AJEMATES
African Journal of Educational Management, Teaching and Entrepreneurship Studies
VOL.14 (1), January-April, 2025 https://ajemates.org

CONTINUOUS ASSESSMENT AS PREDICTOR OF STUDENTS' ACADEMIC ACHIEVEMENT IN WEST AFRICA EXAMINATION COUNCIL EXAMINATION IN IKORODU NORTH LOCAL GOVERNMENT AREA

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ABSTRACT

This study investigated continuous assessments a predictor to student's academic achievement on West Africa Examination Council Examination in Ikorodu North Local Government Area. Two specific purposes with two corresponding research questions and as well as two null hypotheses were formulated to guide the study. Correlational research design was adopted for the study. The population of the study comprised 3,012 senior secondary school students (SS3) who sat for the WAEC examination while the sampled of the study comprised 353 students. Pearson Product Moment Correlation Coefficient statistical tool was used to answer the research questions while Linear Regression was used to test the hypotheses. The findings from the data analysis showed that: there is a high positive relationship between Continuous Assessment scores and the students' achievement in Biology in WAEC, there is a high positive relationship between Continuous Assessment scores and Students achievement in Civic Education in WAEC, while the hypotheses revealed that there is significant correlation between the Continuous Assessment scores and the students' achievement in Biology and Civic Education in WAEC in Lagos State. Based on the findings, the study recommended that: Secondary School Management Board should organize workshops for practical training in using continuous assessments.

Keywords: Continuous Assessment Biology, Achievement, Civic Education, Secondary School, Examination, Predictor

Introduction

Academic achievement of secondary school students in Nigeria in the last two decades has become a major source of concern to all stakeholders. It is a source of worry to everyone. Mhiliwa cited Ndubuisi (2019) observed that lack of support and active participation of the parents in the education of learners, poor management of school resources for effective teaching and learning, lack of physical facilities has constituted to students' academic performance. All these factors and many more have been noted by many scholars to cause students poor academic achievement in both internal and external Examinations. However, this study investigated the relationship between continuous assessment and final examination score (WAEC) results in students' academic achievement in public secondary school in Ikorodu North Local Government Area.

Incidentally, performance of students in Continuous assessment has been said not to commiserate with their performance in WAEC. Continuous assessment as a system of evaluating students' achievement has been in existence since the Inception of the 6-3-3-4 system of education in 1982. Before the implementation of the 6334 system there were two types of assessment that students passed through in the secondary school system. These are internal and external assessments. Internal examinations were conducted by school and at the end of each academic year, annual examination was also conducted. All these were done to determine the progress of learning and the academic strengths of students. External examinations were conducted at the end of the students' course in the secondary level nationwide and usually leads to the certification of students at the post primary school level. However as noted before the federal government in 1982, introduced a method of assessment in which the internal and external assessments are combined for the certification of students. This method of assessment is known as continuous assessment. To determine the academic achievement of students at the end of the course, the internal and external scores must be considered.

Civic education is one of the compulsory subjects that students must pass at the completion of the program in school. According to Okoro (2010), Civic education is aimed at inculcating and development of national and social values in the citizen. It is the study of citizen's rights and duties. It is also concerned with how government works in a society.

Biology a is one of the science subjects that are studied in secondary schools in Nigeria which students who want to pursue professional courses like medicine, pharmacy, nursing, medical laboratory science, and Anatomy must pass at credit level before gaining admission into higher institution. Biology as a subject pervades literally every field of human endeavor. It was observed by Esiobu (2015), that in most secondary schools in Nigeria there is high rate of failure in the subject. The high rate of failure can be attributed to poor interest of subjects in Biology. In the last decade, achievement of students in biology is still minimal. Folorunsho (2014) submitted that poor achievement in biology particularly is due to lack of instructional resources in schools due to poor funding of schools. This scenario has led to students performing poorly even in other subjects thereby making them record poor achievement at the end of their end of course examination coordinated by WAEC which is one of the examination bodies saddled with the responsibility of conducting examination in Nigeria.

Achievement as we know is represented by tests and examination scores or marks assigned by the teacher are used to represent students' scholastic standing. However, achievement of students in Continuous assessment was supposed to be related to their performance in the final WAEC examination since uniform standard is maintained, but this has not been the case in

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Ikorodu North L.G.A. It is against this background that the study investigated the relationship between the continuous assessment scores and WAEC scores in Ikorodu North Local Government Area. The researcher felt that there was a need to compare the relationship between students' achievement in WAEC and their achievement in continuous assessment in Civic Education and Biology in Ikorodu North Local Government Area.

Statement of problem

Poor achievements of students in both their internal and external examinations, pose a serious problem to education stakeholders and of course the parents. This then implies that students may have to pay for another examination, get involved in vices such as hooliganism, stealing and thuggery, which may be borne out of frustration due to failure. Scholars have identified factors such as lack of support and active participation of the parents in the education of the learners, poor management of school resources for effective teaching and learning, and lack of physical facilities (Mhiliwa, 2015) Other scholars have identified some causes for this menace such as unqualified teachers, poor remuneration, incorporative attitude from parents to the education of their children, poor study habits, inadequate instructional facilities and lots more. It has also been argued that this poor achievement especially in WAEC examination after the completion of the student's program school is because of poor quality of the continuous assessment conducted in schools. Hence, the continuous assessment administered to students in schools might be one factor but can improve the student's academic achievement in West African Examination Council. Based on this, the study examined the relationship between Continuous Assessments and Student's Academic Achievement on West Africa Examination Council Examination in Ikorodu North Local Government Area.

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Purpose of the Study

The purpose of this study was to examine relationship between Continuous Assessments and Student's Academic Achievement on West Africa Examination Council Examination in Ikorodu North Local Government Area. Specifically, the study sought to:

1. determine the relationship between students' continuous assessment scores and WAEC examination score in Biology
2. determine the relationship between students' continuous assessment scores and WAEC examinations score in Civic Education in public secondary schools in Ikorodu North Local Government Area.

Research Questions

The following research questions were used to guide the study:

1. What is the relationship between students' continuous assessment scores and WAEC examination scores in Biology in public secondary schools in Ikorodu North Local Government Area?
2. What is the relationship between students' continuous assessment scores and WAEC examination scores in Civic Education in public secondary schools Ikorodu North Local Government Area?

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Hypotheses

The following hypotheses guided the study and were tested at 0.05 level of significance:

1. There is no significant correlation between students' continuous assessment scores and WAEC examination scores in Biology in Ikorodu North Local Government, Lagos state.
2. There is no significant correlation between students' continuous assessment scores and WAEC examination scores in Civic Educations in Ikorodu North Local Government, Lagos State.

Review of Literature

Academic Achievement

Academic achievement refers to a successful accomplishment or Performance in particular subject area. It is indicated by grades, marks and scores of descriptive commentaries. Academic performance also refers to how Students deal with their studies and how they cope with or accomplish different tasks given to them by their teachers in a fixed time or academic year. Fape (2015), used the notion of academic self-concept in referring to individuals' knowledge and perceptions about themselves in academic achievements, and convictions that they can successfully perform a given academic task at designated levels. Fajola (2011) further stated that academic self-concept represents a more past-oriented, aggregated and relatively stable judgment about one's self-perceived ability in a particular academic domain while academic self-efficacy represents a context specific and relatively future oriented judgment about one's confidence for successfully performing an upcoming subject-specific academic task. Learning is not only a product of formal schooling but also of communities, families and peers. Socio-economic and sociocultural forces can affect learning and thus school achievement. A great deal of research on the determinants of school achievement has centered on the relative effects of home-related and school-related factors. Others argued that in various studies they indicated that both home and school environments have a strong influence on performance of students. Musek (2011) stated that there are two broad groups of definitions of academic achievement. The first one could be considered more objective, because it refers to numerical scores of a pupil's knowledge, which measure the degree of a pupil's adaptation to schoolwork and to the educational system. The second group is a more subjective one, as its determination of academic success is reliant upon the student's attitudes towards his academic achievement and himself, as well as by the attitudes of significant others towards his/her success and him/herself. Students' academic achievement refers to how the students deal with or accomplish different tasks given to them by their teachers. (Kayode and Ayodele, 2015). On the other hand, Subramanian (2016), saw academic achievement as excellence in all academic disciplines in the class as well as co-curricular activities. To him academic achievement includes excellence in sporting, behaviour, confidence communication skill, punctuality, assertiveness art, culture and the

like. Academic achievement generally is concerned with students' performance in academic areas like reading or language, history, art, science and mathematics. Hence it is the level of attainment or proficiency in academic work as evaluated by teachers or by standardized tests or combination of both. Achievement in this regard refers to what an individual has acquired after specific training or instruction has been imparted into him. Academic achievement can be assessed by tests which most time are specifically designed to measure the effects of specific program of institution or training.

SSCE (WAEC) and Continuous Assessment (CA) Scores in Biology Subject

Biology is one of the science subjects that senior secondary school students offer at the senior levels in the Nigerian secondary schools. Oni, (2016), observed that continuous assessment scores play significantly roles on students' performance in Biology. Hassan, (2014) revealed that male students had a pretest mean achievement score of 20.67 with a standard deviation of 5.53 and posttest mean achievement score of 11.80 with the standard deviation of 2.37 after two sets of continuous assessments. The difference between the pretest mean achievement score and posttest mean achievement score of male students after two sets of continuous assessments was 8.87. On the other hands, the female students had a pretest mean achievement score of 17.64 with a standard deviation of 5.62 and a posttest mean achievement score of 9.5with a standard deviation of 3.14. The difference between the pretest mean achievement score and posttest mean achievement score of female students was 8.14after two sets of continuous assessments. The study also showed that male students achieve more than female students after two sets of continuous assessments in NCE Biology. However, for each of the groups exposed to two sets of continuous assessments, there is improvement in the mean achievement scores as the posttest mean achievement scores (20marks) were greater than the pretest mean achievement scores (40marks) with the male students having slightly higher mean gain than female students after two sets of continuous assessments in NCE Biology. The result indicated a great relationship between CA Scores and examination scores.

SSCE (WAEC) and Continuous Assessment (CA) Scores in Civic Education

Continuous Assessment (CA) Scores in Civic Education in Civic Education play a significant role in improving Continuous assessment scores students' performance. Udo (2011) revealed that students CA scores are of two dimensions either positive or negative, that CA scores on a high-grade influence students' performance in both internal and external examinations positively. Gani & Attah (2013) submitted that teachers do not adhere to the qualities of school-based assessment and hence making it not to be comparable to external examinations. Teachers use SBA in preparing students for external examinations. If the mean performance in the external examinations and that of SBA is all above the bench mark, it means teachers in Makurdi Local

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Government are using SBA properly in monitoring teaching and learning (Gani and Attah 2013). However, the study found that, even though, the students performed well in all the examinations, there was a consistent higher variability of scores in the SBA than in the certificate examinations. This tends to be in agreement with Monday, Ikiroma and Nwogwugwu (2014) who said, the class teachers are in the best position to tell the extent to which the students have mastered the content. This could also be explained on the fact that, scores in the external examinations were midpoints of the ranges of grades obtained by the sampled students. This might account for the low variation in the spread of the scores.

The study of Nwogwugwu (2014) revealed that, the performance of student in Civic Education in Makurdi LGA of Benue State in SBA, WASSCE and WAEC SSCE was also good since it was above the bench mark of 45.0. This was also evident in the cluster mean of 51.39 which was above the bench mark. The performance in Civic Education by the students in Makurdi LGA in the three Examinations was again above the bench mark of 45.0. This showed the students performed well in SBA, WASSCE and WAEC SSCE. This was in disagreement with the submission of Ukuije (2011) that teacher-made test items are substandard. The students are prepared for WASSCE and WAEC SSCE using SBA. If the teacher-made items were below standard as submitted, it would have affected the performance of the students negatively. The study found out that, there was a statistically significant difference in the mean scores of the students in English Language, Mathematics and Civic Education in the three examinations (WASSCE, WAEC SSCE and SBA) in Makurdi Local Government Area of Benue State. Civic Education is a subject under the social sciences. It is the study of the rights and duties of citizens, its citizens concerning the government and the civic environment. It is also a study of the ways the government works in a society.

Methodology

The researcher adopted a correlational survey research design. A correlational survey design is one aimed at determining the degree of relationship existing between two or more variables. This design helped to explain the relationship between the study variables, hence it is considered appropriate for the study. The population for this study consisted of all senior secondary school students (SS3) who sat for the WAEC examination in the 2022/2023 academic session in public and private secondary schools in Ikorodu North Local Government Area, Lagos State. The sample was made up of students sampled from the population using Taro Yamane's standard sampling procedure. Therefore, with a population size of 3012 and a precision level of 5%, the required sample size (n) according to Taro Yamane's formula is approximately 353. The instrument was the official grades of the students on continuous assessment and WAEC/SSCE results from the WAEC office. SECTION A contained continuous assessment grades which students scored. Section B had SSCE results which were arranged into four clusters. Cluster I

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scores were in English language, which answered research question I. Cluster I scores were in civic education, which answered research question I. Cluster II scores were in Biology, which answered research question II. The continuous assessment scores and WAEC scores were collected directly from the WAEC office in Lagos State. There was no need for validity since they were already official documents. The CA scores and WAEC scores were collected directly from the WAEC office in Lagos State. The research questions were answered using PPMC (Pearson Product Moment Correlation Coefficient) (r). The hypotheses were tested at a 0.05 alpha level. Using Linear regression statistical tool. Decision rule: In answering the research questions, PPMC was used. Any coefficient between 0.8 to 1 was described as a very high positive correlation. Any coefficient between 0.6 to 0.79 was described as a high positive relationship. A coefficient between 0.40 to 0.59 was described as a medium positive relationship. After applying the linear regression tool, the researcher rejected the null hypothesis when the p-value was less than the alpha value and did not reject the null hypothesis when the p-value was greater than the alpha value.

Results

Research Question 1: What is the relationship between students' continuous assessment scores and WAEC examination scores in Biology in public secondary schools in Ikorodu North Local Government area?

Table 1: Relationship between students' continuous assessment scores and WAEC examination scores in Biology in public secondary schools

Continuous Assessment Scores		WAEC Score in Biology	
CA Scores	1.0000	.648	
	(353)	(353)	
Students' WAEC Score Biology	.648	1.0000	
	(353)	(353)	

Source: Researcher's Field Work 2024 **r=0.648** **r^2=0.418**

As can be seen from data in Table 1, the correlation coefficient is 0.648 indicating a high positive relationship. This signifies that there is a high positive relationship between students' assessment scores and students' academic achievement in biology in WAEC in public secondary schools in Ikorodu North local government area. However, the coefficient of determination(r^2) is 42% when converted, which shows the variation in students' academic achievement as indicated in WAEC official results

Research Question 2: What is the relationship between students' continuous assessment scores and WAEC examination scores in Civic Education in public secondary schools in Ikorodu North Local government area?

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Table 2: Relationship between students' continuous assessment scores and WAEC examination scores in Civic Education

Continuous Assessment Scores		Achievement in Civic Education	
CA Scores	1.0000 (353)	.726	(353)
Students' WAEC Score in Civic	.726 (353)	1.0000	(353)

Source: Researcher's Field Work 2024 **r= 0.726** **r^2= 0.526**

Data in Table 2 indicate a correlation coefficient (r) of 0.726 which is within the range of high relationship. This signifies that there is a high relationship between student's continuous assessment scores and students' academic achievement in WAEC Civic Education in public secondary schools in Ikorodu North local government area. Nevertheless, the coefficient of determination (r^2) is 0.526 which when converted to percentage 0.53%. This value explains the variation in academic achievement of students in Biology as shown by secondary school WAEC official Record of students' performance.

Research Hypotheses

Hypothesis 1: There is no significant correlation between students' continuous assessment scores and WAEC examination scores in Biology in Ikorodu north local government, Lagos state.

Table 1: Significant correlation between students' continuous assessment scores and WAEC examination scores in Biology

Computed r (r)	R: Squared (r^2)	Adjusted r-Square	Standard error	Beta	t-cal	P-Value	Dec.
.648	.419	.418	4.5028	.628	9.280	.0000	Sig.

Source: Researcher's Field Work 2024

From Table 3, r represents the coefficient of correlation which is established on relationship between the two variables. The coefficient of determination (r^2) for computed r value is 0.648. This value shows students continuous assessment scores as it leads to students' academic achievement in secondary schools. On the test of significance of the hypothesis as indicated in Table 3, the calculated 't' value is 9.280 while the p-value is 0.0000. This indicates a significant result between the p-value (0.000) that is less than the level of significance (0.05). Therefore, the hypothesis that there is no significant correlation between students' continuous assessment scores and WAEC examination scores in Biology in Ikorodu North Local Government, Lagos state was rejected.

Hypothesis 2: There is no significant correlation between students' continuous assessment scores and WAEC examination scores in Civic Educations in Ikorodu North Local Government, Lagos state.

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Table 4: Significant Correlation between students' continuous assessment scores and WAEC examination scores in Civic Educations

Computed r (r)	r:Squared (r^2)	Adjusted r-Square	Standard error	Beta	t-cal	P-Value	Dec.
.726	.527	.526	3.43314	.726	13.77	.0000	Sig.

Source: Researcher's Field Work 2024

From Table 4, r represents the coefficient of correlation which is established on relationship between the two variables. The coefficient of determination (r^2) for computed r value is 0.726. This value indicates that students' continuous assessment influences their academic achievement in Civic Education in WAEC. On the test of significance of the hypothesis as indicated in table 4, the calculated 't' value is 9.808 while the p-value is 0.0000. This indicates a significant result between the p-value (0.000) that is less than the level of significance (0.05). Therefore, the hypothesis that there is no significant correlation between students' continuous assessment scores and WAEC examination scores in Civic Educations in Ikorodu North Local Government, Lagos State was rejected.

Discussion

Findings from result of analysis of research question one as shown on Table 1 revealed that there was a high positive relationship between continuous assessment scores of Students and students' achievement in Biology in WEAC result. The finding anchored on the computed r and co-efficient of determination (r^2), which indicated that students' continuous' assessment scores enhanced students' academic achievement in Biology. Hypothesis 1 on Table 3 revealed that there was significant correlation between the continuous assessment scores of Students and their achievement in Biology in WAEC, as the alpha level (0.05) is t (probability) value of 0.000. In all indications, it was revealed that there was significant correlation between the continuous assessment scores of Students and their achievement in Biology in WAEC.

This finding is in agreement with Mwebaza (2016) who revealed that continuous assessment boosts student performance in their academic. The author also noted that continuous assessment helps teachers to assess their performance and effectiveness of their teaching. It is also in line the work Ajibade, (2011) who said that, continuous assessment techniques are very effective in the summative performance of students in the study of Biology.

The finding of the study shows that there was a high positive relationship between Continuous Assessment scores and students' achievement in Civic Education in WAEC. Findings anchored on computed r and co-efficient of determination (r^2), which implied that students' performance in WAEC Civic education result could be attributed to student

performance in school continuous assessment borne out of discipline to study. Hypothesis 2 on Table 4 concluded that there was significant correlation between the Continuous Assessment scores and students' achievement in Civic Education. However, the findings are in line with Ukuije, (2011) who suggested that Continuous Assessment policy requires that students be assessed through both Continuous Assessment and terminal assessment to evaluate the progress and growth of students. Therefore, Continuous Assessment directly affects students' achievements. That was why the Federal Ministry of Education, Science and Technology trailing the same pathway of this exercise of Continuous Assessment and encouraging its practice observed that assessing the teaching process is an integral part of the curriculum in which the teacher must be fully involved.

Conclusion

This study focused on Comparison between the Continuous Assessments and West Africa Examination Council (WAEC) Examination scores on Student's Academic Achievement in Selected secondary schools in Ikorodu North Local Government Lagos State. There is a high positive relationship between Continuous Assessment scores and students' achievement in Biology in WAEC while the result of the hypothesis revealed that there is a significant correlation between the Continuous Assessment scores and students' achievement in Biology in WAEC. There is a high positive relationship between continuous assessment scores of Students and their achievement scores in Civic Education in WAEC while the hypothesis revealed that there is a significant correlation between the continuous assessment scores of Students and their achievement in Civic education in WAEC.

Recommendations

From the findings of the study, the following recommendations were made:

1. As regards the positive relationship between continuous assessment scores of Students and their achievement in Biology in WAEC result, Secondary School Management Board should organize workshops for practical training in using continuous assessments.
2. As a result of the positive relationship between Continuous Assessment scores and students' achievement in Civic Education in WAEC result, refresher courses should be given to Civic Education teachers to train them in developing and using continuous assessment. A new culture for enhancing continuous assessment in teaching is what is required in this present education system.

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