 0.09	1	99
13	20, 20, 60	100	33.3 (FGC)	18.9	R = 0.61	37	63
14	100, 100, 100, 100, 100	100	Recommended CAM school				

Results of Hypotheses

Hypothesis 1 sought the extent of difference between the observed and expected frequencies of tests given by the teachers at both levels of basic education classes in the schools. Results obtained showed that the observed and expected numbers of tests, differed significantly from each other at both levels, using the chi-square goodness of fit test statistics.

Table 6: Chi-Square Goodness-of-fit of Tests

	First set of Class Test	Second set of Class Test	Assignment/Project	Mid-Term Test	End Term/year Examination	Total	$\frac{(O - E)^2}{E}$
Observed	14	0	28	14	14	70	11.7
Expected	42	42	28	14	14	140	11.7
Total						210	

Chi-square calculated = 23.4 while the critical value at 0.05 level in 22.4. This shows a significant difference.

Hypothesis 2 sought information on the extent of correlation between the CAM practiced in schools at the respective Basic Education levels and those recommended by Government. Results obtained showed a significant inverse relation of -0.77 for the primary education level. There is a very low relationship for most of CAM practiced at the Higher basic, education, since only two of the CAM of evaluation recorded high correlations of $r = 0.7$ and $r = 0.87$ for serial number 6 and 9 respectively.

Discussion of Results

Results obtained in this study, show that continuous assessment mode of evaluation at the primary and Upper Basic Education levels in Nsukka Local Government Area are being seriously abused by teachers at these levels. The teacher adopt only two types of CAM of evaluation in primary schools and these are significantly, and negatively related with ($r = 0.77$) with the CAM recommended by Government. Similarly results obtained show that at the upper basic education level, there are as many as 14 (fourteen) different CAM of evaluation being adopted. Only 2 (two) of them have high relationship ($r_1 = 0.7$ and $r_2 = 0.87$) with that recommended by the Government. Two also have medium relations of ($r = 0.6$) respectively. All others have very low relationships, showing that there is lack of homogeneity amongst them. These findings are also in line with Ugwuja (2008) which studied CAM of evaluation in secondary schools in Nigeria. The findings are also in line with Ohuche (1980) who observed that teachers lack the motivative spirit to carry out their duties. The same

remarks were also highlighted in Harbore-Peters (2000) where the issue of insufficient supervision of teaching and learning and others contribute in hindering the smooth operation of the CAM in schools. Results obtained also show that teachers at primary education level assess their students with wrong methods. They also teach and assess students in areas not recommended by government.

Conclusion

Secondary school teachers in old Nsukka Education Zone of Enugu State operate different CAM of evaluation in their schools. There are a total of 14 (fourteen) different CAM of evaluation out of these only 2 (two) of them have high correlations with the CAM of evaluation recommended by Government. The rest have CAM of evaluation that have low correlations with those recommended by government. There is therefore an absolute lack of homogeneity between CAM of evaluation in the schools when compared with what government recommended. The teachers also teach some subjects not recommended by Government.

Recommendations

The following recommendations have been made based on the findings:

1. The Enugu State Universal Basic Education Board should seriously look into the operations of the CAM of evaluation at the primary and upper levels of the Basic Education programme in order to ensure their usefulness in decision-making-goals.
2. Teachers at primary school levels should provide in each test the conducts examinees' instructions during assessment
3. Teachers at this level should teach only those courses recommended.
4. Teachers at all levels should learn not to abuse government directives in CAM of evaluation and be patriotic enough.

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