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Harmonization of the Sequential Test Format and Students' Academic Performance in Cameroon: The Case of a Public Secondary School

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ABSTRACT

Since the introduction of the sequential system of assessment (SSA) in Cameroon's secondary schools, students' academic performances have unfortunately witnessed significant drops in both school and public examinations. Besides assessing learning through the use of various assessment tools, the SSA recommends the use of remedial testing for students who have failed during the normal sequential test. Apart from that, the sequential system as a tool for improving instruction and students' ongoing learning in Cameroon's secondary schools lacks proper organization. Specifically, they exist no guidelines that impose the nature of sequential tools and types of tool elements to be selected in the assessment for learning in various subjects. This makes the implementation of the sequential system nonuniform and unproductive. The present intervention study explores the effect that the harmonization of the sequential test format has on students' academic performances, and the effect that gender and class levels equally have on students' academic performances under the sequential system of testing. The study utilized the one group pretest-posttest research design and sampled from school records over 460 first and second cycle students' academic averages from a public secondary school. The treatment involved the use of a common test format for all subjects during the final sequence test of the academic year. The findings revealed that the intervention significantly improved students' academic performances by 4.6%, and that gender and class levels also significantly influenced students' academic performances. Specifically, academic performances were higher for junior classes but dropped steadily across class levels, and female students' academic performances improved by 6.8% compared to an improvement of 2.8% for males. Form 2, form 3 and form 4 students compared to form 1 students witnessed drops of .424, 1.495, and 1.332 units respectively in academic averages after the introduction of the treatment. The findings emphasize the need for a common format of testing, the beneficial role of interventions and use of multiple tools in testing. The use of gender-based pedagogy in bridging the gender gap in the mastery of instruction under the SSA is recommended.

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INTRODUCTION

As students' poor performances continue to be reported in school and public examinations in Cameroon (GCE Board, 2024; The World Bank, 2014), education stakeholders have struggled to find a suitable pedagogy that can improve the quality of students' learning through the integration of classroom learning into the solution of real-world problems (Alemnge & Andongaba, 2021; Wiysahnyuy, 2021). In response different innovations and changes have been introduced into the secondary school curriculum; from the competency-based curriculum to the new secondary school syllabi which

was created to reflect national and international learning needs in terms of knowledge, skills, and attitudes (Alemnge, 2021; Ngwa & Mekolle, 2020). Efforts have been made to improve classroom instruction, students' learning and academic performances in specific disciplines (Foncha et al., 2021; Yaro & Njobam, 2024). In particular, the sequential system of assessment being a form of continuous assessment which distinguishes itself from sample and census-based evaluations was introduced to foster students' engagement in learning, create a data repository that provide teachers with feedback on students' learning challenges, and enhance students' chances of getting outstanding results through the utilization of various instruments in assessing ongoing learning (Muskin, 2017; Saleem et al., 2022). However, since the introduction of the SSA, the concept which mainly translates to assessment for purposes of learning has been largely taken for assessment of learning by isolating assessment as a single exercise (Foncha et al., 2021). Teachers therefore have struggled to improve students' academic performances as a consequence (Chu, 2022; Koge, 2022). When assessment is done for purposes of learning, teachers are expected to significantly raise students' chances of passing in specific academic disciplines (Hudson, 1981) by taking the aggregate of scores from the use of different assessment instruments throughout the course of teaching (Muskin, 2017). According to Pell et al. (2013) increase behavioural observations improves reliability for struggling students by moving students' observed scores as closer to their true scores as possible. A typical SSA model organizes assessment in two parts. The first test is a screening test in which all students take part, and the second test is administered to weaker students who fail the first administration (Homer et al., 2018). In addition, as a result of the timely feedback gotten from using the SSA teachers are expected to adjust their daily teaching based on data from students' performances from the manifold of teaching strategies employed to vet the uncertainties surrounding the association of the process of teaching and learning. Specifically, within the course of a lesson, teachers can quickly change course to address students' misunderstandings before proceeding with the planned lesson, decide prior to the lesson how students' understanding would be assessed during instruction, or embed assessment in the lesson to appraise when learning has or has not occurred and to guide feedback at key stages in the lesson.

Despite the euphoria and excitement that characterized the introduction of the SSA in 2009, as a viable strategy for ensuring effective ongoing learning and evaluation, and maximizing students' learning gains within the highly anticipated competency-based curriculum environment which was being contemplated at that time, students' performances have unfortunately fallen below expectation, especially when compared to students' academic performances prior to the introduction of the SSA (Foncha et al., 2020). In addition, teachers have struggled to fully understand and to practice the basic requirements of the SSA. The current sequential system of evaluation in Cameroon sets periods within which teaching, learning and evaluation of learning are expected to take place. Students' learning is assessed at six different intervals known as sequences, twice in each of the three terms that make up the school academic year. Though there is a specified period (usually spanning one week) during which teachers are expected to assess students' learning, there exist no guidelines or common schemes under the system that prescribe the modes of evaluation to be used in assessing ongoing learning, and core strategies for testing in terms of the forms of test, test duration, and the weighting of test items. This according to Foncha et al. (2020) has been exacerbated by the fact that, the system is led by the need of summative judgment and not necessarily learning. To the authors, the sequential system in Cameroon hardly considers assessment as an ongoing process, but rather often isolates assessments as a single exercise and that this explained the reason for which teaching and learning activities are often officially shut down during testing. Each school is expected to assess students learning after every six weeks of teaching, and teachers are mandated to carry out remedial activities after each administration. The six weeks of teaching are characterized by knowledge acquisition and assimilation activities, and teachers are expected to cover a minimum of 420 hours each during the first term, 420 hours during the second term, and another 175 hours during the third term. The evaluation period is not imposed and each school is expected to adapt according to their syllabus coverage. A major drawback to the practice of the SSA in Cameroon is the large student-to-teacher ratios and large class sizes in most secondary schools and as such teachers barely find sufficient teaching time to either explore different forms of evaluations for daily learning or to reassess learning for struggling students.

Moreover, the SSA has largely failed to incorporate authentic forms of assessments which are characterized by learning in real-world situations. Furthermore, scores from daily assignments, classroom participation, classroom exercises, practice of knowledge, and group work which constitute

salient features of CAs in general are scarcely utilized as teaching/learning strategies, and teachers sometimes administer just a single test and move on to duplicate the scores to make up for the second assessment outcome as required for any given term. The use of assessment tools under the SSA therefore lacks organization and teachers on their own volition, often apply different test formats that make the job easy for them. There is basically no empirical data that appears to indicate the ramifications that this practice might have to the system and students' learning under the system. There is hardly time for struggling students to resit the test given that teachers find this to be an unnecessary addition to their busy teaching schedule. Though the practice of SSA does not eliminate the assessment of learning through regular teacher-made test, they are usually intended to come at the end of the unit and as a compliment to the manifold of daily assessments for learning strategies, and no administration of standardized measures is needed (Muskin, 2017). With no remedial actions envisaged in the nearest future towards improving the status quo, the present study proposes harmonization of the sequential test format as a viable short to mid-term intervention strategy towards improving students' academic performances in the examination led, SSA in practice in Cameroon secondary schools. Though harmonization falls short of standardization, it could have the potential to ensure that variations that exist in the current SSA are reduced thereby mitigating the myriad of shortfalls in the SSA in operation in Cameroon's secondary schools (Aholainen, 2019).

Harmonization in relation to education refer to the agreement, arrangement, and the coordination of education provisions within a given system (Hoosen et al., 2009). In line with continuous assessment, harmonization refers to an agreement between educational authorities and teachers within an institution of learning to organize school-based test in a manner that reduces variations in test and testing conditions. Despite differences that exist in content teachers try to find some common ground with regards to, the forms of the test (oral, essay, structural, MCQ, et cetera), test format (number of sections distinguished by the forms of test), number of test items to be included, and mark distribution. Continuous assessments refer to a system of assessments in which the students are assessed right through the learning process and not only after the learning process (Susanna, 2020). It takes into account all the students' performances in tests, assignments, projects and other educational activities during a given period of term, year or during the entire period of an educational level (Ogbeide-Akugbe et al., 2020; Omonigho, n.d). Some peculiarities of CAs are that they are comprehensive, systematic, cumulative, and guidance oriented (Muskin, 2017). CAs are comprehensive in that unlike regular assessments that mostly assess students' knowledge (cognitive), CAs in addition assess students know how (psychomotor), attitudes and other soft skills (non-academic competencies). Since CAs follow certain steps and procedures in their design, administration and interpretation of scores, they are said to be systematic. While students' learning is assessed using different instruments, these scores eventually cumulate to form a final score which presents a much reliable measure than the regular single test which is given at the end of a school term (Eneze, 2017). Finally, these cumulated scores provide a basis on which teachers can plan interventions to assist struggling students and that helps in the development of a system that builds students' metacognitive abilities and foster students' self-assessment of learning (Muskin, 2017; Saleem et al., 2022).

The general research objective of the study was to determine the effect of the harmonization of the sequential test format on secondary school students' academic performance.

The specific research objectives of the study were;

To examine the effect of gender and class on secondary school students' academic performance before the treatment

To examine the effect of gender and class on secondary school students' academic performance after the treatment

Methodology

The expost facto research design was utilized as the study's inquiry strategy. Specifically, the one group pretest-posttest design was used. According to this design, the intervention or the posttest comes after the pretest has been administered and scored, and there is no manipulation of the study's variables (Creswell, 2012; Tripodi, 2011). Two sets of dependent sample data, constituted datasets for the pretest and posttest measurements. During the first and second terms, no particular form of harmonization was prescribed. During the third term of the academic year (sixth sequence only, fifth sequence excluded), test forms and test formats were harmonized for all subjects in both the first and second cycles. The treatment consisted the integration of three different test formats; multiple choice questions (MCQ), structural, and essay questions in each subject. Teachers were requested to prepare a test blue print containing, 10 MCQs, 5 structural, and 5 essay questions. Test were

therefore evaluated on a 20-point scale. Students test performances for the first and the second term constituted the pretest dataset, while test results from the final sequence of the third term constituted the posttest dataset. The population of the study consisted of all public secondary school students' raw scores in all subject area. The target population consisted of raw scores and final terms averages of secondary school students who took part in the harmonized sequential test from both the first and second cycles. The accessible population consisted of raw scores and final terms averages of 600 students from a public secondary school. From the accessible population over 460 students' averages from both the first and second cycles were sampled from the school's class council report document. The sample consisted of the averages of 342 girls (74.5%) and 118 boys (25.7%), and these students were aged between 11 and 23 years with an average age of 15 years. According to Piaget (1964), children within this age range fall in any of two out of four stages of cognitive development. The concrete (7 to 11years) and the formal (12 upward) operational stages characterized by logical thinking towards concrete events and abstract reasoning. The design of the intervention took students' stages of cognitive development into consideration. There were all together 120 form 1 students (26.1%), 88 from form 2 (19.1%), 103 students from form 3 (22.4%), 90 from form 4 (19.6%), 40 from Lower sixth arts (8.7%) and 19 students from lower sixth science (4.1%) whose averages were selected for the study.

Documentary analysis constituted the main method of data collection for the study. To collect secondary data in the present study, the researcher consulted school records and archives to access students' academic averages for the 2023/2024 academic year. Data collection which involved the uplifting of individual students' averages from student's class council records was preceded by an authorization which was granted by the Principal of the public school under study. The dataset for the study were therefore made up of students' final first, second, and third term averages (students' final term averages are measured on a 20-point scale). First cycle students' final term averages were a result of the combination of students' raw scores from three different subject areas consisting of; arts (English Language, French, Literature in English), sciences (Biology, Chemistry, Mathematics, Physics, computer science) and social sciences (Economics, Geography, History, Citizenship). Second cycle students' term averages (for each sequence) were gotten as a result of the combination of raw scores from two major broadfield areas (arts and sciences). In total they are 13 broadfields in the second cycle of secondary school (5 art broadfileds and 8 science broadfields). Each broadfield (art or science) consist of a combination of between 3 to 5 academic subjects. Missing data was resolved through a data imputation technique. The screening of the data revealed that less than 5% (specifically 3.62%) of values were missing from the dataset which represented just roughly 8% of cases. Data were analyzed using the dependent samples (paired samples) t-test and regression analysis. To investigate the effect of the harmonization of the sequential test format on students' academic performance, the dependent samples t-test was used to explore patterns in the datasets, while the effects of gender and class on students' academic performances before and after the treatment was ascertained through a multiple linear regression analysis. During the regression analysis, categorical variables (gender and class) were dummy coded and the form one category was set as the baseline or reference level for the class variable and the male category was set as the reference level for the gender variable.

Findings

The findings are presented according to the research questions of the study. To investigate the effect of harmonization of the sequential test format on secondary school students' academic performance (SAP), descriptive statistics for the pre and post intervention measurements are presented followed by a dependent samples t-test to compare pre and post treatment measurements of academic performance. In the second part, the effects of gender and class level on students' academic performances before and after the treatment is presented.

Research Question One: What is the effect of the harmonization of the sequential test format on secondary school students' academic performance?

Table 1: Descriptive Statistics and Normality Tests for Students' Academic Performances Before and After Treatment

Measurement	N	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis	Kolmogorov-Smirnov		
								Statistic	df	Sig.
Before Treatment	460	4.83	18.25	10.86	2.72	.193	.305	.025	460	.200
After Treatment	460	4.56	18.60	11.36	2.68	-.218	-.185	.057	460	.001

Descriptive statistics output for students' academic performance (N=460) revealed that students' averages ranged approximately between 4 and 19 on a 20-point scale. Minimum student averages before and after the

intervention were 4.83 and 4.56 respectively, while maximum pre-post intervention averages were 18.25 and 18.60 respectively. Students' scored a class average (mean) of 10.86 before the treatment and 11.36 after the treatment. Data analysis revealed an improvement of .5 points in students' class average (difference between pre-post intervention class averages). The Kolmogorov-Smirnov test of normality revealed normally distributed and non-normally distributed students' averages during the pre and post intervention measurements respectively. The Kolmogorov-Smirnov statistic of .025 and $p > .05$ for the pretest dataset suggests there was no significant evidence to reject the null hypotheses that data was not normally distributed. On the contrary the Kolmogorov-Smirnov statistic of .057, $p < .05$ for the post-test measurement provided significant evidence for the rejection of the null hypothesis. Further evidence of normality was provided by the skewness and kurtosis values for the pre and post intervention measurements. According to Hair et al. (2010), data is considered normal if skewness is between -2 and +2, and kurtosis is between -7 and +7. According to Bloom (1968) students' test scores that follow a normal distribution provide evidence that a teacher has failed in getting students to master the knowledge given that teaching is a purposeful activity. This reveals that instruction was more successful prior to the introduction of the treatment than after the introduction of the treatment despite an overall improvement in students' academic performances after the intervention.

The table below presents students' academic performances according to gender and class both before and after the introduction of the treatment.

Table 2: Descriptive Statistics of Students' Academic Performances Before and After Treatment According to Gender and Class

	Class						Gender		Total (Class Average)
	First Cycle				Second Cycle				
	Form 1	Form 2	Form 3	Form 4	LSA	LSS	M	F	
Before Treatment	11.54	11.15	10.13	10.30	11.01	11.53	11.41	10.88	10.86
After Treatment	12.29	11.85	10.94	10.46	10.63	11.43	11.73	11.62	11.36
Performance Gains	.75 (6.5%)	.70 (6.3%)	.81 (8.0%)	.16 (1.6%)	-.38 (-3.5%)	-.1 (-0.9%)	.32 (2.8%)	.74 (6.8%)	.5 (4.6%)

Descriptive statistics before and after the introduction of the treatment revealed that form three students' academic performances improved more than for any other class after the treatment was introduced with a gain percentage of 8.0%. These gains in performances were followed by students of form 1, form 2 and form 4 in that order. On the contrary the introduction of the treatment did not in any way benefit second cycle students whose performances dropped by 3.5% and .9% for Lower Sixth Arts (LSA) and Lower Sixth Science (LSS) students' respectively. With respect to gender, female students benefited from the treatment (6.8%) more than male students did (2.8%). Despite female students' collective gains in performance, male students were individually better performing both before and after the treatment (high class averages before and after the treatment). Overall, students' academic performance increased by .5 units on the 20-point scale which accounted for over 4.6% improvement in academic performance after the intervention was introduced.

Table 3: Results Output for the Dependent Samples T-Test Comparing Pre and Post-Intervention Measurements

	Paired Differences					t	df	Sig. (2-tailed)
Before & After Treatment Pair	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
	-.50591	1.55756	.07407	.65118	-.36064	-6.830	2062	.000

The paired samples t-test output revealed significant differences in the mean students' averages before and after the intervention $t(2062) = -6.830$, $p < .01$. As a result of these significant differences in the means of students' academic averages, the null hypothesis was rejected. The intervention definitely impacted students' academic performances. It was concluded that the harmonization of the sequential test format had a significant effect on secondary school students' academic performance.

The Pearson product moment correlation coefficient for the pretest and posttest measurements revealed a statistically highly significant association between the two datasets. The correlation coefficient (r) between the datasets was $.822^{**}$ with significant value of .00, at the 99% confidence level for 460 students ($N = 460$, $r = .822^{**}$, $p < .01$).

Research Question Two: what is the effect of gender and class on students' academic performance before and after the treatment?

Table 4: Multiple Linear Regression Model Summary on the Effect of Gender and Class on Students' Academic Performance Before Treatment

Class & Gender Dummy Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Form2	-.424	.372	-.062	-1.140	.254
Form3	-1.495	.359	-.232	-4.160	.000
Form4	-1.332	.377	-.198	-3.538	.000
LSA	-.578	.486	-.132	-1.189	.234
LSS	-.156	.658	-.065	-.238	.812
Female	-.846	.286	-.013	-2.972	.003
Constant = 12.226 R^2 = .254 F-Ratio = 5.213, P = .000 < .05 SEE = 2.68365 n = 460					

During the analyses form 1 was set as the baseline (reference) category for the class variable while male was set as the baseline category for the gender variable. The results reveal that together gender and class accounted for 25.4% of the variance in students' academic performances before the treatment. From the multiple linear regression model output in table 4, we expect that form two students' academic performances would be on average .424 units (20-point scale units) lower than form one students' academic performances, while LSS and LSA students' academic performances were on average .578 and .156 units respectively lower than form one students' academic performances. Specifically, by holding gender constant, the likelihood that the calculated differences between form 2, LSA, LSS and form one students' academic performances are actually happening by chance is very high (t = -1.140, p > .05; t = -1.189, p > .05; t = -.238, p > .05 respectively). Form 2, LSA, and LSS were therefore not significant predictors of students' academic performances. On the contrary, the likelihood that the calculated differences between form 3 and form one, and between form 4 and form one students' performances are actually happening by chance is very small (t = -4.160, p < .01 and t = -13.538, p < .01 respectively). Generally, most students' academic averages from form 3 and 4 were on average lower than form one students' academic averages. Specifically, we expect that form three students' academic performances would be on average 1.495 units lower than form one students' academic performances, while form four students' academic performances would be on average 1.332 units lower than form one students' academic performances. In addition, we expect female students' academic performances to be .846 units lower than their fellow male students' performances. The regression model for the variables before the introduction of the treatment is as follows;

SAP Before Treatment = 12.226 - .424*Form2 - 1.495*Form3 - 1.332*From4 - .578*LSA - .156*LSS - .846*Female

According to this model, when gender is kept constant the predicted academic average of a form four compared to a form one student before the treatment would be 10.89 (Predicted SAP before treatment = 12.226 - .424*0 - 1.495*0 - 1.332*1 - .578*0 - .156*0 - .846*0). While keeping class constant, the predicted academic average of a female student compared to a male student before treatment would be 11.38 (Predicted SAP for a female student before treatment = 12.226 - .424*0 - 1.495*0 - 1.332*0 - .578*0 - .156*0 - .846*1)

Table 5: Multiple Linear Regression Model Summary on the Effect of Gender and Class on Students' Academic Performance After Treatment

Class & Gender Dummy Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Form2	-.471	.362	-.070	-1.302	.193
Form3	-1.411	.350	-.221	-4.027	.000
Form4	-1.894	.363	-.286	-5.214	.000
Female	-.645	.281	-.096	-2.294	.022
LSA	-1.696	.474	-.184	-3.581	.000
LSS	-.975	.649	-.066	-1.501	.133

Constant = 12.810
R^2 = .290
F-Ratio = 6.927, P = .000 < .05
SEE = 2.59611
n = 460

After the administration of the treatment, gender and class together accounted for 29.0% of the variance in students' academic performance. From the multiple linear regression model output in table 5, we expect that form two students' academic performances would be on average .471 units lower than form one students' academic performances, while LSS students' academic performances would be on average .975 units lower than form one students' academic performances. Specifically, by holding gender constant, the likelihood that the calculated differences between form two, LSS and form one students' averages are actually happening by chance is very high (t = -1.302, p > .05; and t = -1.501, p > .05 respectively). Contrary to form 2 and lower sixth science students' performances, the likelihood that the calculated differences between form 3 and form one (t = -4.027, p < .01), between form 4 and form one (t = -5.214, p < .01), and between lower sixth arts and form one (t = -3.581, p < .01) students' averages are actually happening by chance is very small. In general, most students' academic averages from form 3, 4, and LSA were on average lower than form one student' averages. Specifically, we expect that form 3 students' academic performances would be on average 1.411 units lower than form one students' academic performances, form four students' academic performances would be on average 1.894 points lower than form one students' academic performances, while LSA students' academic performances would be on average 1.696 units lower than form one students' academic performances. In addition, we expect female students' academic performances to be .645 units lower than their fellow male students' performances. The regression model for the variables after the introduction of the treatment is as follows;

SAP After Treatment = 12.810 – .471*Form2 - 1.411*Form3 - 1.894*From4 – .645*LSA - 1.696*LSS - .975*Female

According to this model, when gender is kept constant the predicted academic average of a form four compared to a form one student after the treatment would be 10.92 (Predicted SAP after treatment = 12.810 - .471*0 - 1.411*0 - 1.894*1 - .645*0 - 1.696*0 - .975*0). While keeping class constant, the predicted academic average of a female student compared to a male student after the introduction of the treatment would be 11.84 (Predicted SAP for a female student after treatment = 12.810 - .471*0 - 1.411*0 - 1.894*0 - .645*0 - 1.696*0 - .975*1)

Conclusions

The present study has demonstrated the significant effect of the harmonization of the sequential test format on students' academic performances in secondary school. The findings indicate that harmonization of the test format is highly associated with improvements in students' test scores and academic averages across all school subjects practicing the SSA. Findings from the present study back results from Heck and Stout (1991) on the link between test-question sequencing and student performance scores. Findings also supports the finding of Canlar and Jackson (1991). Also, Fish (2001) provided evidence that instituting quizzes as sequential testing tools during instruction improves students' performances in test. The findings supported Kanan et al. (2024) on the effect of remedial activities under the sequential system on students' performance.

In addition, the findings demonstrate that instruction is successful when teachers have the time to teach and explore different assessment tools and that the organization and manner in which these tools are leveraged matters. In the present study, students' sequential test scores were normally distributed after but not before the intervention. In context, while teachers taught for the recommended six weeks before administering sequence tests during the first and second terms (prior to the intervention), instruction was barely effective for two weeks during the entire third term (leading up to the treatment). During the intervention period, school records of work revealed that instruction was only effective for two weeks. This explains the normally distributed students' averages after the intervention. Normally distributed scores during the third term according to Bloom (1868) provide evidence of failure on the part of teachers to get students to master the knowledge, and that was entirely relevant in the present scenario. In order to foster mastery of concepts and keep learning gains on a permanent upward trajectory, teachers are advised to ensure effective use of instruction time, to vary teaching methodology and to use multiple assessment tools. Administratively speaking, the duration of the school terms needs to be redistributed. Presently the first and the second terms appear to be longer than the third term making it

impossible for teachers to be effective in implementing the curriculum during the third term.

Moreover, students' performances under the SSA were found to drop with increasing class levels, and differences were recorded in academic performances between male and female students. Specifically, form one students' academic averages were almost 1.5 units higher than that of students from senior classes (forms 2 to high school). However, in general female students' academic performances were on average better than male students' academic performances after the treatment was introduced (performance gain of 6.8%). The results underscore the need to encourage assessment for purposes of learning and the use of different assessment tools in achieving learning goals. Given that the SSA in Cameroon's secondary schools operates more like a summative system of assessment, findings from the present study emphasize the need to harmonize test formats during every sequential test administration as this would make the SSA a better outcome criterion inching it closer to the desire standard. While assessment for summative purposes is necessary it should come at the end of the prescribed six weeks of instruction. There is an urgent need to develop more robust interventions and strategies which can eliminate the myriad of pitfalls in the current practice of the SSA in Cameroon's secondary schools. In particular, interventions should target students' interest in learning and sources of distraction should be investigated and mitigated especially for senior class students of secondary school. Also, more interventions showcasing the benefits of harmonizing test types, use of identical methods of administration and test response formats, similar methods of interpreting test scores across all teaching subjects should be prioritized.

Finally, gender-based teaching strategies and methods should also be considered for use under the current SSA in Cameroon given that collective male students' performance gains were significantly lower than female students' performance gains both for the first and second cycles especially after the intervention. This means that the intervention was more helpful to female than it was to male students. There is therefore need for teachers to exploit gender responsive teaching and learning practices that consider specific learning needs of male separately from those of female students. In applying gender responsive pedagogy, the teacher in any lesson strives at all times to challenge gender stereotypes, takes into consideration the gaps that exist in the abilities of male and female students to learn, considers students' behaviours resulting from socialization, carefully plans students' siting arrangement during instruction, and is guided by her/his knowledge on students' social representation of learning.

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