# ASSESSMENT OF STUDENTS LEARNING IN THE CLASSROOM IN SECONDARY SCHOOLS IN DELTA NORTH SENATORIAL DISTRICT OF DELTA STATE.

## **Enwefa Chiekem**

Department of Guidance and Counselling, Delta State University, Abraka, Delta State, Nigeria.

**ABSTRACT:** The way and manner in which students go through specific steps or stages of learning or understanding resulted to the learning theories that must be met. These theories led to the assessment of student learning in the classroom in secondary schools. These theories are associated with certain type of instructions that yield productive outcomes in students learning in the classroom. The research design employed is the descriptive survey design. Two research questions were raised and two hypotheses were formulated for the study and tested at 0.05 level of significance. The sample of the study consisted of 360 secondary school teachers by means of stratified sampling technique. Questionnaire was used for gathering data for the study. Data collected were analyzed using mean and standard deviation for the research questions and t-test-statistic for the stated hypotheses. It was observed that there was significant difference between male and female teachers, urban and rural teachers' assessment of student learning in the classroom in secondary schools in Delta North Senatorial District. This implies that some teachers applied these theories hap-hazardly when assessing students learning in the classroom. It is therefore recommended that teachers should develop and try out new assessment methods that give them better information about how to help students improve; Teachers should endeavour to attend seminars, symposia, workshops and conferences regularly to update their professional competence in classroom assessment.

**KEYWORDS**; Assessment, Learning, Classroom and Theories of learning

## INTRODUCTION

One of the critical factors that impact the teaching and learning process is how to design effective instructions that can address diverse learning styles in the classroom and academic background. Learning is evidenced not only in changes in behaviour but also changes in cognitive process. Effective student learning occur as a result of effective teaching strategies in the classroom as well as teachers knowledge of the subject matter. However, a teacher's clarity, stimulation of interests and openness to opinions are other significant factors to manage learning efficiency and effectiveness (Lyons, McIntosh & Kysilka, 2003). Underlying all of this is the teachers understanding of learning theories and how to apply them to the cognitive, motivational and psychological learning process associated with academic success.

Learning occur as a result of observable changes in students behaviour that are acquired through conditioning, a process achieved by interactions with the environment (Brown & Green, 2006). Classrooms are the formal place which provides the opportunity of teacher-student interaction. The quality of teaching and learning environment in secondary schools is a continuing national concern. Learning is a lifelong complex activity which occurs in formal instructional settings and incendentally through experience (Driscoll, 2005). The environment

is considered as the complex set of physical, geographic, biological, social, cultural and political conditions that surrounds an individual and determines his/her form and nature of survival. Learning environment in secondary school is the aggregate of all external conditions and factors influencing the life and nurturing of students (Barab & Duffy, 2000; Fraser & Chionh, 2000). Studies reveals that there is a positive and significant relationship between classroom learning environment and students cognitive and affective outcomes (Goh & Fraser, 2000; Fraser & Chinoh,2000; McRobbie, Roth & Lucus, 1997). Research studies also revealed that the school where the classroom environment is fascinating for students and they feel ease and enjoyment, their achievement is good (Baek & Choi, 2002). In many studies of association between classroom learning environment and students' achievement, classroom learning environment has dimensions that have consistently been identified as determinants of learning (Khine, 2002).

Direct instruction is an approach to learning where students remain engaged and focuses while achieving desired learning outcomes. It requires face-to-face environments to establish a climate for collaborative learning that can enables students to comfortably share their thoughts in the classroom. Mastery learning is based on the belief that if instruction is organized, consistently monitored, and taught in a specific way and if students received consistent feedback on their performance, they can master curriculum knowledge (Ashman & Conway, (1997), mastery learning can yield positive outcomes if there are three active ingredients: clear mastery objectives, pre-established and high passing standards, and a criterion- references grading system (Gentile & Lalley, 2003). Nevertheless, experienced teachers usually set clear and achievable course objectives so that students can learn. They also support students to achieve pre-established standards of performance in a criterion –referenced manner. In mastery learning, knowledge serves as a prerequisite foundation for subsequent learning that one is expected to master a basic lesson or unit exam before proceeding to a more complex one (Davis & Sorrell, 1995). Students who do not achieve the expected mastery level have to receive remediation through tutoring, peer monitoring, small group discussions and or additional assignments. They have to learn and relearn and continue the cycle of studying and testing until mastery standard of performance is achieved. Moreso, teachers should be aware that students need to master fundamental as a criterion for passing the expected standard. In order to ensure students mastery of knowledge, teacher feedback is of critical importance in student progress. The feedback should be based on formative assessment during instruction rather than summative grade or test score at the end of a course (Lalley & Gentile, 2009).

Cognitive learning is consider as a change in cognitive thinking and focuses on internal mental processes that change the way people conceptualize, realize, and understand their environment (Brown & Green, 2006) cognitive learning emphasizes social interactions, a purposeful relationship among individuals and their perceived environment. In social interaction, individuals are consider not passive object but interactive and intentional subjects who interact with the environment based on combine thought and behaviour (Bigge & Shermis, 2004). Cognitive learning is to develop student academic and thinking skills from a novice level to a more expert and to provide adequate experiences in which students structure the learning and teaching themselves (Orlich, Harder, Callahan, Trevisan & Brown, 2004). The primary methods that incorporates cognitive ideas into teaching is the employment of information processing which refers to how information is learned, modified or changed (Lefrancois, 2000). Cognitive learning emphasized on perceptual and conceptual processes that allow the learner to perceive and determine functions of recognition, memory and problem solving which is similar to a computational system that processes information from concrete to abstract, simple

to complex events, and to provide learners with multiple examples to reinforce the organized information (Taylor & Mackenney, 2008).

Self-directed learning aims to develop student autonomy and requires students to take responsibility for their own learning to reach desired outcomes. Among the essential abilities found in self-directed learners are the abilities to engage in divergent thinking; to formulate questions and locate sources of data to answer the questions; to organize, analyze, and evaluate the data; and to generalize and communicate the answers to the audience (Tennant, 1998). In order to develop effective self-directed instruction, teachers should emphasize individual and small group work for discussion and team projects. Teachers should also place a focus on student exploration and student-centeredness and invest a large amount of time in planning self-directed learning tasks (Orlich, Harder, Callahan, Trevisan and Brown, 2004). Effective self-directed learning takes place when learners have access to authentic tasks and expert guidance and to participate in social contexts for skills development (Smith and Sadler-Smith, 2006).

Constructive learning is based on the belief than an individual constructs his or her understanding of the world in which he /she lives by reflecting on personal experience. Constructive learning occurs when individuals actively engaged in the learning process and integrate new knowledge with existing knowledge (Brigge and Shermis, 2004). Learning is considered an active process of constructing rather than receiving knowledge. Also teaching is considered a process of supporting learners to construct ideas rather than delivering knowledge. When applying constructive strategies, teachers may start with the information that students know and lead them to new knowledge by using thought- provoking questions and scaffolding techniques (Oliva, 2009).

Cooperative learning is a teaching strategy that employs small-group assignments to accomplish shared goals. Cooperative learning is recognized as an effective method that can promote socialization and enhance students' willingness to work with others with diverse learning needs and socio-cultural backgrounds (Gillies, 2007). When student work collaboratively, they learn to listen to what others say and how people say it, discuss issues, share ideas and perspectives, seek ways of resolving problems, giving and receiving support and actively work to construct new understanding and learning. Cooperative learning offers a multitude of benefits to students in terms of; improving academic achievement, enhancing student enthusiasm and determination to achieve success; improving interpersonal relations and problem solving skills and fostering students emotional well-being and self-esteem (Wlodokowski, 2008). This study is aimed in assessing students learning in the classroom in secondary schools in Delta North Senatorial District, Delta State.

## **Statement of Problem**

Teachers play a significant role in assessing learning by determining who to teach with objectives based on desired behaviours. A system of teaching and learning within which preestablished subject matter is broken down into small discrete steps and carefully organized into logical sequence in which it can be learned readily by the students who can progress through the sequence steps established by the teacher with response reinforced immediately after each step. In what ways does teachers assessed students learning in the classroom in secondary schools in Delta North Senatorial District, Delta State?

# **Research Questions**

- 1. Is there any difference between male and female teachers assessment of students learning in the classroom in secondary schools?
- 2. What is the difference between urban and rural teacher assessment of students learning in the classroom in secondary schools?

## **Research Hypotheses**

- 1. There is no significant difference between male and female teachers assessment of students learning in the classroom in secondary schools.
- 2. There is no significant difference between urban and rural teachers assessment of students learning in the classroom in secondary schools.

#### METHOD AND PROCEDURES

The design of this study was a descriptive survey design that shows current conditions and needs for improvement.

# **Population**

The population of this study consisted of all the teachers in secondary schools in Delta North Senatorial District of Delta State.

# Sample

The sample of this study was three hundred and sixty (360) teachers randomly selected from Delta North Senatorial District, by means of stratified random sampling technique.

#### **Research Instrument**

The research instrument for this study was a questionnaire developed and validated by the researcher and three other educational evaluators in faculty of education Delta State University, Abraka. The instrument has two sections A and B. section A is focused on the demographic data of the respondents. While section B focused on assessment of students learning in the classroom in Secondary Schools in Delta North Senatorial District. In section B each item had four points rating scale of Strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1).

**Data Collection:** The researcher and one research assistant participated in the field administration and retrieval of the 360 questionnaires which took three weeks to complete.

**Data Analysis:** The data obtained from this study were analyzed using mean and standard deviation for the research questions and t-test statistics to test the stated hypotheses at 0.05 level of significance.

#### **RESULT**

Data collected were analyzed and presented in the tables below;

## **Research Question 1**

Is there any difference between male and female teachers assessment of students learning in the classroom in secondary schools?

**Table 1:** Mean and standard deviation of male and female teachers assessment of students learning in the classroom in secondary schools.

Variable	N	X	SD	MD	lower	upper
Male teachers	146	56.75	7.00	2.74	1.040	4.449
Female teachers	214	54.01	8.74			

Table 1, shows that there is difference between male and female teachers assessment of students learning in the classroom in secondary schools. The mean difference of 2.74 between the two groups is shown in the table along with the 95% confidence interval of the difference showing the lower bound of 1.040 and upper bound of 4.449.

## **Research Question 2**

What is the difference between urban and rural teachers assessment of students learning in the classroom in secondary schools.

**Table 2**: Mean and standard deviation of urban and rural teachers assessment of students learning in the classroom in secondary schools.

Variable	N	X	SD	MD	95% Confidence difference Lower	Interval of the Upper
Urban teachers	207	57.18	7.28	4.84	3.197	6.481
Rural teachers	153	52.34	8.53			

Table 2, revealed that there exists a difference between urban and rural teachers assessment of students learning in the classroom in secondary schools. The mean difference of 4.84 between the two groups is shown in the table along with the 95% confidence interval of the difference showing the lower bound of 3.197 and upper bound of 6.481.

## **Hypothesis 1**

There is no significant difference between male and female teachers assessment of students learning in the classroom in secondary schools.

**Table 3:** t-test analysis of Male and Female teachers assessment of students learning in the classroom in secondary schools.

Variable	N	X	SD	DF	t-cal	t- critical	Level of sign.	Decision
Male teachers	146	56.75	7.00	358	3.164	1.96	0.05	Significant
Female teachers	214	54.01	8.74					(Rejected)

In table 3, the t-calculated value of 3.164 was greater than the t-critical value of 1.96. Therefore, the null hypothesis was rejected. This shows that there was significant difference between male and female teachers assessment of students learning in the classroom in secondary schools.

# **Hypothesis 2**

There is no significant difference between urban and rural teachers assessment of students learning in the classroom in secondary schools.

**Table 4:** t-test analysis of urban and rural teachers' assessment of students learning in the classroom in secondary schools.

Variable	N	X	SD	DF	t-cal	t-	Level of	Decision
						critical	sign.	
Male teachers	207	57.18	7.28	358	5.795	1.96	0.05	Significant
Female teachers	153	52.34	8.53					(Rejected)

The result in table 4, revealed that the t-calculated value of 5.795 was greater than the t-critical value of 1.96. Hence, the null hypothesis was rejected. This implies that there was a significant difference between urban and rural teachers assessment of students learning in the classroom in secondary schools.

## **DISCUSSION**

Table 1 and 3 indicated that there was significant difference between male and female teachers assessment of students learning in the classroom in secondary schools. This finding supports the studies of (Goh & Fraser, 2000; Fraser & Chinoh,2000; Mc Robbie, Roth & Lucus,1997) who revealed that there is positive and significant relationship between classroom learning environment and students cognitive and affective outcomes when male and female teachers assessed their learning in the classroom.

The result in table 2 and 4, showed that there was significant difference between urban and rural teachers assessment of students learning in the classroom in secondary schools. This finding is in line with Lally & Gentile, (2009), who ensured that teachers feedback is of critical importance in students' progress and this feedback should be based on formative assessment during instruction rather than summative grade or test scores at the end of a course which most urban and rural teachers differs when assessing students learning in the classroom.

#### **CONCLUSION**

Assessment of students learning in the classroom allows male, female, urban and rural teachers especially at the secondary school level of our educational system to diagnose problems of students achievement, provide formative feedback to students, and make reliable and valid evaluation of students performance by understanding the learning theories and known how to apply these theories in terms of cognitive, motivational and psychological learning process associated with academic success.

## RECOMMENDATIONS

Based on this study, the following recommendations are made:

- (1) Teachers should develop and try out new assessment methods that give better information about how to help students improved.
- (2) Teachers should endeavored to attend seminars, symposia, workshops and conferences regularly to update their professional competence in classroom assessment.

## REFERENCES

- Ashman, A.,& Conway, R.(1997). An introduction to cognitive education. Theory and applications. New Year, NY: Routledge.
- Baek, Sun-Guen & Chio, Hye- Jeong. (2002). The relationship between students perceptions of classroom environment and their academic achievement in Korea. Asia Pacific Education, 3 (1),125-135.
- Barab, S. A., & Duffy,T.(2000).From practice fields to communities of practices. In D.Jonassen and S.M.Land (EDs). Theoretical foundations of learning environments. Mahwah NJ: Lawrence Erlbaum.
- Bigge, M & Shermis, S. (2004). Learning theories for teachers (6<sup>th</sup> ed) Boston, MA; Pearson.
- Brown, A & Green, T. (2004). The essentials of instructional design. Connecting fundamentals principles with process and practice. Upper Saddle River. New Jersey Pearson.
- Davis,D., & Sorrell, J. (1995).Mastery learning in public schools. From http://teac.valdos.edu/whuitt/files/mastlear.html.
- Driscoll.M.P.(2005). Psychology of learning for instruction. Boston Pearson.
- Fraser, B.J & Chionh, Y.N. (2000). Classrom environment, self- esteem, achievement and attitude in geography and mathematics in Singapore. Paper presented at the annual meeting of America Educational Research Association. New Orleans, LA.
- Gentile, J., & Lalley. J (2003). Standards and mastery learning. Thousand Oaks. CA: Sage.
- Gillies, R. (2007). Cooperative learning: Integrating theory and practice. Thousand Oaks. CA: Sage.
- Goh, S.C & Fraser, B. J (2000). Teacher interpersonal behavior and elementary students' outcomes. Journal of research in childhood education, 14, 216-231.
- Khine, M.S.(2002). Study of learning environment for improving science. In S.C. Goh and M.S. Khine (Eds). Studies in educational learning environment: An international perspective. River edge, NJ: World Scientific.

- Published by European Centre for Research Training and Development UK (www.eajournals.org)
- Lalley, J., & Gentile, J. (2009). Classroom assessment and grading to assure mastery. Theory into practice, 48 (1), 28-3
- Lefrancios, G. (2000). Theories of human learning. What the old man said (4<sup>th</sup> ed.). Belmont .CA CA: Wadsworth.
- Lyons, R., McIntoosh, M. & Kysilka, M. (2003). Teaching college in an age of accountability. Boston, MA: Pearson.
- McRobbie, C.J.,Roth, w.m.,& Lucs,K.B.(1997).Multiple learning environments in a physicis classroom.International Journal of educational research 27,333-342.
- Oliva, P. (2009). Developing the curriculum (7<sup>th</sup> ed.). Boston, MA: Pearson.
- Orlich, D., Harder, R., Callahan, R., Trevisan, M., & Brown, A (2004). Teaching strategies. A guide to effective instruction (7<sup>th</sup> ed.). Boston, MA: Houghton Mifflin.
- Smith,P., & Sadler- Smith,E.(2006). Learning in organizations complexities and diversities. New York: Routledge.
- Taylor, G., & Mackenny, L. (2008). Improving human learning in the classroom. Theories and teaching practices. Lanhn, MD: Rowman & Littlefield.
- Tennant, M.(1998). Psychology and adult learning (2<sup>nd</sup> ed.). New York. NY; Routledge.
- Wlodkowski,R.(2008).Enhancing adult motivation to learn. A comprehensive guide for teaching all adults (3<sup>rd</sup> ed.). San Francisco, CA: John Wiley & Sons.