

# **ASSESSMENT STRATEGIES OF TEACHING AND LEARNING IN HIGHER EDUCATIONAL INSTITUTIONS AS PERCEIVED BY LECTURERS IN TERTIARY INSTITUTIONS IN ENUGU STATE.**

**BY**

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## **Abstract**

*This paper ascertained the formative and summative assessment strategies on teaching and learning in higher educational institutions in Enugu State. Two research questions were answered and one hypothesis was tested in this study. A descriptive survey design was adopted in the study. The sample comprised 200 lecturers (96 males and 104 female). The Instrument used for data collection was a 20 - item questionnaire. The instrument was face-validated by three experts, two in educational psychology and one in measurement and evaluation, all from Enugu university of Science and Technology validity. A reliability coefficient of 0.91 was obtained using Cronbach Alpha's method. The research questions were analyzed using mean scores and standard deviation while the hypothesis was tested at 0.05 level of significance using the t-test. The result of data analysis showed that the use of formative and summative assessment strategies enhance teaching and learning extensively. It was also noted that formative and summative assessment strategies have significant effect in improving the students' lecturing and lecturers teaching. Based on the findings, it was recommended that lecturers in tertiary institutions should beef up their assessment strategies in order to improve on the students' performance.*

## **Introduction**

Assessment plays a crucial role in the educational process. It determines much of the work students undertake, affects their approach to learning and is an indication of which aspects of the course are valued most highly (Brown, 2005). According to Ramsden (2001), assessment is defined as evaluation or appraisal. It is about making a judgment, identifying the strengths and weaknesses, the good and the bad, and the right and the wrong in some cases. It will almost inevitably include an element of subjectivity by the assessor because it

involves making a judgment. However assessment should be made as objectively, fairly and transparently as possible.

In the current climate of higher education, when it is widely recognized that both staff and students face pressure, there is general agreement that assessment is an issue that is particularly important and challenging (Ross, 2005). Assessment seems to be loitering expectantly in the corridors of higher education, thereby reinforcing that it will soon enter the classroom to serve the learner (Loacker, 1996). Assessment is the single most important factor in students' learning.

George and Cowan (1999) note that what and how assessment is carried out has a profound influence, for better or worse, on learning and is a major factor that can encourage either surface or deep learning. Assessment serves many diverse purposes such as motivating students, directing and enhancing learning. It provides feedback to students on strengths, weaknesses and how they might be improved. It provides feedback to the lecturers about students understanding and checks whether learning outcomes are being achieved (Zou, 2008). The primary purpose of assessment is to increase students' learning and development rather than simply grade or rank performance. It is necessary to make an assessment in order to grade performance, but grading is a secondary activity to the goal of helping learners improve the quality of their learning (Morgan & O'Reilly, 2000).

Recent work in Scotland showed that changes to assessment practices did not keep pace with the changing environment in higher education (Hornby, 2005). The rise in student population has stretched the unit of resources, resulting in unintended consequences. There is not enough assessment; feedback is too often slow and not meaningful. Also, the learning outcomes are often assessed several times with no rationale. There is little correlation between credit points, students and staff work load. Mechanisms are poor for co-ordination across modules and bunching of assessments results in school problems.

There are numerous forms of assessment. Assessment can be formative or summative. There is a distinction between assessment which is mainly intended to help the students learn and assessment intended to identify how much has been learnt According to Black and

William (2009), formative assessment is the most useful part way through a course or module and will involve giving the students feedback which they can use to improve their future performance. On the other hand, an assessment is summative in so far as it is being used to provide a summary of what a student knows, understands or can do and not to help by providing feedback to modify the teaching and learning activities in which the student is engaged (Baume, 2004).

In practice and to a varying degree, most forms of assessment probably try to do both although, the end of course examination where the only feedback received is a mark and is almost totally summative. There is a constant tension between formative and summative assessment. Methods that work well for one may not work well for the other (Gibbs, 1998). At the end, both forms of assessment students' achievement and retention in their academic work. The students tend to achieve more in learning and gain more knowledge when they are assessed using both forms of assessments. The advantages of formative assessment always compliment that of summative assessment. This at the end aids students' retention of materials learnt in the classroom and also enriches their knowledge of the world.

There is substantial evidence suggesting that there is significant room for improvement in assessment (George & Cowan, 1999). Recent review reveal that assessment is generally a weak area when compared to other aspects of the curriculum (Black, 1999). Feedback is complex and not easy; many factors need to be taken into account including number of students, time, resources and course objectives (Zou, 2008). Whereas, the

a growing recognition of the value of having a varied assessment regime, there continues to be too much emphasis placed on examination and standard tutor-marked essays and report. There is a danger that passive, bored students give back to teachers what they had already have been given in a worthwhile grade – grubbing way irrelevant to their future lives. Moreover, poor assessment practices has possibly crippled the educational system such that students' academic achievement has fallen below standard.

In a research conducted by Graybill (1995) it was found out young females were usually not rewarded for independence and non- conformity. High school females who enrolled in science and mathematics did not manipulate equipment as much as males did. They are relegated to the responsibility for general clean up. This common life experience of female does provide some foundation for the belief that social milieu, aspiration and rewards for males and females in our society should have some effects on their respective intellectual development. Consequently, sex differences or gender factors may affect the use of formative and summative assessment strategies which is the focus of the study.

It is arguable that assessment in Nigerian higher educational institutions are too often focused on the summative and the accumulation of marks coming at the end of courses while students would benefit from more opportunities to build on their strengths and learn (Hornby, 2005). Paradoxically, the government concern with standards of attainment and accountability favours summative over formative assessment. Research too often draws attention away from teaching and the curriculum utilization increases

attention on summative over formative (Yorke, 2005). It is necessary to reverse the above practice in tertiary institutions because formative assessment has been neglected in both public policy and every day practice (Black, 1999). Both assessment practices will go a long way to boost teaching and learning. There is therefore the need to ascertain the influence of formative and summative assessment strategies on teaching and learning in tertiary institutions in Enugu State.

### **Purpose of the study**

1. This study examined the impact of formative and summative assessment strategies on teaching and learning in higher educational institutions.
2. It ascertained the influence of above assessment strategies improving students' knowledge in tertiary institutions in Enugu State.

### **Research Questions**

1. How do formative and summative assessment strategies help in effective teaching of students in tertiary institutions in Enugu State?
2. How do formative and summative assessment strategies help in improving students' learning in tertiary institutions in Enugu State?

### **Hypothesis**

Ho<sub>1</sub> There is no significant difference between the male and female lecturers' perception scores on their use of formative and summative assessment strategies in teaching and learning in tertiary institutions in Enugu State.

### **Method**

The descriptive survey design was adopted. The study was directed at the

population of tertiary institution lecturers from five out of seven tertiary institutions in Enugu State. Two hundred lecturers were randomly drawn from two faculties that were selected using stratified random sampling techniques across the five tertiary institutions. In all, a total of 200 lecturers formed the sample size.

### Instrument

Data were collected using two basic instruments namely Formative and Summative Assessment Strategies on Teaching (FSAT) and Learning Questionnaire (LQ). The first instrument was a structural questionnaire that featured sections A and B. Section A was used to collect information on respondents' gender. Length of service and academic qualification were included in the teachers' questionnaire). The section B contained 20- item statement developed on a five (5) point Likert type scale. The data collected were analyzed

using statistical packages for social sciences (SPSS) and these included t-tests. In compliance with Nworgu (1991) a pre test of the instrument was carried out and tested with Cronbach Alpha coefficient and a reliability coefficient of 0.91 was obtained, which showed a strong reliability of the research instrument (Saners, Lewis and Thornhill, 2000).

### Results

The results of the study are presented in table 1-3 according to the research questions being answered.

**Research question 1:** How do formative and summative assessment strategies help in effective teaching of students in tertiary institutions in Enugu State?

**Table 1: Mean response on formative and summative assessment strategies on effective teaching of students in tertiary institutions in Enugu State.**

N=200

S/N	Questionnaire Items	SA 4	A 3	D 2	SD 1	$\bar{X}$	SD	Decision
1	Students learn better when they are assessed using formative and summative assessment strategies	70	64	50	16	2.94	0.96	Agreed
2	Formative and summative assessment strategies compel teachers to teach	82	60	35	23	3.01	1.02	Agreed
3	The use of formative and summative assessment strategies are helpful in teaching situations	65	63	48	24	2.85	1.01	Agreed
4	Students who are regularly assessed with the identified strategies have more benefit from the teaching.	73	61	42	24	2.92	1.03	Agreed
5	Formative and summative assessment strategies excite students during teaching process	56	66	41	37	2.71	1.07	Agreed
	Grand Means =					2.88	1.00	Agreed

Table 1 with the grand mean of 2.88 shows that respondents realize that the use of formative and summative assessment strategies help in effective teaching. Also, lecturers are compelled to teach when using formative and summative assessments in tertiary institutions in Enugu State.

### Research Question 2

How do formative and summative assessment strategies help in improving learning of students in tertiary institutions in Enugu State?

**Table 2: Mean Responses on the formative and summative assessment strategies used for improving learning of students in tertiary institutions in Enugu State.**

S/N	Questionnaire Items	SA 4	A 3	D 2	SD 1	$\bar{X}$	SD	Decision
6	Formative and summative assessment strategies enrich students knowledge in different subjects	75	45	45	35	2.80	1.13	Agreed
7	Students improve a lot in skills and knowledge when assessed with formative and summative assessment strategies	61	66	41	32	2.78	1.05	Agreed
8	Formative and summative strategies equip students with what they use to solve their daily needs	73	61	32	34	2.87	1.09	Agreed
9	Improved knowledge gained from formative and summative assessment strategies help students participate actively in teaching and learning process.	81	54	38	27	2.95	1.07	Agreed
10	learning process is made interesting and optimally benefiting with formative and summative assessment strategies	58	72	46	24	2.82	0.99	Agreed
Grand Mean =						2.84	1.06	Agreed

Table 2 with grand mean of 2.84 reveals that the use of formative and summative assessment strategies improve students' learning. Also, assessment strategies benefit students optimally as they gain knowledge and skills which they use to solve their daily problems and needs.

### Hypothesis

Ho<sub>1</sub> There is no significant difference between the mean ratings of male

and female lecturers on the impact of formative and summative assessment strategies on teaching and learning in tertiary institutions.

Table 3: The t-test of mean rating of male and female lecturers on the formative and summative assessment strategies on teaching and learning of students in tertiary institutions in Enugu State.

Gender of lecturers	n	$\bar{x}$	SD	df	Standard error	T-cal	T-crit	Decision
Male	96	2.96	0.96	198	0.72	1.15	1.96	Do not reject $H_0$
Female	104	2.80	1.01					

In the above table, the t-calculated (1.15) is less than the t-critical (1.96) at 0.05 level of significance. Thus the null hypothesis is not rejected indicating that gender is not a significant factor in the use of formative and summative assessment strategies by lecturers in tertiary institutions in Enugu State.

### Discussion

The result of data analysis for research question one revealed that the use of formative and summative assessment strategies enhanced teaching in tertiary institutions in Enugu State. This result agrees with the findings of Zou (2008) who confirmed that formative and summative assessment strategies provide feedbacks to lecturers on their strengths, weaknesses and how they might be improved. They also help to grade performance of the learners. The primary purpose of assessment is to make teaching and learning most effective.

From the result of data analysis for research question two it was observed in this study that formative and summative assessment strategies have significant influence in improving the students' learning. This result was in consonance with the findings of a study conducted by George and Cowan (1999), who noted that what and how assessment were carried out had a profound influence on learning and is a major factor that can encourage

either surface or deep learning. Assessment is the single most important factor in students' learning because it helps students to gather knowledge. It helps the learners to improve the quality of their learning.

The hypothesis tested showed that there was no significant difference in the use of formative and summative assessment strategies by male and female teachers. This showed that the female teachers were not inferior to the male ones in their ability to assess the students using formative and summative method. This disagreed with Gibbs (1998) who opined that there was a constant tension between formative and summative assessment emphasizing that methods that worked well for one might not work well for the other. Further, both sexes could use the two assessment strategies for efficiency and effectiveness on part of the students.

### Conclusion

The following conclusions were made:

- Use of formative and summative assessment strategies enhanced teaching.
- Formative and summative assessment strategies had significant influence in improving the students' learning.
- There was no significant difference in the use of formative and summative

assessment strategies by male  
and female teachers.

Practice (Ed.) *Teaching in higher  
education theory and evidence.*

### Recommendations

The following recommendations were  
made:

- a) Seminars should be organized by  
lecturers on other assessments  
strategies that can improve students'  
knowledge.
- b) Lecturers in tertiary institutions  
should be encouraged to make  
regular use of the formative and  
summative assessment strategies as  
they enhance teaching and learning in  
tertiary institutions.

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