

Students Learning Practices and Performance in the National Achievement Test

Angelie C. De Paz¹, Dr. Gina F. Labitad²

¹Teacher I, Department of Education

²Education Program Supervisor

ABSTRACT

Students' learning practices are vital in shaping their academic performance, especially in standardized assessments such as the National Achievement Test. This study aimed to examine the connection between students' learning practices and their academic performance in the National Achievement Test among Grade 10 learners in Kibawe East District, Division of Bukidnon. It explored how students' personal, family, school, and environmental learning practices influence their performance in English, Mathematics, and Science. The investigation also sought to describe the students' profiles, determine their learning practices, assess their National Achievement Test results, identify correlations between the two variables, and test for significant differences in performance based on demographic and attitudinal characteristics. A descriptive-correlational research design was employed, involving 168 Grade 10 students from public secondary schools in Kibawe East District, who were selected through universal sampling. Data were collected using a validated researcher-made questionnaire and analyzed through descriptive and inferential statistics, including correlation and analysis of variance, to examine the relationships and differences among variables.

Findings revealed that students generally demonstrated favorable learning practices, with family support being the most evident, followed by school-related practices, while environmental support was least observed. Students achieved a nearly proficient level in English, Mathematics, and Science. Results showed a significant positive relationship between learning practices and National Achievement Test performance. Significant differences in achievement were also found based on sex, family status, parental education, and attitude toward core subjects, with learners who had supportive families, effective study habits, and positive attitudes performing better. The study concluded that academic success is greatly shaped by effective learning practices, especially those reinforced by family and school environments. It is recommended that school leaders enhance home-school partnerships, promote self-regulated learning, and expand community-based support to improve students' academic engagement and national test performance.

Keywords: learning practices, national achievement test, performance

INTRODUCTION

Background of the Study

The low academic performance of high school students in Kibawe East District, based on National Achievement Test (NAT) results, remains a major educational concern. The district is among the 50 lowest-performing areas in Region X, with MPS scores of 51.92 in Mathematics, 62.96 in English, and

71.30 in Science. Despite various educational programs, students continue to perform below the desired level. This suggests that academic achievement is influenced not only by classroom instruction but also by students' learning practices, such as study habits, time management, focus, and goal setting.

Students' learning practices refer to the habits and strategies used to understand and retain lessons, while academic performance refers to measurable learning outcomes, particularly NAT scores. Understanding their relationship in English, Mathematics, and Science is important because these subjects are essential for further education and future careers.

The study is anchored on DepEd Order No. 8, s. 2015, which emphasizes assessment in monitoring student learning, and DepEd Order No. 55, s. 2016, which recognizes the NAT as an important tool for assessing learning and guiding educational planning. These policies highlight the value of assessment results in identifying learners' strengths and weaknesses and improving instruction.

Cano (2022) found that family financial conditions affect students' access to learning resources, which may influence Mathematics and Science performance. Lopez and Reyes (2021) found that students who monitor their progress, participate actively in class, and set learning goals tend to achieve better grades. These findings show that both learning practices and home support can influence academic achievement. This study aims to identify learning practices and factors associated with students' NAT performance. Its findings may help teachers, parents, and schools improve instruction, develop learner-support programs, and provide appropriate assistance to students, particularly those with limited resources. It also supports the MATATAG Agenda and revised K to 10 curriculum in promoting equitable and quality education.

Literature and Related Studies

This section presents related literature on students' learning practices, NAT performance, and moderating variables such as age, sex, highest educational attainment, family status, and attitudes toward English, Mathematics, and Science. These studies provide a foundation for the present research.

Respondents' Characteristics

Age

Tan and Lim (2020) found that older students often perform better because they are more responsible, manage time effectively, complete tasks, maintain attention, and persist in difficult lessons. Similarly, Lopez and Ramos (2021) found that older Filipino students tend to have better study habits and greater responsibility for their learning. However, large age differences among classmates may cause social and academic difficulties.

Overall, age may influence learning and academic performance because maturity can improve study habits, responsibility, and thinking skills. However, students who are much older or younger than their classmates may need additional support. Therefore, teachers should consider age differences when providing instruction and learner support.

Sex

Sex may influence students' academic performance and learning behaviors. Anderson and Cook (2020) found that girls often perform better in English because they tend to be organized and persistent, while boys may perform better in Mathematics and Science. Lopez and Reyes (2019) noted that social expectations and personal goals influence study habits. Garcia and Diaz (2021) found that girls often participate more, follow study plans, and ask for help. These findings suggest that teachers should recognize different learning behaviors and provide appropriate support to all students.

Parents' Highest Educational Attainment

Parents' educational attainment can affect students' academic performance. Students with more educated parents often perform better because they receive academic help, encouragement, learning resources, and a supportive study environment. Castillo and Navarro (2021) found this particularly in Mathematics and Science. Although students with less-educated parents may face challenges, teacher and school support can help them succeed.

Family Status

Family socio-economic status can influence students' learning and academic performance. Shi et al. (2023) found that higher SES is linked to greater learning engagement because families can provide resources and parental support. Umeh and Aina (2024) also found that parental education and support contribute to better performance. However, Blessing (2024) and Castillo and Reyes (2022) showed that motivation and parental involvement can be more important than income alone. Thus, family resources, education, support, and home environment all influence student achievement.

Attitude Toward English, Mathematics, and Science

Students' attitudes toward English, Mathematics, and Science affect their learning and performance. Garcia and Santos (2020), Chen and Park (2019), and Lopez and Rivera (2021) found that students who enjoy, value, and feel confident in these subjects tend to participate more and achieve better results. Negative attitudes, anxiety, and lack of interest can make learning difficult. Therefore, supportive teaching, practical activities, and encouragement can help students develop positive attitudes and improve achievement.

Learning Practices

Garvida, Santiago, and Tan (2023) found that students who manage their time well, avoid delaying tasks, and balance school and personal activities tend to achieve better grades. Lopez and Reyes (2021) also found that setting goals, monitoring progress, and actively participating in learning are linked to higher scores. Carandang (2022) reported that motivated students with clear goals remain focused and perform better, particularly in Science and Mathematics.

Personal Learning Practices

Personal learning practices such as motivation, goal setting, good study habits, and time management contribute to academic success. Delos Reyes and Torio (2021) and Carandang (2022) found that motivated students with clear goals participate more and perform better in national tests. Bustos and Padilla (2021) emphasized regular reviewing, note-taking, and organizing information, while Zimmerman and Schunk (2020) highlighted planning and regular study schedules. Garvida et al. (2023) and Liu and Zhao (2020) also found that effective time management is associated with higher academic performance.

Family Learning Practices

Family support and financial resources influence students' learning. Lopez and Dizon (2021) found that parental involvement in homework and school activities improves students' performance. Magsambol (2022) also emphasized the value of educated and supportive parents. Navarro and Garcia (2020) and the OECD PISA report (2021) found that families with more resources can provide books, computers, internet

access, and other learning opportunities. However, students from disadvantaged families may face challenges such as limited resources and absenteeism, which can affect learning (Sirin, 2020; Ramos, 2023). Thus, schools and communities should provide additional support to learners with fewer resources.

School Learning Practices

Teacher support, school resources, and assessment practices strongly influence student achievement. Dela Cruz and Manlapig (2020) found that teacher support improves performance, while Allen et al. (2021) emphasized formative feedback and differentiated instruction. Alcantara and Sy (2023) found that adequate libraries, laboratories, and computer facilities are linked to better NAT results. UNESCO (2022) noted that limited resources can reduce educational quality. Effective assessments, quizzes, feedback, and peer activities can also improve learning and confidence (Lorenzo, 2021; Farias and Silva, 2020). Therefore, schools need trained teachers, sufficient resources, and effective assessment strategies.

Environmental Learning Practices

Students' peers, communities, and learning resources can affect academic performance. Mendoza and Almonte (2022) and Wentzel and Muenks (2021) found that supportive and academically motivated peers encourage better study habits and achievement. Community programs can also improve learning outcomes, particularly in rural areas (Cruz and Hermosa, 2023; Lee and Lee, 2020). Umali et al. (2022) and Singh and Agarwal (2021) found that internet access and digital learning tools can increase student engagement and performance. Overall, a supportive environment and fair access to learning resources help students succeed.

Performance in the National Achievement Test

The National Achievement Test measures students' proficiency in important subjects, particularly English, Science, and Mathematics. DepEd (2023) reported differences in performance across subjects, with Science and Mathematics showing declines after the pandemic, while English remained relatively stable. These results highlight the need to strengthen students' foundational skills and learning support.

English

English proficiency, particularly reading comprehension, vocabulary, and language use, is important for academic success. Cruz and Feliciano (2023) found that students who read regularly and receive language support perform better in national examinations. DepEd (2024) also emphasized reading comprehension as an important factor in NAT performance. Strengthening English instruction and reading activities can therefore improve achievement.

Science

Science performance depends on students' understanding, inquiry skills, and ability to apply knowledge. Lopez and Rivera (2022) found that hands-on activities and investigations improve Science learning, while Fernandez and Torres (2024) found that curiosity and interest are associated with better performance. Providing engaging activities and adequate resources can help students improve their Science scores.

Mathematics

Mathematics remains one of the most challenging subjects for Filipino learners. Reyes and Navarro (2023)

found that students who enjoy Mathematics and regularly practice problem-solving perform better. The OECD (2023) also emphasized strong basic numeracy skills and appropriate teaching methods. Regular practice and effective instruction are therefore important in improving Mathematics performance. Overall, performance in English, Science, and Mathematics is influenced by learning practices, teaching strategies, resources, and students' learning environments. Strengthening foundational skills, improving instruction, and ensuring equal access to learning resources can help improve students' NAT performance.

Objectives

This study aimed to determine the level of learning practices and the performance of Grade 10 students in the 2024 National Achievement Test in Kibawe East District, Division of Bukidnon. Specifically, this aimed to describe the respondents' characteristics; find out learners level of learning practices based on personal, family, school, and environmental; examine the respondents performance in the 2024 National Achievement Test in English, Mathematics and Science; determine the significant relationship between students' learning practices and their National Achievement Test performance and test the significant differences in performance existed when the respondents were grouped according to their demographic and characteristics.

Theoretical Framework

This study is grounded in Albert Bandura's Social Cognitive Theory, which explains that learning and academic performance are influenced by the interaction of personal, behavioral, and environmental factors, known as reciprocal determinism. Personal factors include motivation and self-confidence; behavioral factors include study habits and class participation; and environmental factors include family support, school resources, and peers.

Bandura's concept of self-efficacy emphasizes that students who believe in their abilities are more likely to work hard, persist through difficulties, and use effective learning practices. Students can also develop confidence through encouragement from teachers and parents and by observing successful classmates.

The theory also highlights observational learning, in which students learn by watching and imitating others. Positive examples from teachers and peers can encourage good study habits, time management, and persistence. Thus, student achievement results from the interaction of personal effort, learning behaviors, and support from the surrounding environment.

Conceptual Framework

This study is anchored on DepEd Order No. 8, s. 2015, which emphasizes assessment in improving instruction, addressing learning gaps, and promoting mastery. The framework assumes that students' characteristics and learning practices influence their academic performance in English, Science, and Mathematics.

The first variable consists of respondents' characteristics: age, sex, parents' educational attainment, family status, and attitudes toward English, Mathematics, and Science. These factors provide the context in which students develop their learning practices.

The second variable is learning practices, which include personal, family, school, and environmental factors. Personal practices involve motivation, study habits, and time management. Family practices include parental support and encouragement. School practices include teacher guidance, learning

resources, and assessment, while environmental practices involve peers, community support, and access to learning materials.

The third variable is academic performance, measured through quarterly grades and the 2024 National Achievement Test scores in English, Science, and Mathematics. The framework assumes that student achievement is not determined by one factor alone but by the interaction of students' characteristics, learning practices, and environmental support. These factors collectively influence students' opportunities to learn and their ability to achieve better academic results.

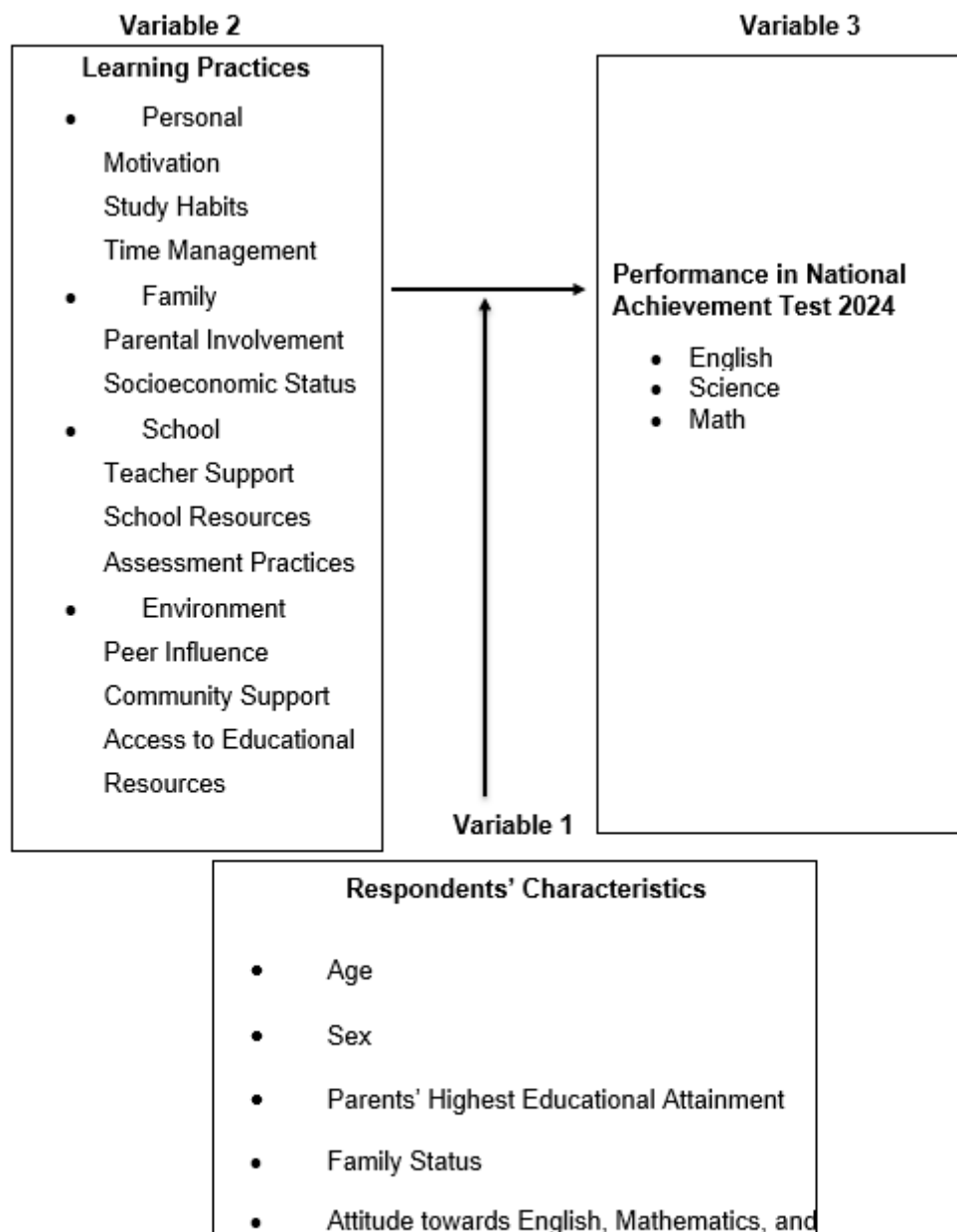


Figure 1. A Schematic Presentation showing the Relationship between the Independent and Dependent Variables of the Study

Statement of the Problem

This study aimed to determine the level of learning practices and the performance in the National

Achievement Test among Grade 10 students in Kibawe East District, Division of Bukidnon during the School Year 2024-2025.

Specifically, this study sought to answer the following questions:

1. How are the respondents characterized in terms of age, sex, parents' highest educational attainment, family status, and attitude towards English, Mathematics, and Science?
2. What is the respondents' level of learning practices based on personal as to motivation, study habits, and time management?
3. What is the respondents' level of learning practices based on family as to parental involvement and socioeconomic status?
4. What is the respondents' level of learning practices based on school as to teacher support, availability of school resources, and assessment practices?
5. What is the respondents' level of learning practices based on environment as to peer influence, community support, and access to educational resources?
6. What is the respondents' performance in the 2024 National Achievement Test in English, Mathematics, and Science?
7. Is there a significant relationship between the respondents' learning practices and their performance in the 2024 National Achievement Test?
8. Is there a significant difference in the respondents' performance in the 2024 National Achievement Test when grouped according to their characteristics?

Hypothesis

Problems 1, 2, 3, 4, 5 and 6 were hypothesis-free. Based on Problems 7 and 8, the null hypotheses were formulated and tested at a 0.05 level of significance.

Ho1: There is no significant relationship between the respondents' learning practices and their performance in the 2024 National Achievement Test.

Ho2: There is no significant difference in the respondents' performance in the 2024 National Achievement Test when grouped according to their characteristics.

Significance of the Study

The findings of this study will provide useful information and recommendations for improving students' academic performance in English, Science, and Mathematics as measured by the National Achievement Test.

School Heads and Education Officials. The study will provide evidence that can guide school planning, support programs, policies, and interventions aimed at addressing factors related to low NAT performance. Teachers. The findings will help teachers identify learning practices that contribute to better performance, such as motivation, effective study habits, and time management. This can guide them in improving instruction and assessment according to students' needs.

Students. The study will help students understand how their personal habits, family support, school environment, and surroundings affect their academic performance. It may encourage them to develop better study habits, manage their time, and become more active learners.

Parents. The findings will emphasize the importance of parental support, involvement, and a suitable home learning environment. This may encourage parents to take a more active role in their children's education.

Future Researchers. The study may serve as a reference for future research on learning practices and academic performance and may provide a basis for similar studies involving other learners, subjects, or settings.

Scope and Limitations

This study focused on the learning practices and 2024 National Achievement Test performance of 168 Grade 10 students in Kibawe East District, Division of Bukidnon, during School Year 2024–2025. The independent variables were limited to learning practices in the personal, family, school, and environmental areas. The dependent variables were students' 2024 NAT performance in English, Mathematics, and Science. Respondents' characteristics, including age, sex, parents' highest educational attainment, family status, and attitudes toward English, Mathematics, and Science, were also considered.

Despite these limitations, the study provided useful findings that may guide educational strategies, strengthen learning environments, address performance gaps, and improve students' achievement in English, Mathematics, and Science.

METHODOLOGY

This section describes the methods and procedures used in the study: the research design, respondents and sampling method, data collection procedure, study's instrument, scoring method, and statistical treatment.

Research Design

This study used a descriptive-correlational design to examine the relationship between students' learning practices and their performance in English, Science, and Mathematics based on the 2024 National Achievement Test. This design was suitable for analyzing students' learning behaviors and their statistical associations with academic outcomes.

The descriptive part profiled the prevailing learning practices and contextual factors of Grade 10 students in the Kibawe East District, Division of Bukidnon. The correlational part assessed the degree and nature of the relationship between these practices, such as motivation, time management, and parental involvement, and National Achievement Test performance.

While not establishing causality, the study identified significant associations that could guide educational interventions. This approach was considered ideal for exploring existing conditions and informing data-driven strategies to improve student achievement, especially in low-performing areas like Kibawe East District.

Study Setting

The study was conducted in Kibawe East District, Division of Bukidnon, Northern Mindanao, Philippines. The district consists of rural and small-town communities where farming, including rice, corn, sugarcane, fruits, and vegetables, is a major source of livelihood. It is also home to Indigenous groups such as the Manobo, Talaandig, and Higaonon, whose traditions and cultural practices contribute to the community's diversity.

The study covered public high schools in Kibawe East District, where students experience different socioeconomic and educational conditions. Some families have limited income and access to learning resources, while parental support, family stability, teaching practices, school facilities, and the learning environment may also influence academic performance.

The district's diverse social, cultural, and educational conditions made it an appropriate setting for examining the factors associated with students' learning practices and academic performance. The findings may help educators, policymakers, and other stakeholders develop appropriate strategies to address students' needs and improve educational outcomes in Kibawe East District and similar communities.

Research Respondents

This study included one hundred sixty eight (168) Grade 10 students. They go to public high schools in Kibawe East District, Division of Bukidnon, for School Year 2024–2025. These students were the main participants because they study English, Science, and Mathematics. These are the key subjects tested in the National Achievement Test.

Grade 10 students were chosen with care and on purpose. This is their last year in Junior High School. They also need to take the National Achievement Test. That is why they are the best group to ask about how well they do in school and how they study. Their answers gave clear and useful information. This tells us how their own choices, their family, their school, and the things around them affect their marks in English, Science, and Math.

Table A
Distribution of Respondents

School Code	Respondents
A	5
B	15
C	12
D	136
TOTAL	168

Sampling Technique

This study used universal sampling. This means we included every Grade 10 student enrolled in public high schools in Kibawe East District, Division of Bukidnon, for School Year 2024–2025. By including all students in this grade, we covered everyone completely. We also made sure we did not pick only a few students for the study.

This method gives a true and full picture of the whole group. It helps us get correct and reliable information. This lets us see clearly how study habits connect with marks in English, Science, and Math. Choosing Grade 10 students is also very suitable. They are the ones who need to take the National Achievement Test. So what we learn will be very useful and right for them.

Research Instrument

The study used a researcher-made survey questionnaire divided into three parts. Part I gathered the respon-

dents' characteristics, including age, sex, family income, parents' educational attainment, and attitudes toward English, Science, and Mathematics.

Part II assessed students' learning practices in four areas: personal, family, school, and environmental practices. Each area contained seven statements rated using a four-point scale: 4—Always, 3—Often, 2—Sometimes, and 1—Never. The items were based on Bandura's Social Cognitive Theory and related studies on self-regulated learning, motivation, parental support, and learning environments.

Part III covered the students' 2024 National Achievement Test scores in English, Science, and Mathematics. The scores were interpreted using DepEd performance levels to determine students' achievement.

Validity and Reliability of the Instrument

The questionnaire was reviewed by three subject-matter experts and one school administrator to ensure that the items were clear, relevant, and aligned with the objectives of the study. Necessary revisions were made based on their recommendations.

A pilot test was conducted in May 2024 with 30 Grade 10 students from a public school outside Kibawe East District. These students were excluded from the actual respondents. The instrument obtained a Cronbach's Alpha of **0.87**, indicating high internal consistency and reliability. Minor revisions were made after the pilot test to improve clarity.

Thus, the questionnaire was established as valid and reliable for assessing the learning practices and academic performance of Grade 10 students in Kibawe East District.

Data Gathering Procedure

The researchers first secured approval from the Dean of the School of Graduate and Professional Studies at PHINMA Cagayan de Oro College, followed by permission from the Schools Division Superintendent of Bukidnon and the concerned Public-School Supervisors. The researchers then obtained approval from the heads of the selected schools and explained the purpose and procedures of the study.

Consent forms were provided to the students, who were informed that participation was voluntary and that they could withdraw at any time. The researchers distributed the survey questionnaires and provided sufficient time for students to answer. They also assisted when necessary and checked the completed questionnaires for completeness.

All collected information was kept confidential, securely stored, and used only for research purposes. The responses were then reviewed and organized for analysis.

Statistical Treatment

The study used frequency, percentage, and mean to summarize the respondents' characteristics, attitudes, learning practices, and NAT performance. Pearson's Correlation Coefficient was used to determine the relationship between learning practices and 2024 NAT performance.

A t-test was used to determine significant differences in NAT performance between two groups, such as sex, while One-Way ANOVA was used for variables with more than two groups, such as age brackets and parents' educational attainment. These tests determined whether differences in mean NAT scores across groups were statistically significant.

Ethical Considerations

The researchers ensured that participants were fully informed about the study, its procedures, possible risks, and benefits before participation. Participation was voluntary, and students could withdraw at any time without penalty. Participants' identities and responses were kept confidential, securely stored, and used only for research purposes.

The researchers also maintained honesty and integrity by accurately reporting the findings, avoiding fabrication or alteration of data, properly acknowledging sources, and following the ethical guidelines and requirements of the school and relevant review bodies.

RESULTS AND DISCUSSION

This section presented the results and discussion on students' learning practices and their performance in the National Achievement Test. The data were presented in tabular form for better appreciation.

Problem 1. How are the respondents characterized in terms of age, sex, parents' highest educational attainment, family status, and attitude towards English, Math, and Science?

Table 1
Distribution of the Respondents' Characteristics in terms of Age

Category	Frequency	Percentage
24 years old and above	0	0.00
21-23 years old	0	0.00
18-20 years old	6	3.57
15-17 years old	162	96.43
12-14 years old	0	0.00
Total	168	100.00

Table 1 shows the respondents' age distribution. Most respondents, 162 (96.43%), were 15–17 years old, indicating that nearly all were within the typical age range for Grade 10. This suggests that most students are progressing through school at the expected pace.

Only 6 respondents (3.57%) were 18–20 years old, indicating that a small number may have experienced delayed schooling due to late enrollment, grade repetition, or personal circumstances. Smith (2019) and Lopez and Ramos (2021) noted that students who are at the expected age for their grade often demonstrate better readiness, self-management, goal setting, and participation in learning. In contrast, Tan and Lim (2020) found that older students may experience social and academic difficulties that can affect their performance.

Overall, the age distribution shows that most respondents are appropriately placed in Grade 10, while the small group of older learners may benefit from additional academic and social support.

Table 2
Distribution of the Respondents' Characteristics in terms of Sex

Category	Frequency	Percentage
Male	73	43.45
Female	95	56.55

Total	168	100.00
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Table 2 presents the respondents' distribution by sex. The results show that 73 (43.45%) were male, indicating that females comprised the majority of the respondents.

Anderson and Cook (2020) found that boys may have less consistent study habits, weaker self-management, and greater difficulty persisting with challenging schoolwork. Ahmad et al. (2021) also noted increased female academic engagement through sex-equity initiatives. Similarly, Reyes and Santos (2021) and Cruz and Mendoza (2022) found that girls often demonstrate stronger school engagement, attendance, persistence, and goal orientation, partly due to family support.

Overall, the findings suggest that female students had greater representation in the study. However, equal opportunities, encouragement, and support should be provided to both male and female learners to promote academic success.

Table 3
Distribution of the Respondents' Characteristics in terms of Family Status

Category	Frequency	Percentage
Complete parents	112	66.67
Single-parent	21	12.50
Extended family setup	28	16.67
Living with guardians or relatives	7	4.17
Orphaned or independently living	0	0.00
Total	168	100.00

Table 3 presents the respondents' family status. The majority, 112 (66.67%), reported having complete parents, indicating that most students live with both parents and may receive regular guidance, care, and academic support at home. Lopez and Dizon (2021) and Hassan and Shabbir (2022) found that supportive parents can encourage good study habits, persistence, and better academic performance.

Only 7 (4.17%) respondents lived with guardians or other relatives. These students may experience less parental guidance, financial challenges, or emotional difficulties that can affect their learning and school participation. Sirin (2020) and Kim and Lee (2022) similarly found that students living apart from their parents may receive less academic support and experience weaker school connection.

Overall, family support can influence students' learning and academic performance. Schools and communities should provide additional guidance and support to learners regardless of their family situation.

Table 4
Distribution of the Respondents' Characteristics in terms of Mothers' Highest Educational Attainment

Category	Frequency	Percentage
Vocational Graduate	6	3.57
College Graduate	38	22.62
College Level	16	9.52

High School Graduate	40	23.81
High School Level	39	23.21
Elementary Graduate	25	14.88
Elementary Level	4	2.38
Others	0	0.00
Total	168	100.00

Table 4 shows that the highest frequency, 40 (23.81%), were students whose mothers were high school graduates. This indicates that many mothers have enough educational background to provide guidance, encouragement, and support for their children's studies. Castillo and Navarro (2021) and Dela Cruz and Bautista (2022) found that higher parental education is associated with greater involvement and better study habits among children.

The lowest frequency, 4 (2.38%), were students whose mothers were elementary graduates. These students may need additional academic support because their mothers may have difficulty assisting with schoolwork. Ramos (2023) and Hernandez and Cruz (2021) reported similar findings.

Overall, the results show that mothers' educational attainment can influence the support students receive at home, highlighting the need for schools to assist families with lower educational backgrounds.

Table 5

Distribution of the Respondents in terms of Fathers' Highest Educational Attainment

Category	Frequency	Percentage
Vocational Graduate	2	1.19
College Graduate	21	12.50
College Level	13	7.74
High School Graduate	84	50.00
High School Level	35	20.83
Elementary Graduate	10	5.95
Elementary Level	3	1.79
Others	0	0.00
Total	168	100.00

Table 5 shows that the highest frequency, 84 (50%), were students whose fathers were high school graduates. This indicates that many fathers have an educational background that may help them provide guidance, encouragement, and support for their children's studies. Fathers' involvement can also promote discipline, regular study habits, and persistence in learning.

The lowest frequency, 2 (1.19%), consisted of fathers who completed short vocational courses. These parents may have fewer opportunities to assist with academic tasks due to their educational background. Lara and Reyes (2019), Villanueva and Castillo (2022), and Singh and Kumar (2021) emphasized that parental education and involvement can influence students' academic performance.

Overall, fathers' educational attainment may affect the academic support students receive at home, highlighting the importance of school assistance for families who need additional support.

Table 6

Distribution of the Respondents' Characteristics in terms of Attitude toward English, Mathematics and Science

Indicator	Mean	SD	Description
As a student,...			
I am eager to improve my skills in English, Mathematics, and Science.	3.52	0.96	Strongly Agree
I feel satisfied when I solve problems related to English, Mathematics, or Science.	3.30	0.90	Strongly Agree
I believe English, Mathematics, and Science help me develop my thinking and problem-solving skills.	3.20	0.87	Agree
I am not afraid of learning English, Mathematics, and Science.	3.05	0.82	Agree
I feel confident in my ability to do well in English, Mathematics, and Science.	2.58	0.59	Agree
I can solve English, Mathematics, and Science-related problems without too much difficulty.	3.09	0.83	Agree
I expect to perform well in any class involving English, Mathematics, and Science.	3.11	0.85	Agree
I am continuously working on building my confidence and improving my skills in English, Mathematics and Science.	3.17	0.87	Agree
I find it easy to understand and learn lessons in English, Mathematics, and Science.	3.08	0.81	Agree
I am confident that I can handle advanced topics in English, Mathematics, and Science.	3.21	0.88	Agree
Overall	3.13	0.84	Agree
Legend: 3.26-4.00 Strongly Agree / Very Positive 1.76 – 2.50 Disagree / Negative 2.51-3.25 Agree / Positive 1.00-1.75 Strongly Disagree / Very Negative			

Table 6 shows that students had a positive attitude toward English, Mathematics, and Science, with an overall mean of 3.13 (SD = 0.84), interpreted as Agree. This indicates that students recognize the importance of these subjects in developing communication, critical thinking, and problem-solving skills. Garcia and Santos (2020) and Lee and Chen (2021) found that positive attitudes are associated with greater participation and better academic performance.

The indicator “I am eager to improve my skills in English, Mathematics, and Science” had the highest mean of 3.52 (SD = 0.96), interpreted as Very Positive. This shows that students have a strong desire to improve their skills. Garcia and Santos (2020) and Bautista and Lim (2022) similarly found that motivation and engaging, meaningful lessons contribute to better learning.

The lowest indicator, “I feel confident in my ability to do well in English, Mathematics, and Science,” had

a mean of 2.58 (SD = 0.59), interpreted as Positive. This suggests that although students are motivated, some still lack confidence in their abilities. Lopez and Rivera (2021) and Nguyen and Tran (2022) emphasized that self-confidence helps students persist and perform better in challenging subjects. Overall, students show strong interest in learning but may need continued encouragement and supportive teaching to strengthen their confidence and academic performance.

Problem 2. What is the respondents' level of learning practices based on personal learning practices as to motivation, study habits, and time management?

Table 7
Summary Distribution of the Respondents' Level of Personal Learning Practices

Variable	Mean	SD	Interpretation
Motivation	3.12	0.83	Practiced
Study Habits	2.98	0.79	Practiced
Time Management	3.05	0.83	Practiced
Overall	3.05	0.83	Practiced

Legend: 3.26-4.00 At all Times / Highly Practiced

1.76 – 2.50 Sometimes / Slightly Practiced

2.51-3.25 Most of the Time / Practiced

1.00-1.75 Never / Not Practiced

Table 7 shows that respondents' personal learning practices had an overall mean of 3.05 (SD = 0.83), interpreted as Practiced. This indicates that students generally apply appropriate learning practices but may not use them consistently. Cho and Park (2021) and Borup et al. (2020) emphasized that self-management, goal setting, time management, and responsibility contribute to better academic performance.

Among the indicators, Motivation obtained the highest mean of 3.12 (SD = 0.83), interpreted as Practiced. This shows that students generally have the desire to learn and succeed. Ryan and Deci (2020) and Pham and Ho (2020) found that motivated students tend to exert more effort, persist in learning, and achieve better results.

Meanwhile, Study Habits had the lowest mean of 2.98 (SD = 0.79), still interpreted as Practiced. This suggests that although students study, their habits may not yet be regular or effective enough to maximize learning. Yulita, Herawan, and Anwar (2021) and Pradana and Widyastuti (2022) emphasized that good study habits are necessary for students to translate motivation into better academic performance.

Overall, students demonstrate positive personal learning practices, but strengthening their study habits and consistency may further improve their academic achievement.

Problem 3. What is the respondents' level of learning practices based on family learning practices as to parental involvement and socioeconomic status?

Table 8
Summary Distribution of the Respondents' Level of Family Learning Practices

Variable	Mean	SD	Interpretation
Parental Involvement	3.22	0.87	Practiced

Socioeconomic Status	3.00	0.82	Practiced
Overall	3.11	0.85	Practiced

Legend: 3.26-4.00 At all Times / Highly Practiced

1.76 – 2.50 Sometimes / Slightly Practiced

2.51-3.25 Most of the Time / Practiced

1.00-1.75 Never / Not Practiced

Table 8 shows that family learning practices had an overall mean of 3.11 (SD = 0.85), interpreted as Practiced. This indicates that families generally provide support for students' learning, although the level of involvement varies depending on time, resources, and family circumstances. Barger et al. (2021) and Tan et al. (2022) emphasized that consistent family support helps students develop positive learning habits and perform better.

Parental Involvement obtained the highest mean of 3.22 (SD = 0.87), interpreted as Practiced. This indicates that parents generally participate in their children's education by monitoring schoolwork, attending activities, and providing encouragement. Garbacz et al. (2021) and Sy and Fang (2021) found that active parental involvement improves students' focus, responsibility, and academic engagement.

Meanwhile, Socio-Economic Status had the lowest mean of 3.00 (SD = 0.82), still interpreted as Practiced. This suggests that some families may have limited resources for books, internet access, and suitable study spaces. Sirin and Rogers Sirin (2021) and Suryadarma et al. (2022) similarly found that financial limitations can restrict students' access to learning resources.

Overall, families provide meaningful support, but strengthening parental involvement and addressing resource gaps can further improve students' learning opportunities and academic performance.

Problem 4. What is the respondents' level of learning practices based on school learning practices as to teacher support, availability of school resources, and assessment practices?

Table 9

Summary Distribution of the Respondents' Level of School Learning Practices

Variable	Mean	SD	Interpretation
Teacher Support	3.27	0.88	Highly Practiced
School Resources	2.86	0.79	Practiced
Assessment Practices	3.16	0.85	Practiced
Overall	3.11	0.85	Practiced

Legend: 3.26-4.00 At all Times / Highly Practiced

1.76 – 2.50 Sometimes / Slightly Practiced

2.51-3.25 Most of the Time / Practiced

1.00-1.75 Never / Not Practiced

Table 9 presents the respondents' level of school learning practices, with an overall mean of 3.11 (SD = 0.85), interpreted as Practiced. This shows that schools generally provide consistent support for learning, although some students may receive less support than others. Good teaching, guidance, and school support help students prepare for major tests such as the National Achievement Test. Kim and Asbury (2020) and

Lim and Cheung (2021) similarly found that strong school support improves student engagement, confidence, and academic performance.

Among the indicators, Teacher Support had the highest mean of 3.27 (SD = 0.88), interpreted as Highly Practiced. This indicates that students often receive guidance, encouragement, and academic help from their teachers. Strong teacher-student relationships can increase students' motivation, participation, and achievement. Quin (2021) and Roorda et al. (2020) also emphasized that teacher support improves engagement and academic resilience.

Conversely, School Resources had the lowest mean of 2.86 (SD = 0.79), interpreted as Practiced. This suggests that although learning materials such as books, computers, and science equipment are available, they may not always be sufficient or equally accessible. Limited resources can make learning more difficult. García and Weiss (2020) and Lee and Jung (2021) likewise found that adequate school facilities and learning materials contribute to better academic performance.

Problem 5. What is the respondents' level of learning practices based on environment as to peer influence, community support, and access to educational resources?

Table 10
Summary Distribution of the Respondents' Level of Environment Learning Practices

Variable	Mean	SD	Interpretation
Peer Influence	3.03	0.82	Practiced
Community Support	2.55	0.61	Practiced
Access to Educational Resources	2.27	0.54	Slightly Practiced
Overall	2.62	0.65	Practiced

Legend: 3.26-4.00 At all Times / Highly Practiced

1.76 – 2.50 Sometimes / Slightly Practiced

2.51-3.25 Most of the Time / Practiced

1.00-1.75 Never / Not Practiced

Table 10 presents the respondents' level of environmental learning practices, with an overall mean of 2.62 (SD = 0.65), interpreted as Practiced. This shows that students receive some support from their surroundings, but it is not always strong or consistent. Improving community support, safe study spaces, and learning opportunities can help students prepare better for the National Achievement Test. Epstein and Sheldon (2020) and Wang et al. (2021) emphasized that supportive communities and safe learning environments improve student participation and study habits.

Among the indicators, Peer Influence had the highest mean of 3.03 (SD = 0.82), interpreted as Practiced. This indicates that students benefit from studying with and receiving encouragement from their classmates. Peer support can improve motivation, participation, and understanding. Hamm et al. (2020) and Järvelä et al. (2021) similarly found that collaboration and peer support contribute to better learning outcomes.

Conversely, Access to Educational Resources had the lowest mean of 2.27 (SD = 0.54), interpreted as Slightly Practiced. This suggests that many students have limited access to books, computers, internet, and suitable study spaces at home. Such limitations may affect their preparation and academic performance.

Van Dijk and Hacker (2021) and Al-Qahtani (2022) found that unequal access to learning resources can contribute to lower academic outcomes.

Table 11
Overall Summary Distribution of the Respondents’
Level of Learning Practices

Variable	Mean	SD	Interpretation
Personal	3.05	0.82	Practiced
Family	3.11	0.85	Practiced
School	3.10	0.84	Practiced
Environment	2.62	0.66	Practiced
Overall	2.97	0.79	Practiced

Legend: 3.26-4.00 At all Times / Highly Practiced

1.76 – 2.50 Sometimes / Slightly Practiced

2.51-3.25 Most of the Time / Practiced

1.00-1.75 Never / Not Practiced

Table 11 presents the overall level of learning practices, with an overall mean of 2.97 (SD = 0.79), interpreted as Practiced. This shows that students use good learning practices but are not always consistent. Regular study habits are important for improving understanding and performance. Almario and Santiago (2021) and Soriano and Cruz (2022) similarly found that consistent studying improves performance, particularly in major subjects such as Science and Mathematics.

Among the four variables, Family had the highest mean of 3.11 (SD = 0.85), interpreted as Practiced. This indicates that students generally receive support and encouragement from their families. Parents help students develop responsibility, maintain study routines, and stay motivated. Torres and Dizon (2022) and Gonzales and Reyes (2023) likewise found that parental involvement contributes to better academic performance and self-directed learning.

Conversely, Environment had the lowest mean of 2.62 (SD = 0.66), interpreted as Practiced. This suggests that students receive less consistent support from their surroundings. Noise, crowded homes, power interruptions, and limited internet access may make studying difficult and affect preparation for major tests. Garcia and Langan (2023) and Martinez and Cruz (2021) found that limited learning environments and resources can negatively affect students’ academic performance.

Problem 6. What is the respondents’ performance in the 2024 National Achievement Test in English, Mathematics, and Science?

Table 12

Summary Distribution of the Respondents' Performance in English, Math and Science in NAT 2024

Subject Area	Mean	SD	Description / Interpretation
English	64.73	12.53	Nearly Proficient
Math	64.99	12.45	Nearly Proficient
Science	63.05	11.65	Nearly Proficient
Overall	64.26	11.21	Nearly Proficient
Legend: 90-100 Highly Proficient 75-89 Proficient 50-74 Nearly Proficient 24-49 Low Proficient Below-24 Not Proficient			

Table 12 presents the respondents' performance in the 2024 National Achievement Test, with an overall mean of 64.26 (SD = 11.21), interpreted as Nearly Proficient. This shows that students have basic knowledge and skills but still need to improve their understanding and application of lessons. The variation in scores also suggests that some students need additional support. Lopez and Bautista (2022) and Cruz and Ramos (2023) similarly found that students often remain at the Nearly Proficient level when they lack practice and support.

Among the tested subjects, Mathematics had the highest mean of 64.99 (SD = 12.45), interpreted as Nearly Proficient. Students can handle basic mathematical skills but still need improvement in solving complex problems and applying Math to real-life situations. Rivera and Cruz (2023) and Lopez and Navarro (2022) found that practical examples, problem-solving, and active learning help improve Mathematics performance.

Conversely, Science had the lowest mean of 63.05 (SD = 11.65), also interpreted as Nearly Proficient. This suggests that students understand basic Science concepts but may struggle to apply them and solve problems. More experiments, hands-on activities, and real-life applications could improve their understanding. Aguilar (2022) and Francisco and Lim (2023) similarly found that active and engaging Science activities lead to better learning outcomes.

Problem 7. Is there a significant relationship between the respondents' learning practices and their performance in the 2024 National Achievement Test?

Table 13

Result of the Test on Relationship Between Respondents' Learning Practices and Performance in the 2024 National Achievement Test

	Performance in NAT			Overall
	English	Mathematics	Science	
Learning Practices	r-value	r-value	r-value	r-value
	p-value	p-value	p-value	p-value
	interpretation	interpretation	interpretation	interpretation

Personal	0.9700	0.8800	0.7450	0.865
	0.0109	0.0198	0.0305	0.0204
	S	S	S	S
Family	0.8923	0.6090	0.8459	0.7824
	0.0302	0.0206	0.0306	0.0271
	S	S	S	
School	0.9000	0.5989	0.8455	0.7814
	0.0103	0.0304	0.0301	0.0236
	S	S	S	S
Environment	0.7809	0.7201	0.7088	0.7366
	0.0409	0.0208	0.0203	0.0273
	S	S	S	S

Legend:

S- Significant

NS- Not significant

Table 13 presents the relationship between learning practices and performance in the 2024 National Achievement Test. Results show that personal, family, school, and environmental learning practices were significantly related to performance in English, Mathematics, and Science, with correlation coefficients ranging from $r = 0.5989$ to $r = 0.97$ and all p-values below 0.05. This means that better learning practices are associated with higher NAT scores. The findings support Lopez and Reyes (2021), Carandang (2022), and Mendoza and Almonte (2022), who emphasized the importance of personal effort, family support, school assistance, and positive surroundings.

Among the domains, personal learning practices showed the strongest relationship with NAT performance. Students who manage their time, set goals, develop good study habits, and take responsibility for their learning tend to achieve higher scores. Delos Reyes and Torio (2021) and Lopez and Reyes (2021) similarly found that self-directed learning improves academic performance.

Family learning practices also showed a strong relationship with student performance. Parental guidance, encouragement, and provision of learning needs help students stay motivated and prepared for tests. Magsambol (2022) and Garcia and Santos (2020) likewise emphasized the positive effects of parental involvement and learning resources at home.

School learning practices were also significantly related to NAT performance. Effective teaching, adequate resources, and regular assessment help students improve their knowledge and confidence. Alcantara and Sy (2023), Dela Cruz and Manlapig (2020), and Lorenzo (2021) support these findings.

Lastly, environmental learning practices also had a significant relationship with performance, although weaker than the other domains. Positive peer influence, community programs, and access to learning resources can support students' achievement. Mendoza and Almonte (2022), Cruz and Hermosa (2023), and Umali et al. (2022) similarly found that supportive social and community environments contribute to better learning outcomes.

Overall, the findings show that student achievement depends on several connected factors. Strengthening personal habits, family involvement, school support, and the learning environment can help improve

students' performance in English, Mathematics, and Science.

Problem 8. Is there a significant difference in the respondents' performance in the 2024 National Achievement Test when grouped according to their characteristics?

Table 14

Comparison Between the Respondent's Performance in the 2024 National Achievement Test when grouped according to their Characteristics

Respondent's Characteristics	Performance in NAT		
	English	Mathematics	Science
	F-value	F-value	F-value
	p-value Interpretation	p-value Interpretation	p-value Interpretation
Age	2.14 0.047 S	1.89 0.062 NS	2.56 0.052 NS
Sex	0.79 0.037 S	0.65 0.042 S	1.07 0.030 S
Family Status	3.02 0.021 S	2.68 0.029 S	1.54 0.046 S
Highest Educational Attainment (Mother)	4.13 0.008 S	3.76 0.012 S	2.94 0.037 S
Highest Educational Attainment (Father)	1.97 0.088 NS	2.45 0.049 S	2.18 0.064 NS
Attitude Towards English, Math, and Science	5.61 0.004 S	6.13 0.003 S	4.88 0.008 S
Overall	2.41 0.040 S	2.29 0.039 S	2.06 0.046 S

Legend:

S- Significant

NS- Not significant

Table 28 presents the comparison of learners' performance in the 2024 National Achievement Test according to age, sex, family status, parents' educational attainment, and learner attitudes. The results show significant differences in performance across English, Mathematics, and Science, indicating that

learners' backgrounds and attitudes can influence their achievement. These findings support Barrot (2021) and Poon and Wong (2022), who emphasized the roles of family support, learning resources, motivation, and self-confidence.

Age showed differences in performance, particularly in English, as older learners may have stronger reading and language skills. Sex also showed differences across subjects, although learning styles and interests vary among individuals. Villanueva and Santiago (2021) and Garcia and Tamayo (2022) similarly reported differences in language and problem-solving abilities among learners.

Family status was also related to performance. Students from supportive and stable homes tend to have better study habits and greater readiness for learning. Mother's educational attainment showed a noticeable influence across the three subjects, suggesting that educated mothers may provide stronger academic guidance at home. Orbeta, Moya, and Torio (2020) likewise found that maternal education supports children's reading and Mathematics skills.

Father's educational attainment showed a significant difference mainly in Mathematics. Fathers may support learning by connecting mathematical skills to everyday activities. Tolentino and Avellano (2023) emphasized the role of fathers in developing children's practical Mathematics skills.

Among the factors, learner attitude had the strongest influence. Students who enjoy English, Mathematics, and Science and believe in their abilities tend to participate more, work harder, and achieve higher scores. Jimenez and Villapaña (2023) similarly found that positive attitudes and self-confidence improve academic performance.

Overall, the findings show that age, sex, family status, parental education, and learner attitudes influence academic performance, although their effects vary by subject. These results highlight the need for teaching strategies that consider learners' personal, family, and emotional needs.

Discussion

The findings show that learning practices and learner characteristics influence academic performance in the 2024 National Achievement Test. Grade 10 students in Kibawe East District were at the Nearly Proficient level in English, Mathematics, and Science, showing that they have basic knowledge but still need more practice and support.

Students performed better when they had strong motivation, family support, caring teachers, and positive peer relationships. Parents encouraged students and supported their learning at home, while teachers provided guidance and confidence. Helpful classmates also encouraged students to study and participate more.

The study further showed that age, sex, family status, parents' educational attainment, and attitudes toward the subjects were related to academic performance. Students whose mothers had higher educational attainment and those who had positive attitudes toward learning tended to perform better.

These findings support Albert Bandura's Social Cognitive Theory, which explains that learning is influenced by the interaction of personal behavior and the environment. Overall, students are more likely to succeed when they are motivated, practice good learning habits, and receive consistent support from their families, teachers, peers, and community.

Conclusion

This study shows that the way students learn makes a real difference in their marks in English, Mathematics, and Science. The greatest support comes from their families. When parents speak kindly to

their children, give encouragement, and help with schoolwork, students feel more sure of themselves. They work harder and do not give up easily. A warm and caring home helps students do well even when the school does not have many materials to use.

Good study habits, a strong wish to learn, and helpful teachers also help students earn better grades. However, not all students learn in exactly the same way. Their marks can be affected by their age, whether they are a boy or a girl, their home life, how much schooling their parents received, and how much they enjoy the subject. Students who like learning and receive help from both their families and teachers usually do better in school.

In the end, students succeed because they work hard and receive support from the people around them. These findings agree with Albert Bandura's Social Cognitive Theory. This theory explains that students learn best when they give their full effort, have good people to guide them, and study in an environment that cares for them. When parents show care and offer help, when teachers guide and encourage them, and when schools provide a safe and happy place to learn, students have a much better chance to do well. When families, teachers, and schools work together as one team, more learners in Kibawe East District will be able to learn, grow, and reach their goals.

Recommendations

In light of the findings of this study, the following recommendations are hereby proposed.

1. Teachers should give clear instructions. Check on students often to see how they are doing. Offer extra help to students who get little support at home. This helps students stay focused. It builds their confidence and it helps them do better in school.
2. School leaders should hold meetings with parents. Share simple guides on how parents can support their children's learning at home. Parents can give great support even if they did not finish many years of schooling.
3. Teachers and guidance counselors should teach students how to manage time wisely. Show them how to plan their tasks and set simple learning goals. These skills help students finish work on time. They also help students become more responsible.
4. Local government and community groups should support schools. They can provide more books, reliable internet connection, extra learning sessions, and safe spaces to study. These resources help students keep learning even after school hours.
5. Teachers should give extra care and practice to students who struggle with Math. Use examples from daily life and simple activities. These help students understand Math better and grow to like the subject more.
6. Teachers should make lessons in English, Math, and Science fun and easy to follow. Show students how these subjects are useful in daily life and in future jobs. This helps students enjoy learning and do their very best.
7. Teachers should keep using methods that help students learn well. Work closely with families. Teach good study habits. And help students develop a love for learning. These steps will help students earn higher scores in the National Achievement Test.
8. Teachers should use different kinds of activities to make English, Math, and Science interesting and easy to learn. Invite parents, especially those with less formal education to join in and help their children. When teachers and parents work together, students will get better test results

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