# The Relationship between Continuous Assessment Scores and Examination Scores of Students Motivated to Attend Lectures

<sup>1</sup>Egede, Bernadette Amukahara Joy (Ph.D) & <sup>2</sup>Omiegbe, Odirin (Ph.D) <sup>12</sup>Department of Educational Foundations, Faculty of Education, University of Delta, Agbor. <u>bajegede@yahoo.com</u>

DOI: 10.56201/ijee.v9.no5.2023.pg30.41

# Abstract

A prominent feature in the pursuance of the Sustainable Development Goals (SDGs) in the learning process in education is the evaluation and assessment of students. As part of the process of evaluating students' learning outcomes, effective practice of continuous assessment is considered capable of influencing other factors that affect the improvement of teaching and learning. We used a strategy of continuous assessment to teach four Basic Science and Technology courses to minimize observed absenteeism to lectures, improve the active participation of students, and enhance learning during lectures. This study aims to find the relationship between the continuous assessment scores and the examination scores of students in the courses using a descriptive/correlational research design. The sample consists of all the students totaling 2,214 who were examined in the courses for three sessions 2010/2011, 2011/2012, and 2012/2013 in the College of Education, Agbor, Delta State, Nigeria. Their examination scores were correlated with the corresponding continuous assessment scores using Pearson's product-moment correlation procedure for each of the courses in each academic session. All the correlation coefficients obtained are positive and statistically significant at .05% level, indicating a consistent and significant positive relationship between the continuous assessment scores and the examination scores for each of the courses, each academic Based on this result, we encourage the use of session, and the overall sample. continuous assessment in more pragmatic ways to enhance both the cognitive and noncognitive correlates of students' performance in courses in tertiary institutions.

*Keywords*: Continuous assessment, Correlation, Examination scores, Tertiary institutions.

# Introduction

The Incheon declaration focused on the commitment to quality education, and improvement of learning outcomes, which requires a strategic strengthening of the evaluation of the in the learning process. inputs. processes. and outcomes (UNESCO,2015). Thereafter, Muskin (2017) expounded on the use of the fullest advantage of continuous assessment as a veritable tool to foster quality education in all nations to achieve the Sustainable Development Goal (SDG) 4. In pursuing the new global SDGs, the evaluation and assessment of students in the learning process featured prominently. As part of the process of evaluating students' learning outcomes, effective implementation of continuous assessment is considered capable of

IIARD – International Institute of Academic Research and Development

influencing other factors beyond the direct improvement of teaching and learning (Muskin, 2017). As educators in a tertiary institution, we observed the factor of flagging students' attendance to lectures and employed a strategic use of continuous assessment to tackle the problem which was adversely affecting students' learning outcomes. This study surveyed the relationship between the continuous assessment scores obtained by the students and their scores in the corresponding examinations within a period of ten academic sessions.

The national policy on education stipulates that continuous assessment (CA) should be practiced at all levels of the educational system in Nigeria. (Federal Republic of Nigeria, (FRN), 2014). At the inception of the continuous assessment practice in the Nigerian school system, the Federal Government of Nigeria published a book "A Handbook on Continuous Assessment". The book defines continuous assessment as: "A mechanism whereby the final grading of a student in the cognitive, affective and psychomotor domains of behaviour systematically takes account of all his performances during a given period of schooling. Such an assessment involves the use of a great variety of modes of evaluation for the purpose of guiding and improving the learning and performances of the students" (Federal Ministry of Education, Science, and Technology, 1985).

The minimum standards for the Nigeria Certificate of Education (NCE) which are provided by the National Commission for Colleges of Education (NCCE guide the implementation of continuous assessment in colleges of education. The NCCE regulates the programmes of the colleges based on the National Policy on Education The minimum standards stated that there should be a regular (or continuous) assessment of students for every course which should be primarily used to improve learning and to derive an overall CA score. (NCCE, 2012). A student's total score in each course shall comprise the overall CA score and the end-of-course examination score (ES). The weighting of the two scores stipulated in the National policy on education is as follows.

Continuous Assessment score (CA): 40%.

End-of-course Examination Score (ES): 60%.

Continuous assessment is achieved practically through formal and informal testing. The formal testing includes well-designed written examinations, like mid-semester examinations, long essays, and projects. Oral or written quizzes, short assignments, and other classroom activities (depending on the nature of the courses) constitute common informal testing methods. Regular informal assessment has proved useful in helping teachers identify students' strengths and weaknesses of students and offer remediation/guidance for timely improvement of their learning Egede (2009). However, it requires regular attendance of students at lectures at the tertiary education level to participate fully in the tests. Consequently, attendance at lectures is a requirement for ensuring effective learning in colleges of education. In the College of Education, Agbor, registered students must attain 75% attendance at lectures to qualify to write the end-of-semester examination in any course (College of Education, Agbor, 2008). The positive relationship between attendance at lectures and the performance of students reported in many research studies (Habib-ullah et al (2003); Thatcher et al (2007); Purcell (2007)), supports this minimum attendance requirement.

The practice of continuous assessment and the recording of attendance at lectures are

adversely affected by two major challenges: management of large class sizes and prevalent poor attendance at lectures. Large class sizes make the marking and recording of scores difficult if students' attendance at lectures is high. But poor lecture attendance hinders students from participating adequately in continuous assessment thereby losing its benefits, especially the improvement of their academic performance. Various studies have addressed the current prevalent poor attendance at lectures in tertiary institutions (Jordaan, (2009); Obeng-Denteh, et al (2012); Latreille (2008); Obiazi, (2009); Fayombo. Ogunkola & Olaleye (2012); Egede & Asabor, (2021)). The findings of these studies revealed the various factors that are responsible for students' apathy to lecture attendance. and proffered suggestions for solving the problem. For example, Fayombo et al (2012) obtained results that indicated that students' intrinsic motivation to learn should be enhanced by lecturers' ingenuity and creativity in their lecturing job. Hence, they recommended that, lecturers should explore creative techniques to increase lecture attendance in addition to keeping the attendance register.

As lecturers, we observed from our experience in the College of Education, Agbor, that the poor attendance of students to lectures adversely affected the practice of continuous assessment and induced students to cheat in the end-of-semester examinations due to their unpreparedness. Responding to the menace of poor lecture attendance and its toll on continuous assessment, the management of the College of Education, Agbor placed sanctions on students who had no CA scores after the examinations. Such students should be credited with an incomplete result (IR) in a course thus invalidating their scores. However, poor attendance at lectures persisted in the College despite the Management's disciplinary measures and posed a great concern for us, the lecturers, as it is in many tertiary institutions according to the findings of Jordaan (2009). The heavy weighting of 40% for CA and the policy of 75% attendance to qualify to write examinations are often disregarded by the students. Ubong and Wokocha (2011) reported students' poor attitudes toward continuous assessment. The flexible nature of continuous assessment can be used to solve these problems.

This background inspired us to seek and adopt a strategy to boost students' lecture attendance using continuous assessment and consequently improve students' performance. Recognizing the heavy weighting of the CA score (i.e., 40%), which includes some percentage from lecture attendance, spread across 13 lecture periods per course, we allocated 75% of the lecture periods (i.e., 10 out of 13) to the administration of short written quizzes. The 75% of the lecture periods tallies with the 75% minimum attendance that qualifies a student to write a course examination. The activities and the kinds of assessment employed in this strategy are described as follows.

Activities carried out during the lectures: Students write and submit their responses to the short quiz in the lecture room/hall after each lecture, and this submission is used for attendance records. The quiz questions a n d / o r other classroom activities are directly drawn from the objectives of each lecture and administered in a way that makes it impossible for a student to write and submit for another person. The students were pre-informed that their scores in the quizzes and/or other classroom activities account for over 75% of their final CA scores. Students who are indisposed or have any proven cases of official distractions are given concessions. Furthermore, takehome assignments not exceeding 2 per course are given to students but weighted less than the classroom quizzes. In this strategy, it was understood by the students that the prerequisites for obtaining their CA scores and consequent success in the course

examinations are their lecture attendance and participation in class activities during the lectures. The short quizzes were easier to score than elaborate tests, but the frequency posed an onerous task for us whenever we encountered large class sizes. But the strategy attracted students to attend lectures especially when they experienced the objective scoring of the quizzes and the immediate feedback/corrections given to them This study surveys the relationship between the CA scores and the examination scores of the students within three academic sessions, as part of the evaluation of the strategy.

## Purpose of the study

The major aim of this study is to evaluate the relationship between the continuous assessment score and the examination scores of the students who were taught using the strategy of regular administration of quizzes and lecture activities used to boost attendance at lectures. In line with this objective, the following research questions were formulated.

- 1. Is there any significant relationship between the continuous assessment scores and the examination scores of the students in each of the courses?
- 2. Is there any significant relationship between the continuous assessment scores and the examination scores of the students in the courses taught in each of the academic sessions?
- 3. Is there any significant relationship between the continuous assessment scores and the examination scores of all the students in all the courses for the three academic sessions?

# Method

# Design

This study used a correlational research design that investigates the relationship between variables without the control or manipulation of any of them. (Bhandari, 2022). The design is suitable for the study that is aimed to determine the strength and/or the direction of the relationship between the continuous assessment scores and the examination scores earned by the students who were taught using the innovative strategy of regular administration of short quizzes and activities during lecture periods. In compliance with the structure of correlational designs, there were no external interventions in the assessment of the relationship between the variables in the context of this study.

# Population/Sample

The population consisted of all the Primary Education Studies (PES) students who were taught the courses PES,114,211, 225, and 325 in 2010/2011, 2011/2012, and 2012/2013 sessions in the College of Education, Agbor, Delta State, Nigeria. These are the students who were taught using the innovative strategy in the three academic sessions (2010/2011; 2011/2012; and 2012/2013).

Using the total population sampling, all the PES students who were taught the five courses in the three sessions formed the sample of the study. This is feasible since the results of all the students could be accessed for the data collection. (Stephanie, 2018). The students in the sample had both CA and examination scores. The sub-samples are obtained in each of the academic sessions to survey the consistency of the observed relationship across the first three academic sessions which are chosen for the convenience of funding the study. The demographic distribution of the students in the study samples is shown in Table 1.

Table 1

Distribution of students in the study samples according to the courses and academic sessions

Course	Numberofstudentsin2012/2013	Numberofstudentsin2011/2012	Number of students in 2010/2011	Total
PES 114	80	153	229	462
PES 211	140	178	221	539
PES 225	160	145	240	545
PES 325	200	201	267	668
Total	957	677	580	2,214

The overall sample size is 2214. **Data collection and analysis** 

The source of data for this study is the moderated results of the students in the courses PES 114, 211, 225, and 325, in which both CA and examination scores are recorded. After the semester examinations, these moderated results are approved as final and fair results of the students by external moderators from other tertiary institutions. The course titles are as follows:

(i). PES 114- Basic Science and Technology Curriculum. (For year-one students in the first semester).

(ii). PES 211- Basic Science and Technology in Primary Education Studies I. (For year- two students in the first semester).

(iii). PES 225- Basic Science and Technology in Primary Education Studies II. (For year-two students in the second semester).

(iv). PES 325- Basic Science and Technology in Primary Education Studies III. (For year-three students in the second semester).

The course PES 114 is offered by the students in the first semester of their first year, while PES 211 and 225 are offered in the first and second semesters of their second year respectively. The fourth course, PES 325 is taught to year three (final year) students in the second semester at the College of Education, Agbor.

Copies of the moderated results are domiciled in the office of the head of department and exams and records division of the Academic office. In addition, lecturers retain personal copies of the moderated results of their courses for reference purposes. Therefore, the moderated results were readily available for use in this study. The moderated results are raw scores comprising CA and examination scores for each student. The dataset consists of a pair of scores for each student in each course.

The data was analyzed using SPSS 23 to obtain Pearson product-moment correlation coefficients and the corresponding probability values (p) to provide answers to the

research questions. The correlation coefficients (r) were. obtained for each of the courses and the overall sample. The continuous assessment scores were correlated with the examination scores as the pair of variables.

The significance of the coefficients was assessed at 0.05 level.

## Results

Table 2.

Correlation between the continuous assessment (CA) scores and examination scores in the 2012/2013 session

S/NO	VALUES/COURSE S	PES114 (r <sub>11</sub> )	PES211 (r <sub>12</sub> )	PES225 (r <sub>13</sub> )	PES325 (r <sub>14</sub> )
1.	Correlation Coefficients	.830**	.862**	.814**	.736**
2.	Level of significance (p)	.000	.000	.000	.000
3.	Confidence Levels	[.768,.880]	[.827,.893]	[.774,.890]	[.693,.776]
4.	Number (N) of Scores	80	140	160	200

\*\* r significant at .001 level

The results in Table 2 above showed that there is a strong statistically significant positive correlation between the continuous assessment scores and the examination scores of the students in all the courses in the 2012/2013 academic session.

#### Table 2.

Correlation between the continuous assessment (CA) scores and examination scores in the 2011/2012 session

S/NO	VALUES/COURSE S	PES114 (r <sub>21</sub> )	PES211 (r <sub>22</sub> )	PES225 (r <sub>23</sub> )	PES325 (r <sub>24</sub> )
1.	<b>Correlation</b> Coefficient	.771**	.882**	.812**	.924**
2.	Level of significance (p)	.000	.000	.000	.000
3.	ConfidenceLevels(Lower andUpperlevels)	[.716,.825]	[.848,.913]	[.762,.865]	[.898,.947]
4.	Number (N) of Scores	153	178	145	201
	** r significant at	.001 level			

The statistics displayed in Table 3 showed that there is a statistically significant positive correlation between the continuous assessment scores and the examination

IIARD – International Institute of Academic Research and Development

scores of the students in the 2011/2012 academic session. The high values of the correlation coefficients indicate a very high positive relationship between the two variables

# Table 3.

Correlation between the continuous assessment (CA) scores and examination scores in 2010/2011 session

S/N	VALUES/COURSES	PES114 (r <sub>31</sub> )	PES211 (r <sub>32</sub> )	PES225 (r <sub>33</sub> )	PES325 (r <sub>34</sub> )
1.	Correlation coefficients	.848**	.972**	.929**	.955**
2.	Level of significance (p)	.000	.000	.000	.000
3.	Confidence Levels	[.808,.883]	[.967,.977]	[.909,.946]	[.946,.964]
4.	Number (N) of Scores	229	221	240	267

\*\* r significant at .001 level

In the 2010/2011 academic session, there is a strong statistically significant positive correlation between the continuous assessment scores and the examination scores of the students as shown in Table 4 in each of the courses. The values of the correlation coefficients were generally very high (.848, .972, .929, .955) in this academic session in which the regular testing of the students was introduced during lectures.

# Table 5.

*Correlation between the continuous assessment scores and examination scores for the overall sample.* 

		CA scores	Examination scores
CA scores	Pearson (r)	1.000	.841*
	Sig.		.000
	Ν		2214
Examination scores	Pearson (r)	.841*	1.000
	Sig.	.000	
	Ν	2214	

\*p<.05

Table 5 showed that there is a statistically significant positive correlation between the CA scores and the examination scores for the overall sample or all the scores, (r=.841, p=.000<.05). The confidence levels for the coefficients are .828 and .853. The overall coefficient of determination  $r^2$  is .707 or 70.7%.

The results from the analyses (see Tables 3,4, and 5) showed very high positive correlation coefficients that are statistically significant at .05% level. The values of the correlation coefficients at the 95% intervals are all on the same side of zero, indicating a genuine

effect in the population. The coefficient of determination computed on all the scores implied that the continuous assessment scores shared more than 70% of the variability in the examination scores, indicating a high degree of association between the two variables.

## Discussion

The results indicated that there is a significant relationship between the continuous assessment and examination scores of the students in each of the courses (PES 114, 211, 225, 325). The teaching and learning of these basic science and technology courses involve the performance of several 'minds-on' and 'hands-on' activities to explain the basic science concepts. Hence, they require the assurance of the attention, interest, and active participation of the students during lectures for meaningful learning. Students' failure to attend lectures becomes synonymous with failure to participate actively in the learning process and a consequent deficiency in the opportunity to learn the concepts as planned by the lecturers. But regular attendance to lectures, which is motivated by the strategic regular formative testing of the students during the lecture periods, gave the attendees the opportunity to learn the concepts and obtain higher continuous assessment scores. Consequently, the students who obtained high continuous assessment scores are likely to get high examination scores as the results of this study portrayed. From our experience, students endeavor to avoid the risk of poor performance in the examinations if they encounter situations that hinder them from regular attendance at the lectures for these courses or/and active participation during the lecture periods. Several studies have shown that the interests and attitudes of students are significantly related to their achievement in science subjects (Narmadha & Chamundeswari, 2013; Ali & Awan, 2013). As students' attitude of frequent participation in learning activities rises, their scores from the accumulation of regular tests increase, the more they learn and consequently score high in the examination (Esposto & Weaver 2011). This trend of the result was consistent across the courses and across the three academic sessions in this study.

The results are corroborated by those of Myllymaki (2013), Aina & Adedo (2013), Kumur & Siya (2017), and Sangoniyi & Gbolagade (2022) for science-related courses. Aina & Adedo found a positive relationship between continuous assessment scores and examination scores of students in physics while Kumur & Siya (2017) and Sangoniyi & Gbolade (2022) found a similar positive relationship for statistics and mathematics courses respectively. In addition, a positive relationship was found between the continuous assessment scores and examination scores of students for education courses (Bichi & Musa, 2015; Ado & Aliyu, 2015) and public administration courses (Gidado,2021). These studies recommended that the practice of continuous assessment should be enhanced to be more objective and valid in tertiary institutions. The results of studies (like Ogundukun & Ogundale (2012); and Mwebaza (2010)) at the secondary school levels showed a similar positive correlation between the two variables, continuous assessment scores, and examination scores.

A profound quality of the strength of the relationship between the two scores obtained in this study is its consistency across the four courses PES, 114, 211, 225, 325) unlike those of some other studies like Gidado (2021) where inconsistent relationships were found for the various public administration courses: some were positive while some were negative. This consistently high positive relationship is explained to result from the consistent method of generating the continuous assessment scores in the teaching of the courses unlike that of other studies. The strategic continuous assessment was designed to boost attendance which has been argued to influence the performances in course examinations including online tests (Ana & Paloma, 2020; Ukwueze, 2012). Ukwueze (2012) explained the weak positive relationship

obtained between the web-based continuous assessment and the examination scores to be an influence of lack of attendance.

The high degree of association between the continuous assessment and examination scores could be employed to enhance learning as proposed by Muskin(2017). This is emphasized in the guidance-oriented nature of continuous assessment. Students are guided to improve on their learning as they receive corrective feedback from the practice of continuous assessment. Consequently, their performances in the examinations are enhanced. To harness the advantages of continuous assessment, a practice that minimizes the problems of large class sizes, students' apathy to attendance at lectures, and malpractices by students should be employed. The flexible nature of continuous assessment can be used to solve these problems. Myllymaki (2013) reported the possibility of effectively incorporating CA into lecture periods which is similar to the strategy we adopted. Students' CA scores were generated from their responses to short written quizzes and classroom activities that can easily be marked and made available to them. The time to answer the questions which are drawn from the objectives of the lectures was short enough to prevent students from cheating or writing for another person. Therefore, students were motivated to attend lectures and be attentive and active also. From the results of this study, the CA scores obtained from this strategic practice of continuous assessment are strongly and positively related to the examination scores.

## Recommendation

Teachers should adopt and adapt innovative strategies to use the practice of continuous assessment to enhance learning since performance in CA is positively related to overall performance in courses or school subjects.

Strategies that are adopted to improve the practice of continuous assessment should enhance students' class/lecture attendance, and active participation during lectures, and minimize malpractices in testing.

The effectiveness of innovative strategies in the practice of continuous assessment should be evaluated and published to disseminate knowledge to the academic community.

# Limitation of study.

This study was limited to the survey of the relationship between CA scores and examination

scores after the strategic practice of continuous assessment during lectures. There was no

comparison of the relationship between the variables before the strategy

# Conclusion

In this study, the relationship between students' continuous assessment scores and

- examination scores in four Basic Science and Technology courses. (PES 114, 211, 225, and 325)
- in three academic sessions in the College of Education, Agbor, Nigeria was surveyed and found

- to be positive and significant. This was partly contrived to assess the effectiveness of a strategy in
- which continuous assessment practice was used to enhance students' attendance at lectures and
- their participation in class activities during lectures in the Basic Science and Technology courses in the Department
- of Primary Education Studies. The results provide additional empirical evidence of the positive
- relationship between CA and students' performances and the need to harness its prospects through
- innovative practices to enhance learning.

## References

- . Ado, A. B. & Aliyu, M. (2015). Assessing the correlation between continuous assessment and exam scores of education course. *American International Journal of Research in Humanities, Arts and Social Sciences.* 10 (3), 290-294.
- Aina, J. K. & Adedo, G. A. (2013). Correlation between continuous assessment and students' performance in physics *Journal of Education and Practice*. 4(6)
- Ali, M. S. & Awan, A. S. (2013). Attitude towards science and its relationship with students' achievement in science. *Interdisciplinary Journal of Contemporary Research in Business*. 4 (10), 707-718.
- Ana, Z. & Paloma, M. (2020). Class-attendance and online-test results: Reflections for continuous assessment. *Journal of Teaching in IntrnationalBusiness*. 31(1), 75-97. DOI: 10.1080/080/08975930.2019.1698:394
- Attah, G.B. and Binda, S. I.A (2001). Correlation Analysis of continuous assessment and examination marks in Mathematics. In P.N. Lassa and J.A. Aghenta (Eds). Proceedings of 26th Annual congress of Nigeria Academy of Education 12th – 16tth Nov. 2001 (pp-210-2011) Jos. The Nigeria Academy of Education/Faculty of Education, University of Jos.
- Bhandari, P. (2022, December 5) Correlational Research/When and how to use. https://scribbr/methdology/correlational research/.
- Bichi, A. A. & Musa, A. (2015). Assessing the correlation between continuous assessment and examination scores of education courses. *American International Journal of Research in Humanities, Arts, and Social Sciences.* (AIJRHASS). 10(3), 290-294.
- College of Education, Agbor. (2008). Student Information Handbook, Agbor, Sani Ventures ltd.
- Esposto, A. S. & Weaver, D. (2011). Continuous team assessment to improve student

engagement and active learning. Journal of University Teaching and Learning Practice.

8(1), 97-108 https://doi.org/ 10.53761/1.8.1.8

IIARD – International Institute of Academic Research and Development

- Egede, B.A.J. (2009). Continuous assessment of UBE Students In E.A. Arubayi and D.D Whawo (Eds) Universal Basic Education (UBE) in Nigeria, Minna, Gurara Publishing.
- Egede, B. A. J. & Asabor, B. M. (2021). Reasons for students' absenteeism from lectures in selected tertiary institutions in Delta and Edo states of Nigeria: The students' views. *Frontiers in Education*, Vol. 4, No. 2, https://doi.org/10.22158/fet/v4n2p68
- Fayombo, G.A., Ogunkola, B. J. & Olaleye, Y. L (2012). Cross-institutional study of the causes of Absenteeism among University students in Barbados and Nigeria. Australian Journal of Educational and Developmental Psychology, 2(1), 122-136.
- .Federal Ministry of Education, Science, and Technology (1985). A Handbook on Continuous Assessment. Ibadan, Heinemann Educational Books (Nig) Ltd.
- Federal Republic of Nigeria. (2014) National policy on Education. Abuja, Nigeria Educational, Research, and Development Council (NERDC).
- Gidado, B. K. (2013). The correlation between continuous assessment and examination scores of public administration students of University of Abuja, Nigeria. *Sokoto Educational Review*, 20(1), 12-20.
- Habib-ullah K., Aziz, M. K., Ihsan-ullah, M., Akhtar, M., Shaukat, A., Muhammad, H. K., Muhammad, S. & Shah, S. H. (2003). Impact of class attendance upon examination results of students in basic medical sciences. *Journal of Ayub Medical College, Abbottabad*, JAMC, 15(2), 56-58
- Jordaan, Y. (2009) Influencing factors on lecture attendance at a tertiary institution. *South African Journal of higher Education*, 23(1), 98-112.
- Kumur, J. H. & Siya, T. K. (2017). Relationship between continuous assessment scores and examination scores. *International Journal of Science and Research*. (IJSR). Vol. 6, Issue 5, 476-478.
- Latreille, P.L. (2008, April). Students' attendance and lecture notes on VLE: part of the problem, part of the solution.

https://economisnetwork.uk.ac/showcase/latreille\_attendance

Muskin, J. A. (2017, n.d). Continuous assessment for improved teaching and learning: A critical review to inform policy and practice.

https://unesco.unesco.org/ark/48223/pf0000255511

Mwebaza, M. (2010, n.d), Continuous Assessment and students performance in 'A' Level secondary schools in Masaka District. http://news.mak.ac.ug/documents/makfiles/these/mwebaza michael pdf.

- Myllymaki .S. (2013). Incorporation of Continuous Assessment into lectures in engineering education *European Journal of Engineering Education*, 38 (4) pp-385-393.
- Narmadha, .U. and Chamundeswari, S. (2013). Attitude towards learning of science among, students at the secondary level. *Journal of sociological research*, Vol. 4, No.2, 114-124.
- NCCE (2012). Nigeria Certificate in Education Minimum Standards. Garki, Abuja, NCCE.
- Obeng- Denteh, W., Kodua-Nana, O., Ansah, S. O., Ansah, R. & Nyamadu, A. Q.(2012) .Modeling student's affinity for lecture attendance using differential equations; The case of students of Kwame- Nkrumah University of Science and Technology *British Journal of Educational Society and behavioural Science 2* (4), 389-401.
- Obiazi, C.C. (2009). Continuous Assessment and attendance to lectures. Implications for the training of Agriculturists. *Journal of Research in national Development*, 7(I) .61-66.
- Ogundoku, M.O & Ogundele, T.O. (2012). Relationship between continuous assessment performance of secondary and academic school students in language and mathematics in Ibadan. African English Journal of Psychological studies of social Issues Vol 15, No. 1. 2-15.
- Purcell, P. (2007, January) Engineering student attendance at lectures: Effect on examination performance. https://www.researchgate.net/...225416978enineering-students-attendance-at-lectures- effect-on-examination-performanc-
- Sangoniyi, S. O. & Gbolagade, A. M. (2022). Relationship connecting continuous assessment and examination scores in mathematics in South-West Nigeria colleges of Education. *Journal of Education and Practice* 6(1). 35-47.
- Thatcher, A, Fudjihon, P.& Cockcro, A.K., (2007). The relationship between lecture attendance and academic performance in an undergraduate psychology class. *South African Journal of Psychology*. 37(3), 656-660.
- Ubong, .B. and Wokocha, M. (2011, August, 22).Continuous assessment, practicum and the quality business education programmes in Nigeria.

https://journal.lib.uoguelph.ca/index.php/rhea/article/view/1526/0

- Ukwueze, A. C. (2012). Correlation between web-based continuous assessment and examination scores in open and distance education: Implication for academic counselling. *Malaysian Journal of Distance Education*, 14(2), 25-37.
- UNESCO. (2015, May, 21). Incheon declaration and framework for Action for the implementation of sustainable development goal 4. https://unesco,org/sites/default/files/document/education:-2030-incheon -framework-for- action-im