

# Effect of Continuous Assessment on the Academic Performance of Students: A Case Study of Selected Secondary Schools in Akwanga Local Government Area of Nasarawa State

<sup>1</sup>Comfort Laraba Ahmed, <sup>2</sup>Julius Adigizi Abimiku and <sup>3</sup>keziah Abimiku

<sup>1</sup>Department of psychology, College of Education Akwanga, Nasarawa State

<sup>2</sup>Department of Business Education, College of Education Akwanga, Nasarawa State

<sup>3</sup>Registry Department, College of Education Akwanga, Nasarawa State

Email: ahmedcomfort1@gmail.com

## Abstract

The important role continuous assessment plays in determining students' success cannot be overemphasised. Continuous assessment is seen to be systematic, comprehensive, cumulative, diagnostic and guidance orientated; that is why the practice of continuous assessment, no doubt, is evident in the changes in assessment techniques by schools. This study aimed to investigate the effect of continuous assessment on the academic performance of students using selected secondary schools as a case study. A survey research design was used for the study; the instrument used to obtain information was a structured questionnaire; the collected data were analysed using descriptive statistics such as frequency counts and percentages, while regression analysis was used to determine the relationship between continuous assessment and students' academic performance. A total population of five hundred respondents (500) were selected among 20 secondary schools in Akwanga Local Government Area of Nasarawa State using the stratified random sampling technique to select the sample. The results of the findings revealed that continuous assessment significantly affects the academic performance of students. The majority (75%) of respondents agreed that continuous assessment tests are used by the teachers to assess students' performance. One problem faced by schools with the introduction of continuous assessment techniques is that 36% of respondents strongly agreed it made teachers' jobs more tedious in secondary schools. The majority (54.8%) of respondents agreed that continuous assessment could lead students to cheating to be awarded higher marks. 36.6% of respondents concurred that continuous assessment techniques could potentially foster favouritism, as teachers might choose to award higher marks to students they prefer. It was recommended that there is a need for the state ministry of education to organise seminars and workshops for teachers to update their knowledge on the practice of continuous assessment, school heads to oversee the keeping of various assessment records, and teachers to have assessment log books for proper assessment, and there should be monitoring and supervision of teachers.

**Keywords:** Continuous assessment, teachers, students, academic performance, evaluation.

Accepted 30/3/2025

Published 31/3/2025

## 1.0 INTRODUCTION

The significant role of continuous assessment in determining students' academic performance cannot be overemphasised. Continuous assessment is a classroom strategy implemented by teachers to determine the knowledge, skills, and understanding attained by students. Teachers administer assessments in various ways over time to allow them to observe multiple tasks

and information about what students know, understand and can do. The assessments are curriculum-based tasks previously taught in the classroom. Continuous assessment was introduced in Nigerian schools in 1981 following the adoption of the 6-3-3-4 system of education (Oyesola, 1986; Idowu & Esere, 2009). The intention was to make the evaluation of the learner more reliable, valid,

objective, and comprehensive. The assessment was usually administered at the midterm and end of the term or school year (academic session). These statements led to the creation of continuous assessment as a way to better measure students' progress by proving that assessment is planned, cumulative, all-encompassing, and focused on providing guidance. Thus, continuous assessment is the current form of school-based assessment in use in Nigerian secondary schools today.

The main focus of this form of assessment is to ensure that students do not wait until the end of a semester or a programme before being evaluated. Continuous assessment has always been one means of measuring students' progress during a course of study. It also serves as a modality for effective teaching and learning. In view of this, the National Policy on Education (2013) emphasised emphatically that educational assessment and evaluation shall be liberalised by their being based in whole or in part on continuous assessment of the progress of the individuals. Continuous assessment is an integral part of the instructional process and is a crucial tool in ensuring the quality of education. Similarly, while continuous assessment focusses on all instructional objectives and learning outcomes, it sometimes fails to provide a comprehensive description of the student's performance. This is because the continuous assessment of students is not based on the same standard of scores and assessment instruments.

The learners are assessed in the three domains of learning, i.e., cognitive, affective and psychomotor domains, several times at certain intervals by using various assessment strategies. Both the pupils and the teachers have the impression that the purpose of education is to pass tests, and not only this, but examinations. Continuous assessment is systematic because it requires an operational plan. It is also cumulative in nature in that any decision-making about learners is based on earlier decisions, and it is guidance-oriented so that any data or information gathered by the learners will serve as the basis for further academic growth and development (Onuka, 2016).

One major innovation in our educational system is the introduction of continuous assessment as an important component for evaluation. Base educational assessment and evaluation on continuous individual progress assessment to liberalise them. In all secondary schools, continuous assessment accounts for 40 per cent of the students' performance in each subject. Most secondary schools allow between 20 and 30 per cent in course assessment (Alex, 2010).

Therefore, continuous assessment is said to be systematic in the sense that it is planned and graded to suit the age and experience of the children and is given at suitable intervals during the school year. Appropriate timing saves students from being tested to death or becoming bored with too-frequent assessments. The comprehensive nature of continuous assessment means

that it is not focused on academic skills alone. It embraces the cognitive, psychomotor, and affective domains. A student is assessed as a whole using all the psychometric devices, such as test and non-test techniques. The cumulative characteristics of continuous assessment mean that all information gathered about the individual has to be pooled together before a decision can be made. To say that continuous assessment is guidance-oriented means that the collected information is to be used for educational, vocational, and personal-social decision-making for the child. Guidance and counselling activities thrive better with valid, sequential, systematic, continuous, cumulative, and comprehensive information (Denga, 2013).

Academic performance, on the other hand, is basically a reflection of a student's abilities, efforts, and achievements. It is related to many intellectual activities and therefore of equal importance in measuring the abilities of the candidates (Obioma and Salau, 2010). In line with this, it could be assumed that academic performance is a measure of general mental abilities, which are responses to tests of different kinds. In most schools in Nigeria, standardised tests of different kinds are used, and the students' response to these standardised tests represents the academic performance of the students. According to Shoukat et al. (2013), the more the students are taught based on a broader set of abilities, the more diverse student achievement can be. In any case, education without a standard is worthless, and if learning is to retain some relevance or worth, there should be a need for standardisation (Aremu, 2011). Based on this premise, the study aims to evaluate the effect of continuous assessment on the academic performance of students in secondary schools in the Akwanga Local Government Area of Nasarawa State.

## 1.2 Statement of the Problem

The introduction of continuous assessment techniques in our school system is not without its challenges that require the attention of both the government and other agencies involved in educational administration. These problems need to be identified so that a possible solution could be proffered to them. Continuous assessment increased the workload of teachers, thereby reducing efficiency and productivity. The attempt to conduct and record assessments regularly often hinders the teacher's ability to complete the scheme of work on schedule. Inadequate learning equipment and other instructional materials in teaching aids and understaffing are intended to reduce the efficiency and effectiveness expected of the students, and this hinders the proper implementation of the program. Inadequate funding for continuous assessment techniques in schools is also one of the problems affecting this program.

The difficulties of quantifying and assessing handwork

## 64. Glob. Educ. Res. J.

materials, local crafts, and other subjects that are practically orientated, as well as the constant writing of reports, progress charts, and records of other faults, often divert the attention of teachers from classwork. The problems of the continuous assessment technique affect the academic records of transfer students because of the differences in timing of assessment between different schools within the same state; the researcher, therefore, aims to find out the effect of continuous assessment on students' academic performance.

This study will reveal how continuous assessment affects students' academic performance, showing that assignments, class projects, class tests, and examinations greatly improve their study habits and overall performance. With these techniques and instruments, continuous assessment, in the opinion of Ohuche and Akeju (2015), states that continuous assessment acts as a stimulant for studying; it directly influences and tests the students or arouses their interest in studies. Therefore, this study intends to add to the existing body of knowledge and bridge the existing gap in education.

### 1.3 Objective of the Study

The main objective of this study is to investigate the effect of continuous assessment on the academic performance of students while the specific objectives are;

1. To identify the extent to which continuous assessment techniques improve on learning in the school system.
2. To determine the problems created by the introduction of continuous assessment technique in our school system.
3. To establish the benefits recorded by school system since the introduction of continuous assessment technique.

### 1.4 Research Questions

1. To what extent does continuous assessment techniques improve on learning in the school system in the study area?
2. What are the problems created by the introduction of continuous assessment technique in school system in the study area?
3. What are the benefits of adopting continuous assessment technique in the study area?

### 1.5 Research Hypothesis

Null Hypothesis (Ho): There is no significant relationship between continuous assessment and students' academic performance in secondary schools.

Alternative Hypothesis (Hi): There is significant relationship between continuous assessment and students' academic performance in secondary schools.

### 1.6 Significance of the Study

The study highlighted the difficulties and prospects of using continuous assessment technique to evaluate the performance of students. It will be of immense significant to the teachers, school, parents, government, policymakers and society in implementing policy that will improve teaching and learning.

## 2.0 LITERATURE REVIEW

### 2.1 Concept of Continuous Assessment

Continuous assessment can be considered taking into account the child's all-round performance in the cognitive, affective and psychomotor domains during a given period of schooling using a wide range of instructions according to Ebon (2011). Continuous assessment is the process of assessing a student in the cognitive, affective and psychomotor domains of behaviour over a period of time using several techniques in order to help him fully develop his ability. According to Ajuonuma (2010), it is a process of gathering and fashioning data into an interpretable form of making decisions. This process involves data collection, which will be used to make value judgements concerning the quality of a person, object, group, or event. A good continuous assessment can make the following contributions: promoting the development of reading skills and encouraging long-term habits through activities such as reading and listening. These learning habits form the key to continuous success in school and to the personal enrichment of leisure (Obi, 2013).

Secondary school is a post-primary school educational level in Nigeria, a 6-3-3-4 system with 3 years at junior secondary school and another 3 years at the senior secondary level. The senior secondary school is the final stage of the secondary school level, whereby a learner who has already gotten the necessary and basic foundation in the cognitive, affective and psychomotor domains of knowledge in junior secondary will be allowed to choose which areas to concentrate on, be it science, arts, commerce or technical. All senior secondary school students have to sit for a Senior Secondary Certificate Examination (S.S.C.E), which can be a West African Senior Secondary Certificate Examination (W.A.S.S.C.E) or a National Examination Council (N.E.C.O). This is the final state before university education. Students must pass this examination before being admitted into any university.

Teachers are those people who deliver education

programmes, assist students' participation in an educational programme, and administer consistent and substantial leadership to an educational programme prescribed under the educational programme (Ajuonuma, 2010). Teaching must occur in a school or another setting that delivers an educational program prescribed by the education curriculum. They must hold a professional certificate in the relevant subject area, exhibit great enthusiasm, interest, and focus in teaching, demonstrate content knowledge and pedagogy competency, assist students outside of class to improve their understanding, and demonstrate patience during question sessions. Teacher's perception can be seen or defined as a teacher's recognition and interpretation of sensory information relating to education. This means how teachers respond to the information from their environment and how to use that information to interact and make meaning out of that information. It is also a teacher's view or opinion resulting from experience and external factors acting on the teachers.

In the Nigerian educational system, two sets of assessments are used to evaluate the level of students' achievements. These are the continuous assessment: periodic course assessment and the final examination assessment. These procedures replaced the one short system of assessment, which was observed to have several shortcomings (Michael and Odeno, 2010). Some of the shortcomings are a lack of diagnostic and guidance-oriented properties, the creation of emotional problems, low context coverage, and a high rate of examination irregularities. According to Danjuma (2010), continuous assessment in the educational system serves several purposes, which include the following:

- i. To provide more valid and reliable assessment of the student overall ability.
- ii. To enable teachers to be more flexible and innovative in their teaching.
- iii. To provide basic guidance for students.
- iv. To reduce examination malpractice.

The Continuous Assessment policy requires that students be assessed through both Continuous Assessment and termly assessment to evaluate the progress and growth of students. The practice is further boosted in the Colleges of Education Evaluation System by the requirements of the National Commission for Colleges of Education. Odile and Ajuar (2012) asserted that continuous assessment takes account of all the child's performances in tests, assignments, projects and other educational activities over a term, year, or the entire educational level. Teachers often make crucial decisions regarding student promotion to the next class, identifying those needing remedial help, and grading and certifying 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/learning process is an integral part of the curriculum in which the teacher must be fully involved. He further observed that it is an all-embracing exercise, which the learner should undergo throughout his schooling period. Continuous assessment is therefore a way of obtaining the most valuable assessment of the capabilities of a student. This is because it is an aggregate of all the achievements a student has made from the beginning of the course to the end of it, which determines the final achievement.

## 2.2 Characteristics of Continuous Assessment

**Systematic:** Continuous assessment is said to be systematic in the sense that it requires an operational plan, which indicates what measurements are to be made of the student's performance or at what time interval, or times during the school year, the measurements are to be made and the results recorded, and the nature of the instrument and tools to be used for the measurement. Ughamadu (2010) emphasised that the systematic nature of continuous assessment necessitates the development of a specific assessment program in advance. An operational plan that specifies what measurements are to be made of students' achievement, the time interval, the results, and the kind of instruments or strategies to be used is usually decided in advance. This research is aimed at finding out the systematic nature of continuous assessment, whether frequent administration of continuous assessment per semester will yield better achievements or not.

Ipaye (2011) stressed that continuous assessment is systematic only when the varieties and types of the assessment to be used are specified in advance for the students to know; the students should know how frequent the continuous assessment should be, whether on a weekly basis or monthly at the end of the semester. He also stressed that students should know who is to be involved in the continuous assessment administration, especially the teacher. Ipaye's view of the systematic nature of continuous assessment is in line with this research. Turton (2010) opined that continuous assessment should be planned and be periodic. This indicates that whatever is going to be used in the measurement of the students' achievements, such as test items and instruments, should be well planned, and the assessment should be made at intervals. This makes continuous assessment systematic.

**Comprehensive:** This has to do with a variety of instruments or assessment procedures used in ascertaining the achievement of students. Bloom (2010) and Ughamadu (2012) stated that these instruments included tests, assignments, questionnaires, interviews,

## 66. Glob. Educ. Res. J.

sociometric technique checklists, and inventories used in the continuous assessment system. Therefore, continuous assessment is comprehensive because it does not only measure the outcome of the instruction in terms of achievement; it also measures other aspects like the affective and psychomotor domains.

**Cumulative:** This occurs when the results of continuous assessment are recorded in a progressive manner, showing trends and growth patterns over time; each data point is added to the previous one and subsequent ones in a given ratio. The fate of the students lies with the teachers who assess them and are responsible for keeping up-to-date records of the students' achievements. Hassan (2012) stressed that scores are added from the first term through the second to the third term and are considered for grading with the final examination scores for either promotion to the next class or for graduation. Danjuma (2011) pointed out that two sets of assessments are used to evaluate the level of students' achievements. These are the periodic course assessment marks, which are cumulative, and the final examination marks. When two, three, or four tests are given in a term, the scores should be added up to make the final continuous assessment score cumulative.

**Guidance Orientated:** Guidance-orientated continuous assessment stressed that those areas of students' strength and weakness should be communicated to the students to enable them to make adjustments. Aliyu and Ngadda (2014) found that periodic assessments are very effective measures of academic achievement. Turton (2013) opined that guidance-orientated continuous assessment has greater validity than other forms of assessment because of the involvement of the classroom teacher in the assessment procedure. Guidance-orientated, continuous assessment indicates that the information obtained is used to guide the students' further development. In other words, information obtained from the the planned and frequent administration of a variety of tests in a continuous assessment practice can be very useful in guiding the students in the right part of learning, not only in the cognitive but also in the affective and psychomotor areas.

**Diagnostic:** Another characteristic of continuous assessment is the diagnostic function. Ohuchi (2013) states that there are many uses for which assessment data scores may be put in our present system of education. Assessment for placement and certification is highly appreciated in continuous assessment, which serves as feedback to both teachers and students. It offers the opportunity to take corrective actions whenever any undesirable trends are observed.

**Prognostic:** This aspect of continuous assessment looks into the future and predicts how well the student will perform on similar tasks or even entirely different tasks in the future (Nwaze, 2013).

**Formative:** Ezenwe (2014) observed that the objective of formative assessment is to enable the students to monitor his progress with a view to identify his learning problems and correct them.

**Summative:** This type of assessment is given at the end of the term, semester or year. It is mostly concerned with decision-making at the end of the term, semester or end of the year, and such a decision takes into account the results of the formative assessment. Turton (2013) added five practical characteristics to school-based continuous assessment, and these include:

- **Simplicity:** This aspect stressed that continuous assessment should be simple in both design and operation. It stressed that any new institutional idea must start simple and be refined later.
- **Comprehensibility:** In this aspect, continuous assessment data or scores should be in the form of what can be easily comprehended by all concerned. One of the aims of the system is to communicate the present information to the students. Comprehensibility is achieved through the adoption of a system of grading based on ranking students in order of merit within a particular year or group for each subject.
- **Security:** The security of continuous assessment is expressed in two areas, namely, the physical security aspect and the security against forgery and misuse. Students' records had to be physically secured against natural hazards such as fire, rain, and theft.
- **Validity:** This includes the content and face validity (that is, internal and external) within the institution, and continuous assessment ensures internal consistency of results. Externally, it is affected by the system of moderation.
- **Integrity:** In this aspect, integrity is promoted within the system through making reasonable demands on the teachers in terms of training and materials. Well-designed forms of data recording and ensuring an equitable distribution of the extra work, which continuous assessment entails, are equally important.

### 2.3 Techniques Used in the Administration of Continuous Assessment

Continuous assessment is mainly teacher-orientated; that is why, in some countries, it is referred to as teacher assessment (Faleye, 2016). Detailed guidelines on how teachers should conduct continuous assessments are outlined; no single assessment tool may be adequate to measure all changes in behaviour or the objectives of a lesson. The objectives of a lesson have been categorised into three broad areas, called domains. These are the cognitive, affective, and psychomotor domains. The cognitive domain is concerned with knowledge and its use. The affective domain deals with emotional

responses, such as interest, appreciation, attitudes, feelings, and values, that one may attempt to teach through the lessons. The psychomotor domain is concerned with physical, motor, and manipulative skills (NTI, 2011).

i. Test: The major and the most useful instrument for the assessment of cognitive behaviour, which are tests, are written-down questions to be answered by students. According to Nitko (2012), testing and examining are the most formal assessment methods. Learning experience is represented by qualitative marks. It could come in the multiple-choice or essay form, which students are expected to answer; it is their responses to the questions that give the measure of the level of achievement or performance. Measurement is the process of assigning the marks.

ii. Projects: This is another instrument used for measuring achievement.

Projects can be used for the measurement of achievement in the cognitive, affective, and psychomotor domains, according to Barclay and Breheny (2013); "project work involves the collection and analysis of data and engaging in open-ended experiments." The process involves identifying and striving to solve problems in various learning fields and investigating the underlying concepts and principles. Some projects may span over a month, term, or year.

iii. Assignments: These are specific tasks meant to be completed within a short time. They are usually meant to reinforce a previous lesson or to prepare for a forthcoming one. According to Ango (2013), assignments provide students the opportunity to practice independent work. After setting a goal, the assignment will follow the same format as other written works.

iv. Observation: This is a very important procedure for psychomotor and affective domains. Through observation, the teacher can learn a lot about the child's interest, attitude, and ability to accomplish a particular task. It is a technique of gathering information; the teacher will be better disposed to include such information in the students' report. The Federal Ministry of Education (2014) pointed out that the technique has the advantage of giving a record of the actual behaviour of the child that is free from the teacher's biased interpretation.

v. Check List: A checklist consists essentially of a listing of steps, activities, behaviours, or statements associated with a given behaviour trait that the observer records when incidents occur. With a checklist, a teacher can determine whether or not a particular behaviour, trait, or characteristic is present or absent. A checklist can be effectively used to assess affective and psychomotor behaviour. A checklist consists of a list of things or

statements, which pupils are expected to respond to by marking/ticking those that apply under the stated situation and leaving unmarked those that do not apply. For instance, when completing a reading checklist, students are asked to indicate whether they use it always, sometimes, or never. Example: love story books – spend time with books, narrate stories from books. A checklist may also outline a particular procedure for carrying out a particular operation (NTI, 2011).

vi. Interview: This technique provides direct observation; the student is confronted by the observer, counsellor, or teacher, and this confrontation could result in students being more cautious in the way they answer questions than they will normally be. According to Nwaeze (2016), interviews may be either structured or unstructured. In the structured interview, the interview schedule, which contains a set of questions to be asked in a specific order, is used. The answers are written down or recorded while in the unstructured interview. The order and the exact form of the questions are not specified, but the general idea of what is expected is known by the interviewer. The interviewer encourages the interviewee to expand on his answers by asking leading questions.

vi. Questionnaires: Questioning people orally in a formal situation makes them anxious. They may be concerned about why they are being questioned, what they are expected to say, and how their responses will be interpreted. Using a questionnaire completely eliminates these concerns. The threat often inadvertently associated with interviews is not there. Questionnaires are instruments that present information to a respondent in writing or through the use of pictures and then require a written response—a tick, a circle, a word, a sentence, or several sentences. (NTI, 2012). According to Emmanuel (2013), questionnaires can be structured or open-ended. In the structured questionnaire, the respondent is required to select one or more responses from alternatives. The open-ended format gives the respondent freedom to answer in his words. Teachers can get information relating to students' attitudes, interests, studying habits, and personal characteristics through the use of a questionnaire. A questionnaire may be made up of statements in the affirmative, which can be agreed or disagreed with. A questionnaire may also be made up of incomplete statements that the student is expected to complete. Questionnaires can serve a number of useful purposes in the classroom if carefully designed.

## 2.4 Continuous Assessment and Academic Achievement

In the Nigerian educational system, two sets of assessments are used to evaluate the level of students' achievements. These are the continuous assessment

(periodic course assessment) and the final examination assessment. These assessments replaced the one short system of assessment, which was observed to have several shortcomings (Kapambwe 2010). Some of the shortcomings are a lack of diagnostic and guidance-oriented properties, the creation of emotional problems, low context coverage, and a high rate of examination irregularities.

According to Farooq et al. (2011), continuous assessment in the educational system serves several purposes, which include the following:

- i. To provide a more valid and reliable assessment of the student's overall ability
- ii. To enable teachers' to be more flexible and innovative in their teaching.
- iii. To provide basic guidance for students.
- iv. To reduce examination malpractice.

The Continuous Assessment policy requires that students' be assessed through both Continuous Assessment and terminal assessment to evaluate the progress and growth of students. The The Universal Basic Education Commission (2010) asserted that continuous assessment takes account of the child's performances in tests, assignments, projects, and other educational activities during a given period of time (term, semester, and year) or during the entire educational level. Teachers' often take crucial decisions on the promotion of students to the next class, identification of students who need remedial help and grading and certification 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/learning process is an integral part of the curriculum in which the teacher must be fully involved. He further observed that it is an all-embracing exercise, which the learner should undergo throughout his schooling period. Continuous assessment is therefore a way of obtaining the most valuable assessment of the capabilities of a student. This is because it is an aggregate of all the achievements a student has made from the beginning of the course to the end of it, which determines the final achievement.

### **2.5 Influence of Continuous Assessment (CA) on Students Performance**

In order to ensure high quality of students' academic performance, students are evaluated from one stage to another through tests and assignments. UBEC (2010) and Wikipedia (2012) described continuous assessment as an educational policy in which students are examined continuously over most of the academic programme. Likewise Situ (2008) and Ajibade (2011) give the description of continuous assessment as a process of periodic collection of information throughout a

course/programme of study with the purpose of determining the progress towards goal attainment. In light of this, continuous assessment is therefore necessary for students in order to determine their periodic performance and for teachers to improve in their course design and assessment skills. The description of continuous assessment also explains the strength of the relationship between continuous assessment and summative performance (final outcome) of students. In terms of their relationship, Ekpeyong (2011), in his studies of the impact of continuous assessment practices and students performance, noted that the use of continuous assessment in rating students performance seems most appropriate for improving class efforts towards final outcomes. Hilma (2012) identified several benefits of implementing continuous assessment as a strategy for performance improvement.

- Students may get increasingly better instructions as the semester progresses.
- Efforts to improve the course will be perceived positively by students; that is for example, they will feel that they have some stake in the rating process.
- The instructor becomes actively involved in instructional evaluation.
- The instructor derives intellectual and interpersonal satisfaction from teaching-related experience as he overcomes the frustrations associated with successful executing tasks of teaching.
- It reduces examination malpractices.

In order to buttress the fact that continuous assessment has impact on students' performance, the UBEC manual for the re-training of Basic Education Teacher and Managers (2010) itemized the following as value attached to continuous assessment

- Periodic feedback to pupils which could be psychologically motivating. - Provide opportunity to parents and pupils for effective monitoring of progress.
- Provides basis for counseling of pupils for improved performance.

Several authors have associated many positive values with continuous assessment. However, Aremu (2011) noticed that the grades obtained from continuous assessment cannot be relied on as a yardstick for measuring performance. According to them, the reasons for such non-reliance are that differing situations exist in terms of programs offered, school traditions, teachers' assessment and rating styles, students' abilities, and entry behaviours, among other factors that could influence performance. They also pointed out that continuous assessment could be abused by teachers since scores obtained in the assessment could be manipulated and that often continuous assessment is only based on tests and assignments which may not be moderated or standardised. In supporting this assertion, Idowu and Esere (2010), in their studies of continuous assessment practices in schools, found out that most teachers fall short in the usage of different continuous assessment strategies because instructors restrict

themselves to tests and assignments only. Despite this negative effect, teachers and students aimed primarily at favourable results before examination results; the nature of continuous assessment, therefore, has a domineering influence on achievement. It could therefore be inferred that for continuous assessment to continue to have more positive influence on students summative performance, teachers should move away from the traditional practice of tests and assignments to other different instruments such as observation, interview and project report.

Kellagha and Gweany (2003) point out that continuous assessment has a direct impact on teaching and learning when it has a substantial weight in terms of performance consequences. This makes it a possible means of raising students' academic performance. Kelly (2017) notes that Nigeria has successfully accomplished learning objectives by implementing mechanisms for thorough continuous evaluation and feedback. Onuka and Oludupe (2005) came to the same conclusion as this study: using formative assessment and feedback systems makes it much easier to fix problems related to poor performance and successful learning rehabilitation.

According to Graume and Naidoo (2004), the school system primarily uses terminal, half-yearly, and annual examinations to evaluate students up to the high school level. There are two types of assessments that can be made: internal and external. Internal assessments are evaluations that take place inside the school and include assignments from classes, tests made by teachers, review exercises, projects, and fieldwork activities. The term "continuous assessment strategy" describes the variety of techniques and protocols used in the classroom to evaluate students' academic performance in terms of their knowledge, attitudes, and values. Furthermore, an assessment strategy is a planned and intentional course of action that presents an organised evaluation technique with the dual goals of achieving predetermined results and avoiding others (Orsmond, 2004).

Continuous assessment is also seen to be systematic, comprehensive, cumulative, diagnostic and guidance orientated; all these, Ukuije (2011) said, are influencing students summative performance. For example, Ajibade (2011), in his submission on continuous assessment characteristics and its impact on performance, explained that continuous assessment involves an operational plan to determine which assessments are to make up students performance, at what intervals during the school year, and what approach or method is to be adopted. It is true that teachers decide what kinds of continuous assessments to use, when to give them, and which ones count towards the final grade. This means that the types, frequencies, and lengths of assessments used will either have a positive or negative effect on their students' final grade.

From the foregoing, teachers can influence the overall academic performance of their students through their guidance-orientated continuous assessment because they are at the centre of all performance assessment

activities of their students. This suggests that teachers who gather data on each student over an extended period can access precise information about their progress, which in turn allows them to modify their instruction to enhance overall performance.

If teachers also adopted a good continuous assessment approach, it would enable them to integrate assessment and assessment results into instructional practice, score assessments, and discuss standards for good learners' performance. Students, on the other hand, need to form favourable attitudes toward continuous assessment by not cheating, playing truancy, stealing and lying. For instance, if these negative attitudes are removed by students, teachers will be able to understand their affective attributes, such as interests, motives, and other characteristics associated with intelligence, to improve summative performance.

### 3.0 RESEARCH METHODOLOGY

#### 3.1 Area of the Study

The study was carried out in secondary schools in the Akwanga Local Government Area of Nasarawa State. The choice of the area was because of its geographical location in the state and the high proliferation of secondary schools situated in the Local Government Area of Nasarawa State.

#### 3.2 Research Design

This study employed a mixed-methods research design, integrating both quantitative and qualitative approaches to provide a comprehensive understanding of the relationship between continuous assessment and academic performance. By combining numerical data with rich contextual insights, this approach ensures a more holistic analysis, capturing both measurable trends and teachers and students' life experiences.

#### 3.3 Quantitative Approach

The quantitative component of the study focused on the collection and analysis of numerical data to identify patterns, correlations, and trends in continuous assessment in relation to students' academic performance. This was achieved through the following methods:

#### 3.4. Data Collection

Survey Questionnaires: copies of structured surveys were administered to a representative sample of teachers and students to evaluate the effects of continuous assessment on the academic performance of students.



## 70. Glob. Educ. Res. J.

Secondary Data Sources: Secondary data was sourced from research journals, government reports, libraries, the internet, magazines, and textbooks.

### 3.5 Qualitative Approach

The qualitative component explored teachers and students' experiences and perceptions, providing a deeper contextual understanding of how continuous assessment affects their students' academic performances. This involved:

Content Analysis: students' responses were analysed to identify impacts on academic performance.

### 3.6. Integration of Mixed Methods

To ensure coherence between the quantitative and qualitative components, the study employed a convergent parallel design, where both data types were collected simultaneously and analysed separately before being integrated. The integration process involved:

Comparing Findings: Quantitative statistical trends were cross-checked with qualitative insights to ensure consistency and identify discrepancies.

Explaining Quantitative Results: Qualitative narratives helped in interpreting statistical relationships, offering deeper explanations for observed patterns.

### 3.7. Population of the Study

The study population consists of teachers and students in the selected secondary schools in the Akwanga Local Government Area of Nasarawa State. These include classroom teachers, principals, the Dean of Studies (DS), and students from selected secondary schools of Akwanga Local Government Area of Nasarawa State.

### 3.8. Sampling Technique and Sample Size

A multi-stage sampling technique was adopted in this study, as explained below:

**Stage 1:** Purposeful sampling was used to select respondents because it allows for the selection of respondents that are more relevant to the research

objectives; it ensures rich and focused data and in-depth insight.

**Stage 2:** Stratified sampling to categorise secondary schools based on the various districts of the local government area.

**Stage 3:** Random sampling of teachers and students within selected secondary schools to ensure representativeness.

Thus, a total sample size of 500 respondents (25 each) from 20 selected secondary schools in Akwanga Local Government Area of Nasarawa State were targeted to ensure statistical significance and avoid bias.

### 3.9. Instrument for Data Collection

The instrument used for the data collation for this study was questionnaires. The questionnaires comprise sections A-D. Each of the sections dealt with each of the research questions. Also, the response mode will be strongly agreed (SA), disagreed (D), or strongly disagreed (SD) and disagreed (D).

### 3.10. Method of Data Collection

The researcher intends to use (500) questionnaires that were administered directly by the researchers and will be collected on the spot after they are filled out by the respondents to ensure optimum return of the instruments.

### 3.11. Method of Data Analysis

Data obtained were analysed using descriptive statistics such as frequency count, percentages, and standard deviations; t-test regression was used to determine the relationship between continuous assessment and students' academic performance.

## 4.0. RESULTS AND DISCUSSION

This data collection for the study was presented and analyzed in this chapter based on the formulated research questions that guided the study. The analysis of the results obtained are presented in the tables below:

**Table 1:** Analysis of the Effects of Continuous Assessment Techniques on Teaching and Learning in the Study Area

S/N	ITEMS	SA 4	A 3	D 2	SD 1	TOTAL
1	Continuous assessment helps in assessing the 3 domains of educational development of a student	280	110	60	50	500
2	Continuous assessment helps in knowing the real ability of the development of the learner	300	105	95	15	500
3	In terms of evaluation it helps the teacher to know if what he/she has taught is been understood by the students	165	210	71	54	500
4	In terms of placing pupils in their positions continuous assessment helps the teacher a lot but examination is not the true test of knowledge	60	20	320	100	500

Source: Field Survey, 2025

From the result obtained in table 4.1 above, the majority (280) of the respondents strongly agreed that continuous assessment helps in assessing the 3 domains of educational development of students, while 60 respondents disagreed with that opinion. 300 respondents strongly agreed that continuous assessment helps in knowing the real ability of the development of the learner, while 15 respondents disagreed with that suggestion. The result also indicated that the majority

(210) of respondents agreed that continuous assessment helps teachers to know if what he/she has taught has been understood by the students. In terms of placing students in their positions, the majority (320) of respondents disagreed that continuous assessment helps the teacher but does not place students in their proper positions, while only a few (60) respondents agreed to that opinion. This result agreed with the axiom that examination is not the true test of knowledge.

**Table 2:** Problems faced by schools through the introduction of continuous assessment techniques in school system in the study Area

S/N	ITEMS	SA 4		A 3		D 2		SD 1		TOTAL
		F	%	F	%	F	%	F	%	
1	It made the teacher's job more tedious	302	36	140	33	38	14.6	20	4	500
2	It could lead the students to cheating in order to be awarded higher marks	128	5.6	274	54.8	92	18.4	6	1.2	500
3	It will necessitate or mandate Teachers Service Commission/Ministry of Education to employ only trained teachers	72	14.4	36	7.2	335	67	55	11	500
4	It gives room for favoritism because teacher may decide to award higher marks to the child he/she likes	160	32	183	36.6	140	28	17	3.4	500

Source: Field Survey, 2025

In table 4.3, the problems that came up because of continuous assessment techniques were analysed. It was found that 36% of respondents strongly agreed that continuous assessment made teachers' jobs in secondary schools more boring, while 14.6% disagreed. The majority (54.8%) of respondents agreed that continuous assessment could lead students to cheating to be awarded higher marks, while a few (18.4%) respondents disagreed with that suggestion. The result also revealed

that 36.6% of respondents agreed that continuous assessment techniques could give room for favouritism because a teacher may decide to award higher marks to the child he/she likes, while a significant proportion of respondents disagreed with that opinion. However, the majority (67) of the respondents do not agree that the continuous assessment technique could necessitate the Teachers Service Commission/Ministry of Education employing only trained teachers.

**Table 3:** Analysis of the Benefits of implementing continuous assessment in secondary schools in the study area

S/N	ITEMS	SA 4	A 3	D 2	SD 1	TOTAL
1	Continuous assessment helps the student to be assessed in the 3 domains of the child development	281(56.2%)	156 (31.2%)	51(10.2%)	10(2%)	500
2	It helps the teacher in placing each student to their correct section (class A,B,C,..)	97(19.4%)	182(36.4%)	128(25.6%)	93(18.6%)	500
3	C.A helps the teachers to understand their level of teaching	196(39.2%)	150(30%)	130(26%)	24(4.8%)	500
4	C.A Techniques helps to build teacher- pupils relationship	99(19.8%)	200(40%)	120(24%)	81(16.2%)	500
5	Continuous assessment helps the teachers to know the ability of each student in various subjects	145(29%)	168(33.6%)	122(24.4%)	65(13%)	200

**Source:** Field Survey, 2025

Table 4.4 above presents the benefits of implementing continuous assessment techniques in secondary schools in Akwanga Local Government Area of Nasarawa State. The result reveals that about 281 of the respondents, representing 56.2%, strongly agreed that continuous assessment helps the students to be assessed in the 3 domains of child development, while 51 respondents, representing 10.2%, disagreed. 36.4% of respondents agreed that continuous assessments help teachers in placing each student in their correct section; 69.2% strongly agreed that it helps the teachers to understand their level of teaching, while 26% of the respondents disagreed with that opinion. The survey revealed that 40% of respondents agreed that continuous assessment (C.A.) techniques help build teacher-pupil relationships. Additionally, 33.6% agreed that these techniques help teachers understand each student's abilities in various subjects, although 24.4% disagreed with this view.

### Test for Research Hypothesis

Null Hypothesis (Ho): There is no significant relationship between continuous assessment and students' academic performance in secondary schools.

Alternative Hypothesis (Hi): There is significant relationship between continuous assessment and students' academic performance in secondary schools.

### Test of Hypothesis

The hypotheses in this study was tested with chi-square( $X^2$ ) which makes use of decision rule. Decision rule states that when degree of freedom or critical value is greater or less than calculated value, then null hypothesis is accepted or rejected respectively.

This hypothesis was tested with respect to table 5 of the questionnaire distribution which states as follow, "continuous assessment does not have significant effect on Student's academic performance in secondary schools in Akwanga Local Government Area".

The statistical tool used was the chi-square( $x^2$ ) using the contingency table previously calculated through the use of simple percentage.

The formula for chi-square ( $X^2$ ) is given as:

$$X^2 = \frac{\sum(O-E)^2}{E}$$

Where

$X^2$  = chi-square

$\sum$  = Summation

O = Observed frequency

E = Expected frequency

To re-state the hypothesis:

1- "continuous assessment does not have significant effect on Student's academic performance in secondary schools in Akwanga Local Government Area

2- Expected frequency =  $500/4 = 125$

**Table 4:** Relationship between Continuous Assessment and Students' Academic Performance

Responses	Option (O)	Expected freq (E)	O-E	(O-E) <sup>2</sup>	(O-E)2E
Strongly Agreed	213	125	88	7,744	61.952
Agreed	149	125	24	576	3.865
Strongly Disagreed	32	125	-93	8,649	69.192
Disagreed	106	125	0.848	0.719	0.005
<b>TOTAL</b>	<b>500</b>	<b>500</b>			<b>135.014</b>

**Source:** Researcher' Computation

Therefore, calculated chi-square value = 135.014

To compute the degree of freedom (DF) or critical value  
 $Df = (R-1) \quad (C-1)$

Where R = Number of rows which is 4  
 C = Number of columns which is 2.  
 Degree of freedom = 3

The researcher assumed 95% level of confidence and 5% level of significance. At 95% level of confidence and 5% level of significance, the degree of freedom at 3 = 7.81 which is 7.8 approximately.

#### Decision Rule

If the calculated chi-square( $\chi^2$ ) value is greater than the critical value, that is, degree of freedom at 3, the null hypothesis is rejected while the alternative hypothesis is accepted and vice-versa.

From the above computation, source the calculated chi-square( $\chi^2$ ) value hypothesis accepted since the calculated frequency value ( $\chi^2$ 135.014) is greater than the critical or tabulated value of 7.82.

135.014 is greater than the chi-square tabulated, the null hypothesis is hereby rejected and the alternative hypothesis accepted since the calculated frequency value ( $\chi^2$ 135.014) is greater than the critical or tabulated value of 7.82.

## DISCUSSIONS OF FINDINGS

From the results of the analysis obtained, the majority (280) of the respondents strongly agreed that continuous assessment helps in assessing the 3 domains of educational development of students, while (60) respondents disagreed with that opinion. 300 respondents strongly agreed that continuous assessment helps in knowing the true abilities and development of learners, while 15 respondents disagreed with that suggestion. This result aligns with James' (2012) findings, which suggest that continuous assessment serves as a means of evaluating students' performance.

The result also indicated that continuous assessment helps teachers to know if what he/she has taught has been understood by the students. It also aids in assigning students to their appropriate roles. However, the majority (320) of respondents disagreed that continuous assessment helps the teacher but does not place students in their proper positions, while only a few (60) respondents agreed to that opinion. This result agreed with the axiom that examination is not the true test of knowledge.

On the problems faced by schools due to the introduction of continuous assessment techniques, it was found that (36%) of respondents strongly agreed that continuous assessment made the teacher's job more tedious in secondary schools, while (14.6%) disagreed with that opinion. The majority (54.8%) of respondents agreed that continuous assessment could lead students to cheating in order to be awarded higher marks. The result further revealed that 36.6% of respondents agreed that the continuous assessment technique could give room for favouritism because the teacher may decide to award higher marks to the student he or she likes, while a significant proportion of respondents disagreed with that opinion. However, the majority (67) of the respondents do not agree that the continuous assessment technique could necessitate the Teachers Service Commission/Ministry of Education employing only trained teachers.

About 281 of the people who answered (56.2% of those surveyed) strongly agreed that continuous assessment helps students be tested in all three areas of child development, while 51 people (10.1%) disagreed. The study was about the benefits of using continuous assessment techniques in secondary schools in the Akwanga Local Government Area of Nasarawa State. 36.4% of respondents agreed that continuous assessments help teachers in placing each student in their correct section; 69.2% strongly agreed that it helps the teachers to understand their level of teaching. It also revealed that the majority (40%) of the respondents agreed that continuous assessment techniques could help to build teacher-student relationships; 33.6% also agreed that the use of continuous assessment techniques helps the teachers to know the ability of each student in various subjects.

## 74. Glob. Educ. Res. J.

At a 95% level of confidence and a 5% level of significance, the hypothesis test on the significant relationship between continuous assessment and students' academic performance showed that continuous assessment does have a significant effect on students' academic performance. This result agreed with Greaney's (2001) idea that continuous assessment is meant to find out what the learner or group of learners knows, how they act, or what skills they have. This is because evaluating how well students learn the curriculum content in terms of knowledge, skills, and values is a big part of many educational reforms.

### CONCLUSION AND RECOMMENDATIONS

#### Conclusion

This study was aimed at evaluating the continuous assessment on students' academic performance in secondary schools in the Akwanga Local Government Area of Nasarawa State. Continuous assessment is used to test the learners' knowledge, but focusing on a particular method of assessment may serve more than one purpose. It should be emphasised that all aspects of teaching, learning, and assessment depend on each other. Assessment in schools is an issue of quality assurance, and thus it is a technique to achieve quality education. Therefore, negligence and/or lack of planning for assessment in schools will compromise and counteract the quality of educational outcomes. It could therefore be inferred that for continuous assessment to continue to have more positive influence on students summative performance, teachers should move away from the traditional practice of tests and assignments to other different instruments such as observation, interview and project report.

#### Recommendations

Based on the findings of this study, the following recommendations were made:

- i. The government should promote a continuous assessment programme under federal and state levels and centres for developing assessment techniques, and our existing educational environment should be developed at the district level.
- ii. The Ministry of Education or its relevant agencies should organise seminars and workshops for teachers to update their knowledge on the practice of continuous assessment.
- iii. Continuous assessment techniques should be enhanced at all levels of education for teaching all subjects/courses.
- iv. The school heads should regularly ensure strict monitoring of the keeping of various assessment records by teachers.
- v. The Ministry of Education should develop a timetable for assessment of students in the school.
- vi. Trained officers from the Ministry of Education should visit schools in the zone from time to time for on-the-spot assessment of the scheme.
- vii. The school authority should ensure that the pupils' populations in the classroom are within the ranges that favour effective supervision of teachers. In the same vein, teachers' workloads should be manageable to enhance their effectiveness.
- viii. Government should motivate teachers through adequate incentives to boost their morale and improve their salary.
- ix. School authority should make funds available for teachers to take students out on field trips to widen their knowledge.
- x. Further research should be conducted to investigate the effectiveness of continuous assessment in teaching different subjects at different levels of education.

#### REFERENCES

- Adeshina, T.J. (2011). Relationship between Information Technology Skills of Secretarial Teachers in Colleges of Education and their Ability to Utilize the Internet for Effective Lecturer. Delivery. Unpublished Dissertation presented to the Department of Vocational and Technical Education, Ahmadu Bello University, Zaria.
- Adeneye, O., Awofala, A., Veronica, F.& Babajide, T. (2013). Examining attitude towards continuous assessment practices among Nigerian preservice STM teachers. *Journal of Education and Practice*, 4(13) pp. 37-49.
- Adeyemi, B. A. (2008). Enhancing academic excellence in social studies through authentic assessment and portfolio assessment. *International Journal of African & African American Studies*, 7(1): 34-42.
- Ajibade, D. (2011). Factors affecting students' academic performance in secondary schools in Imeko Afon Local Government Area of Ogun State, Nigeria. *International Journal of Research in Education: Pan African book company Ghana* 3(5)22-34. retrieved from Ajibade@yahoo.com.uk.
- Airasian, P.W. (2007). *Assessment in the classroom: A*

concise approach 2nd Ed. USA: McGraw-Hill.

Aina, J. K. (2010). Relationship between students' performance in theory and practical physics in colleges of education, Kwara State, Nigeria. (Unpublished Master thesis) University of Ilorin.

Alausa, Y.A. (2012). Continuous Assessment in Our Schools: Advantages and Problems. Kolin Foundation Secondary School. Retrieved from online Arandis PDF complete special Edition.

Aremu, O.D. (2011). August 23rd Educational Assessment: An Exposition of Various Models. Seminar Paper Presented at Federal College of Education, Kontagora Staff Seminar Organizing Committee.

Baker, E. L. (2010). What probably works in alternative assessment. (CRESST Report 772). Los Angeles, CA:University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST). Reprinted from paper originally presented at the Annual Meeting of the American Educational Research Association, Chicago..

Banta, T., Lund, J.P., (2006). Assessment in practice: Putting Principles to Work on College Campuses. San Francisco: Jossey-Bass Publishers.

Bassey, A; Ubong, M; Wokocha, A. (2017). Continuous Assessment Practicum, and the Quality of Business Education Programme in Nigeria. RHEA 1

Bodner, G.M. (2006). Constructivism: A Theory of Knowledge. Vol. 63(10). Purdue University: West Lafayette.

Borko, B., Liston, D., & Whitcomb, J. 2007. Editorial: Genres of Empirical Research in Teacher Education. Journal of Teacher Education, Vol. 58(1): 3-8.

Boyle, J.S. (2004). Styles of ethnography. Critical issues in qualitative research methods. Thousand Oaks, CA: Sage.

Bryan, C. & Clegg, K. (2006). Innovative assessment in higher education. London: Routledge Falmer.

CEPD, (2000). Transformation of the North African Schooling System. Johannesburg: Centre for Educational Policy Development, Evaluation and Management. <http://www.cepd.org.za/22May2007>.

Christie, M. & Nordlund, L. (2002). The quality of assessment. Paper appeared in C-SELT project series. Chalmers Technical University, Göteborg.78

Cobb, T. (2009). "Applying Constructivism: A Test for the Learners-Scientist." Educational Technology Research and Development 47 (3), 15-31.

Cohen, L. & Manion, L. (2000). Research Methods in Education 5th Edition. London and New York: Routledge Falmer.

Cone, J.D. & Foster, S.L. (2001). Training in measurement: always the bribes maid. American Psychologist, 46(6): 653-654.

Dahlstrom, L.O, (2000). Perspectives on Teacher Education and Transformation in Namibia. Windhoek: Gamsberg Macmillan.

Dun, L. Morgan, C. O'Reilly & M. Parry, S. (2004). The learner assessment handbook: New directions in traditional & online assessment. London: Routledge Falmer.

Falk, B., Ort, W. S., & Moirs, K. (2007). Keeping the Focus on the Child: Supporting and Reporting on Teaching and Learning with a Classroom-Based Performance Assessment System. Educational Assessment, Vol. 12(1): 47-75.

Faleye, B. A. & Adefisoye, B. T. (2016). Continuous assessment practices of secondary school teachers in Osun State, Nigeria. Journal of Psychology and Behavioral Science, 4(1): 44-55.

Federal Republic of Nigeria (2014). National Policy on Education. Abuja: NERDC.

Flowers, Nancy. (2002). Four Important Lessons about Teacher Professional Development. National Middle School Association: University of Illinois. [http://www.nmsa.org/research/articles/res\\_articles\\_may2002c.htm](http://www.nmsa.org/research/articles/res_articles_may2002c.htm) retrieved 15/07/2007.

Freiberg, H.J. & Driscoll, A. (2006). Universal Teaching Strategies. Boston: Allyn & Bacon.

Gagnon, G.W. (2008). Constructivist Learning Design. <http://www.prainbow.com/cld/cldp.html> retrieved 14/05/2008.

Idowu, A. I., & Esere, M. O. (2009). Assessment in Nigerian schools: A counsellor's viewpoint. Edo Journal of Counselling, 2(1): 17-27. An Official Publication of Edo State Chapter of Counselling Association of Nigeria.

Joseph, A., John, O., Eric, I. Yusuf, S. & Olubunmi, A. (2015). Effect of gender on students' academic performance in computer studies in secondary schools in New Bussa, Borgu Local Government of Niger State. Journal of Education and Practice, 6(33): 1-7.

## 76. Glob. Educ. Res. J.

Kenni, A. M. (2011). Continuous assessment, mock results and gender as predictors of academic performance of chemistry students in WASCE and NECO examination in Ekiti State, Nigeria. Unpublished Masters Thesis. University of Ibadan, Oyo State, Nigeria. [Taylor, L. & Parsons, J. (2011). Improving student engagement. *Current Issues in Education*, 14(1). Retrieved from <http://cie.asu.edu/>

Universal Basic Education Commission (2010). *Continuous Assessment and Guidance and Counselling: Manual for the Re-Training of Basic Education Teachers*

and Basic Education Managers. Abuja: UBEC. ISBN 13-978-978-49501-9-0.

Wikipedia (2012). Entry Level. Free Online Encyclopedia. Retrieved on 23rd August, 2012.

Yousef, D.A. (2011). Academic Performance of Business Students in Quantitative Courses. A study in the Faculty of Business and Economics at the UAE University. *Journal of Innovative Education: Decision Sciences Institute*. 9 (2) 255-267. Retrieved from Electric Mail [dayousef@vaeu.ac.ea](mailto:dayousef@vaeu.ac.ea) on 29 November, 2018.