

Monthly Testing and Final Examination GPA in a Nepali Secondary School: Historical Cohort Differences and Associations With Self-Reported Learning-Related Factors

Prakriti Bhetwal
prakritibhetwal421@gmail.com

ABSTRACT

The purpose of this paper is to examine whether the introduction of monthly tests in lower secondary education is associated with differences in students' final academic performance, and to investigate associations between students' self-reported behavioral and motivational factors and final GPA among students in the 2025 cohort. The study was conducted at Mount Everest Secondary English Boarding School across grade 7 to 10 in Belbari, Morang, Koshi Province of Nepal. This is a private school that introduced monthly testing as the tool to assist on student's learning from the year 2024. A quasi-experimental design was used, comparing the final examination GPA of the 2023 batch that had no monthly tests with the 2025 batch that experienced monthly testing. To examine associations between students' self-reported learning-related factors and final GPA, a retrospective Likert-scale survey measuring six factors, i.e., study habits, motivation, anxiety, memory and retention, learning approach, and overall perception was given to current students asking them to recall their monthly test experience from the year 2025. Although Grades 7 and 8 showed modest positive trends in GPA and Grade 9 and 10 showed negative trends, independent samples Welch's t-tests revealed no statistically significant GPA differences between the two batches in any grade. The findings of correlation and regression analyses showed that study habits and motivation were the main self-reported learning-related factors associated with GPA in Grades 7 and 8, while memory and retention was significantly associated with GPA in Grade 9 of the 2025 batch. These findings suggest that no statistically significant differences in students' final examination performance were observed between the cohorts, while students reported varying levels of study habits, motivation, and long-term retention in relation to monthly testing. The results offer practical insights for Mount Everest School and similar private institutions in Nepal to strengthen their monthly testing policy by aligning it with conceptual and exam-based testing structure design so that students' reported learning-related experiences can be examined alongside academic outcomes.

INTRODUCTION

Nepal is a landlocked country in South Asia, bordered by India to the East, West, South, and by China to the North. People here follow a different calendar which is Bikram Sambat (BS), a solar-based Hindu calendar that is 56 years and 8 months ahead of the Gregorian calendar. Nepal's education system comprises government-aided public schools, privately funded schools, and religious schools like Gurukuls. The education system here consists of pre-primary education, followed by eight years of basic education (Grades 1-8) and four years of secondary education (Grades 9-12). Students' academic progress is evaluated through final examination results which is measured in the Grade Point Average (GPA) system. Public schools usually rely on terminal and final examinations as assessment tools whereas private schools have increasingly adopted different assessment methods such as monthly tests and continuous evaluations. This research uses the data from Mount Everest Secondary English Boarding School. It is a private school situated in lower part of Nepal i.e. Terai region. It is in Belbari, Morang of Koshi Province. It was established in 2056 B.S(1999 A.D). As a former student of this school, I completed my lower secondary education without the implementation of a monthly test. Following my graduation, the school introduced monthly test as an assessment tool to help students learn and perform better in their final exams. Observing this change from outside as a former student, I became genuinely curious about whether this new assessment policy was actually making a difference. This personal connection to the school and genuine curiosity about the impact of this new assessment policy motivated this research. It raised a fundamental question: do monthly tests genuinely improve students' final academic performance, or do they simply alter short-term study behavior?

Assessments or tests have an important role in education and schools. Monthly test refers to assessing students' learning on subject material every month. It helps teachers to understand student's knowledge on subject matter. Beyond this, it can also assist student learning. The frequency of testing on a monthly basis can help students retain information for a longer time. The introduction of tests in student's lives can motivate them to focus on study, attend class regularly. Previous research suggests that frequent testing has a transformative effect on student's engagement in classroom setting and attendance (Theyab, 2026). It also increases students' motivation and retention, leading to developed academic outcomes (Roediger and Butler, 2011; McDaniel, Howard and Einstein, 2009). Traditional approaches of assessment, like mid-term and final exams, often do not satisfy the continuous learning needs of students, sparking interest in alternative approaches, including frequent testing (Theyab, 2026). Most of the existing research has focused on higher classes rather than on secondary education outside of Nepal leaving a gap in Nepal's lower secondary context (Grades 7-10), so this study adopts a quantitative approach to address this gap especially in Koshi Province by examining the monthly test and its association with a student's final exam. It aims to offer insights into the relationship between frequent testing and students' final academic performance in lower secondary education (Grades 7–10), as well as students' reported learning-related experiences of monthly testing, by comparing the final examination grades of two different years. The school from which data were collected implemented the idea of monthly testing only in 2024. As monthly

tests were not consistently implemented throughout 2024, the final examination results of the 2023 batch were compared with those of the 2025 batch to ensure a more reliable comparison.

Statement of the problem:

Although the importance of frequent assessment in education is known, there is still a notable gap in understanding the relationship between frequent testing and lower secondary education students' academic performance in Nepal. Existing research generally focuses on broader context without isolating the differences associated with frequent testing in this particular demographic.

Research Question:

How did final-examination GPA differ between the 2023 cohort, which did not experience monthly testing, and the 2025 cohort, which did, across Grades 7-10; and, among students in the 2025 cohort, which self-reported behavioral and motivational factors were associated with final GPA?

LITERATURE REVIEW

Education System in Nepal: Past and Present

The education system in Nepal has significantly developed over time. The formal education system in Nepal began with the establishment of the Durbar School in 1854 by Jung Bahadur Rana (Saud, Aryal, & Sapkota, 2024). During this regime, the access to education for the Nepalese population was quite limited to a few specific groups of individuals in the country. However, with significant political transformations that have taken place within the nation, including the fall of the Rana regime, the establishment of the Panchayat regime, the introduction of multiparty democracy within the nation, and the subsequent establishment of the federal democratic republic, significant reforms have been made within the education policies and curricula of Nepal. These reforms have led to the expansion of the accessibility of education for Nepalese citizens and the establishment of a more structured education system within the nation.

The school education in Nepal is guided by the National Curriculum Framework for School Education 2019 which aims to regulate the process of curriculum design, teaching and assessment practices in accordance with contemporary educational goals. Currently, the school education system of Nepal is generally organized into basic education and secondary education. Basic education is defined as grades from 1 to 8, while secondary education is defined as grades from 9 to 12. Student academic performance at the school level is evaluated through a combination of internal and external assessment procedures. Internal assessments may consist of class tests, terminal exams, assignments, and practicals, which are given by teachers throughout the academic year. Apart from school-based assessments, there are many municipal and national assessments in Nepal at various levels of school education. For instance, local municipalities often administer exams for Grades 5 and 8, while the National Examination Board (NEB) administers other major national exams such as the Secondary Education Examination (SEE) in Grade 10 and the Grade 12 examination. The students get certified for their level and promoted to the next level based on the results of these external examinations. Nepal's education system has traditionally followed

summative assessment practice where final tests determine students' pass or fail status. Many institutions have provisions for formative and summative assessment in their curriculum, but the stress is largely on final exams. For example, the Secondary Education English Curriculum (2021) specifies that the internal assessments will be 25 percent of the total, while the external assessments will be rest. Internal assessment evaluates students' performance throughout the academic year and provides feedback for improvement whereas external assessment measures overall achievement at the end of the course. Most of the school focus the teaching and learning practices for passing the exam rather than promoting deeper conceptual understanding (Acharya, 2022). Furthermore, Nepal's school system comprises of both public (government) schools and private schools, which are often different in assessment practice. Private schools usually do more evaluation practice like monthly tests and quizzes or continual assessment while public schools rely on terminal and final examinations.

Therefore, the frequency and the structure of the test vary as per the institutions. With a continued emphasis on high-stakes examinations in Nepal's education system, educators and policymakers are increasingly advocating for alternative assessment strategies that will foster continuous learning. Due to this, the monthly test has gained attention as a potential approach to promote study habits, provide frequent feedback, and improve overall academic engagement among students.

Frequent Testing and Academic Performance

Testing has been used as a method of evaluating students' academic performance since the past. It has also been a tool for students to learn, and not only to assess them. Monthly or frequent testing refers to the regular assessment of students' academic knowledge at short intervals or on a monthly basis throughout the learning process.

Most of the research supports the positive relationship between frequent testing and academic performance. Theyab (2026) found that non-English major university students exposed to frequent tests demonstrated significantly higher academic achievement compared to those assessed primarily through final examinations. Similarly, Haleem and Saeed (2024) reported the statistically significant difference between the achievement scores of control group and the experimental group with Cohen 's large effect size ($d = 1.67$) in the post-test mean scores showing that frequent testing affects the students' academic achievement and recommended to include frequent testing in educational teaching courses for teachers and higher education institutions. At the secondary school level, the research done by Alade, Aletan, and Kuku (2016) reported that students tested every two weeks outperformed those tested weekly, every three weeks, or monthly suggesting that while frequent testing can improve performance, the optimal frequency of assessment is an important consideration.

While almost all of the studies report a positive effect on achievement, the combination of these results under (Başol & Johanson, 2009) meta-analysis fails to indicate a considerable effect size of frequent testing upon achievement. Research conducted by Mines (2014) found a weak correlation between testing frequency and test averages and no significant relationship with final grades in an environmental engineering curriculum, concluding that testing frequency appears to have little effect on students' final

academic outcomes. Similarly, a quasi-experimental study in computer architecture courses found no statistically significant differences in final examination performance across frequent, moderately frequent, and infrequent testing conditions, suggesting that testing frequency alone may not be sufficient to improve cumulative terminal examination grades without accompanying instructional support (Herman et al., 2025). Research suggests that frequent testing alone is not sufficient to engage students in active learning; it must be combined with other instructional measures to improve final academic performance (Roediger & Butler, 2011; McDaniel et al., 2009; Theyab, 2026).

These contradictory findings suggest that the impact of frequent testing depends on geography, educational level, and the structure of test itself. The existing research is mostly conducted on higher educational level and in western context. Studies examining the effect of monthly testing on students' final academic performance at the lower secondary level in Nepal are limited, so this study aims examine differences in students' final academic performance between cohorts before and after the introduction of monthly testing, as well as associations between self-reported learning-related factors and GPA among students who experienced monthly testing in Grades 7-10.

Behavioral and Motivational Mechanisms Of Frequent Testing

Beyond the direct impact of testing on a student's GPA, testing may influence students' behaviors too. It is equally important to understand the behavioral change that testing brings in students. Haleem and Saeed (2024) reported that frequent testing encourages more consistent study routines among students. It also reduces lastminute cramming and promotes distributed learning across the academic. Research in cognitive psychology suggests that repeated testing helps in strengthening memory and long-term retention of academic information through a process known as retrieval practice (Roediger & Butler, 2011; McDaniel, Howard, & Einstein, 2009). When a student has to repeatedly recall information that they have studied during a test, this process helps them strengthen their ability to remember the studied material for a longer time which may help to improve their academic outcomes. Obilor, E. I., & Akwawo (2024) similarly reported that testing influences student's study habits, classroom attendance, and anxiety, impacting academic performance in secondary school. When students study material regularly in smaller portions, they may develop stronger retention and greater academic confidence. This relationship between testing and study behavior is further supported by Başol and Johanson (2009) findings, which say the benefits of frequent testing are proportionally greater when moving from low to moderate testing frequency, suggesting that even modest increases in assessment regularity can alter students' preparation behaviors.

Frequent testing allows students to understand their weak and strong areas in their studies. The feedback received on test results allows them to adjust their learning strategies. Leeming (2002, as cited in Haleem & Saeed, 2024) found that students who were spending comparable or less time studying in frequent testing condition than those in homework conditions were still be able to achieve significantly better examination results particularly among low-GPA students, who demonstrated a ten-percentage-point improvement over their peers in homework conditions. This suggests that frequent testing serves as a motivational factor particularly benefiting students who struggle with academic self-regulation.

The behavioral effects of frequent testing are not always positive. A study by Öncül, G. (2017) found that student perceives that test improved their retention and learning from frequent testing, but it didn't reduce their anxiety or improve their study habits highlighting a gap between perceived and actual behavioral change. Haleem and Saeed (2024) also reported that frequent testing didn't reduce anxiety but rather it may increase student's stress level. This anxiety factor is also relevant in Nepali educational context. The terminal examination and being graded solely on final exam marks to upgrade class already pressurize student's, the addition of frequent test might potentially increase their stress. Student perception of this frequent test adds more complexity in research. Öncül, G. (2017) reported that students hold mixed views about frequent testing. Some appreciates structured preparation and feedback whereas other experience stress and academic burden. This mixed view raises the question of whether students who believe monthly tests help them actually perform better in final examinations, or whether positive perceptions are disconnected from measurable academic gains.

The existing research shows mixed findings. Findings differ depending on student grade level, academic ability, and institutional context. This study examines differences in final academic performance between historical cohorts before and after the introduction of monthly testing, as well as associations between students' self-reported learning-related factors and final GPA, specifically within the context of Nepal's lower secondary education.

METHODOLOGY

This study used a non-equivalent historical cohort comparison combined with a retrospective correlational survey. The historical cohort comparison compared final examination GPA between students in Grades 7-10 in 2079 BS (2023), before monthly testing was implemented, and students in the same grades in 2081 BS (2025), when monthly testing was implemented. The retrospective correlational survey examined associations between students' self-reported learning-related experiences of monthly testing and their own final GPA from 2081 BS. Because the 2079 and 2081 cohorts were different groups of students and were not randomly assigned, the cohort comparison cannot establish that monthly testing caused any observed GPA differences.

a. Data Collection

Permission to conduct the study and access academic records was obtained from Mount Everest School. Students were informed that their responses would be kept confidential and used only for research purposes. Student names were used only to match questionnaire responses with 2081 GPA records and were not reported in the analysis or manuscript. The school assisted by providing final examination GPA records for students in Grades 7, 8, 9, and 10 in 2079 BS (2023), when monthly testing had not been implemented, and in 2081 BS (2025), when monthly testing was implemented. The comparison involved different students in the two years rather than the same students followed over time. Therefore, differences between the cohorts may also reflect differences in student composition, teachers, examinations, curriculum, grading practices, or the introduction of smartboards, in addition to differences in the monthly-testing policy.

MONTHLY-TESTING POLICY

Monthly tests are implemented during the academic year in months that do not contain major school examinations, vacations, or festivals. The academic year begins in Baisakh, and monthly tests are generally not conducted in Baisakh. Monthly tests are conducted in Jestha; after the first-term examination in Asar, they are conducted in Shrawan and Bhadra; after the second-term examination in Ashoj and the festival period in Kartik, they are conducted in Mangsir; and after the third-term examination in Poush, they are conducted in Magh and Falgun. Thus, students generally take approximately six to seven rounds of monthly tests per academic year. Monthly tests are not conducted during major examination months or vacation and festival periods.

Monthly tests cover all subjects taught in the relevant grade. For example, Grade 10 students take monthly tests in all Grade 10 subjects taught during the academic year. Monthly-test scores do not contribute directly to students' final examination GPA. Instead, the tests are used as practice assessments intended to help students prepare for their final examinations. Teachers return marked monthly tests, provide students with feedback on their performance, and ask students who do not pass to retake the test. The monthly-testing procedures described above were also followed during the 2081 BS academic year examined in this study.

RETROSPECTIVE SURVEY AND QUESTIONNAIRE

A retrospective survey was administered in 2082 BS to students currently enrolled in Grades 8, 9, and 10. Students currently in Grade 8 had been in Grade 7 during 2081 BS, students currently in Grade 9 had been in Grade 8 during 2081 BS, and students currently in Grade 10 had been in Grade 9 during 2081 BS. Students were instructed to answer the questionnaire based on their experiences with monthly testing during 2081 BS.

The questionnaire contained 16 items rated on a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. It measured six self-reported learning-related domains: study habits (four items), motivation (three items), anxiety and stress (three items), perceived memory and retention (two items), learning approach (three items), and overall perception of monthly testing (one item). Scores for each multi-item domain were calculated by taking the mean of the relevant item responses. The overall-perception score was based on the single overall-perception item. No items were reverse-coded. Higher anxiety-and-stress scores indicated greater self-reported anxiety, nervousness, or academic pressure related to monthly testing. Higher learning-approach scores indicated greater agreement with surface-level or examination-oriented learning statements. The complete questionnaire is provided in Appendix A.

The questionnaire included a preliminary recall question asking students whether they clearly remembered their experiences with monthly testing during 2081 BS. Only questionnaires from students who reported clear recall of the 2081 monthly-testing experience were retained for analysis. The exact number of questionnaires excluded because of poor recall was not retained. The exact number of students who were absent, unavailable, or otherwise did not participate in the survey was also not retained.

Students provided their names on the questionnaire, and survey responses were matched with students' own 2081 final GPA records using school records. Students who had joined the school after 2081 BS and therefore did not have a corresponding 2081 GPA record were not included in the behavioural survey analyses.

The final matched survey sample included 46 of 53 students from the 2081 Grade 7 cohort, 39 of 51 students from the 2081 Grade 8 cohort, and 33 of 34 students from the 2081 Grade 9 cohort. The survey was administered to students who were present at the time of data collection; therefore, the survey samples were smaller than the full 2081 cohorts. No behavioural survey analysis was conducted for the 2081 Grade 10 cohort because those students had graduated by the time of survey administration.

b. Data Analysis

The collected data was analyzed using JASP software. To describe differences in final academic marks between the 2079 and 2081 historical cohorts, the mean and standard deviation of GPA were calculated for each grade. Welch's independent-samples t-test was conducted to examine whether the observed difference in mean final GPA between the two historical cohorts was statistically significant. The student-t test assumes equal variances between groups. Since both sample sizes and standard deviations differed between batches, Welch's t-test was used as it does not require this assumption and provides more reliable results for unequal groups. For the second question, the surveyed data was analyzed. Students of class 10 i.e. previous year class 9 batch, their previous year GPA along with survey answers were used for the analysis and so on with other grades. Pearson correlation analyses were conducted to examine associations between each self-reported learning-related factor and students' final GPA. Subsequently, multiple linear regression analyses were conducted to examine whether the six self-reported learning-related factors were jointly associated with final GPA.

RESULTS

My study investigated the association between monthly testing and final exam marks by comparing the 2081 B.S. (2025 A.D.) cohort with the 2079 B.S. (2023 A.D.) cohort.

Across Grades 7-9, a total of 18 Pearson correlations were examined (six behavioral factors in each of three grades). Conducting multiple statistical tests increases the probability of obtaining statistically significant results by chance. No formal correction for multiple comparisons (e.g., Bonferroni or Holm) was applied. Therefore, these correlational analyses are treated as exploratory, and the possibility of false-positive findings cannot be ruled out.

Monthly Testing and Final Examination GPA in a Nepali Secondary School: Historical Cohort Differences and Associations With Self-Reported Learning-Related Factors

The following data shows the result of grade 7:

Table: I

GROUP DESCRIPTIVES - GRADE 7 GPA COMPARISON

	Group	N	Mean	SD	SE	Coefficient of variation
GPA	2079	35	2.852	0.567	0.096	0.199
	2081	53	3.084	0.504	0.069	0.164

Note: 2079 B.S in Nepal means batch of 2023 and 2081 B.S means batch of 2025.

Table: II

Independent Samples t-test

	Test	Statistic	df	p	Mean Difference	Cohen's d
GPA	Student	-2.014	86.00	.047	-0.232	-0.439
	Welch	-1.966	66.90	.053	-0.232	-0.433

The average GPA of class 7 of 2079 B.S i.e. 2023 A.D batch was 2.85 with the sample size of 35 . Similarly, the average GPA of grade 7 of the 2081 batch i.e., the 2025 batch, was 3.08 with sample size of 53 . As the No. of students differ by years, the Welch-t test was conducted for a more reliable conclusion. The 2081 batch outperformed the 2079 batch by 0.232 GPA points on average. The result showed the 2025 batch to have higher GPA, but we cannot conclude that this difference is due to the introduction of a monthly test. is due to the introduction of the monthly test. Therefore, Welch's independent sample t -test was conducted to determine if the increment in GPA is due to a monthly test or by random chance. In the Welch t-test, the p-value was 0.053, slightly greater than 0.05, indicating that the difference in GPA between cohorts was not statistically significant (mean difference = 0.232, 95% CI [-0.468, 0.004]; Cohen's d = -0.43, 95% CI [-0.865, 0.001]).

Table: III

ASSUMPTION CHECKS

Test of Normality (Shapiro-Wilk)		
Residuals	W	p
GPA	0.982	.249
Note. Significant results suggest a deviation from normality.		

Prior to conducting the t-test, the Shapiro-Wilk test was used to verify that the normality assumption required for the independent samples t test was satisfied.

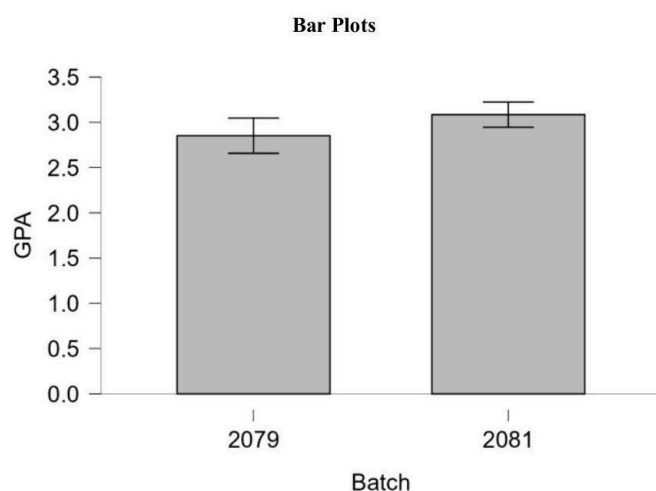


FIGURE I

The 2081 batch outperformed the 2079 batch by 0.232 GPA points on average.

The following data shows the result of grade 8 :

TABLE: IV

GROUP DESCRIPTIVES – GRADE 8 GPA COMPARISON

Group Descriptives						
	Group	N	Mean	SD	SE	Coefficient of variation
GPA	2079	30	2.722	0.633	0.116	0.232
	2081	51	2.923	0.812	0.114	0.278

Table: V

Independent Samples t-test

	Test	Statistic	df	p	Mean Difference	Cohen's d
GPA	Student	-1.161	79.00	.249	-0.201	-0.267
	Welch	-1.238	72.80	.220	-0.201	-0.276

The average GPA of class 8 of 2079 B.S. (2023 A.D.) batch was 2.72 with a sample size of 30. Similarly, the average GPA of grade 8 of the 2081 batch (2025 A.D.) was 2.92 with a sample size of 51. The 2081 batch outperformed the 2079 batch by 0.201 GPA points on average. In the Welch t-test, the p-value was 0.220, greater than 0.05, indicating that the difference in GPA between cohorts was not statistically significant (mean difference = 0.201, 95% CI [-0.524, 0.122]; Cohen's d = -0.28, 95% CI [-0.728, 0.178]).

Bar Plots

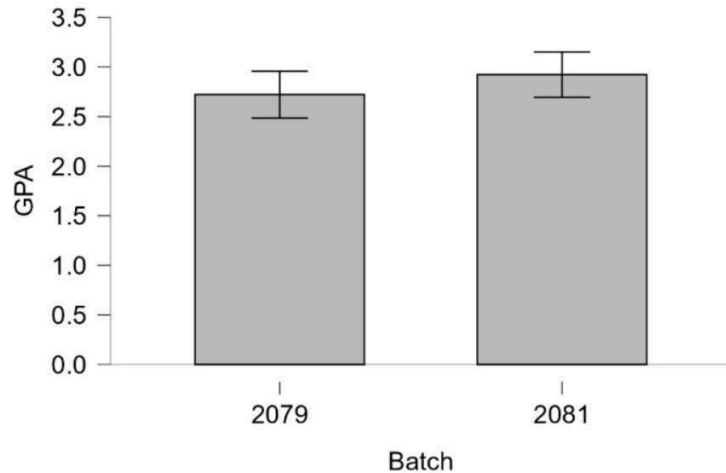


FIGURE II
Final GPA Comparison Between 2079 And 2081 Batch of Grade 8

The following data shows the result of grade 9:

TABLE: VI
GROUP DESCRIPTIVES - GRADE 9 GPA COMPARISON

	Group	N	Mean	SD	SE	Coefficient of variation
GPA	2079	23	3.343	0.323	0.067	0.097
	2081	34	3.227	0.457	0.078	0.142

TABLE: VII

Independent Samples t-test

	Test	Statistic	df	p	Mean Difference	Cohen's d
GPA	Student	1.058	55.00	.295	0.117	0.286
	Welch	1.129	54.85	.264	0.117	0.295

The average GPA of class 9 of 2079 B.S. (2023 A.D.) batch was 3.34 with a sample size of 23. Similarly, the average GPA of grade 9 of the 2081 batch (2025 A.D.) was 3.23 with a sample size of 34. The 2079

batch outperformed the 2081 batch by 0.117 GPA points on average. In the Welch t-test, the p-value was 0.264, greater than 0.05, indicating that the difference in GPA between cohorts was not statistically significant (mean difference = 0.117, 95% CI [-0.090, 0.324]; Cohen's d = 0.30, 95% CI [-0.24, 0.83]).

ASSUMPTION CHECKS

TABLE: VIII

Test of Normality (Shapiro-Wilk)		
Residuals	W	p
GPA	0.978	.392
Note. Significant results suggest a deviation from normality.		

Prior to conducting the t-test, the Shapiro-Wilk test was used to verify that the normality assumption required for the independent samples t test was satisfied

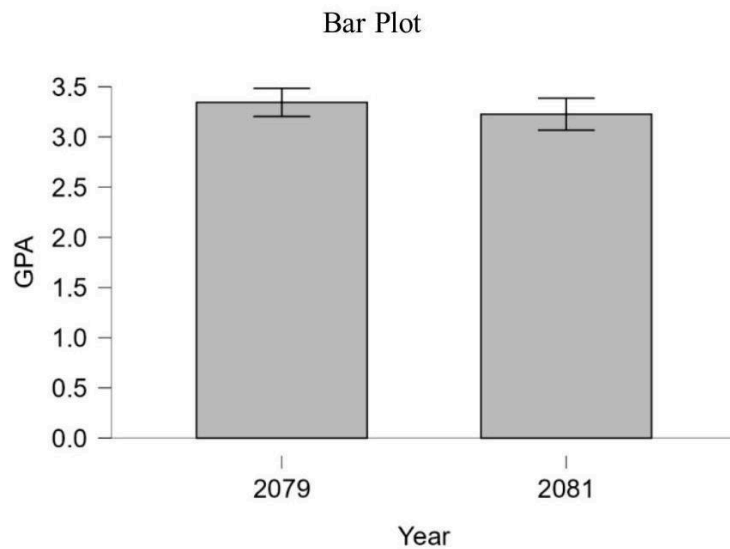


FIGURE III

Final GPA Comparison Between 2079 And 2081 Batch of Grade 9

The following data shows the result of grade 10:

TABLE: IX

GROUP DESCRIPTIVES - GRADE 10 GPA COMPARISON

Monthly Testing and Final Examination GPA in a Nepali Secondary School: Historical Cohort Differences and Associations With Self-Reported Learning-Related Factors

	Group	N	Mean	SD	SE	Coefficient of variation
GPA	2079	29	3.431	0.221	0.041	0.064
	2081	25	3.412	0.221	0.044	0.065

TABLE: X
Independent Samples t-test

	Test	Statistic	df	p	Mean Difference	Cohen's d
GPA	Student	0.309	52.00	.758	0.019	0.084
	Welch	0.309	50.85	.758	0.019	0.084

The average GPA of class 10 of 2079 B.S. (2023 A.D.) batch was 3.43 with a sample size of 29. Similarly, the average GPA of grade 10 of the 2081 batch (2025 A.D.) was 3.41 with a sample size of 25. The 2079 batch outperformed the 2081 batch by 0.019 GPA points on average. In the Welch t-test, the p-value was 0.758, greater than 0.05, indicating that the difference in GPA between cohorts was not statistically significant (mean difference = 0.019, 95% CI [-0.102, 0.140]; Cohen's d = 0.08, 95% CI [-0.45, 0.62]).

TABLE: XI
ASSUMPTION CHECKS

Test of Normality (Shapiro-Wilk)		
Residuals	W	p
GPA	0.975	.313
Note. Significant results suggest a deviation from normality.		

Prior to conducting the t-test, the Shapiro-Wilk test was used to verify that the normality assumption required for the independent samples t test was satisfied

Bar Plot

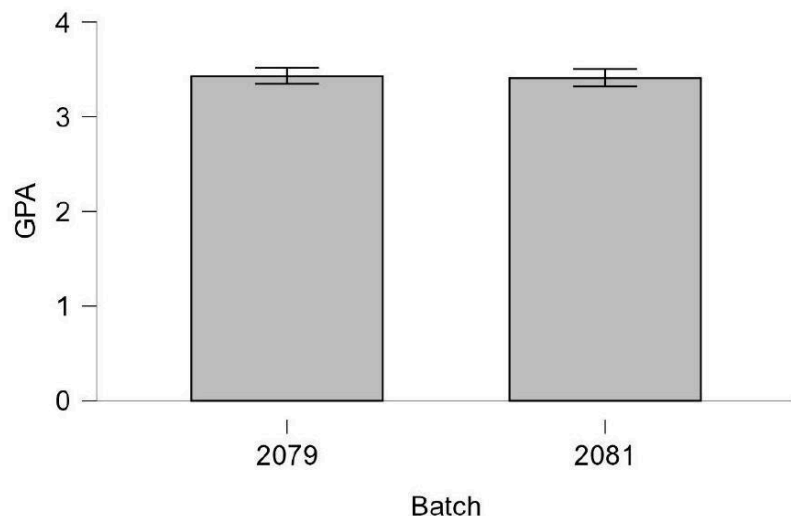


FIGURE IV

Final GPA Comparison Between 2079 And 2081 Batch of Grade 10

Behavioral Survey Analysis - Grade 7 (2081 B.S.) Batch

The following survey was administered to the same students, now in Grade 8 (2082 B.S.), asking them to recall their monthly test experience from the previous academic year

TABLE: XII

PEARSON'S CORRELATIONS

			Pearson's r	p
Study Habit score	-	Final GPA	0.354*	.016
Motivation Score	-	Final GPA	0.351*	.017
Anxiety Score	-	Final GPA	0.088	.562
Memory and Retention score	-	Final GPA	0.198	.188
Learning Approach Score	-	Final GPA	0.111	.463

*Monthly Testing and Final Examination GPA in a Nepali Secondary School: Historical Cohort
Differences and Associations With Self-Reported Learning-Related Factors*

Overall Perception Score	-	Final GPA	0.259	.082
* $p < .05$, ** $p < .01$, *** $p < .001$				

The findings show that Study Habit score ($r = 0.354$, $p = .016$) and Motivation Score ($r = 0.351$, $p = .017$) were positively associated with final GPA at the conventional 0.05 level. This indicates that Grade 7 students who reported stronger study habits and higher motivation in relation to monthly testing also tended to achieve higher final examination grades. The remaining four factors did not show statistically significant associations with GPA. These findings suggest that, among Grade 7 students, monthly testing was associated with academic performance primarily through self-reported study habits and motivation rather than through anxiety, memory and retention, or learning approach.

Scatter plots for all six factors against final GPA are presented in the figures below, visually supporting the correlation findings:

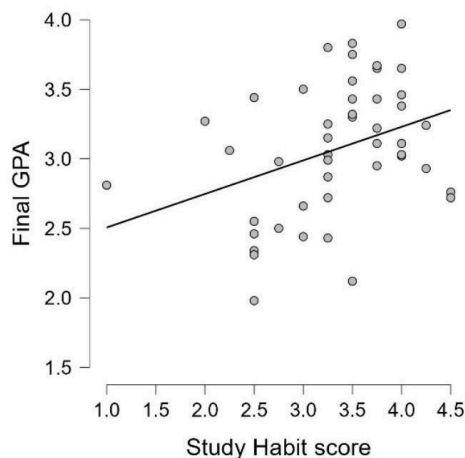


FIGURE V
Study Habit score vs. Final GPA

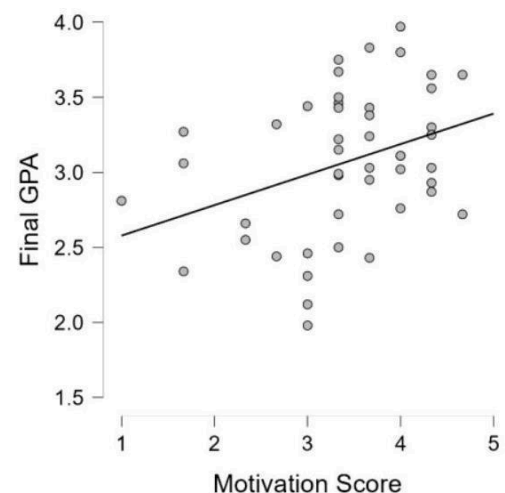


FIGURE VI
Motivation Score vs. Final GPA

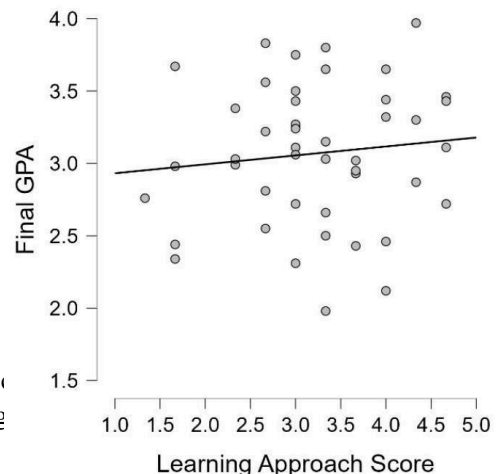
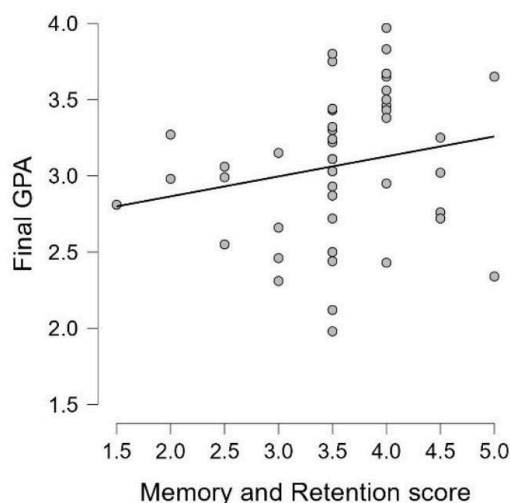


FIGURE VII

Memory and Retention Score vs. Final GPA

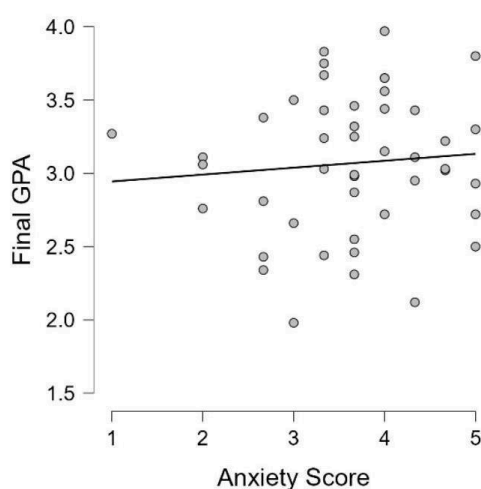


FIGURE VIII

Learning Approach Score vs. Final GPA

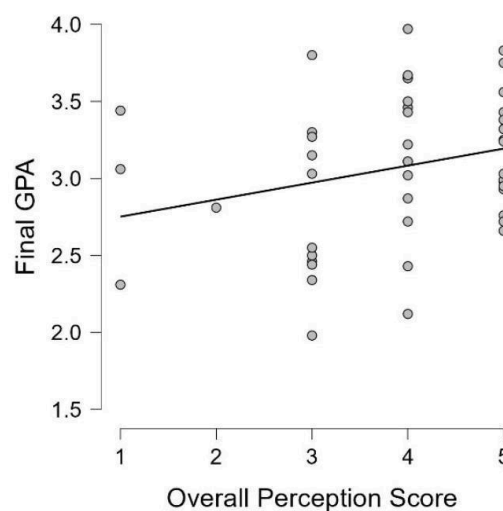


FIGURE IX

Anxiety Score vs. Final GPA

FIGURE X

Overall Perception Score vs. Final GPA

TABLE: XIII

Linear Regression

Model Summary - Final GPA								
Model	R	R^2	Adjusted R^2	RMSE	R^2 Change	df1	df2	p
Mo	0.000	0.000	0.000	0.480	0.000	0	45	
M	0.387	0.150	0.019	0.476	0.150	6	39	.354

Note. M_1 includes Study Habit score, Motivation Score, Memory and Retention score, Learning Approach Score, Overall Perception Score, Anxiety Score

TABLE: XIV

ANOVA

Model		Sum of Squares	df	Mean Square	F	p
M_1	Regression	1.557	6	0.259	1.147	.354
	Residual	8.823	39	0.226		
	Total	10.38	45			

Note. M_1 includes Study Habit score, Motivation Score, Memory and Retention score, Learning Approach Score, Overall Perception Score, Anxiety Score

Note. The intercept model is omitted, as no meaningful information can be shown

TABLE: XV

Coefficients

Predictor	B	SE	β	t	p	95% CI Lower	95% CI Upper	Tolerance	VIF
(Intercept)	2.347	0.479	—	4.903	<.001	1.379	3.315	—	—
Study Habit score	0.148	0.211	0.217	0.701	.487	−0.279	0.575	0.227	4.403
Motivation Score	0.141	0.153	0.244	0.922	.362	−0.169	0.452	0.311	3.218

*Monthly Testing and Final Examination GPA in a Nepali Secondary School: Historical Cohort
Differences and Associations With Self-Reported Learning-Related Factors*

Memory & Retention score	−0.05 1	0.13 2	−0.07 7	−0.38 7	.701	−0.31 8	0.216	0.548	1.82 4
Learning Approach Score	0.027	0.09 5	0.049	0.287	.776	−0.16 4	0.218	0.752	1.32 9
Overall Perception Score	0.010	0.09 2	0.024	0.110	.913	−0.17 5	0.196	0.470	2.12 6
Anxiety Score	−0.05 5	0.09 7	−0.10 2	−0.56 2	.577	−0.25 1	0.142	0.669	1.49 5

Note: B = unstandardised regression coefficient; β = standardised regression coefficient; t = t-statistic; p = p-value; 95% CI = 95% confidence interval for B; VIF = variance inflation factor.

A linear regression analysis was conducted to examine whether the six behavioral factors together predicted final GPA. The overall model was not statistically significant, $F(6, 39) = 1.15$, $p = .354$, $R^2 = 0.15$, indicating that these factors did not reliably predict GPA in this grade. None of the individual predictors were statistically significant (all $p > 0.05$). Collinearity diagnostics suggested no severe multicollinearity among the predictors (VIF range: 1.33–4.40). However, with only 46 participants and six predictors in the model, the analysis had limited statistical power, so the results should be interpreted cautiously.

TABLE: XVI
DESCRIPTIVE STATISTICS OF GPA AND BEHAVIORAL FACTORS

	N	Mean	SD	SE
Final GPA	46	3.068	0.480	0.071
Study Habit score	46	3.332	0.705	0.104
Motivation Score	46	3.413	0.829	0.122

*Monthly Testing and Final Examination GPA in a Nepali Secondary School: Historical Cohort
Differences and Associations With Self-Reported Learning-Related Factors*

Anxiety Score	46	3.638	0.894	0.132
Memory and Retention score	46	3.554	0.724	0.107
Learning Approach Score	46	3.217	0.864	0.127
Overall Perception Score	46	3.870	1.128	0.166

The average of anxiety score is higher among all other behavioral factors, which means students perceive monthly tests as associated with considerable stress. However, correlation analysis showed no statistically significant relationship between anxiety and final GPA ($r = 0.088$, $p = .562$), suggesting that although students experienced stress from monthly testing, this was not significantly associated with their final academic performance in this grade. Additionally, the Overall Perception Score ($M = 3.870$) indicated that students believed monthly tests helped them overall, but this perception was not significantly associated with GPA in this grade.

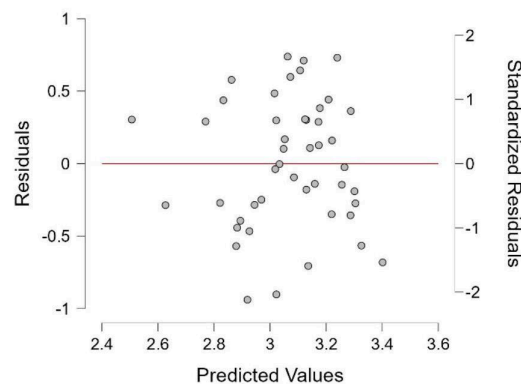


FIGURE XI

Residual plot showing distribution of residuals across predicted GPA values.

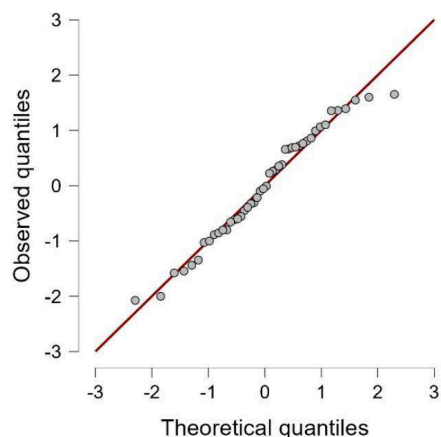


FIGURE XII

Q-Q plot assessing normality of residuals.

Behavioral Survey Analysis - Grade 8 (2081 B.S.) Batch

TABLE: XVII

Pearson's Correlations

			Pearson's r	p
Study Habit score	-	Final GPA	0.391*	.014
Motivation Score	-	Final GPA	0.457**	.003
Anxiety Score	-	Final GPA	-0.165	.315
Memory and Retention score	-	Final GPA	0.029	.862
Learning Approach Score	-	Final GPA	-0.279	.085
Overall Perception Score	-	Final GPA	0.057	.731
* $p < .05$, ** $p < .01$, *** $p < .001$				

The finding shows that Study Habit score ($r = 0.391$, $p = 0.014$) and Motivation Score ($r = 0.457$, $p = 0.003$) were both statistically significantly correlated with final GPA as the p value is less than 0.05. This indicates that Grade 8 students who reported stronger study habits and higher motivation in relation to monthly testing also tended to achieve higher final examination grades. The remaining four factors didn't demonstrate statistically significant correlation with GPA. These findings suggest that among Grade 8 students, monthly testing may be associated with academic performance primarily through study habits and motivation rather than through anxiety, memory, or learning approach.

Scatter plots for all six factors against final GPA are presented in the figures below, visually supporting the correlation findings:

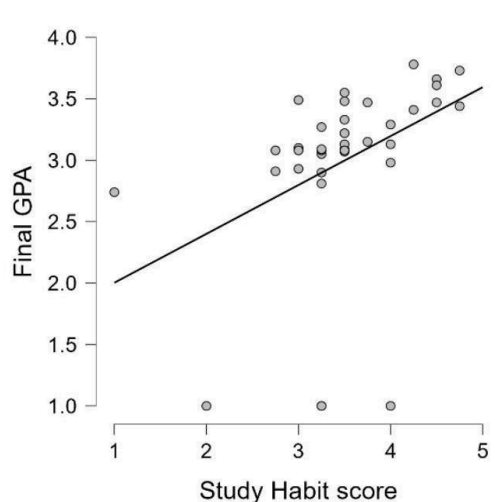


FIGURE XIII

Study Habit score vs. Final GPA

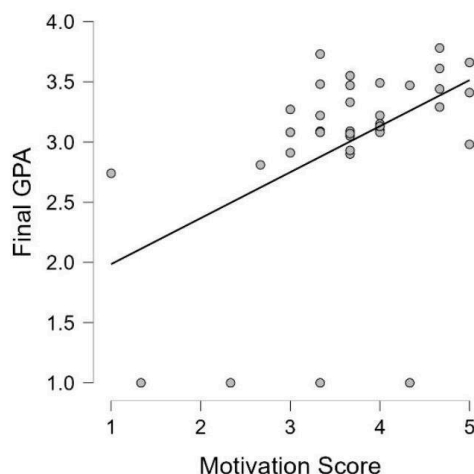
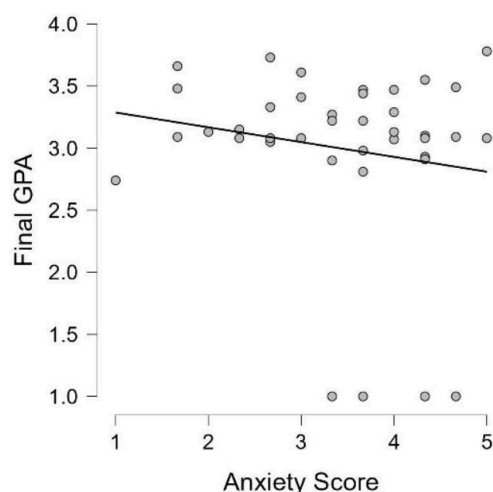


FIGURE XIV

Motivation Score vs. Final GPA

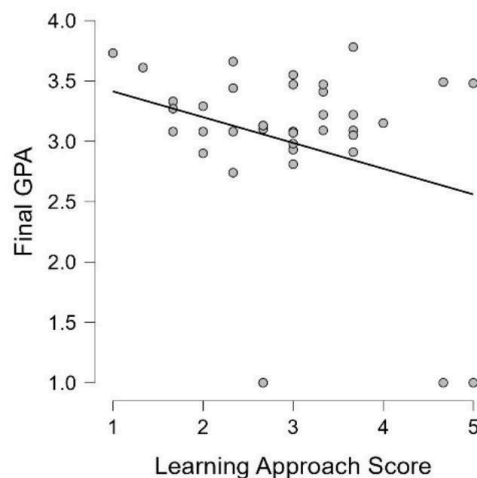


FIGURE XV

Anxiety Score vs. Final GPA

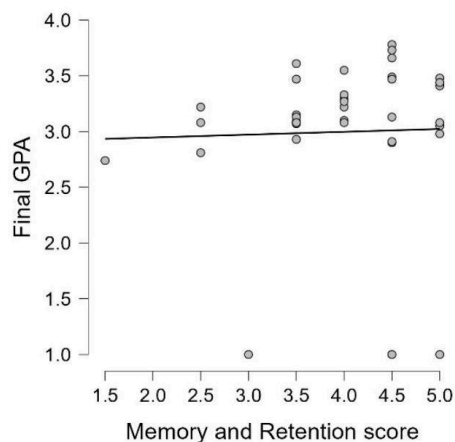


FIGURE XVI

Learning Approach Score vs. Final GPA

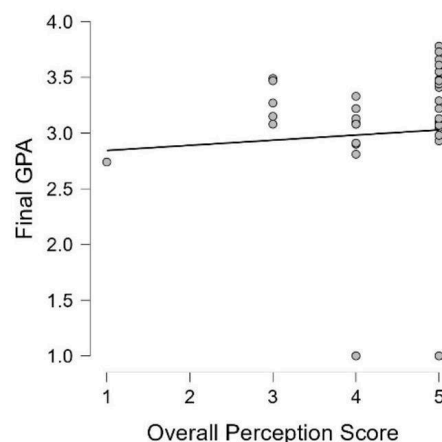


FIGURE XVII

Memory and Retention score vs. Final GPA

FIGURE XVIII

Overall Perception Score vs. Final GPA

TABLE: XVIII
Linear Regression

Model Summary - Final GPA								
Model	R	R^2	Adjusted R^2	RMSE	R^2 Change	df1	df2	p
Mo	0.000	0.000	0.000	0.728	0.000	0	38	
M_1	0.566	0.321	0.193	0.654	0.321	6	32	.041
Note. M_1 includes Study Habit score, Motivation Score, Anxiety Score, Memory and Retention score, Learning Approach Score, Overall Perception Score								

TABLE: XIX

ANOVA

Model		Sum of Squares	df	Mean Square	F	p
M_1	Regression	6.457	6	1.076	2.518	.041

Model		Sum of Squares	df	Mean Square	F	p
	Residual	13.68	32	0.427		
	Total	20.14	38			

Note: M_1 includes Study Habit score, Motivation Score, Anxiety Score, Memory and Retention score, Learning Approach Score, Overall Perception Score

Note: The intercept model is omitted, as no meaningful information can be shown.

TABLE:XX

Coefficient

Predictor	B	SE	β	t	p	95% CI Lower	95% CI Upper	Tolerance	VIF
(Intercept)	2.778	0.761	—	3.651	<.001	1.228	4.327	—	—
Study Habit score	0.028	0.281	0.027	0.099	.922	-0.544	0.600	0.278	3.596

*Monthly Testing and Final Examination GPA in a Nepali Secondary School: Historical Cohort
Differences and Associations With Self-Reported Learning-Related Factors*

Motivation Score	0.4317	0.216	0.5165	1.9971	.054	−0.009	0.870	0.318	3.143
Anxiety Score	−0.097	0.114	−0.135	−0.851	.401	−0.329	0.135	0.850	1.176
Memory and Retention score	−0.054	0.152	−0.061	−0.355	.725	−0.363	0.255	0.722	1.385
Learning Approach Score	−0.165	0.118	−0.216	−1.401	.171	−0.404	0.075	0.894	1.119
Overall Perception Score	−0.096	0.148	−0.119	−0.652	.519	−0.397	0.204	0.640	1.561

Note: B = unstandardised regression coefficient; β = standardised regression coefficient; t = t-statistic; p = p-value; 95% CI = 95% confidence interval for B; VIF = variance inflation factor.

A linear regression analysis was conducted to examine whether the six behavioral factors together predicted final GPA. The overall model was statistically significant, $F(6, 32) = 2.52$, $p = .041$, $R^2 = 0.32$, indicating that these factors jointly explained a significant proportion of the variance in GPA in this grade. However, none of the individual predictors reached statistical significance at the 0.05 level. Motivation Score showed the strongest individual association with GPA ($p = .054$), but this did not reach conventional statistical significance and should not be interpreted as evidence that motivation is the “most contributive” predictor. Collinearity diagnostics indicated no severe multicollinearity (VIF range: 1.12–3.60). Given the small sample size ($N = 39$) and six predictors, the model had limited statistical power, and the results should be interpreted cautiously.

TABLE: XXI

DESCRIPTIVE STATISTICS OF GPA AND BEHAVIORAL FACTORS

	N	Mean	SD	SE
Final GPA	39	2.997	0.728	0.117

*Monthly Testing and Final Examination GPA in a Nepali Secondary School: Historical Cohort
Differences and Associations With Self-Reported Learning-Related Factors*

Study Habit score	39	3.500	0.716	0.115
Motivation Score	39	3.650	0.872	0.140
Anxiety Score	39	3.427	1.009	0.162
Memory and Retention score	39	3.987	0.823	0.132
Learning Approach Score	39	2.949	0.954	0.153
Overall Perception Score	39	4.333	0.898	0.144

The average of memory and retention score is higher among all other behavioral factors, which means students perceive monthly tests as most beneficial for their long-term retention of information. However, correlation analysis showed no statistically significant relationship between memory and retention and final GPA ($r = 0.029$, $p = .862$), suggesting that although students believed monthly tests helped them retain information for a longer time, this perception was not associated with higher GPA in this grade. Additionally, the Overall Perception Score had the highest mean of all variables including behavioral factors ($M = 4.333$), the highest overall perception score across all three surveyed grades. This indicates that Grade 8 students most strongly believed monthly tests helped their academic performance, but the independent samples t-test for this grade showed no statistically significant GPA improvement ($p = .220$). This divergence between student perception and the observed associations with GPA represents one of the most notable findings of this study.

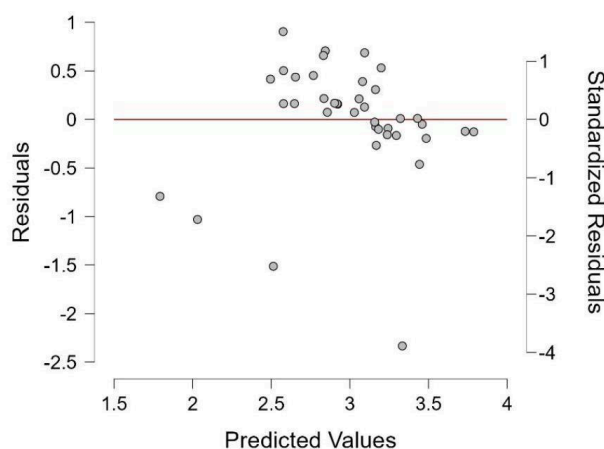


FIGURE XIX

Residual plot showing distribution of residuals across predicted GPA values.

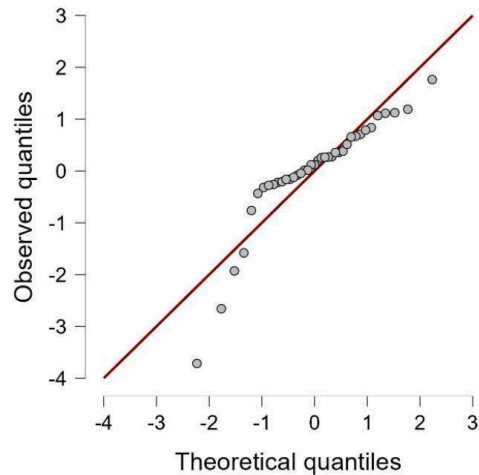


FIGURE XX

Q-Q plot assessing normality of residuals.

Behavioral Survey Analysis - Grade 9 (2081 B.S.) Batch

TABLE: XXII

Pearson's Correlations

			Pearson's r	p
Study Habit score	-	Final GPA	0.092	.611
Motivation Score	-	Final GPA	0.306	.083
Anxiety Score	-	Final GPA	-0.075	.679
Memory and Retention score	-	Final GPA	0.424	.014
Learning Approach Score	-	Final GPA	-0.118	.512

Overall Perception Score	-	Final GPA	0.162	.368
--------------------------	---	-----------	-------	------

The finding shows that memory and retention score was statistically significantly correlated with final GPA as the p-value is 0.014, which is less than 0.05. Unlike Grades 7 and 8, where study habits and motivation were the primary factors associated with GPA, only Memory and Retention score demonstrated a statistically significant correlation with final GPA in this grade ($r = 0.424$, $p = .014$). This indicates that Grade 9 students who reported stronger memory and retention in relation to monthly testing tended to achieve higher final examination grades. The remaining four behavioral factors didn't demonstrate statistically significant correlation with GPA. The transition in the major behavioral factor associated with GPA from motivation and study habits in the lower grades to memory and retention in Grade 9 is interesting, but because the study did not follow the same students longitudinally, this pattern should be regarded as a tentative interpretation requiring further research rather than an established developmental change.

Scatter plots for all six factors against final GPA are presented in the figures below, visually supporting the correlation findings:

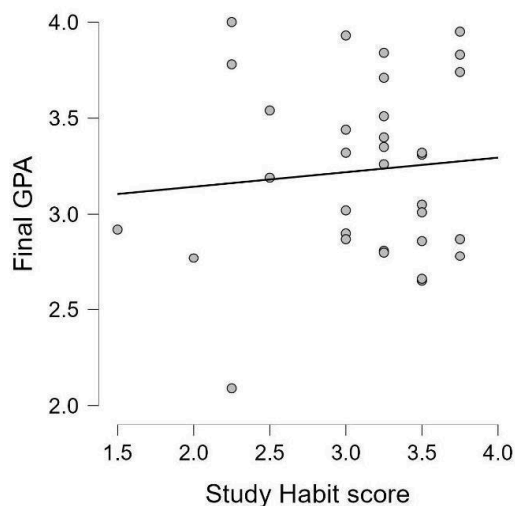


FIGURE XXI

Study Habit score vs. Final GPA

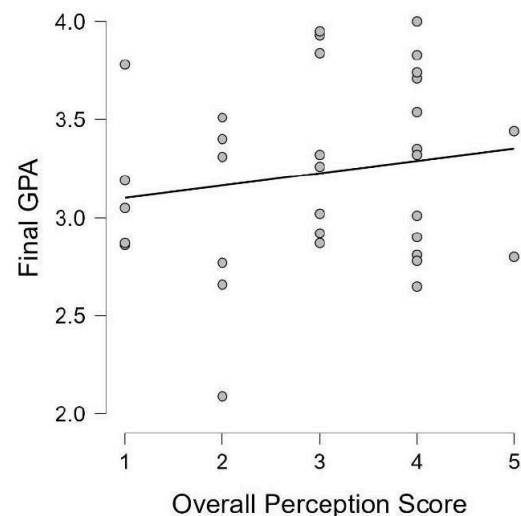


FIGURE XXII

Overall Perception Score vs. Final GPA

Monthly Testing and Final Examination GPA in a Nepali Secondary School: Historical Cohort Differences and Associations With Self-Reported Learning-Related Factors

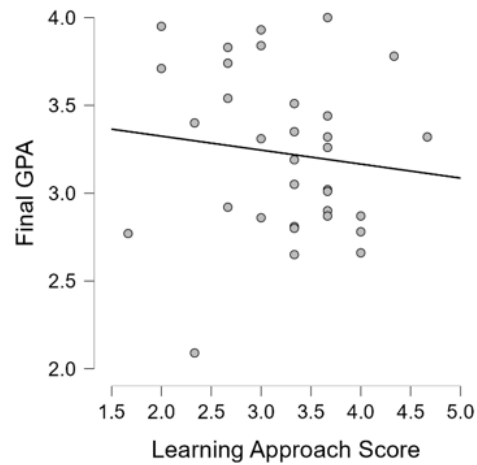


FIGURE XXIII

Learning Approach Score vs. Final GPA

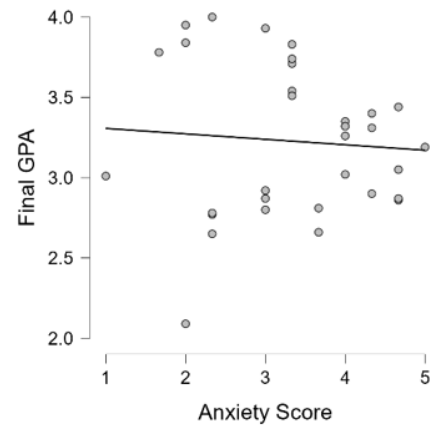


FIGURE XXIV

Anxiety Score vs. Final GPA

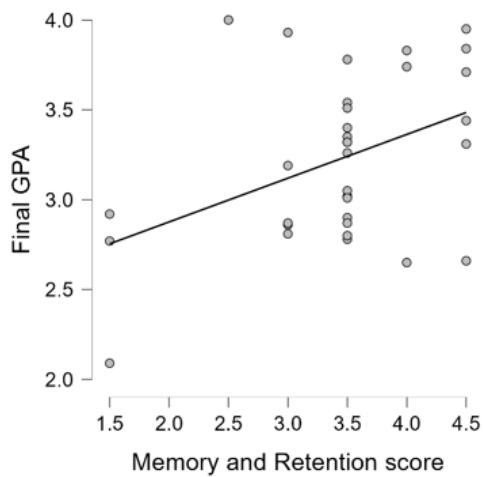


FIGURE XXV

Memory and Retention score vs Final GPA

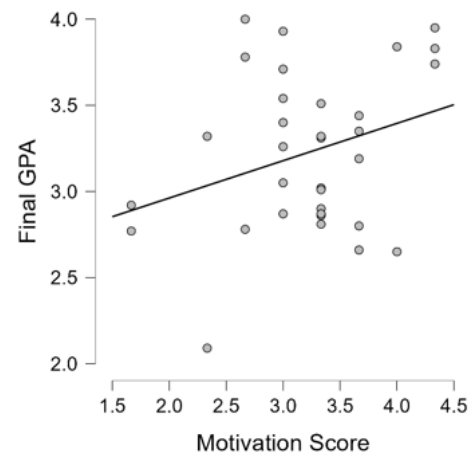


FIGURE XXVI

Motivation score Vs. Final GPA

TABLE: XXIII

LINEAR REGRESSION

Model Summary - Final GPA								
Model	R	R^2	Adjusted R^2	RMSE	R^2 Change	df1	df2	p

*Monthly Testing and Final Examination GPA in a Nepali Secondary School: Historical Cohort
Differences and Associations With Self-Reported Learning-Related Factors*

Mo	0.000	0.000	0.000	0.464	0.000	0	32	
M ₁	0.567	0.322	0.165	0.423	0.322	6	26	.094
Note. M ₁ includes Study Habit score, Motivation Score, Anxiety Score, Memory and Retention score, Learning Approach Score, Overall Perception Score								

TABLE: XXIV

ANOVA

Model		Sum of Squares	df	Mean Square	F	p
M ₁	Regression	2.214	6	0.369	2.058	.094
	Residual	4.662	26	0.179		
	Total	6.875	32			

Note: M₁ includes Study Habit score, Motivation Score, Anxiety Score, Memory and Retention score, Learning Approach Score, Overall Perception Score

Note. The intercept model is omitted, as no meaningful information can be shown.

TABLE:XXV

Coefficient

Predictor	B	SE	β	t	p	95% CI Lower	95% CI Upper	Tolerance	VIF
(Intercept)	3.202	0.574	—	5.576	<.001	2.022	4.383	—	—

*Monthly Testing and Final Examination GPA in a Nepali Secondary School: Historical Cohort
Differences and Associations With Self-Reported Learning-Related Factors*

Study Habit score	−0.367	0.206	−0.446	−1.780	.087	−0.791	0.057	0.416	2.406
Motivation Score	0.047	0.185	0.066	0.252	.803	−0.334	0.427	0.382	2.617
Anxiety Score	−0.039	0.079	−0.087	−0.500	.621	−0.201	0.122	0.871	1.149
Memory and Retention score	0.423	0.160	0.737	2.645	.014	0.094	0.752	0.336	2.978
Learning Approach Score	−0.106	0.115	−0.158	−0.924	.364	−0.342	0.130	0.893	1.120
Overall Perception Score	0.012	0.067	0.030	0.175	.863	−0.126	0.149	0.871	1.148

Note: B = unstandardised regression coefficient; β = standardised regression coefficient; t = t-statistic; p = p-value; 95% CI = 95% confidence interval for B; VIF = variance inflation factor.

A linear regression analysis was conducted to examine whether the six behavioral factors together predicted final GPA. The overall model was not statistically significant, $F(6, 26) = 2.06$, $p = .094$, $R^2 = 0.32$. Memory and Retention score was the only individual predictor significantly associated with GPA ($p = .014$). Collinearity diagnostics indicated no severe multicollinearity (VIF range: 1.12–2.98). Given the small sample size ($N = 33$) and six predictors, the model had limited statistical power, and the results should be interpreted cautiously.

TABLE: XXVI
DESCRIPTIVE STATISTICS OF GPA AND BEHAVIORAL FACTORS

	N	Mean	SD	SE
Final GPA	33	3.227	0.464	0.081
Study Habit score	33	3.106	0.563	0.098
Motivation Score	33	3.222	0.654	0.114
Anxiety Score	33	3.354	1.020	0.178
Memory and Retention score	33	3.439	0.808	0.141
Learning Approach Score	33	3.232	0.690	0.120
Overall Perception Score	33	3.000	1.199	0.209

The average of memory and retention score is higher among all other behavioral factors, which means students perceive monthly tests as most beneficial for their long-term retention of information. Correlation analysis also showed a statistically significant relationship between memory and retention and final GPA ($r = 0.424$, $p = .014$). Additionally, Overall Perception Score had the lowest mean of all variables ($M = 3.000$), and notably the lowest overall perception score across all three surveyed grades. This suggests that, compared to Grade 7 and Grade 8 students of the 2081 batch, Grade 9 students were considerably more skeptical about whether monthly tests helped their final academic performance overall. This finding is consistent with the independent samples t-test result for this grade, which showed that the 2081 batch with monthly tests scored slightly lower than the 2079 batch without monthly tests, though not significantly.

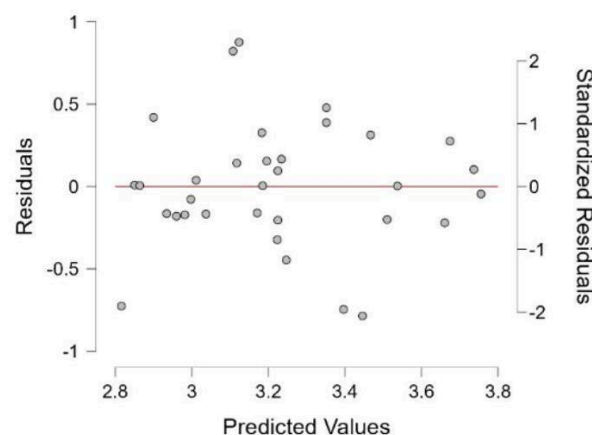


FIGURE XXVII

Residual plot showing distribution of residuals across predicted GPA values.

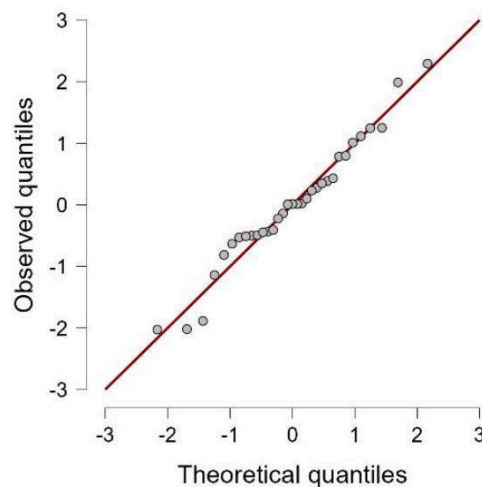


FIGURE XXVIII

Q-Q plot assessing normality of residuals

DISCUSSION

GPA Comparison Across Grades

The comparison of final examination GPA between the 2023 batch without monthly tests and the 2025 batch with monthly tests showed no statistically significant difference across any of the four grades. In Grades 7 and 8, the 2025 batch performed slightly better, with mean GPA differences of 0.232 and 0.201 points respectively. However, when Welch's t-tests were conducted, the p-values showed no significant findings. In Grades 9 and 10, the 2023 batch had higher GPAs than the 2025 batch, though again this was not statistically significant ($p = 0.264$ and $p = 0.758$). These results indicate that monthly testing has not yet produced a measurable improvement in students' final examination performance in this school. This

null result is similar to the study by Herman et al. (2025), which found that frequent testing alone does not always improve final exam performance, even when it is associated with changes in students' behaviors. Still, the positive trend in Grades 7 and 8 is worth mentioning, especially since Grade 7 was borderline significant ($p = 0.053$).

Grade-Level Shift In Behavioral Mechanisms

The retrospective survey revealed that monthly testing was associated with different behavioral factors across grade levels. In Grades 7 and 8, study habits and motivation were the only factors that showed statistically significant correlations with final GPA in the 2025 batch. Students who reported that monthly testing was associated with stronger study habits and higher motivation also tended to perform better on the final examination. This is consistent with studies (Haleem & Saeed, 2024; Obilor, E. I., & Akwawo, 2024) which report that frequent testing is associated with more consistent study routines among students and with school attendance. However, in Grade 9, this pattern changed. Study habits and motivation were no longer significantly correlated with GPA, and memory and retention emerged as the only significant factor. This aligns with research in cognitive psychology which suggests that repeated testing can strengthen long-term memory through retrieval practice (Roediger & Butler, 2011; McDaniel, Howard, & Einstein, 2009). Because this study did not follow the same students longitudinally, the apparent shift from study habits and motivation in Grades 7 and 8 to memory and retention in Grade 9 should be regarded as a tentative interpretation that requires further research, rather than an established developmental change.

The Perception–Reality Mismatch

The findings revealed a divergence between the factors students rated most highly and the factors most strongly associated with GPA. Across all three surveyed grades, students' beliefs about which aspects of monthly testing helped them and what the data showed were often not the same. Grade 7 students rated anxiety as their highest behavioral response to monthly testing, suggesting they felt the tests stressed them most. Yet anxiety showed no significant correlation with GPA, while study habits and motivation, factors they rated slightly lower, were the ones associated with their academic performance. Grade 8 students rated memory and retention highest, believing that monthly tests helped them remember what they learnt in class for a longer time, but the data showed a different pattern: study habits and motivation again correlated with GPA in this grade, not memory and retention. Grade 8 students also had the highest overall perception scores across all surveyed grades, meaning they were the most confident that monthly tests helped their overall examination performance, yet their grade showed no statistically significant GPA improvement. Grade 9 was the only class where student perception of monthly testing matched the correlational finding: memory and retention were both rated highest by students and also showed a significant relationship with GPA. This partially diverges from the 2017 study by Öncül, G., who found a consistent gap between students' perception and actual behavioral changes across all grades. The present study suggests that this perception gap may itself vary by grade level. Younger students may be less

accurate in identifying which mechanisms are associated with their performance, while older students may develop a more accurate sense of how testing is related to their learning.

Across all three grades, anxiety was consistently among the highest-rated factors, indicating that students perceived monthly tests as a source of stress. This is consistent with Haleem and Saeed (2024), who reported that frequent testing may increase student stress rather than reduce it. However, anxiety showed no statistically significant relationship with GPA in any grade, suggesting that the perceived pressure was not associated with measurable academic harm or benefit in this study.

LIMITATIONS

This study has several limitations that are important to acknowledge. The quasi-experimental design means that the 2023 and 2025 cohorts are different groups of students, so any GPA differences between these cohorts cannot be attributed to monthly test alone. It could be influenced by factors such as changes in teacher quality, syllabus, or examination conditions. Although the school uses a consistent 4.0 GPA system, the study did not independently verify whether the syllabus coverage, examination format, marking criteria, or weighting of internal and final assessments were exactly equivalent across 2023 and 2025. Any differences in these factors could have influenced students' final GPA independently of monthly testing.

Additionally, in 2024 Mount Everest School transitioned from traditional whiteboard teaching to smart board-based instruction. This pedagogical shift affected every classroom and could independently have influenced student learning and academic outcomes. Since smart board adoption and monthly test introduction occurred around the same time, it is difficult to isolate the effect of monthly testing from the effect of improved instructional technology. Future studies would benefit from controlling for such concurrent institutional changes.

The retrospective nature of the behavioral survey also introduces the possibility of recall bias, since students were asked to reflect on experiences from the previous academic year and their memories may not fully or accurately capture how they felt or behaved at the time. Finally, the study was conducted in a single private school in the Terai region, which limits how broadly these findings can be applied to public schools, schools in other parts of Nepal, or institutions with different student demographics.

The questionnaire was developed for this study and was not formally pilot-tested or psychometrically validated. Internal-consistency reliability statistics were not calculated for the multi-item scales. Therefore, the reliability and validity of the self-reported measures cannot be established from this study, and the survey findings should be interpreted cautiously.

In addition, the regression models included six predictors but were based on relatively small grade-level samples. This predictor-to-sample-size ratio may result in limited statistical power and unstable regression coefficients. Consequently, the regression findings should also be regarded as exploratory.

CONCLUSION

This study investigated whether the introduction of monthly testing at Mount Everest Secondary English Boarding School was associated with differences in students' final academic performance across Grades 7 to 10 and examined the behavioral factors related to any such differences. The GPA comparison between the 2023 cohort without monthly tests and the 2025 cohort with monthly tests found no statistically significant differences in any grade. However, the behavioral survey revealed that, among students who experienced monthly testing, self-reported study habits, motivation, and memory and retention were associated with GPA, and that these associations varied according to grade level. In Grades 7 and 8, stronger study habits and motivation were associated with higher GPA, while in Grade 9, memory and retention emerged as the significant associated factor. These findings suggest that monthly testing has not yet produced a statistically significant improvement in students' final academic GPA. Selected self-reported factors were associated with GPA in particular grades, but the study did not establish that monthly testing produced behavioral or cognitive changes.

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to Mount Everest Secondary English Boarding School for supporting this research. I am especially thankful to Rabin Sundas Sir for helping me conduct the survey, and to Keshar Gurung for assisting me with the academic data collection. Without their cooperation and willingness to support this study, this research would not have been possible. I would also like to extend my heartfelt thanks to my Lumiere Research mentor, Kavitha Muralidhar, for her guidance and encouragement throughout this project. Her feedback and support at every stage of the research helped me navigate the challenges of conducting an independent study and shaped this paper in meaningful ways. Lastly, I want to thank all the students at Mount Everest School who took the time to participate in the survey and honestly share their experiences with monthly testing. Their responses are the heart of this research.

REFERENCES

- [1] Theyab, F. M. (2026). The effect of frequent tests on the academic achievement of non-English major students at the university level. *Journal of Education for Humanities*, 6(21), 1307–1322.
- [2] Roediger, H. L., III, & Butler, A. C. (2011). The critical role of retrieval practice in long-term retention. *Trends in Cognitive Sciences*, 15(1), 20–27. <https://doi.org/10.1016/j.tics.2010.09.003>
- [3] McDaniel, M. A., Howard, D. C., & Einstein, G. O. (2009). The read-recite-review study strategy: effective and portable. *Psychological science*, 20(4), 516-522. <https://doi.org/10.1111/j.1467-9280.2009.02325.x>
- [4] Saud, M. S., Aryal, S., & Sapkota, J. L. (2024). Student assessment in formal education: Nepali community school teachers' perspectives. *Prithvi Academic Journal*, 7, 67-77.

- [5] Acharya, D. R. . (2022). An Analysis of Student Assessment Practices in Higher Education of Nepal. *Molung Educational Frontier*, 12(01), 37-55. <https://doi.org/10.3126/mef.v12i01.45898> .
- [6] Haleem, B., & Saeed, M. (2024). Effect of Frequent Testing on Students' Academic Achievement at Undergraduate Level. *Bulletin of Education and Research*, 46(3), 43-55.
- [7] Alade, O. M., Aletan, S. M., & Kuku, O. O. (2016). Impact of Frequency of Testing on Achievement in Mathematics among Secondary School Students in Ogun State, Nigeria. *African Journal of Educational Management*, 17(1), 284-293.
- [8] Başol, G., & Johanson, G. (2009). Effectiveness of frequent testing over achievement: A meta analysis study. *Journal of Human Sciences*, 6(2), 99-121.
- [9] Mines, R. O. (2014). The impact of testing frequency and final exams on student performance. In Proceedings of the 2014 ASEE Southeast Section Conference. American Society for Engineering Education.
- [10] Herman, G. L., Patel, K., Emeka, C., Zilles, C., & West, M. (2025). Frequent testing vs. second-chance testing: An exploration. In Proceedings of the 2025 ACM Conference on International Computing Education Research (Vol. 1, pp. 354–366). Association for Computing Machinery. <https://doi.org/10.1145/3702652.3744210>
- [11] Obilor, E. I., & Akwawo, U. K. (2024). Influence of frequent testing on the academic performance of students in public senior secondary schools in Akwa-Ibom state. *Int J Innov Soc Sci Edu Res*, 12(2), 91-107.
- [12] Öncül, G. (2017). Frequent testing: What are the real impacts of frequent quizzes on students, teachers, and instruction? *Turkish Online Journal of English Language Teaching*, 2(1), 1-19.

Appendix A: Student Survey Questionnaire on Monthly Testing

Survey Questionnaire for the students of Mount Everest English Boarding School

Your responses will be kept completely confidential and used only for research purposes.

Name:

Current grade(2082):.....

Do you clearly remember your experience with monthly tests in 2081(how you felt giving monthly test in that year)? Circle one.

- a. Yes, I remember clearly
- b. Somewhat, but not all details
- c. No, I don't remember well

Please answer the following questions based on your experience during the academic year 2081, when monthly tests were conducted in your school.

For each statement, write your level of agreement:

Sep 2026
Vol 11. No 7.

1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

STUDY HABITS

How did monthly tests affect how you studied during 2081?

- a. I studied my subjects more regularly because of monthly tests.
- b. I reviewed my notes specifically to prepare for each monthly test.
- c. Monthly tests helped me keep a consistent study schedule.
- d. I spent more time on studying subjects because monthly tests kept coming.

MOTIVATION

How did monthly tests affect your motivation?

- a. Monthly tests encouraged me to pay more attention in class.
- B. Knowing that a test would come each month kept me motivated to study.
- c. Monthly tests made me want to perform better in subjects.

ANXIETY & STRESS

How did monthly tests affect your stress levels?

- a. The frequent monthly tests made me feel stressed about schoolwork.
- b. I often felt nervous or anxious before monthly tests.
- c. Having so many monthly tests increased my academic pressure.

MEMORY & RETENTION

How did monthly tests affect how well you remembered your lessons?

- a. Preparing for monthly tests helped me review lessons and notes more frequently.
- b. Monthly tests helped me remember what I learned in class for a longer time.

LEARNING APPROACH

How did preparing for monthly tests affect the way you learned?

I sometimes studied just to pass the monthly test, not to truly understand the topic.

To prepare for monthly tests quickly, I memorized answers instead of understanding them.

*Monthly Testing and Final Examination GPA in a Nepali Secondary School: Historical Cohort
Differences and Associations With Self-Reported Learning-Related Factors*

Because monthly tests came so often, I didn't have enough time to understand subjects deeply.

OVERALL PERCEPTION

Overall, the monthly testing system helped me prepare better for final exams.

Thank you for completing this questionnaire. Your responses are important for this research.