Measuring Continuous Assessment Competencies of Primary School Teachers

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Abstract

There is a popular saying that if you don't know where you are going, you won't know when you get there'. But there is more to it as you need to be aware of road signs which are guides that will make you know when you get there. This explains the position of continuous assessment (CA) in schools. This study is a survey type and it measured the continuous assessment literacy of primary school teachers using a sample of 102 teachers taken from two geographically contiguous local government areas. The only instrument for the study was Teacher Continuous Assessment Literacy Scale (TCALS) with four different subscales namely teachers' knowledge (r = .90), teachers' perception (r = .93), teachers' attitude (r = .92), and teachers' continuous assessment practice of (r = .91). The findings revealed that the teachers were highly literate in CA and that 64.3% of the variance in teachers' CA practice is attributable to teachers' knowledge, perception and attitude towards CA. Regression coefficients further show that of the three predictors the teachers' perception of CA has the most significant contribution($\beta = .504$) followed by teachers' knowledge ($\beta = .290$) to the criterion variable. It is recommended amongst others that government units and agencies responsible for the training and retraining of teachers should send teachers out on periodic workshop in order for them to update their knowledge of continuous assessment practice.

Key Words: Continuous Assessment, Competence, Teachers, Practice, Attitude, Knowledge, Perception

INTRODUCTION

The teaching and learning process according to Alonge (2003) will not be complete unless the students taught are examined, their scripts marked and their result released as and when due. The situation whereby students are not attended to in classroom with backlog of examination results should be a matter of great concern to all stakeholders in the education sector.

In the attempt to provide solutions to problems militating against effective teaching and assessment in Nigeria primary schools, Obanya (2004), stressed the need to improve in-service training and staff development opportunities for teachers to avoid situations whereby the present knowledge and skills of practicing teachers will grow increasingly outdated and inadequate to meet current demands of assessing effectiveness of learning through continuous assessment. These needs have become

more urgent in the present educational setting because the introduction of the current free and compulsory Universal Basic Education (UBE) programme with its challenges of Continuous Assessment (CASS) signifies a greater responsibility for the practicing teacher who is expected to structure instructions, develop, adapt, obtain and administer several instruments in order to get comprehensive and cumulative information on students, (Okpala & Onocha, 2001). The teacher is also expected to keep accurate cumulative record of data on each student for further use such as aiding the student's further development, feeding necessary information to parents and/or guardians and for general academic purposes (Obe, 1983). These expectations have a lot of assessment implications for which practicing teachers need to be retrained.

Continuous assessment has been defined as —the systematic collection of marks or grades over a period of time and their aggregation into a final grade. The National steering committee on Continuous assessment in Nigerian schools cited by Ipaye (1984) defined Continuous assessment as —a method of ascertaining what a pupil gains from schooling in terms of knowledge, industry and character development, taking into account all his/her performances in tests, assignments, projects and other educational activities during the entire period of an educational activities during a given period of term, year or during the entire period of an educational level.

The issue of large classes is one of the problems militating against effective teaching and assessment in Nigerian primary schools (Bamisaye, 2002). This problem could be attributed to the insufficient human and material resources required for the implementation of quality teaching and the associated CASS programme in the schools. For example, the assessment needs of teachers in highly populated schools in terms of provisions, administration and scoring of instrument, reporting pupils' progress to interested persons, diagnosing pupils' academic problems and providing guidance, counseling service based on the diagnosis, prognostic and remedial are likely to be much more than those teachers in moderately populated schools. Ohuche (1988) also pointed out that teachers could not introduce innovations both in the teaching and evaluation of their students partly because of the —straight jacketl syllabuses followed by the external examining bodies and partly because teachers were not meaningfully involved in the evaluative part of their job. Therefore, the continuous assessment system of evaluation was aimed at correcting the anomalies inherent in the one-shot summative evaluation.

The form of assessment in which the students' performance in a one short test determines his/her achievement has a number of demerits. On the contrary, continuous assessment is a method in which the student's performance in a term, session or a course is determined using a series of tests and other instruments administered to the students at various time during the term, session or course. Continuous assessment as an evaluation technique therefore takes cumulative record of the students' behaviour or performance through the term, session or course.

Consequently, the Federal Ministry of Education Science and Technology (1985) handbook emphasized the use of continuous assessment system of evaluation. According to the curriculum (FME, 1989, p.4) —there should be efforts to evaluate the whole spectrum of abilities and competencies both at convenient intervals and at the

end of the programme. There should be continuous assessment and public examinations. The spectrum of abilities, attitudes, and competencies could be comprehensively assessed by the use of such techniques as objectives and essay questions, practical exercises including field work.

After years of supposed implementation of Continuous Assessment in Nigeria, research findings show that continuous assessment is not being adequately implemented in many school subjects (Ekwonye, 1987; Nzewi, 1990; Egwu, 1989). Ekwonye (1987) and Eze (1990) observed that problems exist in the implementation of continuous assessment in all subject areas. Ekwonye (1987) specifically mentioned that teachers do not possess the required competencies for implementation of CA. Obe (1996) concurred that teacher's general lack of skill in objectives test construction and incompetences in observational techniques for assessing behaviour contributes to the poor implementation of continuous assessment in Nigerian primary schools. Eme (1985) on the other hand observed that the task of continuous assessment due to frequent testing and marking of papers, increase teachers' work load and weigh them down. Kanno (1985) also reported that teachers focused their greatest attention on measuring cognitive attainment rather than affective and psychomotor behaviour. Corroborating the assertion of Kanno, Mkpa (1987) indicated that there is still a preponderance of cognitive testing in the schools.

In Nigeria, the problems of the implementation of continuous assessment could be categorized into two major groups. The first has to do with enormity of teachers' tasks and the other has to do with the problem of conservatism. An average class teacher at every level of schooling in Nigeria has many responsibilities on his shoulder; he has many students to teach meaning that he has many scripts to mark. He has to perform the roles of surrogate parents, liaise with the students' homes where necessary and on many occasions perform the duties of a counsellor.

The average class size in most public educational institutions in the country is larger than what is manageable for a teacher. In a situation where the class size is small, it will be easy for the teacher to painstakingly grade students' works and pass useful comments that will make it possible for students to independently correct themselves thereby improving and promoting learning. Apart from the workload of the teacher, the issues of knowledge of assessment constitute another category of challenges. Premised on the background provided above, this study sought to measure the continuous assessment competencies of primary school teachers in Ijebu-Ode and Odogbolu Local Government Areas of Ijebu division of Ogun State.

Research Ouestions

- 1. What is the level of teachers' knowledge, perception, attitude and teachers' continuous assessment practice?
- 2. Is there any significant relationship between the teachers' knowledge, perception, attitude and teachers' continuous assessment practice?
- 3. What is the composite contribution of teachers' knowledge, perception and attitude towards continuous assessment to their continuous assessment (CA) practice?

4. What is the relative contribution of teachers' knowledge, perception and attitude towards continuous assessment to their continuous assessment (CA) practice?

MATERIALS AND METHODS

StudySample

One hundred and two teachers (n=102) participated in the study out of a total of 1713 from twenty primary schools in Ijebu-ode and Odogbolu Local Government Areas of Ijebu division of Ogun state. These two local government areas were selected because they are geographically contiguous and represent urban and rural demographic regions. From each of the selected schools average of 5 teachers were selected. Both levels of sampling were done using using simple random technique.

Instrumentation

A composite instrument known as teachers continuous assessment literacy survey (TCALS) was used to collect data for the study. The instrument was developed by the researchers. TCALS is made up of four parts apart from section A that captures demographic information about the respondents. The four parts include:

- a) The knowledge assessment subscale, consisting of 13 items with a score range of 13-26. It is a measure of teachers' knowledge of continuous assessment in terms of scope, characteristics and rationale
- b) The teachers' perception subscale consisting of 10 items has a score range of 10 20. The subscale measured the respondents' perception of the rights of the pupil and the obligation of the teachers.
- c) The 15-item attitude survey subscale with a score range of between 15 and 60, measured the general attitude of the teachers towards continuous assessment and
- d) The 11-tem Teachers' Continuous Assessment Practice subscale. The subscale had a score range of 11 to 44 and it is a measure of the continuous assessment behaviour of the teacher in the classroom

Validation and Reliability of the Instrument

The draft version of TCALS was given to experts in educational evaluation and educational psychology who did a part to part critique of the instrument to ensure its suitability in content, language and format. The final version of the instrument was trial tested on a parallel sample of 30 teachers. The internal consistency of the teachers' perception, teachers' attitude and teachers' Continuous assessment practice subscales were established using cronbach alpha, while that of the teachers' knowledge subscale was established using KR-21. The reliability coefficients obtained were as follows: teachers' knowledge subscale (r=.90); teachers' perception subscale (r=.93); teachers' attitude subscale (r=.92) and teachers' continuous assessment practice subscale (r=.91).

Data Collection and Analysis

The researchers administered the instrument to the respondents in their various schools and the whole exercise lasted a week. The data collected were analysed using descriptive statistics to provide information about the level of continuous assessment literacy of the primary school teachers. In addition, correlational statistics and multiple regression were used to explore the relationships between the variables and to explain the proportion of variance in teachers' continuous assessment practice predicted by other variables of the study.

RESULTS AND DISCUSSION

Research Question 1

What is the level of teachers' knowledge, perception, attitude and teachers' continuous assessment practice?

Table 1. Mean and standard deviations of teachers' score on teachers' continuous

| assessment interacy survey (1 cm2s) | | | | |
|-------------------------------------|------|------|--|--|
| Subscale | Mean | S.D | | |
| Teachers' knowledge of C.A | 19.6 | 5.3 | | |
| Teachers' perception of C.A | 16.3 | 4.7 | | |
| Teachers' attitude toward C.A | 37.9 | 12.4 | | |
| Teachers' C.A. practice | 29.7 | 9.8 | | |

Table 1 indicates mean of 19.6 out of a possible score range of 13 to 26 with a standard deviation of 5.3 to teachers' knowledge of CA This finding indicates a high level of knowledge of continuous assessment (CA) among the primary school teachers. For teachers' perception of CA, mean score of 16.3 with a standard deviation of 4.7 were recorded within a score range of 10 to 20. The indication of the statistics was a high level of perception of CA among the primary school teachers. Mean of 37.9 and standard deviation of 2.4 were recorded for teachers' towards CA within a possible score range from 15 to 60.

The result implied a moderately positive level of attitude of teachers' towards CA. Meanwhile, 29.7 and 9.8 were recorded as the mean and standard deviation respectively for teachers' CA practice. The range of scores is 11 to 44. The result shows that the primary school teachers had a fairly above average level of CA practice.

About average attitude and CA practice of teachers despite high levels of their knowledge and perception shows there were other challenges limiting their performance. They may likely be constrained of non availability of required facilities, outrageous class size, excess workload, poor level of motivation and poor conditions of service.

Research Question 2

Is there any significant relationship between the teachers' knowledge, perception, attitude and teachers' continuous assessment practice?

Table 2. Zero-order correlations between subscales of the teachers' continuous assessment literacy survey (TCALS)

| | Teacher's knowledge of C.A | Teachers' perception of C.A | Teachers attitude toward C.A | Teachers' C.A. practice |
|--------------------------------|----------------------------------|-----------------------------------|------------------------------------|-------------------------------|
| Teachers' knowledge of C.A | 1 | .884** | .786** | .768** |
| Teachers' perception of C.A | | 1 | .882** | .796** |
| Teachers attitude toward | | | 1 | .713** |
| C.A Teachers' C.A. practice | | | | 1 |

The results from Table 2 using Zero – Order Correlations generally indicate high level of relationships among the four variables of interest. Meanwhile the highest correlation was observed between the teacher's knowledge of CA and teachers' perception of CA (r = .884, p<.01). Higher levels of correlation were recorded for interaction between the teachers' perception of CA and teachers' attitude towards CA (r = .882, p<.01), between teachers' perception of CA and teachers' CA practice (r = .796, p<.01) and between the teachers' knowledge of CA and teachers' attitude towards CA (r = .786, p<.01). Other bivariate correlations were moderately high and statistically significant too and they include a correlation coefficient of .768 (p<.01) between teachers' knowledge of CA and teachers' CA practice and a correlation coefficient of .713 (p<.01) between teachers' attitude and teachers' CA practice.

The implication of the findings above is that all the variables in the TCALS are important for consideration to improve and enhance continuous assessment practice in primary schools based on the teacher competencies of the process of assessment. However, the relative interaction between the independent variable and the dependent variable that calls for the best attention when planning in- service training and workshops for teachers is the teachers' perception of CA and teachers' CA practice. The three independent variables: teachers' knowledge of CA, perception of CA and attitude toward CA were found to be significantly related to teachers' CA practice. The three variables deserve attention if we are to record remarkable improvement in the continuous assessment (CA) practice of primary school teachers.

Research Question 3

What is the composite contribution of teachers' knowledge, perception, and attitude towards continuous assessment to their continuous assessment (CA) practice?

Table 3. Composite contribution of knowledge, perception and attitudes on teachers

| CA practice | | | | |
|-------------------------------------|-------|--|--|--|
| Parameter | Value | | | |
| Multiple Regression Coefficient (R) | 0.808 | | | |
| R Square | 0.653 | | | |
| Adjusted R Square | 0.643 | | | |
| Standard error of estimate | 5.887 | | | |
| F() 3.98 | 61.52 | | | |
| P | 0.000 | | | |

The multiple regression coefficient (R) showing the relationship between the independent variables (knowledge, perception and attitude towards CA) and dependent variable (Teachers' CA practice) as shown in Table 3 is 0.808. The adjusted R square equals 0.643 meaning that 64.3% variance in teachers' CA practice is accounted for by their knowledge, perception and attitude towards CA.

Further verification on the significant linear relationship existing between independent variables and dependent variable using regression, ANOVA produced $F_{(3.98)}$ ratio 61.52 (p < 0.05). This implies that there is significant linear relationship between the independent variables and the dependent variable.

The composite contribution of the three variables to CA practice of the teachers is quite high and this goes further to confirm the significant relationship that exists between each of the predictor variables and the criterion. The model is parsimonious for providing explanation to variance in teachers' CA practice.

Research Question 4

What is the relative contribution of teachers' knowledge, perception, and attitude towards continuous assessment to their continuous assessment (CA) practice?

Table 4. Relative contribution of knowledge, perception and attitudes on teachers' CA

| | F | | | |
|------------------------------|---------------------------|-------|-------|--------|
| | Standardized coefficients | T | value | Remark |
| | Beta. | | | |
| Teachers' perception of C.A | 0.504 | 3.019 | 0.003 | S |
| Teachers' knowledge, of C.A | 0.290 | 2.283 | 0.025 | S |
| Teachers attitude toward C.A | 0.040 | 0.317 | 0.752 | NS |

S = significant at 0.05 alpha level

NS = Not significant at 0.05 alpha level

Among the three predictors shown in Table 4, teachers' perception of CA contributed most to their CA practices with $\beta=0.504$; t=3.019; P<0.05. Next is knowledge of CA with $\beta=0.290$; t=2.283; p<0.05. Teachers' attitude towards CA contributed least to variance in their CA practice with $\beta=0.040$; t=0.317 at p>0.05. The findings therefore imply that only the teachers' perception and knowledge of CA contributed significantly to variation in their CA practice.

The imperative is that teachers cannot be poor in knowledge of CA and we expect them to do the needful in terms of conduct of CA among their pupils. The idea is what you do not have you cannot give. Teachers' knowledge and skills in CA must be highly enriched. Similarly, their perception of CA is another factor of significance. The way they see CA matters much. Do they actually see the need for it? Do they realize how indispensable CA is in classroom teaching and learning activities? These are questions that must be answered in affirmative before we can think of remarkable improvement in the conduct of CA from the teachers. Once teachers' performance level of CA is high it suggests high attitude towards it in the first instance.

CONCLUSION AND RECOMMENDATIONS

To make effective implementation of continuous assessment as suggested by the National Policy of Education a reality, there is need to focus more attention on competence level of the teachers. Since classroom teaching is not meaningful without evaluation and continuous assessment in specific terms, it becomes necessary and essential for teachers to be highly committed to it and it is a function of direct effects of teachers' knowledge of CA teachers' perception of CA and teachers' attitude towards CA as suggested by this study.

The researchers would like to lend support to the notion that —no nation can rise above the quality of its teachers (Federal Republic of Nigeria, 2004, p. 39). Therefore, there is a need to make the teachers preparation programme richer in training in assessment tools, skills and competence for pre-service teachers. The various units and agencies of government responsible for training and retraining of teachers should consider it worthwhile to send out their teachers for workshop on continuous assessment on periodic basis in order for them to update their knowledge of current trends, events and innovation with a view to ultimately improve teaching learning outcomes.

The required equipment in terms of computer facilities should be made available in schools to facilitate effective implementation of CA policy as enshrined in the National Policy of Education.

Bearing the above in mind, we will begin to realize the significance of CA and by extension positive impact of resources deployed by the government to the education industry in terms of desirable learning outcomes.

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BIO - DATA

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