

## Continuous assessment practices and impact on students' learning outcomes in Secondary Schools in the South West Region of Cameroon

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**Abstract:** The study sought to find out if assessment practices have a significant impact on students' learning outcomes in Secondary schools. The general objective of the study was to investigate the impact of continuous assessment (CA) practices on students' learning outcomes. The specific objectives were to find out the impact of formative and sequential assessment practices on students' learning outcomes. The main research questions were what is the impact of assessment practices on students' learning outcomes? The general hypothesis was that assessment practices have a significant impact on students' learning outcomes. The research method adopted was the mixed method using the explanatory sequential design. The population of the study comprised students and teachers of secondary schools in the South West Region. The target population was students and teachers of the three selected divisions namely; Fako, Meme and Manyu. The accessible population comprised form four students and teachers in some accessible schools from the three selected divisions. The sample for the study comprised of twelve (12) schools selected within the three divisions. The two main instruments of the study were questionnaire for students and interview guide for teachers. The convenience, purposive and simple random sampling techniques were used to select the sample size comprised of 382 form four students and 24 teachers. Data were analyzed using descriptive and inferential statistics, that is, frequencies, percentages and Pearson product correlation coefficient. The findings showed that continuous assessment practices have a great influence on students' learning outcomes. Findings showed that formative and sequential assessments practices have a great impact on students' learning outcome. Findings also revealed that sequential assessment has great impact on students' learning outcomes. All the 2 null hypotheses were rejected while the 2 alternative hypotheses were retained. The conclusion was that formative and sequential assessments have great impact on students' learning outcomes. The study thus recommends an adequate implementation of formative and sequential assessments practices in our school system to enhance students' learning outcomes. Teachers should be motivated to effectively implement assessment practices in the teaching-learning process.

**Keywords:** Assessment, Continuous assessment, formative assessment and sequential assessment.



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## INTRODUCTION

Historically, classroom assessment and student learning have evolved over time with a great change in methodology and shift in paradigms. The evolution is from the conventional or old system of evaluation to a new system of evaluation, which is based on continuous assessment. Assessment in education has its origin in the American system of education where guidance and counselling also originated (Denga, 1996). There has been an increasing criticism in the educational field on high stakes examinations of having harmful effects on students' learning and that it should be reduced to a minimum (Clark, 2012). Learning is the acquisition of knowledge or skills through study, experience or being taught (Dunlosky et al., 2013). The history of assessment of students began when the doors of school houses were first open. By the early 19<sup>th</sup> century, teachers tested their students to see if they had mastered what was taught (USAID, 2006). If students failed, they were held back or retained while those who passed were promoted to the next level.

The concept of assessment has evolved greatly over time and with new orientations to improve on the teaching-learning process. In the international scene, different countries have adopted continuous assessment system to measure students' learning and achievement (OECD, 2005). The educational reforms recommend that continuous assessment is an integral part of the evaluation system.

Concepts like continuous assessment (CA) were officially introduced to South African schools during 1996 (Shilinge, 2004). Schools have been reformed with new pedagogic devices as regards the implementation of this exciting and demanding new mode of assessment. All the schools in South Africa are making effective use of the CA system put in place by the Ministry of Education to improve on students' learning and achievement.

Continuous assessment has a long history in Nigeria and it is well established in Nigeria compared to many other African countries (Denga, 1987). This is available in the 'Handbook of Continuous Assessment' published by the Federal Government of Nigeria (Federal Ministry of Education, 1985). According to the policy demand, there should be a functional CA Committee in each school. The CA committee should plan the schedule of assessment activities for the school year or term at all levels of education in Nigeria.

The millennium development goals adopted by the United Nations General Assembly (2000) and the various recommendations in the sustainable development goals in 2015 emphasized the need for learners to acquire basic skills and competences to be able to solve socio-economic problems. Also, during the UNESCO General conference (2001) in Bonn, Germany, it was agreed that students should be equipped with basic knowledge, competences, skills, values and attitudes to become productive and responsible citizens.

In Cameroon like other countries, classroom assessment practices have undergone a lot of changes and evolution with focus on continuous assessment. Based on the need to improve students' learning outcomes and performance, MINEDUC in 1996 signed an order dividing the school year into teaching units commonly known as "Sequence" which is a continuous assessment system of evaluation. During the 1995 National Education Forum (Yaoundé, 1995), many innovations were introduced into our educational system, specifically in the domains of pedagogy and classroom assessment. The historical evolution of Continuous assessment in Cameroon dates back to 1995 during the national forum of Education that held in Yaoundé to reform our Educational system. During the Forum, many innovations were introduced to our educational system with the aim of improving the teaching-learning and assessment processes. According to the decree N° 78/B1/1464/MINEDUC/SG/IGP/ESG/ESTP/EPMN of 31<sup>st</sup> July 1996 the government of Cameroon officially introduced the Continuous assessment system of evaluation based on the sequential assessment practice. As a follow up, the 1998 law of education in Cameroon emphasis

the implementation of the Continuous assessment and Sequential assessment of evaluation of students' learning outcomes.

Conceptually, assessment comes from the word to assess. The word assess comes from the Latin word "assidere", which means to sit beside. Literally, it is the process of observing learning, describing, collecting, recording, scoring and interpreting information about students' learning. Classroom assessment can be defined as the process of gathering data for grading or for decision making. It involves collecting data with a view to make value judgment about the quality of the person, object, group or event (Clark, 2012). Assessment also means to appreciate student learning progression and achievements in a lesson, unit, course or program of study using different strategies (Ngonganang, 2021). Assessment is a means whereby teacher obtains information about knowledge gains, behavioural changes and other aspects of the development of learners (Okonkwo, 2002).

Well-constructed classroom assessments are veritable tools for motivating students to learn. What is assessed and how it is assessed is hugely influential in determining what is taught and how it is taught (Black & Williams, 2012). Assessment forms the bedrock of education and represents a commitment to high academic standards and school accountability (Ebok, 2021).

Continuous assessment means assessing learners using different strategies and tools frequently during the teaching-learning process making use of feedback to enhance students' learning and achievement (Okonkwo, 2002). Formative assessment practices enable learners to achieve instructional and lesson objectives. It is beneficial to both teachers and learners in that it guides instructions, facilitate remembering and understanding of facts, enhances students' learning and mastery.

Formative assessment has several important characteristics:

1. **Ongoing Process:** Formative assessments are conducted continuously throughout the learning process, rather than at the end of a unit or course.
2. **Purposeful Feedback:** They provide immediate feedback to both students and teachers, helping to identify areas for improvement and guiding future instruction.
3. **Student-Centered:** Formative assessments often involve students in the assessment process, encouraging self-reflection and self-assessment.
4. **Variety of Methods:** These assessments can take many forms, including quizzes, discussions, observations, peer assessments, and projects.
5. **Informal and Flexible:** They can be informal and adapted as needed based on student responses and needs, allowing for responsive teaching.
6. **Focus on Learning Goals:** Formative assessments align with specific learning objectives, helping to track progress toward those goals.
7. **Collaborative:** They often involve collaboration between students and teachers, promoting a shared understanding of learning goals and expectations.

Sequential assessment (end of sequence assessment) is the type of continuous assessment given to students every after six weeks within the teaching-learning process. Corrections and feedback from the sequential assessment enhance students' learning outcomes. The sequential assessment system which is a form of continuous assessment was introduced with the hope that it was going to enhance classroom instruction and students' learning (Agborbechem and Frinwie, 2013)

Sequential assessment has the following characteristics:

1. **Step-by-Step Approach:** Sequential assessments are conducted in a series of stages, allowing educators to evaluate student understanding progressively after a given period of teaching.

2. **Cumulative Knowledge:** Each assessment builds on previous ones, helping to track student growth and mastery of concepts over time.
3. **Structured Framework:** They follow a structured framework, often aligned with specific learning objectives or curriculum standards.
4. **Clear Progression:** Assessments are designed to demonstrate a clear progression of skills and knowledge, guiding students through increasingly complex tasks.
5. **Feedback Loops:** Regular feedback is provided after each assessment, allowing students to reflect on their performance and make necessary adjustments.
6. **Summative Elements:** Sequential assessments can include summative components at key stages to evaluate overall understanding.
7. **Engagement and Motivation:** By breaking learning into manageable parts, sequential assessments can enhance student engagement and motivation, as they see their progress over time. Report cards are issued at the end of each sequence to evaluate students' learning.

Learning outcomes are specific and clear statements of what students are expected to learn and to be able to demonstrate at the completion of their lesson or course of study (Ramsden, 2003). They are typically expressed in terms of knowledge, skills and attitudes to be acquired to satisfy the educational need of the lesson. Bloom's taxonomy (1956) is a model that can be used to help write learning outcomes. It describes levels of achievement that can be attained across the domains of learning in the cognitive, affective and psychomotor domains. The study was guided by some theories which are related to the topic under investigation.

The following theories were of relevance to the study. Instructional theory by Robert Gagne (1992), Classroom assessment theory For Colleges by Susan M. Brookhart (2003), Classical Test Theory (True score theory) by Charles Spearman (1904) & Melvin Novick (1966), Item Response theory (Latent response theory) by Alfred Binet & Lawrence Thurstone (1950s), Frederic Lord 1952, Lord & Novick 1968, Zinnes & Griggs (1974).

Robert Gagne's instructional theory (1992) serves as frame for organising instruction and achieving students' learning outcomes. The theory provides a great number of valuable ideas to instructional designers, trainers and teachers. According to Brookhart classroom assessment theory (2003), assessment means collecting information about students' learning and achievement to be used for measurement purpose. Assessment can include measurement of different skills and competences both kinds of information, quantitative and qualitative, can be useful assessment information. However, which one to use and why depend on the purpose of your assessment and what you plan to do with the information according to Brookhart (2003). Typical classroom assessment purposes include providing feedback to students for their study, making instructional decisions (what to emphasize in the next lessons and in what manner), assigning grades, and advising students about additional coursework, lesson, or topic (Brookhart, 2003).

The Classical Test Theory (CTT) is also known as the "true score theory". The founder is Charles Spearman since 1904 and other proponents such as Novick (1966). Classical test theory (CTT) is an approach to measurement and considers the relationship between the expected score (or true score) and observed score (Courville, 2004). The central model of the classical test theory is that observed test scores (TO) are composed of a true score (T) and an error score (E) where the true and the error scores are independent. The variables are established by Spearman (1904) and Novick (1966) and best illustrated in the formula:  $TO = T \pm E$  or  $X = T \pm E$ .

Item response theory (IRT) also known as (latent response theory or latent trait theory) propounded by Binet et al. (1950s) helps to explain the concept of sequential assessment practice and students' learning outcomes. It is sometimes referred to as the strong true score theory or

modern mental test theory. This is because IRT is a more recent body of theory and makes stronger assumptions as compared to classical test theory. This approach to testing based on item analysis considers the chance of getting particular items right or wrong. In this approach, each item on a test has its own item characteristic curve that describes the probability of getting each particular item right or wrong given the ability of the test takers (Lee et al. 2008).

Also, in the Cameroon context, the new method of student assessment is based on the use of CA practices. Teachers make use of various CA strategies and tools (tests, assignments, quizzes, projects, presentations and other instruments) during the teaching – learning process to improve on students’ learning and achievement. During the 1995 national forum of education held in Yaoundé, many innovations were brought into our educational system. These innovations were aimed at improving the teaching-learning and assessment processes. The forum brought many changes in the Cameroon education system and led to new policy orientations and education law in 1998. Since 1996, following order no. 78/B1/1464/MINEDUC/SG/IGP/ASG/ESG/ESTP of 31<sup>st</sup> July 1996, continuous assessment practices were encouraged. Also, Law no. 98/004 of 14<sup>th</sup> April 1998 to lay down guidelines for education in Cameroon emphasized the use of continuous assessment in our school system. Section 2(1) states “education shall be a top priority of the nation”. The 1998 law (section 4) further states that “the general purpose of education shall be to train children for their intellectual, physical, civic and moral development and their smooth integration into society bearing in mind prevailing economic, socio-cultural, political and moral factors (Tambo, 2003). In other words, to train citizens who are strong in the cognitive, affective and psychomotor domains. Chapter II (section 30) states that “the states shall evaluate the educational system regularly through continuous assessment systems.

Also, in the Cameroon context sequential assessment is different from Formative assessment practice in terms of content scope, duration, frequency of assessment activities (tasks) and outcomes. Formative assessment is done during the teaching and learning process while the sequential assessment is done after every six weeks to evaluate students’ learning and achievement. Feedback is an important feature in the continuous assessment practices which helps to enhance students’ learning outcomes. The recent pedagogic innovations carried out by the Ministry of Secondary Education such as the CBA, project-based learning and digitalisation of teaching reiterated in pedagogic seminars are testimony to the fact that students’ learning seems problematic.

### **Statement of Problem**

After learning and effective continuous assessment, students are expected to display learned competencies, problem solving, critical thinking and creativity skills. Students are also expected to make use of the acquired competences after leaving school. Unfortunately, this is far from being the reality in our school system.

For over twenty-four (24) years as a teacher, the researcher has observed with dissatisfaction that continuous assessment practices do not translate to the acquisition of expected competencies and skills. South west regional Statistics and pedagogic reports from schools for the past seven (07) years portrays a dwindling performance and students inability to think critically, create and solve problems.

Concurrently, the South West regional pedagogic inspectors report for the above years also raises similar concerns about falling standards, high failure rates, poor and mediocre performance of students which is a cause for concern. Again, end of sequence statistics reports, beginning of year reports, end of year reports on students’ learning and performance from the regional delegation is below average and unsatisfactory. Also, seminar reports of teachers in different subject areas attest to the fact that student learning has some problems. Over the years policy modification has been done by government and educational stakeholders as a way to ameliorate the issue of student

learning; new pedagogic approach, competency-based approach, project-based approach and digitalization of teaching aimed at enhancing students learning and the acquisition of competencies and skills. The above challenges related to students' learning despite the use of CA practices is a cause for concern. This study will therefore examine whether formative and sequential assessments have impact on students' learning outcomes.

## **Research Objectives**

### **General Objective**

To investigate the impact of classroom assessment practices on students' learning outcomes in Secondary schools in the South West Region of Cameroon.

### **Specific Objectives**

Specifically, the study sets out to:

1. To examine the impact of formative assessment practice on students' learning outcomes in Secondary schools.
2. To ascertain the impact of sequential assessment practice on students' learning outcomes in secondary schools.

## **Research Questions**

### **General Research Question**

What is the impact of classroom assessment practices on students' learning outcomes in Secondary schools in the South West Region of Cameroon?

### **Specific Research Questions**

Specifically, the study aimed at answering the following research questions:

1. How does formative assessment practice impact on students' learning outcomes in Secondary schools?
2. How does sequential assessment practice impact on students' learning outcomes in secondary schools?

## **Research Hypotheses**

### **General Research Hypotheses**

**H<sub>0</sub>**: Classroom assessment practices have no significant impact on students' learning outcomes.

**H<sub>a</sub>**: Classroom assessment practices have a significant impact on students' learning outcomes.

### **Specific Research Hypotheses**

**H<sub>01</sub>**: There is no significant impact of the formative assessment practice on students' learning outcomes.

**H<sub>a1</sub>**: There is a significant impact of the formative assessment practice on students' learning outcomes.

**H<sub>02</sub>**: There is no significant impact of the Sequential assessment Practice on students' learning outcomes.

**H<sub>a2</sub>**: There is a significant impact of the Sequential assessment practice on students' learning outcomes.

## Significance of the Study

This study provided qualitative information to benefit policy makers in the ministries of education, pedagogic inspectors, school administrators, teachers, students and parents.

This study like others intends to elucidate and throw more light through which students' learning outcomes could be improved in our school system. Findings from this study would be beneficial to education authorities and policy makers to reform the curriculum at all levels in Cameroon, especially the Ministry of Secondary Education. The findings would throw more light on the impact of various Continuous assessment practices used in our school system and impact on students' learning outcomes. Education authorities and policy makers would make use of the findings to improve on the teaching-learning process.

Findings from this research would help to improve classroom assessment practices at all levels of education. Findings from this research would broaden the understanding of the why, how, what, when and results of continuous assessment in our school system. It would also provide more insights to the relevance and implementation of CA practices and its effects on students' learning outcomes and achievement. The government and policy makers would understand the need for curriculum reforms in the area of classroom assessment and to train teachers in test construction and administration in the various teachers' training institutions in Cameroon. The study would bridge the gap, introduce new training courses, and organize seminars and workshops to meet the challenges of continuous assessment practices.

The tasks of supervision of instruction, curriculum implementation and evaluation are not easy. Consequently, findings from this research would provide pedagogic inspectors with adequate knowledge to forge ahead with the tasks of supervision of the teaching-learning and assessment processes. The Pedagogic inspectors would have new knowledge and skills in relation to continuous assessment practices and impact on students' learning outcomes. Again, findings from this study will enhance knowledge and skills of the pedagogic inspectors to better follow up teachers.

The roles of school administrators (Principals, vice principals and Dean of Studies) are complex especially the role of supervision of instruction (pedagogic functions of school heads). Consequently, findings from this research would enhance their knowledge and skills towards the supervision of the teaching-learning and assessment processes in their various schools.

The task of teaching and evaluation is not an easy one in this 21<sup>st</sup> century with so many pedagogic innovations and shifts in paradigm. Consequently, findings from this research would enhance teachers with additional knowledge and skills on classroom assessment practices and its effects on students' learning and achievement. Teachers would make use of the findings to improve on their classroom assessment practices to improve on students' learning. Research findings and recommendations of this study could be very educative to teachers and it may inform them on the need to change teaching methods and assessment practices.

Learners' needs and interest are important components to be considered by teachers in the teaching-learning and assessment processes. The findings and recommendations could help and inform students and teachers to work together to achieve common educational goals. Students are supposed to be part of the classroom assessment practices as the results affect them directly. As such, findings from this study would enable students to achieve their educational objectives. More importantly, it may enable students to understand the role they are expected to play during teaching and learning for them to develop cognitive, affective and psychomotor competencies and skills. These competencies may be achieved through the use of CA practices.

Parents are stakeholders of the school system and they need to know about the learning progress and achievement of their children for better appraisal and follow up at home. Consequently,

findings from this research would furnish parents with enough information about their children learning progression and their academic achievements. Again, findings and recommendations from this study may inform parents and guidance about the strength and weaknesses of their children and for them to assist at home.

It is hoped that knowledge created or findings from the research can be exploited to create more enabling conditions that would impact on students' learning and achievement. The findings would provide researchers and educators with valuable and practical information needed to improve the teaching- learning and assessment processes. Implementing CA practices in Cameroon secondary schools would constitute change. It is further significant in that it aligns with regional, national and international strategies to improve the quality of education and to meet the needs of the learners. This shift in paradigm is reiterated by Cameroon's sector wide approach to education (2005), GESP (2009) and UNESCO recommendations (2015, 2017) on quality teaching and good assessment practices to improve on students' learning and sustainable development.

The effective implementation of CA practices would benefit both students and teachers and would equally improve the quality of education in Cameroon in line with the UNESCO goals of education (2015), Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs).

In-depth research into these CA practices would guide classroom instruction as well as enhance students' learning and achievement in our school system. Thus, this study is a pioneering study that would help improve the implementation of CA practices in our schools. This research work is to bridge the gap between theory and practice and to help improve students' learning outcomes.

### **Conceptual Review**

The literal meaning of the word 'Assessment' is from the Latin word "assidere" which means "to sit beside". Sitting beside children suggest a close relationship and sharing of experiences between the teacher and the learner. Presently, the meaning of assessment is not limited to its original literal meaning. Assessment includes the full range of information teacher gather about their students, instruction and classroom climate (Brookhart, 2003). Assessment reports should therefore be made to include the assessment or more attributes than the cognitive. Assessment involves a report on how students can demonstrate that they have reach their learning goals (Agborbechem, 2015).

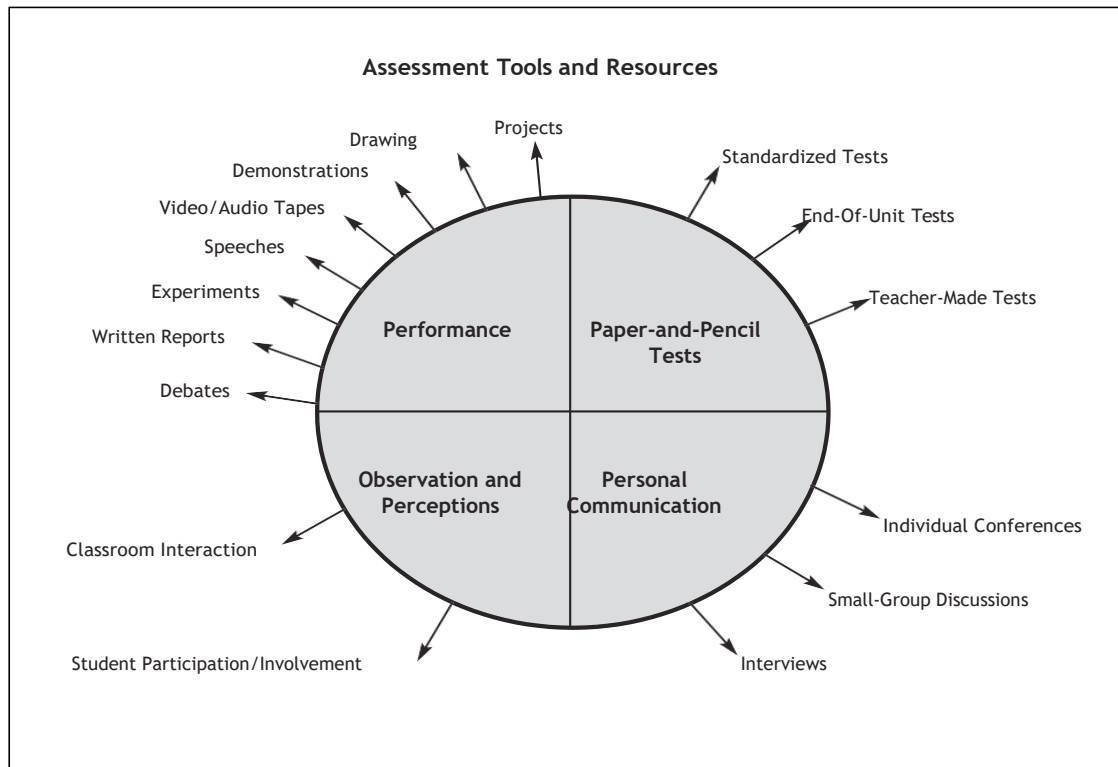
It occurs frequently during the teaching – learning process and is a part of regular teacher pupil interactions. Pupils receive feedback from teachers on their performance that allows them to focus on topics they have not yet mastered. When both formal and informal assessments are done on a regular and continuous basis, they are referred to as continuous assessment (Faleye & Adefisoye, 2016).

Ramalepe (2015) summarizes the importance of classroom assessment as follows; provides early indicators of students' learning and improve performance of students, indicates early warnings and provides remedial activities to improve learning, encourages regular, systematic study and does not encourage rote learning, places more emphasis on worth- while learning or mastery learning of facts, uses a range of different assessment techniques and tools to test other skills, and provides much more extensive syllabus coverage than terminal assessment.

### **Assessment Tools and Strategies**

Choosing assessment strategies and tools requires that teachers consider the range of classroom situations that students will experience. A variety of tools and resources may be used by teachers as seen in the figure below. Figure 1 presents assessment tools and strategies used in the teaching-learning process

**Figure 1: Assessment Tools and strategies.**



**Source: Adapted from Heartland AEA, 1992, also available online <https://www.assessmenttoolsandstrategies.com/>, retrieved 10/01/2022.**

Continuous assessment is a multifaceted tool that significantly influences student learning outcomes. From fostering critical thinking and collaboration to aligning curriculum with standards, effective assessment practices create a dynamic learning environment. By utilizing assessment strategically, educators can enhance engagement, motivation, and ultimately, student success ( Shilinge 2004, Mulu 2005 & Ramalepe 2015).

### **Effectiveness of Formative Assessment**

Research shows that formative assessment positively impacts student achievement. Black and William’s (1998, 2009) seminal study demonstrated that formative assessment leads to significant learning gains across various subjects and grade levels. Their meta-analysis indicated that students who experienced formative assessments performed better than those who did not. The study also highlighted that the greatest benefits were observed in low-achieving students, making formative assessment a tool for promoting equity in education.

### **Feedback as a Critical Component**

Feedback is considered the cornerstone of formative assessment. Hattie and Timperley (2007) examined the role of feedback in the learning process and found that effective feedback has a powerful influence on learning outcomes. The study indicated that feedback is most beneficial when it is specific, timely, and linked to clear learning goals. Empirical evidence from their research also suggests that feedback focused on the task, process, and self-regulation levels is more impactful than feedback focused solely on self-evaluation.

### **Sequential (Sequence) Assessment Practice**

Based on the need to improve learner performance, and the current world trend of accountability in learner performance, the Minister of National Education in 1996 signed an order (of 31st July 1996) dividing the school year into teaching units commonly known as “sequence” which in this

work would be referred to as sequential assessment practice. Each sequence has a maximum period of six weeks with the school year having a total of six sequences and thirty-six weeks (Foncha et al.,2020). The Cameroon Government introduced the sequential assessment system in order to improve the teaching- learning and assessment processes (Ebok, 2002). The sequential assessment practice as a form of continuous assessment is different from formative assessment in terms of scope, duration, frequency of assessment activities and tasks as well as outcomes. Feedback from the sequential assessment enhances students' learning and achievements.

Sequential assessment is more summative in nature (assessment of learning) which is administered after a long period of teaching to check students' progress and achievement. It is summative in nature and assesses students' performance after a long period of study (Harlen, 2005 & Au, 2007).

### **Differences between Formative and Sequential Assessments**

Formative assessment and sequential assessment also known as end of sequence or summative assessment are two main types of assessments used in education to enhance students' learning outcomes. Both are similar in some aspects but they have different characteristics, methods and outcomes. Both are used to measure students' learning and achievement. However, they are different in terms of purposes, timing, scope, feedback applications, frequency and different outcomes. Below is a detailed comparison between the two:

#### **1. Purpose**

- Formative Assessment (assessment for learning): Its primary purpose is to monitor student learning during the instructional process. It helps teachers to adjust instruction to meet students' needs (Black & William, 1998, William, 2011).
- Sequential Assessment (assessment of learning): The purpose of sequential assessment is to evaluate student learning at the end of an instructional period, such as the end of a unit, semester, or course. It aims to measure the extent to which learning objectives have been achieved and often contributes to final grades or certifications (Harlen, 2005).

#### **2. Timing**

- Formative Assessment: It occurs continuously throughout the learning process. It can happen during or even after a lesson to check for understanding and inform next steps in instruction (William, 2011).
- Sequential Assessment: Conducted at the end of an instructional period. That is, after every six weeks of teaching teachers administer test to check students' learning progress and achievement. Examples includes end of sequence tests, end-of-sequence projects which summarize what students have learned over a given period (Garrison & Ehringhaus, 2007).

#### **3. Feedback**

- Formative Assessment: Provides immediate, specific, and actionable feedback aimed at improving students' learning. It helps students understand their progress and gives teachers insights into areas that need re-teaching (Brookhart, 2003, 2004).
- Sequential Assessment: Feedback from sequential assessments is often less detailed and typically delivered after the instruction has ended, making it less useful for immediate instructional changes (Brookhart, 2013).

#### **4. Assessment Techniques**

- Formative Assessment: Includes techniques such as quizzes, tests, observations, group work and assignments that are used to gauge understanding during the learning process (Black & William, 1998).

➤ Sequential Assessment: Employs techniques such as end of sequence tests, cumulative projects and presentations to evaluate overall achievement (Popham, 2011)

#### 5. Impact on Teaching and Learning

➤ Formative Assessment: Directly influences teaching and learning by shaping instructional decisions and providing ongoing feedback. It is a tool for learning rather than a tool for grading (Stiggins, 2005).

➤ Sequential Assessment: Primarily used to judge the success of teaching and learning after instruction is completed. It can be used for accountability purposes, such as grading, placement, or certification (Harlen, 2005).

#### 6. Nature of Assessment

➤ Formative Assessment: Generally low-stakes or no-stakes for students, as it is intended to support the learning process rather than judge performance.

➤ Sequential Assessment: High-stakes as it often determines final grades, decision making, promotion, or graduation (Brookhart, 2013). It is generally more difficult, lengthy and time consuming.

#### 7. Frequency of assessment

➤ Formative assessment is more frequent and ongoing during the teaching-learning process to enhance students' learning outcomes.

➤ Sequential assessment is more summative in nature and it is given after a long period of time. It is not frequent and students need to cover many lessons and topics before the sequence assessment.

#### 8. Scope

➤ Formative assessment: Generally, it has a limited content scope for assessment tasks or activities within or after lessons.

➤ Sequential assessment: generally, it has a larger content scope to be covered

before assessment. Students' are expected to cover many lessons or topics before the assessment which is every six weeks. This comparison highlights the different roles these assessments play in the educational process and how they can be used to enhance both teaching and learning.

### **Importance of Student Learning Outcomes in School**

1. Guides Instructional Planning: SLOs provide a framework for teachers to design their lessons, assessments, and teaching strategies to ensure that all students achieve the desired competencies.

2. Measures Educational Effectiveness: Schools can evaluate the success of their instructional programs and interventions by assessing how well students meet learning outcomes.

3. Supports Accountability: Clearly defined outcomes ensure that schools and educators are accountable for student progress and help identify areas where improvements are needed.

4. Facilitates Student-Centred Learning: SLOs help students understand what is expected of them, enabling them to take ownership of their learning and track their own progress.

5. Enhances Curriculum Alignment: Ensures that the curriculum, instruction, and assessments are aligned, promoting consistency in educational standards across grade levels.

6. Promotes Equity in Education: By setting clear and measurable expectations, SLOs help ensure all students, regardless of background, have access to high-quality learning experiences.
7. Provides Data for Continuous Improvement: The data generated from assessing learning outcomes can be used for refining teaching methods, curricular adjustments, and targeted interventions.

Students' learning also involves assessments and evaluation to measure students' progress and achievement. These assessments may include tests, projects, presentations and examinations. The results of these assessments help determine students' academic standing and may be used for grading, promotion and to make important decisions (Ebok, 2021). Students' learning extends beyond the classroom through interactions with peers, teachers and the broader school community. Students develop social skills, learn to collaborate, participate in leadership roles, teamwork and community service which contributes to their personal growth and character development (Abiabio & Dumba, 2014). Overall, students' learning involves acquiring academic knowledge, developing critical thinking skills, exploring personal interests and application of creativity during and after schooling (Hayford, 2007). Students' learning has many indicators which are used in the teaching – learning process.

It is important to note that these indicators should be used in combination and considered within the broader context of students' experiences and circumstances. Indicators of learning outcomes are specific, measurable signs that demonstrate whether students have achieved the desired educational goals. Common indicators include knowledge acquisition, skill development, achievement level and acquisition of competences.

Bloom's Taxonomy provides a framework for categorizing educational goals and objectives. It consists of six levels of cognitive skills, each with specific indicators of learning. Below are the following levels of learning indicators according to Bloom's taxonomy of learning objectives in three domains (cognitive, affective and psychomotor).

## **Theoretical Review**

### **Instructional Theory by Robert Gagne (1992)**

Robert Gagne's instructional theory serves as frame for organising instruction and achieving students' learning outcomes. The theory provides a great number of valuable ideas to instructional designers, trainers and teachers. This theory was used to explain the impact of diagnostic assessment practice of students' learning. Gagne breaks down his theory into three major areas: the taxonomy of learning outcomes, the conditions of learning, and the events of instruction. However, the work focuses on the nine events of instruction and its implication to continuous assessment practices especially diagnostic assessment. The nine events of instruction follow a systematic design process that shares the behaviourist approach to learning, with a focus on the outcomes. According to Gagne, et al. (2005), the events of instruction are design to activate the processes of information processing, and to prepare learners for a new instruction or lesson. Also, these events are intendant to promote the transfer of knowledge or information from perception through the stages of memory.

What is Assessment for in the view of Brookhart, 2003?

Assessment, according to Brookhart (2003), means collecting information about something to be used for some purpose. Assessment can include measurement of different skills and competences both kinds of information, quantitative and qualitative, can be useful assessment information. However, which one to use and why depend on the purpose of your assessment and what you plan to do with the information. Typical classroom assessment purposes include providing feedback to students for their studying, making instructional decisions (what to emphasize in the next lessons

and in what manner), assigning grades, and advising students about additional coursework, lesson, or topic (Brookhart, 2003).

Evaluation goes one step further according to Brookhart. Evaluation means using assessment information to make judgments about the worth of something. Examples of value judgments instructors make based on assessment information include; deciding activities students do or do not know enough about a topic. Based on the assessment information from the classroom, remedial and enrichment exercises are given to the students accordingly (Brookhart, 2010).

Classical Test Theory (CTT) by Charles Spearman (1904) & Melvin Novick (1966)

CTT is also known as the “true score theory”. The founder is Charles Spearman since 1904, Melvin Novick (1966) and other proponents. Some other scholars who played a significant role in the Classical Test Theory’s approach include: Truman Lee Kelley, George Udny Yule, Louis Guttman amongst others have contributed to expand and propagate the theory from the 1970s. This theory was used to explain the impact of sequential assessment practice on students’ learning outcomes. The measurement of students’ learning is based on tests given by teachers to measure their competencies and skills. Teachers perform many types of tasks in different situations and in different contexts to measure students’ learning and achievements.

The classical theory assumes that each individual has a true score which would be obtained if there were no errors in measurement. However, because measuring instruments are imperfect, the score observed for each person may differ from an individual’s true ability. The difference between the true score and the observed test score results from measurement error. Using a variety of justifications, error is often assumed to be a random variable having a normal distribution.

Item Response Theory (IRT) by Alfred Binet, Lawrence Thurstone & Frederic Lord (1950s, 1960s).

IRT also known as (latent response theory or latent trait theory). It is sometimes referred to as the strong true score theory or modern mental test theory. This is because IRT is a more recent body of theory and makes stronger assumptions as compared to classical test theory. This approach to testing based on item analysis considers the chance of getting particular items right or wrong. In this approach, each item on a test has its own item characteristic curve that describes the probability of getting each particular item right or wrong given the ability of the test takers (Courville, 2004).

## **RESEARCH METHODOLOGY**

The researcher employed a mixed method approach using the explanatory sequential research design. Mixed method research (MMR) is a research methodology that incorporates multiple methods to address research questions in the field of education. The mixed method research design is a procedure for collecting, analysing and mixing both quantitative and qualitative research methods in a single study to understand a research problem (Amin, 2005). collected over a period of time in two conservative phases. The researcher first collects and analysed the quantitative data and later on the qualitative data.

### **Population of the Study**

The population of this study consist of 65531 students and 7264 teachers that are found in all the 342 functional secondary schools in the region. The population of the study comprised all the secondary schools in the SWR of Cameroon, since all the schools implement Classroom assessment practices at various levels and extent. Both students and teachers of general secondary education were involved in the study.

The researcher targeted form four students and teachers in secondary general education in Fako, Meme and Manyu divisions. A sample of 12 schools, 382 students and 24 teachers were selected

for the study. The simple random, purposive and convenient sampling techniques were used to select the schools, students and teachers for the study. The instruments used for the study were questionnaire for students and interview guide for teachers. The instrument was trial-tested to establish the reliability of the instrument in the school not used for the main study. Cronbach alpha was used to obtain the reliability coefficient of the instrument. The instrument had an internal consistency of 0.84. The data collected were analysed using both descriptive and inferential statistics. In this analysis, descriptive statistics (frequency and percentage) were calculated while for inferential statistics the Pearson product moment correlation was used to analyse the questionnaire for students. The hypotheses was tested at 0.05 level of significance or 95% certainty of prediction. See summary table below.

**Table 1: Summary Table from the Total Population to the Sample Size**

	Schools	Students	Teachers	Total No of students and teachers
Total Population	342	65531	7264	72795
Target	270	13322	1449	14771
Accessible	36	3908	449	4363
Sample	12	382	24	406

Source: Conceived by the researcher (2022).

### Hypotheses and Findings

The study was based on the null hypothesis which states that there is no significant impact of continuous assessment practices on students' learning outcomes. The alternative states that there is a significant impact of continuous assessment practices on students' learning outcomes.

#### Research Question One: How does formative assessment practice impact on students' learning outcomes in Secondary schools?

**Descriptive Analysis:** The interview guide had 5 questions for teachers to give their opinions on formative assessment practice. Table 2 presents the impact of formative assessment practice on students' learning outcomes.

**Table 2 The impact of Formative Assessment Practice on Students' Learning outcomes.**

S/N	Theme	Grounding	Response
1	What do you understand by formative assessment practice?	24	17(70.83%) said 'it is the process where teachers assess students frequently and continuous in the in the course of teaching'. 3(12.50%) said 'this when teachers ask questions, give tests and assignments in the course of teaching' while the rest 4(16.67%) said 'it is the assignment given to students in the course of teaching e.g., test, assignment and projects'.
2	Are you applying it?	24	All the 24(100%) said yes.
3	How do you apply it in the classroom?	24	All the 24(100%) said 'by giving tests, assignments, projects, group work and practical'. During the teaching learning process
4	How does it influence students' learning?	24	All the 24(100%) said 'it helps the students to learn, analyse, evaluate and create new ideas'
5	What are some of the challenges you face in the application of formative assessment practice?	24	All the 24(100%) said 'it is time consuming due large class sizes.

### Verification of the Hypothesis H0<sub>1</sub>

There is no significant impact of the formative assessment practice on students' learning outcomes.

The independent variable in this hypothesis is Formative assessment practice, while the dependent variable is students' learning outcomes. The scores of the independent variable were gotten from the responses recorded from the ten (10) items of a four-point Likert-scale questionnaire that measured formative assessment practices. The scores of the dependent variable were gotten from the ten (10) items of a four-point Likert scale questionnaire that measured students' learning outcomes. Considering that the data collected from both the independent variable and the dependent variable are all continuous data, the statistical analysis technique used to test this hypothesis was the Pearson Product Moment Correlation coefficient. Table 3 shows the impact of Formative assessment practice on students' learning.

**Table 3: Formative Assessment Practices**

S/N	Statements	Stretched				Collapsed	
		SA	A	SD	D	SA&A	SD&D
1	Teachers test us frequently in the class during teaching	172 (45%)	123 (32%)	47 (12%)	40 (11%)	295 (77%)	87 (23%)
2	The continuous testing helps us to remember and understand better	234 (60%)	77 (20%)	33 (10%)	38 (10%)	311 (81%)	71 (19%)
3	Teachers ask questions after teaching a lesson to test our knowledge and skills	219 (58%)	73 (19%)	50 (13%)	40 (10%)	292 (77%)	90 (23%)
4	Feedback (corrections) from the tests and assignments help us to learn better	303 (79%)	34 (9%)	14 (4%)	31 (8%)	337 (88%)	45 (12%)
5	We are tested at the end of each lesson or topic	84 (22%)	58 (15%)	95 (25%)	145 (38%)	142 (37%)	240 (63%)
6	Teachers correct all assignments in class which help us to think and create	244 (64%)	62 (16%)	45 (12%)	31 (8%)	306 (80%)	76 (20%)
7	Formative assessment helps us to apply and analyse facts and concepts.	178 (47%)	80 (21%)	103 (27%)	21 (5%)	258 (68%)	124 (32%)
8	The students who answer questions correctly in class are rewarded	62 (16%)	225 (59%)	83 (22%)	12 (3%)	287 (75%)	95 (25%)
9	Our teachers give us group assignments and exercises in class	76 (20%)	134 (34%)	140 (37%)	32 (8%)	210 (55%)	172 (45%)
10	The many tests and questions are boring to us.	50 (13%)	131 (35%)	161 (42%)	40 (10%)	181 (48%)	201 (52%)
Mean Response Rate		162 (42%)	100 (26%)	77 (20%)	43 (11%)	262 (69%)	120 (31%)

Item 1 shows that 295(77%) of the students agree or strongly agree that teachers test them frequently in the class during teaching, while 87(23%) of the students either disagree or strongly disagreed that teachers test them frequently in the class during teaching.

Item 2 shows that 311(81%) of the students agree or strongly agree that continuous testing helps them to remember and understand better, while 71(19%) of the students either disagree or strongly disagreed that continuous testing helps them to remember and understand better.

Item 3 shows that 292(77%) of the students agree or strongly agree that teachers ask questions after teaching a lesson to test their knowledge and skills, while 90(23%) of the students either

disagree or strongly disagreed that teachers ask questions after teaching a lesson to test their knowledge and skills.

Item 4 shows that 337(88%) of the students agree or strongly agree that feedback (corrections) from the tests and assignments help them to learn better, while 45(12%) of the students either disagree or strongly disagreed that feedback (corrections) from the tests and assignments help them to learn better.

Item 5 shows that 142(37%) of the students agree or strongly agree that they are tested at the end of each lesson or topic, while 240(63%) of the students either disagree or strongly disagreed that they are tested at the end of each lesson or topic.

Item 6 shows that 306(80%) of the students agree or strongly agree that teachers correct all assignments in class which help us to think and create, while 76(20%) of the students either disagree or strongly disagreed that teachers correct all assignments in class which help us to think and create.

Item 7 shows that 306(80%) of the students agree or strongly agree that formative assessment helps them to apply and analyse facts and concepts, while 76(20%) of the students either disagree or strongly disagreed that formative assessment helps them to apply and analyse facts and concepts.

Item 8 shows that 287(75%) of the students agree or strongly agree that the students who answer questions correctly in class are rewarded, while 95(25%) of the students either disagree or strongly disagreed that the students who answer questions correctly in class are rewarded.

Item 9 shows that 210(55%) of the students agree or strongly agree that their teachers give them group assignments and exercises in class, while 172(45%) of the students either disagree or strongly disagreed that their teachers give them group assignments and exercises in class.

Item 10 shows that 181(48%) of the students agree or strongly agree that the many tests and questions are boring to them, while 201(52%) of the students either disagree or strongly disagreed that the many tests and questions are boring to them.

The mean response rate shows that 252(69%) of the students agree or strongly agree that formative assessment practices improve their academic outcome, while 120(31%) of the students either disagree or strongly disagreed that formative assessment practices improve their academic outcome.

The result of the analysis is presented in Table 4: Pearson Product Moment Correlation analysis of impact of Formative assessment practice on students' learning outcomes (N= (382).

**Table 4 Pearson Product Moment Correlation analysis**

Variable	$\sum X$	$\sum X^2$			
	$\sum Y$	$\sum Y^2$	$\sum XY$	$\Gamma_{xy}$	p-value
Formative assessment practices (X)	13229	461577	455987	0.453**	
Students' learning outcomes (Y)	13129	453685			0.002

$P^* < 0.05$ ;  $df = 380$ ; critical  $\Gamma_{xy} = 0.113$

The result of the analysis reveals that the calculated  $\Gamma_{xy}$  -value of 0.453 is higher than the critical  $\Gamma_{xy}$  -value of 0.113 at 0.05 level of significance with 380 degrees of freedom. Also, the p-value of 0.002 is lower than 0.05. With the result of this analysis, the null hypothesis was rejected and the alternative hypothesis retained. This result therefore means that  $H_1$ : Formative assessment practice has a significant impact on students' learning outcomes.

## Research Question Two: How does sequential assessment practice impact on students' learning outcomes in secondary schools?

**Descriptive Analysis:** The interview guide had 5 questions for teachers to give their opinions on sequential assessment practice. Table 5 presents the impact of sequential assessment practice on students' learning outcomes.

**Table 5** *How does sequential assessment practice impact students' learning outcomes in secondary schools?*

S/N	Theme	Grounding	Response
1	What do you understand by Sequential (Sequence) assessment?	24	All the 24(100%) said 'it is the assessment given to students after every six weeks of study to measure their knowledge and skills'.
2	Are you putting it into practice?	24	All the 24(100%) said 'Yes'
3	How do you apply it in the teaching-learning process?	24	They all the 24(100%) said by given students tests or projects every six weeks
4	How does it affect students' learning?	24	22(91.67%) Said 'it helps the students to learn and apply the knowledge learned' while 2(8.33%) said 'it helps the students to evaluate and create new knowledge'.
5	What are some of the challenges you face in the application of sequential assessment practice in the classroom?	24	All the 24(100%) said 'it is time consuming and affects syllabus coverage because of the large class size.'

### Verification of the Hypothesis H0<sub>2</sub>

There is no significant impact of the Sequential assessment Practice on students' learning outcomes.

The independent variable in this hypothesis is Sequential assessment practices, while the dependent variable is students' learning outcomes. The scores of the independent variable were gotten from the responses recorded from the ten (10) items of a four-point Likert-scale questionnaire that measured Sequential assessment practices. The scores of the dependent variable were got from the ten (10) items of a four-point Likert scale questionnaire that measured students' learning outcomes. Considering that the data collected from both the independent variable and the dependent variable are all continuous data, the statistical analysis technique used to test this hypothesis was the Pearson Product Moment Correlation coefficient. Table 6 shows the impact of sequential assessment practice on students' learning.

**Table 6: Sequential Assessment Practices**

S/N	Statements	Stretched				Collapsed	
		SA (%)	A (%)	D (%)	SD (%)	SA&A (%)	SD&D (%)
1	Teachers assess us continuously every six weeks	290 (76%)	63 (16%)	27 (7%)	2 (1%)	353 (92%)	29 (8%)
2	The sequence test and the report cards help us to study well	23 (6%)	203 (53%)	107 (28%)	49 (13%)	226 (59%)	156 (41%)
3	Sequential assessment helps us to remember and understand the different lessons taught	217 (57%)	59 (15%)	44 (12%)	62 (16%)	276 (72%)	106 (28%)

4	Sequence tests help us to analyse facts and learn well	242 (63%)	92 (24%)	33 (9%)	15 (4%)	334 (87%)	48 (13%)
5	Sequence tests does not help us pass our exams	103 (27%)	70 (19%)	173 (45%)	36 (9%)	173 (46%)	209 (54%)
6	Corrections (Feedback) from the sequence assessment help us to learn well	155 (41%)	73 (19%)	80 (21%)	74 (19%)	228 (60%)	154 (40%)
7	Sequential report cards help us to identify our strengths and weaknesses	231 (60%)	109 (29%)	26 (7%)	16 (4%)	340 (89%)	42 (11%)
8	Sequence assessment does not improve our learning	81 (21%)	33 (9%)	230 (60%)	38 (10%)	114 (30%)	268 (70%)
9	Sequence assessment does not help us to pass our promotion exams	10 (3%)	25 (7%)	180 (47%)	167 (43%)	35 (10%)	347 (90%)
10	Feedback from Sequence assessment encourage us to study well	300 (79%)	41 (10%)	25 (7%)	16 (4%)	341 (89%)	41 (11%)
Mean Response Rate		165 (43%)	77 (20%)	92 (24%)	48 (13%)	242 (63%)	140 (37%)

Item 1 shows that 353(92%) of the students agree or strongly agree that teachers assess them continuously every six weeks, while 29(8%) of the students either disagree or strongly disagreed that teachers assess them continuously every six weeks.

Item 2 shows that 226(59%) of the students agree or strongly agree that the sequence test and the report cards help them to study well, while 156(41%) of the students either disagree or strongly disagreed that the sequence test and the report cards help them to study well.

Item 3 shows that 276(72%) of the students agree or strongly agree that sequential assessment helps them to remember and understand the different lessons taught, while 106(28%) of the students either disagree or strongly disagreed that sequential assessment helps them to remember and understand the different lessons taught.

Item 4 shows that 334(87%) of the students agree or strongly agree that sequence tests help them to analyse facts and learn well, while 48(13%) of the students either disagree or strongly disagreed that sequence tests help them to analyse facts and learn well.

Item 5 shows that 173(46%) of the students agree or strongly agree that sequence tests do not help us pass our exams, while 209(54%) of the students either disagree or strongly disagreed that sequence tests do not help us pass our exams.

Item 6 shows that 228(60%) of the students agree or strongly agree that corrections (Feedback) from the sequence assessment help us to learn well, while 154(40%) of the students either disagree or strongly disagreed that corrections (Feedback) from the sequence assessment help us to learn well.

Item 7 shows that 340(89%) of the students agree or strongly agree that sequential report cards help us to identify our strengths and weaknesses, while 42(11%) of the students either disagree or strongly disagreed that sequential report cards help us to identify our strengths and weaknesses.

Item 8 shows that 114(30%) of the students agree or strongly agree that sequence assessment does not improve our learning, while 268(70%) of the students either disagree or strongly disagreed that sequence assessment does not improve our learning.

Item 9 shows that 35(9%) of the students agree or strongly agree that sequence assessment does not help them to pass our promotion exams, while 347(91%) of the students either disagree or strongly disagreed that sequence assessment does not help them to pass our promotion exams.

Item 10 shows that 341(89%) of the students agree or strongly agree that feedback from Sequence assessment encourage us to study well, while 41(11%) of the students either disagree or strongly disagreed that feedback from Sequence assessment encourage us to study well.

From the mean response rate, 242(63%) of the students agree or strongly agree that sequential assessment practices effect students learning outcome, while 140(37%) of the students either disagree or strongly disagreed that sequential assessment practices effect students learning outcome.

The result of the analysis is presented in Table 7: Pearson Product Moment Correlation analysis of impact of Sequential assessment practice on students' learning outcomes (N= (382)).

**Table 7 Pearson Product Moment Correlation analysis**

Variable	$\Sigma X$	$\Sigma X^2$			
	$\Sigma Y$	$\Sigma Y^2$	$\Sigma XY$	$\Gamma_{xy}$	p-value
Sequential assessment practice (X)	13062	449504	450232	0.491**	
Students' learning outcomes (Y)	13129	453685			0.002

$P^* < 0.05$ ;  $df = 380$ ; critical  $\Gamma_{xy} = 0.113$

The result of the analysis reveals that the calculated  $\Gamma_{xy}$  -value of 0.491 is higher than the critical  $\Gamma_{xy}$  -value of 0.113 at 0.05 level of significance with 380 degrees of freedom. Also, the p-value of 0.002 is lower than 0.05. With the result of this analysis, the null hypothesis was rejected and the alternative hypothesis retained. This result therefore means that  $H_{a1}$ : Sequential assessment practice have a significant impact on students' learning outcomes.

In summary, findings showed that formative and sequential assessments practices have a significant impact on students' learning outcomes. That is, it helps students to remember, understand, apply, analyse, evaluate and create knowledge. Formative and sequential assessment also emphasized the use of feedback and remedial exercises which helps to improve students' learning outcomes.

## Conclusion

The study has shown that, continuous assessment practices have great impact on students' learning outcomes in secondary schools in the south west region of Cameroon. Specifically, that, formative assessment has a positive impact on students' Learning outcome. Also, sequential assessment has a positive impact on students' learning outcomes.

This conclusion is strongly backed by Brookhart (2004), who says that, assessment is the process of making judgment about a student's performance on a particular task. Her theory supports the impact of continuous assessment in the teaching – learning process. Ebok (2021) research findings conclude that continuous assessment significantly impact on students' learning outcomes. Also, assessment helps learners to remember, understand, apply, analyse, evaluate and create knowledge and applies the skills in problem-solving. Also, instructional theory by Gagne' helps to confirm the conclusion that continuous assessment practices have a significant influence on students' learning outcomes. Brookhart's theory (2003, 2004) also helps to explain the concept of formative assessment. Classical test theory and item-response theory also helps to explain the concept of sequential assessment. Black and William (2004) research findings also confirm the important role formative assessment plays in the teaching-learning process. They reiterate that formative assessment enhance students' learning and achievement. Hanover (2014) research also found out that formative assessment has a great influence on students' learning and achievement. Ozan and Kincal (2018) also confirms that formative assessment has a great influence on students' learning and achievement. Again Awandia (2022) confirms that school-based assessment (formative assessment) has a great influence on students' learning and achievement. Formative assessment has been shown to increase student engagement and motivation. Andrade and Cizek (2010)

explored how self-assessment, a form of formative assessment, helps students take ownership of their learning. Their research revealed that when students engage in self-assessment, they become more reflective about their learning goals and progress. This active involvement helps to foster intrinsic motivation and encourages a growth mindset, where students see learning as a process of continuous improvement.

From the foregoing discussion, it is clear that sequential assessment practice has an impact on students' learning outcomes. The findings reveal that sequential assessment practice impact on students' learning outcomes positively. That is, the more the sequential assessment the better the students' learning outcomes.

These findings are supported by that of many scholars. For example, Ebok, (2002) research findings are similar to this study. That is, sequential assessment has a great influence on students' learning and achievement

### **Recommendations**

This study has both administrative and pedagogic implications. Based on the objectives, the following recommendations are addressed to all stakeholders involved. The government and other stakeholders should follow up the effective implementation of continuous assessment practices in our school system. Specifically, government and stakeholders should follow up the effective implementation of formative and sequential assessment practices. seminars, workshops and conferences should be organised for teachers to be trained in test and measurement. Students too should be motivated to take active part in continuous assessment practice.

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