# TRAINING NEEDS OF TEACHERS IN SCHOOL-BASED ASSESSMENT IN ANGLOPHONE WEST AFRICAN COUNTRIES

By

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#### **ABSTRACT**

This study focused on the training needs of teachers in Continuous Assessment (CA) by examining their level of knowledge and the difficulties encountered in the development and administration of different assessment tools. The research sample comprised 2,422 teachers selected from junior secondary and senior secondary schools and 448 heads of schools and educational administrators/officers in Ghana, Nigeria and The Gambia. The study revealed that assessment tools like Essay test, Objective test and Assignments were frequently used and found easy to score by teachers. Teachers were however found deficient in the use of other assessment tools particularly, in the assessment of project work, formative testing, assessment by interviews and behavioural assessment. The teachers signified their ambition to be trained in these areas as well as in the development of marking schemes/scoring keys. Their other training needs were identified and recommendations made to make implementation of CA more effective in schools.

# ASSESSMENT OF TRAINING NEEDS OF TEACHERS IN SCHOOL-BASED ASSESSEMENT IN ANGLOPHONE WEST AFRICAN COUNTRIES

#### 1. INTRODUCTION

Assessment is a powerful educational tool. It is used to monitor the quality of the school system, evaluate education policies and programmes, make important instructional and placement decisions about students, and certify students' learning achievement. In the words of MacGaw (2006), assessment helps students to see their own progress, enables teachers to monitor their students and themselves and (assessment) expresses what the educational systems consider to be important. He cautioned however that, assessment can be counter-productive when stakes are high; driving attention to only the narrow and measurable and ignoring the important but un-measurable. These shortcomings underlie the importance which member countries of the West African Examinations Council (WAEC) attach to school-based assessment (continuous assessment) which, it is believed, addresses these weaknesses and risks in assessment. School-based assessment is a classroom strategy implemented by teachers to ascertain the knowledge, understanding and skills attained by pupils (Educational Quarterly, 2003).

The introduction of continuous assessment (CA) in the instructional and testing process in schools in member countries of WAEC is generally intended to achieve four major purposes. One, it is to certify both the validity and reliability of the results of pupils' performance in the final/certification examination by reflecting the performance of the pupils under normal classroom situations in the final grading. Second, continuous assessment is best suited for and does facilitate the assessment of the totality of each pupil/student, particularly as it relates to the affective and psychomotor domains (Adeyegbe, 1992). Furthermore, continuous assessment is meant to bestow on the classroom teacher a measure of involvement in the evaluation of his/her students. Lastly, CA is to help the student to develop an effective and productive learning habit. Assessment types and tools that easily lend themselves to use in CA include class tests, class exercises, home work, projects, observations, interview, behavioral assessment and practical skills testing.

Since the introduction of CA into the education systems of WAEC member countries almost three decades ago, educators and researchers have recognized and identified some challenges associated with its implementation. For instance, Quansah (2005) described the CA system as being essentially based on only frequent test-taking which did not really serve the entire four critical purposes outline above. Amedehe (1998) found out that both teachers who received instructions in measurement at teacher training institutions and those who did not, failed to follow basic principles of test constructions. In similar studies, WAEC (1990 & 1993) discovered that teachers appeared to be more generous in the award of marks to their students in the school-based assessment than the students achieved in the external examination in all subjects investigated. It was also observed that CA scores were usually clustered together with the teacher manifesting a conscious effort to make each student get close to the maximum mark. Emmanuel (1990), Alausa (1988) and Emeka (1996) had all made similar findings. These findings raised concerns on the credibility of the school-based assessment and these concerns informed the decision to reduce the weighting of CA from 40% to 30%.

The reduction in the weighting of CA was not the only outcome of those adverse findings on the programme. A number of interventions were introduced to restore the credibility of CA scores. The various Ministries of Education in member countries, the Ghana Education Service (GES), the research community, and some non-governmental organizations in the education sector tried to provide guidance to schools regarding the implementation of CA through seminars, workshops and short courses.

WAEC has also been committed to improving the validity and reliability of school-based assessment. This it does through the organization of seminars and moderating the CA scores received from the schools before incorporating them into the final grading. Generally, WAEC does this to safeguard its reputation which rests, among others, on the reliability of certificates issued in its name. The Council therefore considers the task of improving the validity and reliability of school-based assessment as one of its top priority development needs. Other professional priority development needs are training of the West African Senior School Certificate Examination (WASSCE) Item Writers, training of WASSCE Examiners, and training of Staff in the Test Development and Research Divisions of Council. These four (4) priority areas constitute the framework of cooperation between WAEC and the World Bank on the Global Partnership for Assessment of Educational Achievement programme. Under this programme, the International Association for the Evaluation of Educational Achievement (IEA) has been mandated by the World Bank to oversee the management and distribution of Development Grant Facility (DGF) funds allocated for strengthening the capacity of WAEC as a Regional Assessment Institution. For Financial Year 2006 (FY06), i.e. Phase I of the project, the focus is on improving the validity and reliability of school-based assessment.

The ultimate objective of Phase I of the Contract is to equip teachers with the requisite skills for meaningful continuous assessment. WAEC intends therefore to facilitate the training of teachers through appropriate local structures in generating and managing valid and reliable continuous assessment scores. This demands the needs assessment of teachers as basis for planning a training programme.

#### 2. STATEMENT OF PROBLEM

Since the introduction of continuous assessment (CA), educators and researchers have recognized the challenges associated with its implementation. CA was originally weighted 40% but reduced to 30% when it became evident that the scores submitted by the schools to WAEC were mostly unreliable. There is therefore a need to up-grade the quality of school-based assessment through the training of teachers. This demanded training needs assessment of teachers, hence this study.

#### 3. RESEARCH QUESTIONS

Specifically the following research questions were addressed:

- (1) What is the level of teachers' knowledge about key issues in continuous assessment?
- (2) What skills do teachers require to be effective in implementing a meaningful CA programme?
- (3) How can WAEC assist in the training of teachers to ensure an effective implementation of the CA programme?
- (4) What structures are/should be in place at the school level to promote effectiveness in the implementation of CA?

# 4. <u>METHODOLOGY</u>

#### (1) Design

This Needs Assessment study was essentially an action research and made use of the survey design.

#### (2) Population

Teachers in all Junior and Senior Secondary Schools as well as the educational administrators/managers in the five member countries constituted the target population for the study. Administrators/Managers of Education were taken to include Heads of Schools (JSS and SSS), Circuit/local or sub-district structures, Supervisors and Schedule Officers responsible for CA in district offices and the Directors of Education.

#### 3) Sample and Sampling Procedure

Three countries - Ghana, Nigeria and The Gambia – were sampled out of the five member countries of WAEC. The stratified random sampling technique was used to select the states/regions, schools and the respondents. In Ghana, fifty (50) junior and fifty (50) senior secondary schools from ten (10) districts in four (4) out of the ten regions of the country were selected. In Nigeria, sixty (60) Senior Secondary Schools were selected from twelve states while thirty (30) Junior secondary schools and eighteen (18) Senior Secondary Schools were selected in Nigeria because WAEC does not deal with Junior Secondary Schools there. In all the three countries, the schools were stratified into public and private schools before the selection of the sample schools proportional to their total numbers in the country. While a total sample of 710 teachers and 108 administrators/managers were selected in Ghana, 1,800 teachers and 360 administrators were selected randomly in Nigeria. The sample in The Gambia comprised of thirty-eight (38) teachers and fifty-five (55) Administrators. (see table I).

Table I: Sample Distribution by Countries by Gender

Table I. Cample Distribut									
Respondents	Ghana	a	Niger	ia	The Gam	nbia			
	Male	Female	Male	Female	Male	Female			
Heads of Schools/ District	82	26	184	101	52	3			
Education Officers	(75.9%)	(24.1%)	(64.6%)	(35.4%)	(94.5%)	(5.5%)			
Teachers	480	230	926	744	38	4			
	(67.6%)	(32.6%)	(55.4%)	(44.6)	(90.5%)	(9.5%)			
Total	562	256	1110	845	90	7			
	(68.7%)	(31.3%)	(56.8%)	(43.2%)	(92.8%)	(7.2%)			

## (4) Instrumentation

Two sets of questionnaire were developed and used in the study - Questionnaire for Teachers (of JSS and SSS) and Questionnaire for Mangers/Administrators of Education.

The drafts of the questionnaires were subjected to expert scrutiny, refined and pre-tested in two schools (a JSS and SSS) in Accra.

The pre-tested questionnaires were analyzed to ensure that the questions were understood by respondents and that there were no ambiguities.

#### (5) Data Collection

The two sets of questionnaires were administered directly to respondents by researchers from the various research departments and unit – six officers from the Accra department, twelve from the Lagos department and one from the Banjul unit. The officers visited the sampled schools and the Education Offices to administer and retrieve the questionnaires within a period ranging from five days to two weeks.

## (6) Analysis of Data

Frequency counts, percentages as well as qualitative analysis techniques were the main statistical tools employed in analyzing the data generated through the questionnaires. A non response to any item of the questionnaires was considered invalid and was left out of the analyses. The analyses of the two questionnaires were done separately but similar items were presented on the same table for comparison purposes.

## 5. <u>RESULTS</u>

The results are presented from the following perspectives: Knowledge in assessment and its methods, training programmes participated in, test development, understanding and perceptions of the process of Continuous Assessment, additional training needs and required structures to use for training at school level

### (1) Knowledge in Assessment

In order to ascertain the level of knowledge of teachers in CA and its use, their views along those of the administrators' were sought on different key issues relating to CA. The results are presented in sub-sections (a) to (e) of this section.

#### (a) Reasons for Conducting Class Tests

Respondents' perception on purpose of school level assessment is presented in Table II.

Table II: Reasons for Conducting Class Tests

Reasons	Ghana		Niger	ia	The Gan	nbia
	Adm	Trs	Adm	Trs	Adm	Trs
	%	%	%	%	%	%
To know if students are	81.5	73.7	78.5	74.5	87.2	97.7
adequately learning.						
To find out if students	100	96.6	67.7	66.1	97.4	100
understand the lessons.						
To satisfy CASS requirements.	57.4	70.0	48.8	46.0	56.6	88.1
To know how to plan for the next	88.9	83.0	48.8	44.7	78.1	85.1
batch of lessons.						

Note: Multiple responses allowed

Majority of respondents in Ghana, Nigeria and The Gambia (73.7 and 81.5 for Ghana, 74.5% and 78.5% for Nigeria and 97.7% and 87.2% for Gambia) of teachers and administrators respectively) contended that they conducted class tests to determine if their students were learning while another majority (96.6% and 100% for Ghana, 67.7% and 66.1% for Nigeria and 100% and 97.4% for Gambia of teachers and administrators respectively) stated that another reason for conducting class tests was to find out if students understood the lessons.

#### (b) Use of Various Assessment Types/Areas of Assessment

The frequency of use of the various types assessment in the schools was measured and the results are presented in Table III.

Table III: Frequency of Use of Various Assessment Tools/Types (self or subordinate)

Type/Area of	Respondents	Daily	/ Weekly	1	Mon	ithly		Ter	mly		Nev	er Used	
Assessment		Gh	Nig	Ga	Gh	Nig	Ga	Gh	Nig	Ga	Gh	Nig	Ga
		%	%	%	%	%	%	%	%	%	%	%	%
Essay test	Managers	36.7	30.6	23.1	49.0	49.5	61.5	11.2	19.6	7.7	3.1	0.4	7.7
	Teachers	39.7	29.5	28.6	42.1	50.1	50.0	16.2	15.9	14.3	2.1	3.6	7.1
Objective test	Managers	55.1	26.0	38.5	18.4	26.0	46.2	24.5	44.8	15.4	2.0	3.2	0.0
	Teachers	52.3	33.6	40.5	18.6	20.8	26.2	28.4	38.3	33.3	0.8	7.4	0,0
Assignment	Managers	90.1	76.3	76.9	7.9	11.5	7.7	1.9	9.4	7.7	0.0	2.9	7.7
	Teachers	85.7	80.7	71.4	12.9	12.2	16.7	0.9	4.3	4.8	0.6	2.9	2.4
Project	Managers	12.5	13.1	0.0	39.6	23.5	7.7	33.3	45.5	53.8	14.6	17.9	30.8
	Teachers	19.2	12.6	21.4	36.7	14.3	4.8	30.6	36.2	35.7	13.6	36.9	38.1
Behavioural	Managers	38.1	66.1	30.8	15.5	8.0	15.4	27.8	20.4	30.8	18.6	5.5	23.1
Assessment	Teachers	43.5	66.1	50.0	14.3	5.6	9.5	21.9	14.1	4.8	20.3	14.2	26.2
Practical Skills	Managers	28.0	53.7	15.4	41.0	20.0	23.1	21.0	21.1	7.7	10.0	5.2	46.2
Test	Teachers	30.4	44.9	23.8	33.8	17.4	19.0	14.1	13.8	16.7	21.6	23.9	14.3
Interview	Managers	21.3	31.5	23.1	17.0	11.9	15.4	24.5	17.3	23.1	37.2	37.3	30.8
	Teachers	30.4	40.2	23.8	23.3	10.3	9.5	13.0	9.6	11.9	33.3	39.9	40.5
Diagnostic/	Managers	14.4	31.5	15.4	18.9	14.2	30.8	38.9	23.9	30.8	27.8	30.4	23.1
Formative test	Teachers	23.8	32.2	31.0	28.8	15.1	23.8	23.1	17.1	11.9	24.3	35.1	14.3
Assessment by	Managers	54.4	57.2	53.8	9.7	11.1	7.7	20.4	16.6	0.0	15.5	15.1	30.8
Observation	Teachers	54.1	68.9	52.4	13.9	6.3	7.1	15.5	6.2	9.5	16.5	18.6	16.7

The various assessment types were used in the schools but to a varying degree of frequency. Majority of respondents in the three countries indicated that Objective tests, Assignments, Behavioural assessment and Assessment by Observation were done daily or weekly. Indeed both the managers/administrators and teachers in the three countries had indicated strongly that assignment was what they used most frequently (daily/weekly). The assessment types that were less frequently used or never used at all were Interview, Diagnostic tests and Project work in Nigeria, Interview and Diagnostic/Formative test in Ghana and Practical skills test and Interview in The Gambia.

## (c) Competence in the Development of Assessment Tools

The level of difficulty of respondents in the development of the various assessment tools as indicated by them is of varying degrees as shown in Table IV.

Table IV: Level of Difficulty in the Development of the Assessment Tools.

Type/Area of	Respondents	Ve	ery Diffic	ult		Difficult		Not Difficult			
Assessment		Gh	Nig	Ga	Gh	Nig	Ga	Gh	Nig	Ga	
		%	%	%	%	%	%	%	%	%	
Essay test	Managers	6.7	12.4	7.7	47.1	35.2	69.2	46.2	52.4	23.1	
	Teachers	9.3	4.0	11.9	31.1	23.2	26.2	59.6	69.6	50.0	
Objective test	Managers	1.9	9.3	0.0	16.3	20.9	30.8	81.7	69.8	69.2	
	Teachers	6.4	3.6	4.8	22.9	17.1	11.9	70.7	73.4	76.2	
Assignment	Managers	1.0	9.6	0.0	18.8	14.4	38.5	80.2	76.0	61.5	
	Teachers	2.6	2.4	2.4	14.7	1.4	11.9	82.7	77.6	76.2	
Project	Managers	20.2	27.0	53.8	51.5	31.8	30.8	28.3	41.2	15.4	
	Teachers	8.6	5.9	14.3	41.7	29.1	28.6	49.7	38.3	11.9	
Behavioural	Managers	23.7	15.3	46.2	46.2	37.2	38.5	30.1	47.5	15.4	

Assessment	Teachers									
		14.9	6.0	7.1	40.9	27.9	23.8	44.2	53.1	33.3
Practical Skills	Managers									
Test	_	8.0	18.3	38.5	51.0	29.7	30.8	41.0	52.0	15.4
	Teachers						31.0			33.3
		11.0	5.1	14.3	36.7	27.8		52.3	47.6	
Interview	Managers									
	_	16.1	16.0	30.8	34.4	22.4	7.7	49.5	61.6	46.2
	Teachers	7.6	4.5	20.4	23.6	18.8	16.7	68.8	47.1	21.4
Diagnostic/	Managers									
Formative test	_	24.4	22.3	15.4	51.1	36.8	38.5	24.4	40.9	38.5
	Teachers									
		10.3	6.0	2.4	42.2	23.0	21.4	47.5	42.9	45.2
Assessment by	Managers									
Observation	_	16.7	NA	30.8	31.3	NA	30.8	52.1	NA	38.5
	Teachers									
		7.3	NA	2.4	25.1	NA	9.5	67.6	NA	59.5

Most respondents in the three countries indicated that they had no difficulty developing multiple-choice (objective test) items, assignments, and practical skills assessment tools. Majority of respondents in all three countries had however indicated behavioural assessment, Formative/diagnostic test and practical skills assessment as the assessment areas they found either difficult or very difficult.

# (d) Competence in Scoring/Marking in Assessment

Only teachers were asked to indicate the level of difficulty in scoring or marking of response to assessment tools. The results are shown in Table V.

Table V: Level of Difficulty in Scoring/Marking Responses to the Various Assessment Tools

Type/Area of	Respondents	Ve	ery Diffic	ult		Difficult		N	ot Diffic	ult	Nev	er Devel	oped
Assessment		Gh %	Nig %	Ga %	Gh %	Nig %	Ga %	Gh %	Nig %	Ga %	Gh %	Nig %	Ga %
Essay test	Teachers	19.6	7.2	16.7	37.7	26.2	35.7	40.7	62.5	38.1	1.9	4.0	4.
Objective test	Teachers	0.4	1.6	2.4	4.2	7.6	7.1	94.4	85.1	88.1	0.9	5.7	0.0
Assignment	Teachers	2.1	2.9	0.0	20.2	16.4	16.7	76.7	75.7	76.2	1.0	5.0	0.0
Project	Teachers	6.5	5.3	9.5	32.9	24.4	14.3	49.4	44.0	35.7	11.3	26.3	23.8
Behavioural Assessment	Teachers	13.0	8.1	2.4	39.8	29.9	28.6	30.4	48.4	23.8	16.7	13.5	28.6
Practical Skills Assessment	Teachers	6.8	5.1	7.1	32.5	25.7	26.2	45.8	49.8	40.5	15.0	19.5	14.3
Interview	Teachers	8.2	4.7	9.5	22.6	19.1	9.5	45.1	48.7	28.6	24.1	27.5	40.5

Diagnostic/ Formative test	Teachers	9.5	5.3	4.8	33.8	21.9	19.0	37.0	48.0	52.4	19.8	24.8	11.9
Assessment by Observation	Teachers	6.8	6.3	7.1	26.8	21.9	23.8	52.1	55.6	38.1	14.3	16.2	21.4

The response patterns in the three countries for this particular question which was restricted to only the classroom teachers are very similar. While identifying Essay tests, Projects, Practical skills assessment as those they found difficult to score, a very substantial proportion of them admitted that they did not use Interviews or Diagnostic tests at all to necessitate having to score them. Teachers generally did not seem to have any difficulty in scoring only three types of assessment – objective test, assignment and assessment by observation.

The frequency of respondents' use of marking schemes in scoring in assessment is presented in Table VI.

. Table VI: Frequency of Use of Marking Scheme in Scoring

Type/Area of	Respondents	Al	ways Us	ed	Occa	sionally	Used	N	ever Use	ed
Assessment		Gh	Nig	Ga	Gh	Nig	Ga	Gh	Nig	Ga
		%	%	%	%	%	%	%	%	%
Essay test	Managers	59.8	71.2	38.8	35.5	22.3	53.8	4.7	6.6	0.0
	Teachers	79.0	80.5	71.4	18.5	16.2	21.4	2.5	3.3	2.4
Objective test	Managers	84.6	68.7	100	10.6	25.9	0.0	4.8	5.4	0.0
	Teachers	87.4	80.4	83.3	11.2	15.3	14.3	1.5	4.3	0.0
Assignment	Managers	61.1	50.5	69.2	26.9	38.3	30.8	12.0	11.2	0.0
_	Teachers	74.2	62.1	64.3	23.0	30.3	31.0	2.8	7.6	0.0
Project	Managers	25.7	28.4	0.0	57.4	48.0	53.8	16.8	23.6	38.5
_	Teachers	48.2	31.3	23.8	37.4	33.5	19.0	14.4	35.3	38.1
Behavioural	Managers	16.0	31.9	7.7	44.7	35.2	30.8	39.4	33.0	61.5
Assessment	Teachers	22.2	30.4	19.0	38.4	35.2	26.2	39.4	34.4	45.2
Practical Skills	Managers	29.0	35.2	15.4	53.0	43.1	46.2	18.0	21.7	30.8
Assessment	Teachers	42.4	37.0	45.2	37.0	33.5	28.6	20.6	29.4	16.7
Interview	Managers	17.7	22.3	23.1	45.8	45.0	53.8	36.5	32.7	15.4
	Teachers	23.6	21.2	16.7	33.8	34.3	19.0	42.7	44.5	50.0
Diagnostic/	Managers	18.1	23.1	30.8	46.8	43.2	53.8	35.1	33.7	15.4
Formative test	Teachers	38.5	28.7	35.7	31.0	32.5	26.2	30.5	38.8	21.4
Assessment by	Managers	24.7	34.3	2.1	36.1	30.6	30.8	39.2	35.1	38.5
Observation	Teachers	30.1	26.1	26.2	34.0	34.5	21.4	35.9	39.3	38.1

In the three countries, Essay test, Objective test and assignment ranked highest in the frequency of use of marking scheme – between 62.1 and 87.4% of the teachers indicated that they used Marking Scheme and scoring keys in scoring always. Their assertions were corroborated by the administrators.

However, between 20.6% and 39.4% of the teachers in Ghana and Nigeria admitted that they had never used marking schemes in such areas as Behavioural Assessment, Practical Skills Assessment, Interview, Diagnostic/Formative test, and Assessment by Observation.

#### (2) Training in Test Development

## (a) Pre-service and In-service Training in Assessment

The teachers were required to indicate whether they had had any form of training in assessment at the preservice training or during service. The results are presented in table VII.

Table VII: Training in Assessment

Question Asked	Yes				No		Not Su	re	
	Gh	Nig	Ga	Gh	Nig	Ga	Gh	Nig	Ga
	%	%	%	%	%	%	%	%	%
Did you have training in assessment when you were under training?	75.1	56.0	76.2	18.0	32.0	9.5	6.9	12.0	14.3
Have you participated in any training programme on assessment since you started teaching?	44.5	30.0	45.2	48.9	63.0	47.6	6.6	7.0	7.1

Majority of teachers (75% in Ghana, 56% in Nigeria and 76% in Gambia) had had training in assessment during their pre-service years, while 44.5%, 30% and 45.2 in Ghana, Nigeria and Gambia respectively, stated that they had participated in in-service training programmes on assessment during service. Such inservice training programmes were however alleged to have had very short duration, ranging between one hour to one week. Only a handful of respondents (9.6% of teachers in Ghana) indicated training periods exceeding one week. The in-service training programmes were organized either by the various Ministries of Education, the Ghana Education Service in Ghana and the WAEC.

Respondents in Nigeria however indicated that the CA programme cannot be effectively implemented unless some structures were put in place. These are listed as follows:

- (a) Conducive teaching/learning environment including:
  - (i) Provision of adequate facilities and equipment
  - (ii) Availability of instructional materials
  - (iii) Small class size
- (b) Adequate Supervision and Inspection
- (c) Provision of Computers
- (d) Proper remuneration of teachers
- (e) Organization of regular short courses, seminars and workshops to improve teachers' knowledge of CA
- (f) Proper orientation of students on the importance of CA

#### (b) Need for Additional training in Assessment

On whether or not there was any need for additional training in assessment, majority of both school managers/administrators (90.7% and 86.0%) and teachers (76.2% and 82.1%) in Ghana and Nigeria respectively responded in the affirmative. They also identified the areas in assessment in which they required additional training. These are presented in table VIII.

Table VIII: Areas of Additional Training Needs of Teachers

Type/Area of Assessment	Respondents	Trainin	g Needed		Indiffer	ent	
		Gh	Nig	Ga	Gh	Nig	Ga
		%	%	%	%	%	%
Essay test	Managers	49.1	34.5	57.1	50.9	63.5	42.9
-	Teachers	28.7	37.9	52.6	71.3	62.1	47.4
Objective test	Managers	31.5	23.4	52.7	68.5	66.6	47.3
-	Teachers	12.4	23.1	52.6	87.6	66.9	47.4
Assignment	Managers	26.9	43.3	72.7	73.1	56.7	27.3
	Teachers	12.1	43.9	47.4.	87.9	56.1	52.6
Project	Managers	61.1	42.3	60.0	38.9	57.7	40.5
•	Teachers	38.6	43.9	60.5	61.4	56.1	39.5
Behavioural Assessment	Managers	75.9	48.6	54.5	24.1	51.4	45.5
	Teachers	60.7	46.0	52.6	39.3	54.0	47.4
Practical Skills Assessment	Managers	64.8	26.5	89.1	35.2	73.5	10.9
	Teachers	41.1	23.5	60.5	58.9	76.5	39.5
Interview	Managers	46.3	55.7	54.5	53.7	44.3	45.5
	Teachers	41.1	59.2	60.5	58.9	40.8	39.5
Diagnostic/	Managers	67.6	31.9	72.7	32.4	68.1	27.3
Formative test	Teachers	52.5	32.1	73.7	47.5	67.9	26.3
Assessment by Observation	Managers	41.7	24.1	34.5	58.3	75.9	65.5
-	Teachers	-	38.8	44.7	-	61.2	55.3
Preparation of	Managers	60.2	30.4	60.0	39.8	69.6	40.0
Marking scheme	Teacher	32.5	32.9	86.8	67.5	67.1	13.2

The five most popular areas of assessment suggested for additional training by both teachers and school managers/administrators in all three countries are Behavioural Assessment, Diagnostic/Formative testing, Practical Skills Assessment, Interview and Assessment using Projects.

# (c) WAEC'S Role in Additional Training of Teachers

Analyses of the responses to the open-ended questions on training needs indicated that majority of both categories of respondents in all three countries expected WAEC to put its expertise in assessment at the disposal of teachers.

# (3) Perceptions on Various Aspects of Continuous Assessment

The respondents' perception on the recording of CA scores, time of submission of CA scores to WAEC, and supervision of CA at the school level are presented in Tables IX, X, and XI.

Table IX: Periodic Recording of CASS scores

Respondents	Wee	kly		Mo	nthly		Term	nly		Yearly		
	Gh	Nig	Ga	Gh	Nig	Ga	Gh	Nig	Ga	Gh	Nig	Ga
	%	%	%	%	%	%	%	%	%	%	%	%
Managers/Administrators	32.3	14.9	15.4	27.1	68.4	61.5	40.6	14.2	15.4	0.0	2.6	7.7
Teachers	33.4	22.4	0.0	30.7	48.9	38.1	35.9	26.6	50.0	0.0	2.1	11.9

Whereas majority of Managers and teachers in Nigeria (68.4% Managers and 48.9% Teachers) indicated monthly recording of CA scores rather than weekly or monthly, their counterparts in Ghana indicated a term based recording.

Table X: Responsibility for Supervision of CA in Schools

	Lload of Cohool Assistant Lload									Calcad Danas and an		
Respondents	Hea	d of Schoo	ol	Assis	tant Hea	d	Head o	f Departi	ment	School Inspector		
	Gh Nig Ga			Gh	Nig	Ga	Gh	Nig	Ga	Gh	Nig	Ga
	%	%	%	%	%	%	%	%	%	%	%	%
Managers/Administrators	58.3	12.7	15.4	34.5	69.1*	30.8	6.0	13.9	46.2	1.2	3.6	7.7
Teachers	52.6	11.8	23.8	33.5	51.5*	31.0	12.1	30.4	45.2	1.8	3.5	2.4

- \* Note: 1. There were CA Committees under the Chairmanship of the Assist. Head in Nigeria. Thus Respondents who had specified supervision of the Committee were grouped under Assistant. Head.
  - 2. Some respondents (0.8% Managers and 2.8% teachers) in Nigeria had indicated cases of no supervision.

The Heads of school and their Assistants were reported by the Nigerian respondents to be the main officers charged with the responsibility for the supervision of the CA programme in the schools. On the other hand, both Managers and Teachers in Ghana had identified the Heads of school as the officers charged with the supervision of CA in the schools.

Table XI: General Perceptions on Continuous Assessments

Respondents	Essential part Ofteaching			Added responsibility			Not Sure		
	Gh	Nig	Ga	Gh	Nig	Ga	Gh	Nig	Ga
	%	%	%	%	%	%	%	%	%
Managers	71.3	84.8	92.2	25.9	15.2	7.7	2.8	0.0	0.0
Teachers	59.2	91.2	78.6	36.2	8.8	21.4	4.6	0.0	0.0

Majority of respondents in all countries (Ghana – 71.3% and 59.2%, Nigeria – 84.8% and 91.2%, and Gambia – managers and teachers respectively) indicated that CA was an essential part of the teaching process.

#### 6. SUMMARY OF FINDINGS

(1) More than 50% of teachers in all sampled countries could be said to have reasonable levels of knowledge and perception about assessment and the need for it. For example majority of teachers considered CA as an essential part of the teaching process. Most of the assessment types were used but to varying degrees by teachers in all the countries. In addition majority of the teachers claimed they did not have difficulty in developing and scoring most of the assessment tools except those for Project, Practical skills assessment, Interview and Formative test. In Ghana and Nigeria majority of teachers were however found to be proficient in the use of essay and objective tests only.

- (2a) More than 55% of teachers indicated that they had training in assessment during their pre-service training, while over 30% of them participated in in-service training programmes on assessment. (See table VII).
- (2b) Majority of both school managers and teachers (see Table VIII) indicated that teachers needed some additional training in assessment. The five most popular suggested assessment areas for training were Behavioural Assessment, Diagnostic/Formative test, Practical Skills Assessment, Interview and Assessment using Projects.
- (3) Majority of respondents in all countries indicated that WAEC as a professional assessment body could come to the aid of teachers by organizing training programmes on CA.
- (4) The structures to be put in place at the school level to promote effectiveness in the implementation of CA as suggested by majority of the teachers and administrators in Nigeria are as listed in 5(2a).

#### 7. DISCUSSION OF FINDINGS

It is undeniable that the assessment of students without any input from the classroom teachers who direct learning activities is incomplete.

This was the stance of Adeyegbe (1992) when he submitted that a more representative view of the students' capabilities is obtained through teachers' assessment in the classroom than from a single-shot examination. It is also an accepted fact in educational circles that school-based assessment provides a means of testing aspects of attainment which may not be easily or adequately tested by writing time-limit examination papers.

Assessment therefore should reflect this understanding by employing a diverse array of methods, including those that call for actual performance, using them over time so as to reveal change, growth and increasing degree of integration. Such an approach aims for a more complete (holistic) and accurate picture of learning achievement and therefore a good base for improving students' educational experience.

Assessment is however best conducted by people who understand what assessment seeks to achieve and are technically equipped to handle it. It is gratifying to note that some of the respondents, particularly the teachers in the study have demonstrated knowledge of tangible educational reasons for assessing their students. Significantly however, a good proportion of them, especially among the Ghana sample perceived CA as additional responsibility on teachers. This type of attitude towards the CA programme is a serious impediment to the successful implementation of the programme.

The study has revealed that various assessment tools were used in the schools but the frequency of use varied from teacher to teacher. For instance, while the use of some assessment tools was on daily/weekly basis other teachers used those same tools on monthly and even termly basis. This was not surprising as respondents differed to some extent on their perceptions of the difficulty or otherwise of developing the various tools and the corresponding difficulty or otherwise of scoring the responses. Those who felt more at ease developing and using these tools used them more frequently.

In the Ghanaian and Nigerian situation, lack of uniformity in the frequency of use of some specific assessment tools should not have arisen since the guidelines on CA explicitly state the

frequency of use of each of the assessment types/tools. However, lack of access to the CA guidelines, ineffective supervision, indifference to the CASS programme and difficulty in developing the various assessment tools, most likely, accounted for the non-uniformity in the use of the tools.

The study revealed that teachers generally did not find it difficult to develop the essay test. This is perhaps because it does not take as much time in developing essay test as objective tests. This possible advantage in the development of essay test is however neutralized by how long it takes to mark essay tests. It was also surprising that the teachers claimed that they did not have problem developing marking schemes for essay tests and other assessment tools. Indeed evidence exists (WAEC, 1996) to the effect that some teachers scored school-based essay tests without marking schemes while others were unable to mark various essay tests they gave their students for well over three months of the students having submitted their scripts.

Evidence from some studies conducted by the Accra Research Department of the WAEC Research Division appear to contradict the assertion by some teachers that they had no difficulty in developing and using assessment instruments, especially instruments other than testing. Substantial evidence exist in the literature to show that teachers generally, found it difficult to develop almost all the assessment tools and their corresponding marking schemes to a required quality standard. Most of them often resorted to the use of WAEC past questions for class tests and assignments. But the WAEC questions have a different purpose and are indeed summative in nature. Moreover, the WAEC questions often resorted to were based on only the Examination syllabuses of WAEC. In most cases these are narrower than the teaching syllabuses which form the basis of the school work.

Over reliance on the WAEC questions may result in the neglect of portions of the curricula which do not lend themselves easily to paper or pencil tests. The need for skills in developing diagnostic, behavioural and practical assessment becomes urgent.

Incidentally, less than half of the teachers in all countries participated in any in-service training programme on assessment. Consequently, an overwhelming majority of school managers and teachers across countries opined that they needed additional training in assessment. Among others they identified the following assessment areas/types: Behavioural Assessment, Diagnostic/Formative Testing, Practical Skills Assessment and Assessment using Projects

Apparently, many of the respondents were aware of their weaknesses in keeping abreast with modern trends in assessment. This might explain their overwhelming crave for additional training in assessment techniques. Though quite a sizeable proportion of the Nigerian teachers, for instance indicated that they had had a previous training in assessment during pre-service training, they still indicated their willingness for further training on the subject matter. This finding is a strong justification for having embarked on this study.

Equally important are the assessment areas which respondents had specified for this additional training. These specified areas could provide a guide in planning a training programme for teachers in a bid to equipping them with the necessary and appropriate skills. This would enable them to be more confident in implementing the continuous assessment programme.

### 8. RECOMMENDATIONS

From the findings and the foregoing discussion, the following are recommended as a way forward.

- (1) Teachers at the pre-tertiary level of education should be given refresher courses in the development of various assessment tools and their corresponding marking schemes/scoring keys. This refresher course should focus on: Behavioural Assessment, Diagnostic/Formative test, Practical Skills Assessment, Interview and Assessment using Projects.
- (2) The proposed refresher course should be done in phases beginning with the schedule officers in-charge of assessment at the district/local government level.
- (3) Periodic refresher courses should be organized for school managers and teachers to minimize the incidence of non-uniformity in the use of the assessment tools and management of CA scores.
- (4) Required conditions listed in Finding 4 should be improved upon to motivate teachers to approach CA with favourable attitude.
- (5) The Ministries of Education of the various countries should seek the assistance of corporate bodies to sponsor training programmes for their teachers and administrators/managers.

### 9. CONCLUSION

The commitment of WAEC to improving the validity and reliability of school-based assessment is without any doubt. This Needs Assessment Study provides a justification for an intervention which is aimed at strengthening the capacity of teachers in school-based assessment at the pre-university level of education. WAEC and the World Bank are therefore collaborating with the World Bank under the Global Partnership for Assessment of Educational Achievement programme to achieve this end.

#### **REFERENCES**

Adeyegbe S.O. (1992). *Management of assessment: the Nigerian teachers'* approach and its implications on certification at secondary school level. A paper presented at the 19<sup>th</sup> IAEA annual conference Mauritius May 31 – June 4 1993.

Alausa, Y.E. (1988). A formative evaluation of continuous assessment practice in Ijebu North local government area, Ogun State. Unpublished M.Ed dissertations, University of Ibadan.

Akinpelu, J.A. (1993): "Ethical issues in examination malpractice:" causes, implication and remedies.

Amedehe F.K (1988). *Models of combining continuous assessment scores with external examination scores for selection and certification.* Unpublished doctoral dissertation, University of Pittsburgh, Pittsburgh.

Emeke, E.A. (1996). Psychological dimensions of continuous assessment implementation on teachers and students in secondary schools in Oyo State. A paper presented at the WAEC monthly seminar series.

Emmanuel, E.E. (1990). *Evaluation of continuous assessment practice in Cross River State*. Unpublished M.Ed dissertation, University of Ibadan.

EQ Review (2003). Educational quality in the developing world, vol. 1, No.1 Heartele & Calfee R. (1988): school achievement thinking about what to test.

McGaw, Barry (2006). 'Assessment fit for purpose.' Keynote presentation at the 32<sup>nd</sup> IAEA annual conference held in Singapore.

Quansah K.B (2005). Continuous assessment handbook. Ghana education service publication. (BECAS project document).

WAEC (1990). A research report on "the relationship between school estimates and ordinary level examination results: Science and mathematics. WAEC publication. Accra department of WAEC research division.

WAEC (1993). A research report on "Ghana basic education certificate examination (BECE): Relationship between Internal and external assessments. WAEC publications. Accra department of WAEC research division.

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