

# LANGUAGE AND COMMUNICATION PERFORMANCE IN THE NATIONAL ACHIEVEMENT TEST: INSIGHTS FROM SELECTED SECONDARY SCHOOLS IN NEGROS ORIENTAL

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**ABSTRACT:** *The National Achievement Test (NAT) is a standardized measure of student learning in the Philippines, particularly in key domains such as Problem Solving, Information Literacy, and Critical Thinking under Language and Communication. In Negros Oriental, NAT results revealed mean percentage scores (MPS) of 34.90, 37.53, and 29.76 in these domains, respectively, all below regional and national averages. This study examined whether students' academic performance in English predicts NAT performance in selected public senior high schools from three municipalities in the division. A descriptive-correlational design was employed using documentary data on students' academic performance and NAT results. Descriptive statistics summarized English grades and NAT scores, Spearman's rho measured the relationship, and simple linear regression assessed predictive validity. Findings showed that the mean English general weighted average was 86.83 (Very Satisfactory). In contrast, NAT scores remained at the Low Proficient level across domains, with Critical Thinking as the weakest area. Correlation analysis revealed negligible to low but non-significant relationships between English performance and NAT scores. Regression confirmed that English averages did not significantly predict NAT outcomes, with  $R^2$  values ranging from 0.009 to 0.069 and all  $p$ -values above 0.05. The results demonstrate a disconnect between classroom performance and standardized test outcomes. While students achieve satisfactory grades in English, these do not translate into improved NAT performance. This finding aligns with earlier studies highlighting systemic misalignments between instruction, assessment, and national standards, emphasizing the need to consider broader factors influencing standardized achievement.*

**Keywords:** National Achievement Test, academic performance, English proficiency, problem solving, information literacy, critical thinking, standardized assessment.

## 1. INTRODUCTION

The quality of education in the Philippines has long been measured through standardized assessments such as the National Achievement Test (NAT), which evaluates learners' mastery of key competencies across subject areas. Among these domains, Language and Communication plays a crucial role as it develops essential 21st-century skills, namely Problem Solving, Information Literacy, and Critical Thinking, which are indispensable for academic success and lifelong learning [1].

Despite ongoing reforms, NAT results consistently reveal gaps in performance at both national and regional levels. For instance, a narrative inquiry conducted in Misamis Oriental highlighted that socioeconomic status, student motivation, teacher preparedness, and school resources significantly shape NAT outcomes [2]. Similarly, Reyno and Guzman [3] emphasized that socio-demographic factors, teaching effectiveness, and management practices strongly influence learners' standardized test results, particularly in English and related competencies.

In the Division of Negros Oriental, these challenges are evident in the recent NAT results for Language and Communication. Learners posted mean percentage scores (MPS) of 34.90 in Problem Solving, 37.53 in Information Literacy, and 29.76 in Critical Thinking. These figures fall below both the Central Visayas regional averages (38.11, 41.43, 31.86) and the national averages (36.99, 40.51, 31.37). Critical Thinking emerged as the weakest domain, indicating learners' difficulty in analysis, evaluation, and synthesis of information, which are essential components of higher-order thinking.

Research underscores that performance in national assessments is shaped by multiple, interrelated factors. Casildo [4] demonstrated that academic performance strongly

predicts NAT outcomes, while Cabrella and Junsay [5] found that teacher qualifications, classroom management, and parental involvement also influence achievement across Science, Mathematics, and English. In addition, Ojastro et al. [6] noted that the disconnect between classroom academic performance and NAT results suggests systemic misalignments between instruction and assessment.

Given these findings, the consistently low performance of Negros Oriental learners compared to regional and national standards highlights the urgency of investigating underlying causes at the school and division levels. This study focuses on selected secondary schools within three municipalities of the division, aiming to provide evidence-based insights that could guide instructional interventions, policy formulation, and teacher development programs. By addressing the persistent gaps in Problem Solving, Information Literacy, and Critical Thinking, this research seeks to contribute toward bridging disparities in NAT performance and enhancing overall educational quality in the region.

Specifically, it purports to shed light to the following questions:

1. What is academic performance of the public senior high schools of the selected 3 municipalities in Negros Oriental in Language and Communication?
2. What is the National Achievement test mean percentage score (MPS) of the public senior high schools of the selected 3 municipalities in Negros Oriental in Language and Communication in terms of:
  - 2.1 problem Solving;
  - 2.2 information Literacy; and
  - 2.3 critical Thinking?
3. What is the standing of the selected schools in the Negros Oriental Division relative to the national and regional MPS in terms of their performance in:

- 3.1 problem solving;
- 3.2 information literacy; and
- 3.3 critical thinking?
4. Which domain of Language and Communication (Problem Solving, Information Literacy, or Critical Thinking) reflects the widest gap between the performance of the selected schools and the regional and national standards?
5. Is there a relationship between the academic performance and the National Achievement test mean percentage score (MPS) in Language and Communication in terms of:
  - 5.1 Problem Solving;
  - 5.2 Information Literacy;
  - 5.3 Critical Thinking; and
  - 5.4 Overall MPS
6. Do students' academic performance in English significantly predict their National Achievement test mean percentage score (MPS) in Language and Communication in terms of:
  - 4.1 Problem Solving,
  - 4.2 Information Literacy, and
  - 4.3 Critical Thinking?
7. What recommendations can be proposed to improve the academic performance and National Achievement Test (NAT) mean percentage scores in Language and Communication of the public senior high schools of the selected 3 municipalities in Negros Oriental?

## 2. REVIEW OF RELATED LITERATURE

### The National Achievement Test in the Philippines

The National Achievement Test (NAT) serves as the Philippines' primary standardized assessment for evaluating mastery of core learning areas. It not only measures competencies but also provides diagnostic insights into instructional practices and curriculum effectiveness [1]. Recent research confirms that NAT outcomes consistently highlight systemic challenges in Philippine education, including low proficiency in problem solving, information literacy, and critical thinking [7].

Namoco *et al.* [2] found that poverty, motivation, and instructional resources strongly influenced NAT outcomes in Misamis Oriental, while Reyno and Guzman [3] emphasized socio-demographic characteristics, teacher effectiveness, and school management as significant correlates of test performance. Similarly, Babatuan, Subong, and Yurango [8] documented subject-level disparities in NAT results across Davao City, with English and Science consistently among the weakest areas. These studies collectively highlight the diagnostic importance of NAT as both a measure of individual performance and an indicator of systemic inequities.

### Academic Performance as a Predictor of Standardized Test Results

A significant body of literature has established the predictive value of academic performance in relation to standardized tests such as NAT. Casildo [4] demonstrated that grades across subjects are strong predictors of NAT outcomes, developing a model that identified academic indicators with the greatest influence. Similarly, Ojastro *et al.* [6] examined academic performance against NAT scores in Science and Mathematics, finding weak but notable correlations that

suggested misalignments between classroom grading practices and standardized measures.

In the Philippine context, Cabrella and Junsay [5] confirmed that school-based academic performance variables including demographics, school type, and teacher attitudes were significantly linked to NAT outcomes in Science, Mathematics, and English. Valderama [9] identified discriminating factors between high and low-performing schools in Mathematics NAT results, highlighting the influence of student preparation, class size, and availability of resources. Kalaing [10] showed that English academic grades were significantly related to NAT English scores, underscoring the predictive role of language proficiency.

At the international level, findings converge on the same theme. Waluyo and Panmei [11] demonstrated that English course grades significantly predicted overall GPA in a Thai university, while Devi [12] reported that English proficiency had a significant positive correlation with postgraduate students' academic achievement in Indonesia. Hakorimana, Oye bimpe, and Andala [13] similarly found a strong positive relationship between English language skills and academic achievement in Rwanda. These studies highlight the predictive utility of academic performance, particularly in English, across diverse contexts.

Philippine-based studies also reinforce this relationship between English proficiency, academic grades, and standardized tests. Cantara *et al.* [14] observed that English proficiency levels significantly influenced students' school performance in English, while Lerongan [15] confirmed that teacher scholastic achievement in English was linked to learners' NAT performance. Azarcon and Zabala [16] further found a small but significant correlation between English proficiency scores and scholastic performance, suggesting that language ability predicts classroom and test outcomes.

Other evidence underscores the role of academic achievement as a determinant of national test performance. Anub [17] linked English NAT outcomes to teacher strategies and remedial instruction, while Rayla and Sonsona [18] and Dadulla [19] emphasized that proficiency gaps in oral communication and affective factors like self-esteem contribute to weaker NAT performance. Collectively, these findings support the premise that students' academic achievement in English is a meaningful predictor of their standardized assessment outcomes, particularly in Language and Communication domains.

### English Proficiency and Academic Achievement

Beyond NAT-specific studies, literature affirms the centrality of English proficiency as a predictor of academic success. Waluyo and Panmei [11] and Devi [12] showed that English performance correlates strongly with academic achievement in both Asian and international settings. Hakorimana *et al.* [13] reported similar patterns in Rwanda, while Nwokedi [20] established that classroom environments conducive to English proficiency significantly improved students' language performance.

Within the Philippines, Cantara *et al.* [14] confirmed that student proficiency directly affected English subject performance, while Babatuan *et al.* [8] identified English as

among the learning areas requiring urgent intervention due to lower NAT results. Lerongan [15] further emphasized that teachers' scholastic achievement in English translated into improved student outcomes, reflecting the close link between academic performance and test scores.

### **Comparative and Systemic Perspectives**

Studies also compare NAT outcomes with international benchmarks such as PISA. Orbeta, Melad, and Potestad [21] revealed that test performance among Filipino 15-year-olds was shaped by family background, bullying, and disciplinary climate. Acido and Caballes [22] noted that the Philippines' PISA scores correlated with its Human Development Index, reinforcing the systemic dimension of educational challenges. These results parallel NAT findings, where student grades, proficiency, and external factors combine to shape outcomes. Moreover, Tizon [23] and Bargo and Go [24] highlighted the importance of curriculum alignment and communicative approaches in strengthening performance in oral communication, an area closely linked to English NAT outcomes. Rayla and Sonsona [18] and Dadulla [19] also stressed oral proficiency as an essential dimension of academic and test performance, further supporting the predictive role of language-based competencies.

### **3. SIGNIFICANCE OF THE STUDY**

This study is significant as it provides empirical evidence on the predictive relationship between students' academic performance in English and their National Achievement Test (NAT) outcomes in Language and Communication. The results are expected to benefit the following stakeholders:

**Students.** The findings will help students become more aware of the importance of their academic performance in English as a foundation for developing competencies in problem solving, information literacy, and critical thinking. Such awareness may motivate learners to improve study habits, strengthen literacy skills, and prepare more effectively for standardized assessments.

**Teachers.** For classroom practitioners, the study will provide insights into how students' academic performance relates to NAT results. This information can guide teachers in designing more targeted instructional strategies, aligning classroom assessments with competencies measured by the NAT, and adopting remediation programs to address specific skill gaps in language learning.

**School Administrators.** The study will assist principals and school heads in understanding the link between classroom performance indicators and standardized test outcomes. This can inform policy decisions, professional development initiatives, and the implementation of programs that enhance instruction in English and strengthen critical thinking, problem solving, and information literacy.

**Curriculum Developers and Policymakers.** At the division and regional levels, the results can provide evidence-based insights to guide curriculum enhancement and policy formulation. By identifying the predictive role of academic performance, decision-makers can design interventions that bridge the gap between classroom learning and national standards.

**Future Researchers.** The study will serve as a reference for scholars who wish to explore related variables affecting NAT

outcomes or extend investigations to other learning areas, school contexts, or divisions. It provides a foundation for comparative analyses, replication studies, or expanded models that integrate additional predictors of standardized test performance.

### **3. METHODOLOGY**

#### **Research Design**

This study employed a descriptive-correlational research design. The descriptive aspect was used to determine the academic performance of students in English and their National Achievement Test (NAT) mean percentage scores (MPS) in Language and Communication. The correlational aspect examined the relationship between academic performance and NAT outcomes, while regression analysis was applied to determine whether academic performance significantly predicts NAT MPS in the domains of Problem Solving, Information Literacy, and Critical Thinking.

#### **Research Locale**

The study was conducted in selected public senior high schools from three municipalities in Negros Oriental, Philippines. These included the municipality of Siaton, where the researchers' home university is situated, and the two neighboring municipalities closest to Siaton. These areas were chosen because of their accessibility to the researchers and the feasibility of conducting extension activities in partnership with local schools.

The selection of these municipalities was also purposive since they represent nearby communities where academic performance and NAT outcomes can be meaningfully studied and where results of this research may directly inform school-based interventions and community extension programs..

#### **Respondents of the Study**

The respondents of the study were Grade 12 students enrolled in public senior high schools within the selected municipalities who had taken the National Achievement Test in Language and Communication. Their academic performance in English was obtained from their final grades, while their NAT MPS served as the basis for standardized test performance. Only schools with available NAT results and corresponding student academic records were included.

#### **Sampling Technique**

The study utilized purposive sampling to select schools and respondents with complete data sets on English academic performance and NAT MPS. This approach ensured that the analysis would be based on reliable and comparable information.

#### **Research Instruments**

The study used documentary analysis as its main research instrument. Academic performance was measured using the students' final grades in English subjects, while NAT scores were based on official Division of Negros Oriental reports on the mean percentage scores in Language and Communication. The NAT scores were disaggregated into the three domains: Problem Solving, Information Literacy, and Critical Thinking.

#### **Data Gathering Procedure**

Permission was sought from the Division Office and participating schools to access NAT results and students' academic records in English. Upon approval, official data

were collected, recorded, and tabulated. Strict confidentiality and ethical standards were observed, ensuring that individual student names were not disclosed, and only aggregate data were analyzed.

### Data Analysis

The following statistical tools were employed:

**Descriptive Statistics** (mean, percentage, and standard deviation) to present the academic performance of students and their NAT MPS in Language and Communication.

Pearson Product-Moment Correlation (or Spearman's rho if data are not normally distributed) to determine the relationship between students' academic performance and their NAT scores in Problem Solving, Information Literacy, and Critical Thinking.

**Simple Linear Regression Analysis** to test whether academic performance in English significantly predicts NAT outcomes in the three domains of Language and Communication.

All analyses were conducted at a 0.05 level of significance.

### Ethical Considerations

The study adhered to ethical standards in educational research. Approval from school authorities was obtained prior to data collection. Student information was kept strictly confidential, and only aggregated results were reported. The study complied with the provisions of the Data Privacy Act of 2012.

## 4. RESULTS AND DISCUSSION

**Table 1.1 Academic Performance of the Public Senior High Schools of the Selected 3 Municipalities in Negros Oriental in Language and Communication**

School	General Weighted Average	Description
1	83.48	Satisfactory
2	82.50	Satisfactory
3	86.35	Very Satisfactory
4	83.85	Satisfactory
5	82.84	Satisfactory
6	85.22	Very Satisfactory
7	88.57	Very Satisfactory
8	91.52	Outstanding
9	90.74	Outstanding
10	87.92	Very Satisfactory
11	89.56	Outstanding
12	89.53	Outstanding
13	85.07	Very Satisfactory
14	92.50	Outstanding
15	83.25	Satisfactory
16	85.77	Very Satisfactory
17	84.38	Satisfactory
18	89.36	Very Satisfactory
19	87.60	Very Satisfactory
20	88.78	Very Satisfactory
21	84.63	Very Satisfactory
<b>Mean</b>	<b>86.83</b>	Very Satisfactory

Legend:

DESCRIPTOR	GRADING SCALE
Outstanding	90-100
Very Satisfactory	85-89
Satisfactory	80-84
Fairly Satisfactory	75-79
Did Not Meet Expectations	Below 75

\*Department of Education

Table 1.1 presents the academic performance of the public senior high schools in Language and Communication across the three selected municipalities in Negros Oriental. The results reveal that students obtained a mean General Weighted Average (GWA) of 86.83, which falls within the Very Satisfactory range. Out of the 21 schools, four schools (Schools 8, 9, 11, and 14) attained an Outstanding performance (90–100), while nine schools achieved Very Satisfactory ratings (85–89). The remaining eight schools registered Satisfactory performance (80–84). Notably, none of the schools fell below the satisfactory level.

These results suggest that, overall, the students in the selected municipalities demonstrate a commendable level of academic performance in English. This finding is consistent with the argument of Casildo [4] that academic performance, as reflected in classroom grades, often serves as a reliable predictor of standardized test performance, including the National Achievement Test (NAT). Similarly, Kalaing [10] reported that learners' academic grades in English significantly correlate with their NAT English results, confirming that classroom achievement is strongly tied to outcomes in national assessments.

The Outstanding performance of several schools underscores that learners are capable of excelling when instructional alignment and school support are strong. This supports the findings of Cabrella and Junsay [5], who identified that factors such as classroom management, teacher motivation, and parental involvement positively influence student achievement in English, Mathematics, and Science. On the other hand, the concentration of schools in the Satisfactory and Very Satisfactory categories suggests that while performance is generally above average, there remain areas for improvement to push more schools toward the Outstanding range.

From an international perspective, similar patterns have been observed. Waluyo and Panmei [11] established that English course grades strongly predicted overall GPA in higher education, while Devi [12] found a significant positive correlation between English proficiency and academic achievement among postgraduate students in Indonesia. These findings align with the Philippine data, emphasizing that English performance is a foundational predictor of academic success across levels of education.

Moreover, the results in Table 1.1 highlight the opportunity for targeted interventions. As Ojastro *et al.* [6] explained discrepancies between classroom performance and NAT outcomes may arise due to systemic misalignments between instruction and assessment. Thus, while the "Very Satisfactory" mean performance indicates academic strength, this must be examined alongside NAT results to determine whether classroom achievement translates into standardized test proficiency.

In summary, the academic performance of the selected schools in Language and Communication is generally strong, with most students performing at least satisfactorily and several schools excelling at the outstanding level. However, given that NAT results in the region remain below national standards [3; 7]; it becomes crucial to investigate whether these academic grades predict learners' performance in NAT,

particularly in the domains of Problem Solving, Information Literacy, and Critical Thinking.

**Table 2.1 National Achievement Test Mean Percentage Score (MPS) of the Public Senior High Schools of the Selected 3 Municipalities in Negros Oriental in Language and Communication in Terms of Problem Solving, Information Literacy, and Critical Thinking**

National Achievement test mean percentage score (MPS)								
School	Problem Solving	Description	Information Literacy	Description	Critical Thinking	Description	Overall MPS	Description
1	31.28	Low Proficient	34.16	Low Proficient	26.75	Low Proficient	30.73	Low Proficient
2	35.07	Low Proficient	39.24	Low Proficient	27.78	Low Proficient	34.03	Low Proficient
3	36.57	Low Proficient	40.30	Low Proficient	30.96	Low Proficient	35.94	Low Proficient
4	32.69	Low Proficient	36.11	Low Proficient	28.42	Low Proficient	32.41	Low Proficient
5	34.19	Low Proficient	34.08	Low Proficient	27.46	Low Proficient	31.91	Low Proficient
6	40.71	Low Proficient	40.96	Low Proficient	31.67	Low Proficient	37.78	Low Proficient
7	34.93	Low Proficient	34.69	Low Proficient	28.86	Low Proficient	32.83	Low Proficient
8	37.16	Low Proficient	38.06	Low Proficient	30.03	Low Proficient	35.09	Low Proficient
9	33.94	Low Proficient	36.64	Low Proficient	29.95	Low Proficient	33.51	Low Proficient
10	24.31	Low Proficient	29.86	Low Proficient	22.92	Not Proficient	25.69	Low Proficient
11	35.56	Low Proficient	41.11	Low Proficient	31.11	Low Proficient	35.93	Low Proficient
12	32.56	Low Proficient	33.99	Low Proficient	29.65	Low Proficient	32.07	Low Proficient
13	22.35	Not Proficient	26.32	Low Proficient	25.00	Low Proficient	24.56	Low Proficient
14	49.15	Low Proficient	50.14	Proficient	35.33	Low Proficient	44.87	Low Proficient
15	59.58	Proficient	46.26	Low Proficient	44.06	Low Proficient	49.97	Proficient
16	25.13	Low Proficient	32.80	Low Proficient	24.34	Not Proficient	27.43	Low Proficient
17	29.78	Low Proficient	28.70	Low Proficient	24.38	Not Proficient	27.62	Low Proficient
18	34.16	Low Proficient	37.73	Low Proficient	28.96	Low Proficient	33.61	Low Proficient
19	27.98	Low Proficient	33.13	Low Proficient	23.66	Not Proficient	28.26	Low Proficient
20	31.98	Low Proficient	31.37	Low Proficient	26.56	Low Proficient	29.97	Low Proficient
21	24.85	Low Proficient	27.47	Low Proficient	24.38	Not Proficient	25.57	Low Proficient
<b>Mean</b>								

Legend:

Levels of Proficiency	MPS	Descriptions
Highly Proficient	90-100	At this level, the students are highly capable of solving problems, managing and communicating accurate information, and analyzing and evaluating data to create/formulate ideas.
Proficient	75-89	At this level, students are skilled in solving problems, managing and communicating information, and analyzing and evaluating data to create/formulate ideas.
Nearly Proficient	50 - 74	At this level, students met the minimum level of skills in solving problems, managing and communicating information, and analyzing and evaluating data to comprehend ideas.
Low Proficient	25-49	At this level, students can identify strategies in solving problems, differentiate and organize information.
Not Proficient	0-24	At this level, students can solve simple problems, classify and identify the source of information.

Table 2.1 presents the National Achievement Test (NAT) mean percentage scores (MPS) of public senior high schools from the three selected municipalities in Negros Oriental in the domains of Problem Solving, Information Literacy, and Critical Thinking. The overall findings reveal that the majority of schools fall within the Low Proficient level across all domains, with only two schools attaining Proficient status. In terms of Problem Solving, the mean scores range from 22.35 to 59.58, with most schools classified as Low Proficient. Only School 15 reached the Proficient category, highlighting that few learners are capable of applying strategies effectively to solve complex tasks. Similar results are evident in Information Literacy, where scores range from 26.32 to 50.14. Although School 14 achieved Proficient, most

schools remain in the Low Proficient level, indicating challenges in organizing, managing, and interpreting information. For Critical Thinking, scores range from 22.92 to 44.06, with no school surpassing the Low Proficient category. This suggests that learners struggle significantly with analysis, evaluation, and synthesis of ideas.

The overall MPS also reflects this trend, with most schools falling under Low Proficient, except for School 15, which achieved a Proficient level (49.97%). The average results highlight a consistent pattern of underperformance, particularly in higher-order thinking domains such as Critical Thinking.

These findings are consistent with previous studies. Amar, Barros, and Manlagaylay [7] found that learners in Bukidnon similarly demonstrated low proficiency levels in problem solving, information literacy, and critical thinking. Ojastro et al. [6] also noted a disconnect between classroom performance and NAT outcomes, with standardized test scores often lagging behind academic grades. Reyno and Guzman [3] further argued that socio-demographic variables and instructional practices significantly affect NAT performance, which may explain the persistent gaps in Negros Oriental compared with regional and national averages.

Comparative studies echo these challenges. Namoco *et al.* [2] highlighted that factors such as poverty, limited resources, and student motivation contribute to low NAT performance in Misamis Oriental, while Babatuan, Subong, and Yurango [8] confirmed that English and Science often register the lowest MPS among learning areas in Davao City. International evidence also supports these trends. Orbeta, Melad, and Potestad [21] demonstrated that test outcomes among Filipino students in PISA were shaped by family background and school climate, while Acido and Caballes [22] linked weak Philippine performance in PISA to broader development indicators.

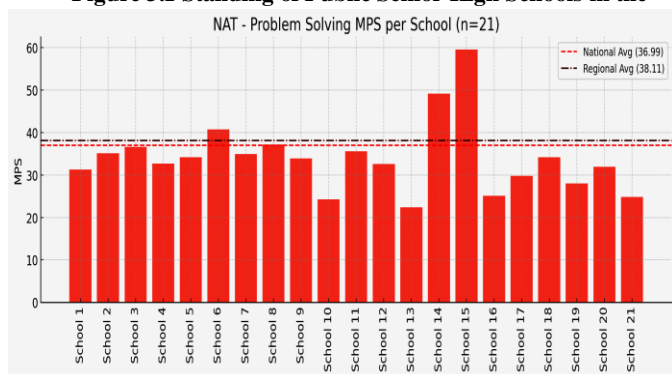
The low results in Critical Thinking are particularly concerning. As emphasized by Cabrella and Junsay [5], NAT outcomes in English are closely associated with teacher attitudes, school type, and parental involvement, which collectively influence learners' ability to analyze and evaluate information. Likewise, Valderama [9] stressed that discriminating factors such as class size and access to resources distinguish higher-performing schools, which may partly explain why only two schools in this dataset reached proficiency.

The findings underscore the urgent need to align academic performance with NAT competencies. While Table 1.1 revealed a "Very Satisfactory" mean performance in academic grades, the results in Table 2.1 show that students still underperform in standardized assessments. This misalignment reinforces the claim of Casildo [4] and Kalaing [10] that while academic grades are useful predictors, systemic gaps in instruction and assessment alignment may prevent classroom achievement from fully translating into national test performance.

In sum, the NAT results of the selected municipalities demonstrate a critical gap between academic performance and standardized assessment outcomes, particularly in Problem

Solving, Information Literacy, and Critical Thinking. This validates earlier findings that NAT serves as a diagnostic tool to expose learning gaps [1]; [7] and supports the need for evidence-based interventions to strengthen English instruction and higher-order thinking skills in Negros Oriental.

**Figure 3.1 Standing of Public Senior High Schools in the**



**Selected Three Municipalities of Negros Oriental in the NAT Regional and National MPS for Language and Communication in Terms of Problem Solving**

Figure 3.1 illustrates the performance of the 21 public senior high schools from the selected three municipalities of Negros Oriental in the NAT Language and Communication domain for Problem Solving, benchmarked against the regional mean percentage score (MPS) of 38.11 and the national MPS of 36.99.

The data reveal that the majority of schools performed below both the national and regional averages. Only Schools 6, 14, and 15 surpassed these benchmarks, with School 15 standing out significantly by attaining a Problem Solving MPS close to 60%. The remaining schools fell into the Low Proficient category, with scores mostly ranging from 20% to 35%. The weakest performances were observed in Schools 10, 13, 16, 17, and 21, which fell far below the national and regional thresholds.

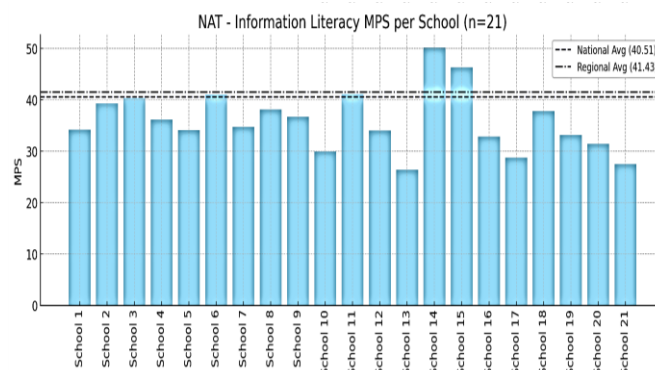
This pattern is consistent with earlier findings that learners in Negros Oriental and other Philippine regions continue to struggle in higher-order thinking skills, particularly problem solving [7]. Similarly, Namoco *et al.* [2] reported that NAT results often expose deficiencies in critical domains such as mathematics and problem solving due to factors like poverty, lack of resources, and limited academic preparedness.

The underperformance of most schools below national and regional standards underscores a systemic gap between academic achievement and standardized test outcomes. Ojastro *et al.* [6] highlighted this misalignment, noting that while classroom grades often indicate satisfactory or even outstanding achievement, NAT scores consistently fall in the “Low Proficient” range.

At the same time, the outlier success of School 15 demonstrates that improved outcomes are possible under certain conditions. This supports the findings of Cabrella and Junsay [5], who showed that factors such as effective classroom management, teacher motivation, and parental involvement significantly improve NAT outcomes. Similarly, Valderama [9] found that schools with smaller class sizes, adequate textbooks, and strong administrative leadership tend to perform better in the NAT.

Overall, the figure highlights a pressing need for targeted interventions to strengthen problem-solving instruction and align classroom assessments with the competencies measured in the NAT. As emphasized by Reyno and Guzman [3], addressing disparities in NAT performance requires not only academic support but also systemic reforms in teaching, curriculum, and resource allocation.

**Figure 3.2 Standing of Public Senior High Schools in the Selected Three Municipalities of Negros Oriental in the**



**NAT Regional and National MPS for Language and Communication in Terms of Information Literacy**

Figure 3.2 presents the performance of the 21 public senior high schools from the three municipalities of Negros Oriental in the NAT Language and Communication domain for Information Literacy, compared with the regional mean percentage score (MPS) of 41.43 and the national MPS of 40.51.

The data show that most schools scored below both the regional and national averages, indicating a general weakness in managing, analyzing, and interpreting information. Only Schools 14 and 15 exceeded both benchmarks, with School 15 performing exceptionally well (above 46%), while a few others (Schools 6 and 11) approached the thresholds. In contrast, the majority of schools clustered around the 30–39% range, which is classified as Low Proficient. The lowest scores were recorded by Schools 13, 16, 19, 20, and 21, falling significantly behind the benchmarks.

These results confirm previous studies showing that Filipino learners often struggle with information literacy skills, which are central to 21st-century learning and critical for academic success. For example, Añar, Barroso, and Manlagaylay [7] found that students generally exhibit low proficiency in information literacy across subjects, while Babatuan, Subong, and Yurango [8] reported English and Science as the weakest areas in terms of NAT performance among Davao City schools.

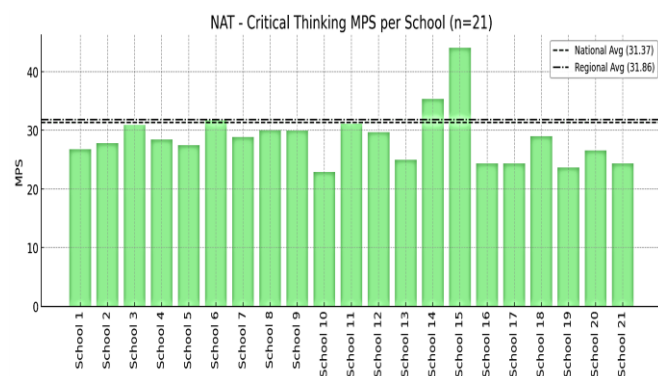
The disparity between classroom achievement and standardized assessments again emerges here. Although students in the selected municipalities demonstrated “Very Satisfactory” academic performance in English (Table 1.1), their NAT scores in information literacy remain low, echoing the findings of Ojastro *et al.* [6] who highlighted the misalignment between classroom grades and national test performance.

At the same time, the success of Schools 14 and 15 suggests that improvement is possible when school-level interventions and supportive practices are in place. This aligns with



Cabrella and Junsay [5] and Valderama [9], who emphasized that effective teaching strategies, resource adequacy, and school management practices significantly influence NAT outcomes.

Overall, Figure 3.2 underscores the urgent need for targeted interventions that strengthen learners' ability to evaluate and use information critically. As Reyno and Guzman [3] and Namoco et al. [2] argue, addressing such gaps requires not only pedagogical reforms but also systemic support in curriculum delivery, resource allocation, and teacher development.



**Figure 3.3 Standing of Public Senior High Schools in the Selected Three Municipalities of Negros Oriental in the NAT Regional and National MPS for Language and Communication in Terms of Critical Thinking**

Figure 3.3 displays the performance of the 21 public senior high schools from the three municipalities of Negros Oriental in the NAT Language and Communication domain for Critical Thinking, compared with the regional mean percentage score (MPS) of 31.86 and the national MPS of 31.37.

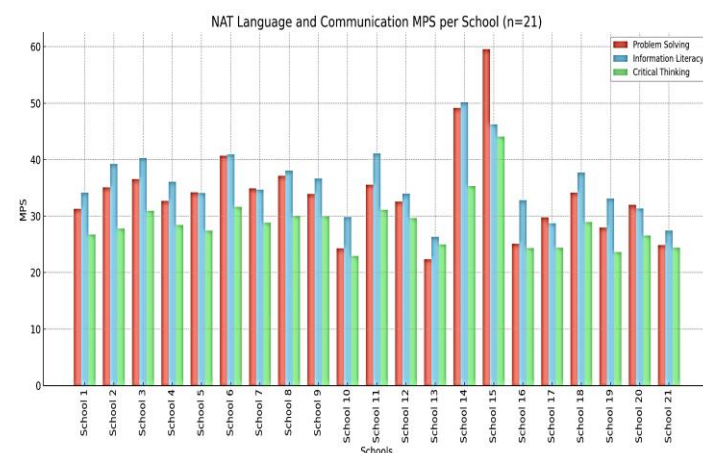
The results reveal that almost all schools scored at or below both regional and national averages, with only Schools 14 and 15 surpassing the benchmarks. School 15, in particular, achieved an exceptional performance above 40%, while the majority of schools clustered between 22% and 30%, which falls within the Low Proficient level. Schools such as 10, 13, 16, 17, 20, and 21 scored well below national and regional thresholds, reflecting significant challenges in higher-order thinking skills.

The findings reinforce earlier studies indicating that critical thinking is the weakest domain in NAT performance. Añar, Barroso, and Manlagaylay [7] concluded that Filipino learners at both elementary and secondary levels consistently exhibit deficiencies in analysis, evaluation, and synthesis, skills which are essential in critical thinking. Similarly, Ojastro et al. [6] observed that while academic performance often appears satisfactory or outstanding, standardized assessments like the NAT expose persistent weaknesses in critical reasoning skills.

The underperformance of most schools also mirrors international assessments. Results from PISA analyses [21]; [22] consistently show that Filipino students rank among the lowest in critical thinking and problem-solving, largely due to gaps in curriculum implementation, teaching approaches, and socio-economic disparities.

The standout performance of School 15 illustrates that improvement is possible with strong instructional strategies and systemic support. This observation aligns with Cabrella and Junsay [5], who emphasized the role of teacher motivation, parental involvement, and school type in strengthening NAT performance, and Valderama [9], who identified school resources and management practices as key discriminators of high-performing schools.

In summary, Figure 3.3 underscores the urgent need to prioritize critical thinking development in classroom instruction and assessment. As Reyno and Guzman [3] argue, improving NAT outcomes requires more than academic grades; it demands systemic reforms that emphasize higher-order thinking, curriculum alignment, and evidence-based pedagogy.



**Figure 4.1 Domain of Language and Communication Reflecting the Widest Gap Between the Performance of the Selected Schools and the Regional and National Standards**

Figure 4.1 presents the comparative performance of the 21 public senior high schools across the three domains of Language and Communication: Problem Solving, Information Literacy, and Critical Thinking, benchmarking them against regional and national standards.

The results show that Critical Thinking consistently reflects the widest gap between the performance of the schools and the benchmarks. Across nearly all schools, Critical Thinking scores lag behind Problem Solving and Information Literacy, with the majority of schools falling in the Low Proficient category. This weakness is especially visible in Schools 10, 13, 16, 17, 20, and 21, where Critical Thinking scores dipped well below 25 percent, classifying them as Not Proficient. Conversely, while some schools such as Schools 14 and 15 managed to surpass the benchmarks in all three domains, they remain exceptions rather than the norm.

The consistent underperformance in Critical Thinking confirms earlier studies that identified higher-order thinking skills as the most critical deficiency in Philippine standardized assessments. Añar, Barroso, and Manlagaylay [7] emphasized that while learners often manage basic competencies, they struggle with analytical and evaluative tasks. Similarly, Reyno and Guzman [3] noted that students' inability to transfer classroom learning into test situations often manifests most strongly in critical thinking components of the NAT.

Information Literacy emerges as the second area of concern, with most schools hovering near but still below the national (40.51) and regional (41.43) averages. This aligns with findings by Namoco *et al.* [2], who identified insufficient instructional materials and low student motivation as barriers to information literacy development. On the other hand, Problem Solving, while also below standards, showed a relatively smaller gap, especially in schools such as 6, 14, and 15 that managed to surpass national and regional averages.

The wider literature corroborates these results. International assessments such as PISA [21; 22] consistently highlight Filipino learners' limited capacity in applying critical reasoning and literacy skills compared to global standards. At the school level, factors such as teacher preparation, curriculum delivery, and availability of learning resources have been shown to play vital roles [5; 9].

Overall, Figure 4.1 underscores the systemic gap between classroom academic performance and standardized test proficiency, particularly in Critical Thinking. This gap validates the need for targeted interventions focusing on higher-order thinking skills, curriculum realignment, and teaching strategies that better prepare learners for NAT demands [6].

**Table 5.1 Relationship Between the Academic Performance and the National Achievement Test Mean Percentage Score (MPS) of the Public Senior High Schools of the Selected 3 Municipalities in Negros Oriental in Language and Communication in Terms of Problem Solving, Information Literacy, and Critical Thinking**

NAT vs Academic Performance	Method	Correlation	p-value	Interpretation
Problem Solving	Spearman	0.166	0.470	Negligible, Not Significant
Information Literacy	Spearman	0.204	0.374	Low, Not Significant
Critical Thinking	Spearman	0.307	0.175	Low, Not Significant
Overall MPS	Spearman	0.226	0.323	Low, Not Significant

\*Adapted from Calmorin

An  $r \pm 0.00$  denotes zero correlation.

An  $r$  from 0.01 to  $\pm 0.20$  deals on negligible correlation

An  $r$  from  $\pm 0.21$  to  $\pm 0.40$  denotes low or slight relationship.

An  $r$  from  $\pm 0.41$  to  $\pm 0.70$  indicates marked or moderate correlation.

An  $r$  from  $\pm 0.71$  to  $\pm 0.90$  shows high relationship.

An  $r$  from  $\pm 0.91$  to  $\pm 0.99$  denotes very high correlation.

An  $r \pm 1.0$  indicates perfect relationship.

Table 5.1 shows the correlation between students' academic performance in English and their National Achievement Test (NAT) mean percentage scores (MPS) in Language and Communication across the three domains of Problem Solving, Information Literacy, and Critical Thinking.

The results reveal that all correlations are positive but weak and not statistically significant. Specifically, the relationship between English grades and Problem Solving yielded a negligible correlation ( $\rho = 0.166$ ,  $p = 0.470$ ). For Information Literacy, the correlation was low but still not significant ( $\rho = 0.204$ ,  $p = 0.374$ ). The strongest relationship was found with Critical Thinking ( $\rho = 0.307$ ,  $p = 0.175$ ), although it remained statistically insignificant. The overall MPS also showed only a low correlation ( $\rho = 0.226$ ,  $p = 0.323$ ).

These findings suggest that while there is a slight tendency for higher English academic performance to align with higher

NAT scores, the relationship is not strong enough to establish predictive validity in this sample. This result supports the earlier conclusion of Ojastro *et al.* [6], who found that academic grades do not consistently align with standardized test outcomes, especially in Mathematics and Science, due to systemic gaps between classroom instruction and assessment frameworks.

Similarly, Añar, Barroso, and Manlagaylay [7] observed that despite learners' satisfactory or even high academic performance, NAT outcomes across regions remained low, particularly in higher-order thinking domains such as problem solving and critical thinking. The negligible-to-low correlations in this study further validate their claim that NAT uncovers deeper issues in curriculum alignment, teaching strategies, and assessment practices.

On the other hand, international studies such as Waluyo and Panmei [11] and Devi [12] have established stronger links between English proficiency and academic performance, underscoring that language skills can be predictive of student achievement in certain contexts. The weak associations found in Negros Oriental therefore highlight that local factors, such as resource disparities, teacher practices, and socio-economic conditions [3; 2], may moderate or weaken the predictive power of academic performance on standardized test scores.

Overall, Table 5.1 indicates that academic performance in English, while positively associated with NAT MPS, is not a significant predictor in this study. This finding calls for further investigation into other factors influencing NAT outcomes, such as school environment, teacher qualifications, and socio-demographic variables, which earlier works have shown to exert stronger influence [5; 9; 17].

**Table 6.1 Simple Linear Regression of English Average Predicting NAT Domains**

Predictor (English Average) → Outcome	R <sup>2</sup>	Adj. R <sup>2</sup>	p-value	Interpretation
Problem Solving	0.009	-0.043	0.684	Not significant; negligible predictive power
Information Literacy	0.069	0.020	0.249	Not significant; weak positive relationship
Critical Thinking	0.012	-0.040	0.639	Not significant; negligible relationship
Overall MPS	0.024	-0.027	0.501	Not significant; negligible predictive power

Table 6.1 presents the results of the simple linear regression analysis that examined whether students' academic performance in English, as measured by their general average, could significantly predict their National Achievement Test (NAT) outcomes in Language and Communication.

The findings reveal that English Average is not a significant predictor of any of the NAT domains. For Problem Solving, the regression yielded an  $R^2$  of 0.009 and an adjusted  $R^2$  of -0.043, with a p-value of 0.684, indicating a negligible and non-significant relationship. Information Literacy showed the strongest association among the domains, but it was still weak ( $R^2 = 0.069$ , adjusted  $R^2 = 0.020$ ,  $p = 0.249$ ), suggesting that



English grades explain only about 6.9 percent of the variance in students' NAT scores for information processing skills. For Critical Thinking, the model resulted in an  $R^2$  of 0.012 and adjusted  $R^2$  of  $-0.040$ , with a p-value of 0.639, reflecting no meaningful predictive power. Finally, the model for Overall MPS yielded an  $R^2$  of 0.024 and adjusted  $R^2$  of  $-0.027$ , with a p-value of 0.501, again demonstrating no significant relationship.

These results indicate that while academic grades in English often reflect classroom learning outcomes, they do not translate into predictive validity for standardized assessments like the NAT. This finding supports the conclusion of Ojastro *et al.* [6] that a disconnect exists between academic performance and standardized test scores, particularly when higher-order skills such as problem solving and critical thinking are assessed. Similarly, Añar, Barroso, and Manlagaylay [7] noted that despite satisfactory academic performance, learners still scored low in NAT domains, especially in critical thinking, due to systemic issues in curriculum alignment and instructional delivery.

International evidence also mirrors this pattern. For instance, studies of PISA performance in the Philippines [21; 22] have shown that school-level grades are often inflated or inconsistent predictors of standardized outcomes, with factors such as socio-economic background, school resources, and teaching effectiveness exerting stronger influences.

In summary, Table 6.1 demonstrates that students' English averages in the selected municipalities of Negros Oriental cannot significantly predict NAT performance in Language and Communication. This finding highlights the need to explore other factors beyond classroom grades, such as teacher qualifications, school environment, and student motivation, as potential drivers of NAT success [3; 9].

## 5. CONCLUSION

This study investigated the relationship between academic performance in English and National Achievement Test (NAT) outcomes in Language and Communication among public senior high schools in three selected municipalities of Negros Oriental. The findings revealed that students' English academic performance was generally rated as Very Satisfactory ( $M = 86.83$ ). However, their NAT scores in Language and Communication domains (Problem Solving, Information Literacy, and Critical Thinking) were predominantly at the Low Proficient level, with Critical Thinking emerging as the weakest domain across schools.

Correlation analyses showed that English academic performance exhibited only negligible to low positive associations with NAT outcomes, none of which were statistically significant. The strongest relationship was observed with Critical Thinking, yet it remained weak and non-significant. Regression analyses further confirmed that English averages do not significantly predict NAT performance in any of the domains or in the overall MPS, as indicated by low  $R^2$  values and non-significant p-values.

These results highlight a clear disconnect between classroom academic performance and standardized test outcomes. While students perform well in classroom-based assessments, these achievements do not consistently align with their

performance in national examinations that emphasize higher-order thinking skills. This finding affirms earlier studies in the Philippine context that identified systemic misalignments between school-based grading practices and the competencies assessed in standardized tests [6; 7].

In conclusion, the study establishes that academic performance in English, though indicative of classroom achievement, is not a reliable predictor of NAT performance in Language and Communication. This underscores the complexity of factors influencing standardized test outcomes and the limitations of relying solely on grades as measures of student proficiency in key domains such as problem solving, information literacy, and critical thinking.

## 6. RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are offered:

**Strengthen Critical Thinking Instruction.** Since Critical Thinking emerged as the weakest domain in the NAT, schools should intensify classroom strategies that promote analysis, evaluation, and synthesis of information. Activities such as debates, case studies, and problem-based learning may be prioritized to help learners transfer knowledge from classroom contexts to standardized assessments.

**Align Classroom Assessments with NAT Competencies.** Teachers are encouraged to design test items and performance tasks that mirror the competencies and question formats of the NAT. This alignment may reduce the disconnect observed between high classroom grades and low standardized test scores, as noted in earlier studies [6; 7].

**Enhance Information Literacy Development.** Schools should provide structured opportunities for learners to practice identifying, evaluating, and synthesizing information from multiple sources. Incorporating digital literacy and research-based tasks will help students build the skills measured in the NAT.

**Implement Targeted Remediation Programs.** Schools performing consistently below national and regional benchmarks should design intervention programs such as after-class tutorials, peer mentoring, and focused review sessions that address specific weaknesses in problem solving, information literacy, and critical thinking.

**Support Professional Development for Teachers.** Training programs that focus on innovative teaching methodologies, assessment design, and higher-order thinking skill development should be conducted regularly. Equipping teachers with strategies aligned with NAT standards will better prepare students for national assessments.

**Promote Evidence-Based Policy and Curriculum Enhancement.** Division and regional offices may use the findings of this study to review existing policies and curricula, ensuring that they emphasize the integration of higher-order skills across subjects. This aligns with national goals to improve the country's performance in standardized tests such as the NAT and PISA.

## Conduct Further Research.

Future studies may explore additional predictors of NAT performance, such as socio-economic background, school resources, teacher qualifications, and learning environment, to provide a more comprehensive understanding of factors influencing student outcomes.

## 7. REFERENCES

- [1] Francisco, R., & Caingcoy, M. (2022). Competencies of basic education teachers and performance of learners in 2017–2018 National Achievement Test in the Philippines. *Jurnal Pendidikan Progresif*, 12(2), 545–557. <https://doi.org/10.23960/jpp.v12.i2.202212>
- [2] Namoco, S. O., Duero, J. G. Q., Branzuela, N. F., Jr., Dumaog, A. C., & Walag, A. M. P. (2022). Narrative inquiry to understand the National Achievement Test of primary and secondary school students in Misamis Oriental, Philippines. *Science International (Lahore)*, 34(5), 495–501.
- [3] Reyno, R. G., & Guzman, R. B. (2025). Factors affecting the performance of students in the National Achievement Test. *Journal of Interdisciplinary Perspectives*, 3(6), 605–617. <https://doi.org/10.69569/jip.2025.255>
- [4] Casildo, N. J. G. (2022). Modelling the effect of academic performance on National Achievement Test (NAT). In *Proceedings of the 14th International Conference on Computer Supported Education (CSEDU 2022)* (Vol. 1, pp. 517–522). <https://doi.org/10.5220/0011106300003182>
- [5] Cabrella, J. B. B., & Junsay, M. D. (2019). Factors of performance of secondary schools in Science, Mathematics and English. *Asian Journal of Education and Social Studies*, 5(1), 1–23. <https://doi.org/10.9734/AJESS/2019/v5i130134>
- [6] Ojastro, N. C., Banot, V. L., Ragay, N. L., & Batucan, N. A. (2025). Academic performance and National Achievement Test (NAT) performance in Science and Mathematics. *Science International (Lahore)*, 37(1), 109–117.
- [7] Añar, L. E., Barroso, C. J. V., & Manlagaylay, M. P. (2023). The performance of basic education learners in the National Achievement Test. *Journal for ReAttach Therapy and Developmental Diversities*, 6(9s), 1520–1535. <https://jrtd.com>
- [8] Babatuan, J. M. D., Subong, A. R. A., & Yurango, C. P. (2025). Comparative analysis of NAT results across five learning areas among Buhangin East District public elementary schools. *Asian Research Journal of Arts & Social Sciences*, 23(7), 62–67. <https://doi.org/10.9734/arjass/2025/v23i7727>
- [9] Valderama, J. S. (2022). Profile variables of high and low performing schools: Discriminating factors of mathematics performance. *Journal of Computational Innovation and Analytics*, 1(2), 91–110. <https://doi.org/10.32890/jcia2022.1.2.5>
- [10] Kalaing, A. A. (2023). Selected performance variables: Their relationships to the National Achievement Test results in English and academic grade in English. *Global Scientific Journal*, 11(2), 111–123. <https://www.globalscientificjournal.com/>
- [11] Waluyo, B., & Panmei, B. (2021). English proficiency and academic achievement: Can students' grades in English courses predict their academic achievement? *MEXTESOL Journal*, 45(4), 1–15.
- [12] Devi, A. P. (2023). The relationship between English proficiency and academic achievement of Indonesian EFL postgraduate students. *Journal of English Language Learning*, 7(1), 303–308. <https://doi.org/10.31949/jell.v7i1.5566>
- [13] Hakorimana, E., Oye bimpe, A., & Andala, H. O. (2020). English language skills and students' academic performance in Rwandan public secondary schools: Case of Bugesera District. *Journal of Education*, 3(3), 35–43. Stratford Peer Reviewed Journals and Book Publishing.
- [14] Cantara, S. M. O., Esimos, M. J. V., Francisco, L. B., Jungco, S. J. S., Limson, M. C., Maligang, A. K. P., & Malubay, L. S. (2021). English language proficiency and school performance in English. *International Journal of Social Science and Human Research*, 4(12), 3768–3772. <https://doi.org/10.47191/ijsshr/v4-i12-43>
- [15] Lerongan, D. S. (2025). Teachers' scholastic achievement test and students' National Achievement Test in English: Basis for proficiency training design. *International Journal of Research and Innovation in Social Science (IJRISS)*, 9(2), 336–344. <https://doi.org/10.47772/IJRISS.2025.9020028>
- [16] Azarcon, B. R., & Zabala, C. P. (2022). English proficiency level and scholastic performance of Grade 11 students in a private higher education institution: Basis for an intervention material. *Psychology and Education*, 0(0), 1–14. <https://doi.org/10.5281/zenodo.7015878>
- [17] Anub, C. D. (2020). Factors contributing to the English National Achievement Test (NAT) performance. *Middle Eastern Journal of Research in Education and Social Sciences*, 1(2), 131–145. <https://doi.org/10.47631/mejress.v1i2.132>
- [18] Rayla, A. D., & Sonsona, R. P. J. V. (2021). Assessing senior high school students' oral proficiency skills in the new normal. *Science International (Lahore)*, 33(3), 153–157.
- [19] Dadulla, J. B. (2023). Self-esteem and English oral proficiency level of junior high school students in the Philippines. *Journal of Second and Multiple Language Acquisition (JSMULA)*, 11(3), 432–445.
- [20] Nwokedi, B. F. C. (2023). Influence of classroom environment on the academic performance of students in English language. *International Journal of Advance Social Sciences and Education (IJASSE)*, 1(4), 191–198. <https://doi.org/10.59890/ijasse.v1i4.732>
- [21] Orbeta, A. C., Jr., Melad, K. A. M., & Potestad, M. (2021). Correlates of test performance of 15-year-old students in the Philippines: Evidence from PISA (PIDS Discussion Paper Series No. 2020-57). Philippine Institute for Development Studies. <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps2057.pdf>
- [22] Acido, J. V., & Caballes, D. G. (2024). Assessing educational progress: A comparative analysis of PISA results (2018 vs. 2022) and HDI correlation in the Philippines. *World Journal of Advanced Research and Reviews*, 21(1), 462–474. <https://doi.org/10.30574/wjarr.2024.21.1.0020>
- [23] Tizon, C. M. (2019). Senior high school teachers' perceived level of communication skills and teaching performance. *International Linguistics Research*, 2(3), 17–29. <https://doi.org/10.30560/ilr.v2n3p17>
- [24] Bargo, D. D., & Go, M. B. (2021). Communicative language teaching (CLT) strategies in daily lesson plans of oral communication teachers and their alignment to standards in curriculum guide. *International Journal of Linguistics, Literature and Translation*, 4(6), 89–97. <https://doi.org/10.32996/ijllt.2021.4.6.11>