

**BANE FOR EFFECTIVE IMPLEMENTATION OF CONTINUOUS
ASSESSMENT IN CHEMISTRY IN EBONYI STATE SECONDARY
SCHOOLS OF NIGERIA**

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Abstract

This study was carried out to fine out the factors that hinders the effective implementation of continuous assessment in chemistry in Ebonyi State Secondary Schools. The study was conducted using 90 chemistry teachers, 30 each from the three educational zones in the State. The instrument used was teacher questionnaires, which was made up of 17 items each question measuring the problem areas against effective implementation of continuous assessment in chemistry. Data were collected and duly analyzed. Based on the analysis made some findings were made which include inadequate chemistry teachers, large class and lack of seriousness among teachers to mention but a few. In view of the findings some recommendations were made on how best continuous assessment could be effective implemented in chemistry in Ebonyi State Secondary School

KeyWords: *Assessment, continuous, Implementation assessment, continuos assessment*

Introduction:

In everyday life Assessment is used in human interaction. In order to access the work of anything information must be provided which judgment must be base on. In educational sector, information to determine how well or poor in which students have performed is needed.

Continuous assessment is viewed as barometer where by students academic achievement or outcome can be gauged. It is a class room strategy implemented by teachers to ascertain the knowledge, understanding and skills attained by students, (Azubike 2013). Further more, continuous assessment is described as an on going process of gathering, and interpreting information about learning achievement that is used in making decision about what to teach and how well students have learned. (Ntiko 2004). He as well highlighted some merits of continuous assessment to include. It promotes frequent interaction between students and teachers which enable the teacher to evaluate the strength and weakness of learners and identified which student need review or remediation.

Students receive feed back base on performance that allow them to focus on topics they have not mastered.

The continuous assessment process is much more than examination of pupils' achievement. It is also a powerful diagnostic tool that enable student understand areas in which they are having difficulty and need to concentrate their efforts in those areas. Continuous assessment also allows teachers to monitor the impact of their lesson on students understanding. Teachers can modify their pedagogical strategies to include the construction of remediation activities for pupils who are not working at the expected grade level (**Eze, 2012**).

According to **Ezewu and Okoye (1986)**, continuous assessment is reviewed as a showcasing the extent of students performance in all the expected changes in his or her behaviour, from the day he enters school to study a course and a judicious accumulation of all pieces of data derived from his or her purpose with view of using them to guide and shape the student and to serve as basis for making important decisions about the child. That is to say continuous assessment is systemic, comprehensive and cumulative and guidance oriented. Continuous assessment is systemic in view that it is planned, graded to suit the age and experience of the child and it's govern at a suitable intervals, during the school year. Appropriate timing saves students from being tested to death or becoming bored with too frequent assessments comprehensiveness of continuous assessment means that, it is not focused on academic skills alone. It includes the cognitive; affective and psychomotor domains. The cumulative characteristics of continuous assessment means that all information gathered on individual has to be pooled together before decision can be taken. More so, continuous assessment is guidance oriented means that the information collected is to be used for educational, vocational and personal-social decision making for the child. Guidance and counseling activities thrive better on valid sequential systemic continuous cumulative and comprehensive information. Continuous assessment is also described as a medium whereby the final grading of student in the cognitive, affective and psychomotor domains of behaviour takes account in a systemic way of all his or her performance during a given period of schooling. Such an assessment involves a great variety of modes of evaluation for the purpose of guiding and improving the learning and performance of the students (Federal Ministry of Education 2004).

Prior to the institutionalization of continuous assessment, the primary and secondary schools in the country based their assessment and promotion of learners on result of promotion examination that usually come up at the end of each academic session. Through the result, summary judgments were usually passed on the children's learning and achievement. Purposes of passing these examinations, students diverse various means to cheat, more daring learners usually the more insecure students, were all out for live papers (Ipaye 1982). This was the genesis of large scale examination malpractice which characterized, the years, between (1970-1978) in the history of Nigeria Education.

Not with standing the benefits continuous assessment offers to schools, the practice of continuous assessment implementation in secondary schools face some challenges such challenges may include large class sizes, staffing, remediation and

enrichment, learners' absenteeism, insufficient supply of teaching and learning resources, poor teacher networking, inadequate monitoring and feedback, unbearable administrative workload, lack of skills in test construction, poor record keeping by educators, insufficient time for teaching and assessment, low qualification of teachers, lack of equipment, lack of remedial instruction, lack of moderator and illiteracy levels of parents, (Alausa 2003).

These challenges hamper the implementation of continuous assessment by adversely impacting three aspects the implementations process, which includes (i) designing; the designing aspect of continuous assessment involves development lesson plans, assessment polices and test construction.

ii. Administration; The challenges in terms of administration are lack of moderation from the school management team, lack of feedback from school management team to teachers and from teachers to learners, learners discipline manifesting in learners' absenteeism and other behavioral problems, lack of monitoring and support from members of the school management team and lack of parent involvement and participation.

iii. Evaluation; this involves the process informed by recorded data on the learning of learners; therefore it can be challenged by lack of meticulous record keeping.

The combinations of these challenges have negative bearing on the implementation of continuous assessment in secondary schools.

Statement of the problem;

Teaching and learning process in our secondary schools mostly in chemistry need a continuous follow -up to achieve its objective, in view of this the federal ministry of education in designing the 6-3-3-4 system of education in Nigeria emphasized the use of continuous assessment techniques in evaluating students' progress in schools, Despite these, observations have shown that, the use of continuous assessment effectively to assess students progress is rather ignored and considered as mere theory in most secondary schools in Ebonyi state. The reason behind this ugly trend might not be unconnected with the proliferation of large class, poor staffing, learner's absenteeism, insufficient supply of teaching and learning resources, inadequate monitoring and feedback to mention but a few.

In view of these, the aim of this work is to investigate and find out the likely challenges which associated with the effective implementation of continuous assessment in chemistry in Ebonyi State secondary schools.

The purpose of study:

The purposes of this study among other thing include the following.

1. To find out the challenges that hinders the effective implementation of continuous assessment in chemistry.
2. To determine how competent are chemistry teachers in the implementation of continuous assessment in secondary schools.
3. To find out the various methods chemistry teachers employ to

assess students' performance continuously in secondary schools.

Research Question:

1. What are the challenges affecting the effective implementation of continuous assessment in chemistry?
2. To what extent do chemistry teachers competent in the effective implementation of continuous assessment in secondary schools?
3. What, are the methods' chemistry teachers employ to assess students' performance in chemistry continuous?

Design of the study:

A descriptive survey research design was adopted for the study. In this case information was gathered from group of people viewed as exact representative of the entire group, according to their responses the variables were duly described.

Population for the study:

The population of the study covers all the chemistry teachers in Ebonyi State secondary education which cut across the three educational zones in the state namely: Afikpo Zone, Onueke Zone and Abakaliki Zone

Sample and sample techniques:

Simple random sampling was used to select 30 chemistry teachers each from the 3 Educational zones making a total of ninety (90) chemistry teachers.

Instrument for data collection:

The instrument used for data collection was a questionnaire. The items were structured to reveal the various problem areas associated with effective implementation of continuous assessment in chemistry in Ebonyi State secondary schools. The 90 questionnaires were distributed to 90 chemistry teachers. 30 each from the three educational zones in the state.

Validation of the instrument:

The instrument for data collection was validated by five (5) experts from Chemistry Department and measurement and evaluation unit in Department of Education Foundation in Ebonyi State Collage of Education, Ikwo.

Method of Data Analysis:

The data collected were statistically analysis using mean.

Decision Rule:

A mean less than 2.5 is rejected while mean of 2.5 and above are accepted.

The results of this study were presented in tables base on the research questions.

Research question 1:

what are the challenges affecting effective implementation of continuous assessment in chemistry?

Table 1: Description of the challenges affecting effective implementation of Continuous assessment in chemistry.

S/N	Items	SA 4	A 3	D 2	SD 1	N 90	\bar{X}	Decision
1	<i>I find it difficult to carry out continuous assessment because of large class</i>	40 (160)	20 (60)	10 (20)	20 (20)	(260)	2.85	Accepted
2	<i>As a chemistry teacher I viewed continuous assessment as time consuming and burdensome</i>	30 (120)	35 (105)	15 (30)	10 (10)	(265)	(2.94)	Accepted
3	<i>Inadequate availability of chemistry teachers affects</i>	15 (60)	40 (129)	20 (40)	15 (15)	(235)	2.61	Accepted
	<i>implementation of continuous Assessment in chemistry</i>							
4	<i>Insufficient supply of teaching and leaning resources hinders implementation of continuous assessment in chemistry</i>	10 (60)	50 (150)	25 (50)	5 (5)	(245)	2.72	Accepted
5	<i>Poor record keeping by chemistry teachers affects effective implementation of continuous Assessment</i>	25 (100)	45 (135)	10 (20)	10 (10)	(265)	2.94	Accepted
6	<i>When teachers teaching chemistry are not educationally qualified implementation of continuous assessment would</i>	40 (160)	30 (90)	16 (32)	4 (4)	(286)	3.17	Accepted

	<i>affected.</i>							
7	<i>Poor monitoring of teachers affects effective implementation of continuous assessment negatively</i>	35 (140)	27 (81)	13 (26)	15 (15)	(262)	2.91	<i>Accepted</i>
8	<i>Lack of skill test construction can affect the effective implementation of continuous assessment in chemistry</i>	32 (128)	38 (114)	19 (38)	3 (3)	283	3.14	<i>Accepted</i>

The result obtained from the analysis indicated that all the items had a mean score greater than 2.49 which showed the level of acceptability in the decision rule. Based on the analysis, one can categorically states that all the items in research question one can be viewed as challenges that negatively affect the effective implementation of continuous assessment in chemistry in secondary schools.

Research question 2: To what extent do chemistry teachers competent, in the effective implementation of continuous assessment in secondary school?

Table2: Description of the extend of the chemistry teacher's competent in the effective implementation of continuous assessment in secondary schools.

S/N	Items	V.G E 4	G.E 3	LE 2	N.E 1	N 90	- X	Decision
1	To what extent do chemistry teachers proficient in measurement and evaluation	15 (60)	10 (30)	15 (30)	50 (50)	(170)	1.88	Less extent
2	To what extent do chemistry teachers keep proper record of continuous assessment test?	15 (60)	16 (48)	25 (50)	34 (34)	(192)	2.13	Less extent
3	To what extent do chemistry teachers understand the techniques involve in carrying out continuous assessment	19 (76)	18 (54)	29 (58)	24 (24)	(212)	2.35	Less extent
4	To what extent do chemistry teachers implement continuous assessment with integrity in the conduction and administration	14 (56)	15 (45)	30 (60)	31 (31)	192	2.13	Less extent

From the table above it was observed that greater number of teachers were of the opinion that chemistry teachers teaching chemistry in secondary schools in Ebonyi state are not competent in the effective implementation of continuous assessment in chemistry. This was indicated with the mean scores of less than 2.5 in all the items in the table which showed extent in the decision rule. So for continuous assessment to be effectively implemented teachers must be competent.

Research question 3: what are the methods chemistry teachers employ to access students performance in chemistry continuous?

Table 3: Descriptions of method chemistry teachers employed to access student performance

S/N	items	SA 4	A 3	D 2	SD 1	N 90	- X	Decision
1	As chemistry teacher I do not always make use of teacher made test to access students performance	10 (40)	5 (15)	35 (70)	30 (30)	155	1.72	Rejected
2	Chemistry teachers don't make use of observational instrument to access performance in chemistry	40 (160)	25 (75)	10 (20)	15 (15)	270	3.0	Accepted
3	As chemistry teacher I don't include take home assignments for assessment of students performance	50 (200)	20 (60)	10 (20)	10 (10)	290	3.22	Accepted
4	Most chemistry teachers don't include learners' attitude for assessment of performance	60 (240)	15 (45)	5 (10)	10 (10)	305	3.38	Accepted
5	Interviews and project works are not part of my instrument for assessment of performance in chemistry CA.	30 (120)	35 (105)	15 (30)	10 (10)	265	2.94	Accepted

The result obtained in the analysis in the above table revealed that most teachers teaching chemistry in secondary schools don't make use of appropriate method for conduction of continuous assessment; such are observational instrument, take home assignment, learner attitude and project. These are indicated with various mean scores greater than 2.5 starting from items 2-5 in the table. From the table only item one has mean less than 2.5 showing that most teachers make use of teacher made test which is not enough. With this one can categorically state that non, use of appropriate method for conduction of continuous assessment affect its effective implementation in chemistry in secondary schools in Ebonyi State.

Discussion:

The analyses in table one showed that, the following are some of the challenges that inhibit the effective implementation of continuous assessment, such are large class, its time consuming, inadequate availability of chemistry teachers in secondary schools, insufficient supply of teaching and leaning resources, poor record keeping unqualified chemistry teachers teaching chemistry, poor monitoring of teachers and lack of skill in test construction among teachers of chemistry in secondary schools.

Table two as well revealed the extent of competency of chemistry teachers in effective implementation of continuous assessment. The table showed that most teachers teaching chemistry in secondary schools are not competent in terms of continuous assessment implementation as indicated in the mean scores of the items at less extent meaning less than acceptable level of the decision rule. At this level of competency there would be inhibition in the effective implementation of continuous assessment in secondary schools.

Finally, table three revealed that, lack of using effective method and skills in teaching chemistry hinders effective implementation of continuous assessment in secondary schools in Ebonyi State.

Findings:

From the analysis of data collected the following findings were made.

1. The challenges for effective implementation of continuous assessment are; large class, the feeling that continuous is time consuming, inadequate chemistry teachers, insufficient supply of teaching and leaning resources, poor record keeping, unqualified chemistry teacher teaching chemistry, poor monitoring of teachers and lack of skill in test construction.
2. Most teachers teaching chemistry are not competent in terms of effective implementation of continuous assessment.
3. Non application of effective method of teaching and skills affect the implementation of continuous assessment in secondary schools.

Recommendations:

The challenges of effective implementation of continuous assessment are enormous. In view of these the following recommendations are made in this study

they include;

1. There should be strict control of student's placement in a class to avoid large class. That is to say the National policy on education on the bases of teacher student ration of 1:40 should be strictly implemented.
2. Government should at all time supply teaching and leaning materials to schools and make sure that they should at time to time carry out supervision and monitoring of teachers to make sure that the aims and objectives of continuous assessment are properly implemented.
3. There should be improvement of teachers' status and their teaching skills through regular sending the teachers to in- service training as this would enhance their skills in terms of test construction and effective teaching methods.
4. The employer of teachers of chemistry bearing in mind important of chemistry in the nation building should make sure that, only professional chemistry teachers are allowed to teach chemistry.

Conclusion:

This study was centered on the bane for effective implementation of continuous assessment in chemistry in Ebonyi State secondary schools. The research work revealed the various challenges that inhibit effective implementation of continuous assessment in chemistry such as large class, poor monitoring of teachers among others.

The work covered the three (3) educational zones in Ebonyi State. For effective carrying out the study 90 chemistry teachers, 30 each from each of the three (3) educational zones were used for data collection. In all seventeen (17) items teacher's questionnaire which measures the various challenging issues on effective implementation of continuous assessment in chemistry were used? The data were collection and analyzed. From the analysis some findings which pointed out some of the challenges against the effective implementation of continuous assessment in chemistry were made, which include inadequate monitoring and large class and so on. In line with the findings some recommendations where made such as implementation of national policy on teachers student ratio, effective monitoring of chemistry teachers. Finally, when these recommendations made were put into practice the challenges of continuous assessment implementation would be a thing of the past.

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