Exploring the Reading Profiles and Academic Performance of Grade 8 Learners: Insights from the Literacy and Numeracy (LAN) Program

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Abstract

This study examined the reading profiles and academic performance of Grade 8 learners in Sara, Western Philippines, within the framework of the Literacy and Numeracy (LAN) Program. Grounded in Vygotsky's Sociocultural Theory of Learning (1978), the research sought to determine the learners' reading levels, assess their academic performance, and identify the relationship between literacy proficiency and scholastic achievement. A quantitative descriptive–correlational design was employed, involving 60 purposively selected Grade 8 students who were assessed using the LAN reading evaluation tool and official academic records. Results revealed that most learners (46.7%) were at the *instructional level*, 23.3% were *independent readers*, and 30% were at the *frustration level*. Learners' academic performance corresponded to their reading proficiency, with *independent readers* achieving the highest average grades. Statistical analysis indicated a significant positive correlation (r = 0.654, p = 0.001) between reading profiles and academic performance, confirming that stronger reading ability predicts higher academic achievement. Major challenges in program implementation included limited time, insufficient reading materials, and large class sizes. The study concludes that the LAN Program contributes to literacy improvement but requires strengthened support systems for sustainability. It recommends enhanced teacher training, resource provision, and parental involvement to foster learners' transition from instructional to independent reading levels and improve academic outcomes.

Keywords: Literacy And Numeracy Program, Reading Profiles, Academic Performance, Grade 8 Learners, Sociocultural Theory, Literacy Education, Philippines

1. Introduction

Reading is a fundamental language skill that serves as the foundation for all learning. It enables learners to comprehend information, acquire new knowledge, and engage critically with texts across academic disciplines. As Gedik and Akyol (2022) emphasized, reading is not merely decoding written symbols but a cognitive process involving the construction of meaning through interaction with text. Similarly, Koray and Çetinkılıç (2020) explained that effective reading fosters comprehension and problem-solving, which are central to academic success. However, many students continue to struggle with reading proficiency, affecting their overall scholastic performance. Reading comprehension is therefore considered an essential indicator of literacy and a strong predictor of academic achievement (Alghonaim, 2020; Elleman & Oslund, 2019).

In the Philippine educational context, reading difficulties remain a persistent concern. The Programme for International Student Assessment (PISA) results from 2018 and 2022 revealed that Filipino learners consistently scored below proficiency levels in reading, with little improvement over time (Acido & Caballes, 2024). These findings point to systemic challenges in literacy development, highlighting the need

for intervention programs that address gaps in reading skills. Reading proficiency directly influences learners' ability to perform across subjects, as it underpins comprehension in science, mathematics, and social studies (Abocejo et al., 2022). Recognizing this, the Department of Education (DepEd) and various public schools have initiated literacy programs designed to improve reading fluency, comprehension, and overall academic performance.

One such initiative is the Literacy and Numeracy (LAN) Program, implemented in several schools in Western Philippines. The LAN Program aims to identify students' reading levels and provide interventions tailored to their needs through three core dimensions: *enrichment*, *consolidation*, and *intervention.* During enrollment, students undergo diagnostic reading assessments to determine their proficiency level—*independent*, *instructional*, or *frustration*—and are grouped accordingly. Teachers then design targeted learning activities to support struggling readers and improve their comprehension and academic performance. The LAN Program thus serves as a strategic response to the literacy challenges brought about by disrupted learning conditions following the COVID-19 pandemic (Sari & Oktaviani, 2021).

Understanding the relationship between learners' reading profiles and academic performance is critical for evaluating the effectiveness of such literacy interventions. Capin et al. (2022) stressed that profiling reading development helps identify learners' strengths and weaknesses early, allowing teachers to design evidence-based interventions. Similarly, Holopainen et al. (2020) found that students' reading profiles—defined by word recognition and comprehension—can predict academic outcomes and guide individualized instruction. Given these considerations, this study investigates the reading profiles and academic performance of Grade 8 learners under the LAN Program at a public secondary school in Sara, Western Philippines. It aims to determine whether the program effectively supports learners' reading development and contributes to improved academic performance. The findings of this study provide valuable insights into the role of literacy programs in addressing reading gaps and promoting educational equity in Philippine secondary schools.

Aim and Objectives

Aim

This study aims to examine the reading profiles and academic performance of Grade 8 learners in Sara, Western Philippines, within the context of the Literacy and Numeracy (LAN) Program.

Specific Objectives:
   a. To determine the reading profiles of Grade 8 learners as classified under the LAN Program (independent, instructional, or frustration level).
   b. To assess the academic performance of the learners based on their latest grading results.
   c. To analyze the relationship between learners' reading profiles and their academic performance.
   d. To identify challenges encountered by teachers and students in implementing the LAN Program.
   e. To propose recommendations that may enhance the effectiveness of the LAN Program in improving literacy outcomes.

Null Hypotheses

1. **H_{01}:** There is **no significant relationship** between the learners' reading profiles and their academic performance under the Literacy and Numeracy (LAN) Program.

2. **H_{o2}:** There is **no significant difference** in the learners' academic performance when grouped according to their reading profiles (independent, instructional, and frustration levels).
3. **H_{o3}:** There is **no significant difference** in the reading profiles of learners when grouped according to selected demographic variables such as sex and age.

Significance of the Study

This study holds significance for educators, school administrators, and policymakers as it provides empirical insights into how the Literacy and Numeracy (LAN) Program contributes to improving the reading skills and academic performance of junior high school learners. Reading proficiency is widely recognized as a foundation for success across all learning areas, making literacy interventions vital in addressing the academic challenges faced by Filipino students. The 2018 and 2022 PISA results revealed that Filipino learners continue to perform below expected levels in reading comprehension, reflecting deep-rooted gaps in literacy instruction and assessment (Acido & Caballes, 2024). By analyzing the reading profiles of Grade 8 learners, this study offers valuable data that can guide teachers in tailoring instruction to meet the diverse needs of students identified as independent, instructional, or frustration-level readers. Furthermore, the findings will help curriculum developers and school heads evaluate the LAN Program's implementation and improve its effectiveness through targeted reading interventions and monitoring systems. For policymakers, the results emphasize the importance of sustaining literacy programs through adequate resources, teacher training, and performance tracking mechanisms. The study also contributes to the growing body of literature on literacy education in the Philippine context by providing localized evidence of how structured reading interventions can support equitable learning recovery efforts in the post-pandemic period (Sari & Oktaviani, 2021).

Theoretical Framework

This study is anchored on Vygotsky's Sociocultural Theory of Learning (1978), which posits that cognitive development, including literacy skills, occurs through social interaction and guided instruction. According to Vygotsky, learning is mediated by language and occurs within the *Zone of Proximal Development (ZPD)*—the range between what a learner can achieve independently and what can be accomplished with teacher support or scaffolding. Within the context of the Literacy and Numeracy (LAN) Program, this theory explains how learners at varying reading levels—independent, instructional, or frustration— progress through targeted interventions and teacher-facilitated activities. The LAN Program serves as a structured platform where reading skills are developed through social engagement, peer collaboration, and scaffolded instruction aligned with learners' current proficiency. This theoretical grounding supports the idea that effective literacy instruction requires active guidance and contextualized learning experiences that bridge gaps in comprehension and fluency (Holopainen et al., 2020). Thus, the study applies Vygotsky's Sociocultural Theory to understand how differentiated instruction and teacher mediation contribute to improving learners' reading profiles and, consequently, their academic performance.
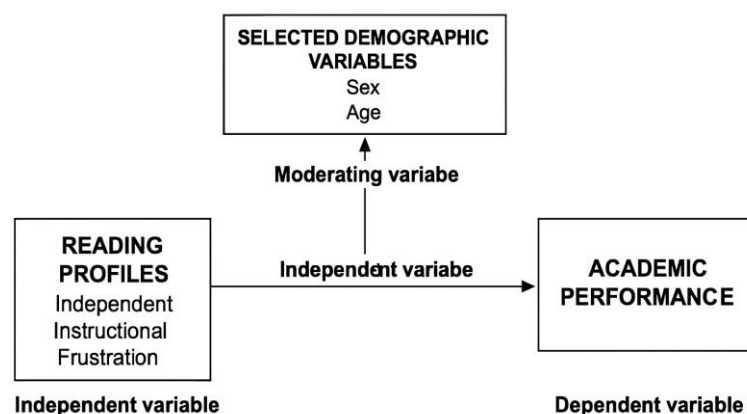
Conceptual Framework

Figure 1. Diagram of Conceptual Framework

Figure 1 presents the research paradigm of the study, illustrating the relationship among the key variables investigated under the Literacy and Numeracy (LAN) Program. The diagram shows that the Independent Variable is the learners' *Reading Profiles*, categorized into three levels—*Independent*, *Instructional*, and *Frustration*. These levels represent students' varying degrees of reading fluency and comprehension, which are expected to influence their scholastic outcomes. The Dependent Variable is *Academic Performance*, measured through learners' general average in core academic subjects. The arrows between the variables indicate the hypothesized influence of reading proficiency on students' academic achievement, suggesting that higher reading levels are associated with stronger academic results. On the other hand, Sex and Age serve as Moderating Variables, representing demographic factors that may affect the strength or direction of this relationship. This paradigm is grounded in Vygotsky's Sociocultural Theory, which posits that literacy development is shaped by guided instruction and social context. Overall, the figure provides a visual overview of how reading competence, as developed through the LAN Program, contributes to students' overall academic performance while considering individual learner differences.

2. Review of Related Literature

Reading is a complex cognitive and linguistic process that involves decoding, comprehension, and meaning construction. According to Elleman and Oslund (2019), effective reading requires not only word recognition but also the ability to integrate background knowledge and interpret textual information critically. Reading proficiency serves as a foundation for all academic learning, as students with higher reading competence demonstrate stronger performance across subjects (Alghonaim, 2020). International research has consistently highlighted the correlation between reading ability and academic success, suggesting that comprehension difficulties often translate into lower achievement in other disciplines (Gedik & Akyol, 2022). Hence, literacy interventions that develop decoding fluency, vocabulary, and comprehension skills are vital in supporting learners' overall educational progress.

In the Philippine context, reading literacy remains one of the most pressing educational challenges. The results of the Programme for International Student Assessment (PISA) in both 2018 and 2022 indicated that Filipino students scored significantly below the OECD average in reading, reflecting persistent issues in language instruction and text comprehension (Acido & Caballes, 2024). Studies by Abocejo et al. (2022) and De Vera and Custodio (2023) confirmed that low reading proficiency among Filipino learners is closely

linked to limited vocabulary exposure, inadequate reading motivation, and insufficient instructional support. These findings reveal the urgency of improving school-based literacy programs that target foundational skills such as reading fluency and comprehension. The Department of Education (DepEd) has responded through initiatives such as the *Every Child a Reader Program (ECARP)* and the *Literacy and Numeracy (LAN) Program*, which emphasize diagnostic assessment and tailored intervention for struggling readers.

The LAN Program represents a systematic approach to improving literacy by identifying learners' reading levels and providing targeted instruction based on their profiles—independent, instructional, or frustration (Capin et al., 2022). Drawing on Vygotsky's Sociocultural Theory, the program emphasizes scaffolded learning and peer collaboration as tools for developing reading competence. Research by Holopainen et al. (2020) showed that learners' reading profiles are strong predictors of academic performance, demonstrating the value of continuous assessment and differentiated teaching. Similarly, Sari and Oktaviani (2021) argued that literacy initiatives must adapt to students' individual learning contexts and utilize interactive strategies to sustain reading engagement. Within this framework, the present study investigates how the LAN Program influences the reading profiles and academic performance of Grade 8 learners in Western Philippines, contributing evidence to the broader discourse on literacy improvement and equitable learning recovery in the post-pandemic education landscape.

3. Methodology

Research Design

This study employed a quantitative descriptive–correlational design to examine the relationship between the reading profiles and academic performance of Grade 8 learners under the Literacy and Numeracy (LAN) Program. The descriptive component determined learners' reading levels—categorized as *independent*, *instructional*, or *frustration*—while the correlational component analyzed whether these profiles were associated with academic achievement. This design was appropriate because it allowed the researchers to describe existing literacy conditions and test for relationships between variables without manipulating any factors (Creswell & Creswell, 2018).

Respondents and Sampling Technique

The study involved 60 Grade 8 learners enrolled in a public secondary school in Sara, Western Philippines, during the 2023–2024 academic year. Participants were selected using purposive sampling, focusing on students officially assessed under the LAN Program. The sample represented diverse reading levels and academic standings to capture variations in literacy development. Inclusion criteria required students to have completed the diagnostic reading test and participated in at least one LAN intervention cycle.

Research Instrument

Data were collected using a teacher-administered reading assessment form and official grade records. The reading assessment followed the LAN Program's standard framework, classifying learners based on oral reading fluency, comprehension, and decoding accuracy. The instrument was validated by three reading specialists to ensure content relevance and alignment with DepEd's literacy standards. Academic performance data were drawn from the learners' general averages across core subjects for the same grading period. The reading test results and academic grades were coded and tabulated for analysis.

Data Gathering Procedure

Prior to data collection, formal permission was obtained from the school principal and the Department of Education Division Office. The researchers coordinated with language teachers to administer the reading assessment during regular class hours. Learners read selected passages aloud, followed by comprehension questions. Based on accuracy and fluency, each student was categorized into one of the three LAN reading levels. After assessment, teachers submitted the learners' academic performance records, which were paired with their reading profile data. Confidentiality was maintained by anonymizing student names and restricting access to data only to the research team.

Data Analysis

Data were analyzed using descriptive and inferential statistics. Frequencies and percentages described the distribution of learners across reading levels. Mean and standard deviation summarized academic performance by category. To test the relationship between reading profiles and academic achievement, the Analysis of Variance (ANOVA) and Pearson correlation were applied at a 0.05 level of significance. These statistical tools determined whether variations in reading proficiency corresponded to significant differences in learners' academic outcomes.

Ethical Considerations

The study observed ethical standards as outlined by the Department of Education and institutional research guidelines. Participants were informed of the study's purpose and assured that their responses and academic records would remain confidential. Parental consent and school authorization were obtained before data collection. The study adhered to the principles of voluntary participation, anonymity, and non-maleficence throughout the research process.

4. Results and Discussion

Table 1
Distribution of Grade 8 Learners According to Their Reading Profiles under the LAN Program

Reading Profile	Frequency (f)	Percentage (%)	Interpretation
Independent	14	23.3	Reads fluently with comprehension
Instructional	28	46.7	Reads with guidance and partial comprehension
Frustration	18	30.0	Struggles to decode and comprehend
Total	**60**	**100.0**	—

Table 1 reveals that most learners (46.7%) fall under the *instructional* level, meaning they can comprehend texts with teacher assistance, while 23.3% are *independent* readers capable of reading fluently with comprehension. However, 30% remain at the *frustration* level, struggling to decode and understand texts. This distribution suggests that although the LAN Program has improved literacy among some students, reading difficulties persist among nearly one-third of the participants. These findings align with Capin et al. (2022), who emphasized that students with limited vocabulary and decoding skills often require sustained intervention to achieve functional literacy. Similarly, Elleman and Oslund (2019) noted that instructional-level readers benefit most from scaffolded learning within their Zone of Proximal

Development (ZPD), which supports the LAN Program's design grounded in Vygotsky's theory of guided learning.

Table 2
Academic Performance of Grade 8 Learners Based on Their Reading Profiles

Reading Profile	Mean Grade (%)	Interpretation
Independent	89.25	Very Satisfactory
Instructional	84.36	Satisfactory
Frustration	78.42	Fairly Satisfactory
Overall Mean	**83.68**	**Satisfactory**

As shown in Table 2, learners at the *independent* level achieved the highest mean academic grade (M = 89.25), followed by *instructional* readers (M = 84.36), while *frustration*-level readers scored the lowest (M = 78.42). The overall mean rating of **83.68%** indicates a satisfactory performance across all learners. The data demonstrate a clear relationship between reading proficiency and academic achievement, confirming that stronger readers tend to perform better in their subjects. This pattern corroborates findings by Gedik and Akyol (2022), who concluded that reading comprehension significantly predicts performance in mathematics, science, and language arts. Similarly, Abocejo et al. (2022) found that Filipino students' academic success strongly correlates with reading fluency and comprehension, reinforcing that literacy is a foundational component of scholastic achievement.

Table 3
Relationship Between Reading Profiles and Academic Performance of Grade 8 Learners

Variables	r-value	p-value	Interpretation
Reading Profile vs. Academic Performance	0.654	0.001	Significant Relationship

Table 3 shows that the computed correlation coefficient (r = 0.654, p = 0.001) indicates a significant positive relationship between learners' reading profiles and academic performance. This suggests that as students' reading proficiency improves, their academic performance also increases. The result supports the assertion of Holopainen et al. (2020) that reading profiles are predictive of learners' academic outcomes, as comprehension enables students to process and apply information across disciplines. The finding also validates Vygotsky's (1978) premise that learning occurs most effectively when instruction is scaffolded according to learners' developmental level. Therefore, the LAN Program's emphasis on differentiated reading instruction appears instrumental in enhancing not only literacy skills but also broader academic performance.

Table 4
Common Challenges Encountered in the Implementation of the LAN Program

Challenges Identified	Frequency (f)	Percentage (%)	Rank
Limited time for reading intervention	45	75.0	1
Insufficient reading materials	39	65.0	2
Large class size	34	56.7	3
Inconsistent parental support	32	53.3	4
Lack of training for teachers	28	46.7	5

As shown in Table 4, the primary challenge in implementing the LAN Program was limited time for reading intervention (75%), followed by a lack of adequate reading materials (65%). Teachers also cited large class sizes (56.7%) and inconsistent parental support (53.3%) as significant constraints. These findings are consistent with Abocejo et al. (2022), who reported that teacher workload, resource shortages, and insufficient parental involvement hinder the sustainability of literacy programs in public schools. Capin et al. (2022) similarly emphasized that effective literacy instruction requires manageable teacher-student ratios and access to varied reading resources. These challenges indicate the need for policy-level support to ensure that LAN initiatives are properly funded, equipped, and sustained.

Summary of Findings

The results highlight that the majority of learners are instructional readers, with a strong correlation between reading proficiency and academic achievement. Students who read independently achieve significantly higher academic performance, demonstrating that literacy competence directly enhances learning outcomes. The study also revealed operational barriers to the LAN Program's implementation, including time constraints, inadequate materials, and teacher training gaps. These findings underscore the need for sustained instructional support, teacher capacity-building, and community involvement to strengthen reading interventions in Philippine schools.

Implications of the Results

The results of this study carry important implications for literacy instruction, program implementation, and educational policy. The significant relationship between learners' reading profiles and academic performance confirms that improving reading proficiency is key to academic success across all subject areas. This suggests that interventions like the Literacy and Numeracy (LAN) Program should remain a central strategy in strengthening foundational literacy skills among junior high school students. As Vygotsky's Sociocultural Theory emphasizes, learning occurs most effectively through scaffolded instruction and guided social interaction, meaning that teachers play a vital role in facilitating progress from instructional to independent reading levels. Schools should therefore ensure that teachers are adequately trained to implement differentiated reading interventions that address the specific needs of learners at varying proficiency levels. Moreover, the challenges identified—such as time constraints, limited resources, and large class sizes—highlight systemic issues that must be addressed to sustain literacy programs. Policymakers and administrators should prioritize resource allocation, teacher development, and community engagement to ensure the long-term success of the LAN Program and similar literacy initiatives. Finally, the findings underscore that reading development is not an isolated goal but a foundation for lifelong learning, academic achievement, and equitable education outcomes.

5. Conclusion and Recommendations

Conclusion

This study investigated the reading profiles and academic performance of Grade 8 learners under the Literacy and Numeracy (LAN) Program in Sara, Western Philippines. The results revealed that most students were at the instructional reading level, while a smaller portion were independent or frustration-level readers. Learners who demonstrated higher reading proficiency achieved better academic performance, and a statistically significant correlation was found between reading profiles and academic achievement. These findings affirm that reading competence directly contributes to scholastic success and

supports the LAN Program's purpose of addressing literacy gaps through targeted interventions. The study further identified several implementation challenges, including insufficient reading materials, limited instructional time, and inadequate teacher training, which affect program efficiency. Grounded in Vygotsky's Sociocultural Theory, the study concludes that scaffolded instruction and peer-supported learning are essential to improving reading outcomes. Strengthening the LAN Program through sustained support, monitoring, and training will help ensure that learners transition from dependent to independent readers, thereby enhancing their academic and lifelong learning potential.

Recommendations

In light of the findings, this study recommends a series of actions to enhance the implementation and effectiveness of the Literacy and Numeracy (LAN) Program. First, teachers should integrate continuous diagnostic reading assessments and individualized instruction to accurately address learners' reading needs. Reading sessions should be extended beyond class hours or integrated into other subjects to reinforce literacy across the curriculum. Second, school administrators should ensure adequate provision of reading materials and adopt classroom libraries or mobile reading corners to support diverse reading levels. Third, professional development programs must be provided for teachers, focusing on differentiated instruction, scaffolding techniques, and effective literacy interventions. Fourth, parental and community involvement should be strengthened by organizing literacy support activities, reading partnerships, and parent awareness sessions about the importance of home reading habits. Finally, future researchers are encouraged to conduct longitudinal or mixed-method studies to further evaluate the long-term effects of the LAN Program and to explore how digital literacy tools could complement traditional reading interventions. Implementing these recommendations will contribute to a more inclusive, evidence-based, and sustainable literacy environment that empowers students to achieve higher levels of academic performance.

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