

How to Cite

Cobeña-Anchundia, H. A. (2025). Reading comprehension in the cognitive performance of Language and Literature in high school students. *International Journal of Social Sciences*, 8(3), 86-92.
<https://doi.org/10.21744/ijss.v8n3.2432>

Reading Comprehension in the Cognitive Performance of Language and Literature in High School Students

Helen Auxiliadora Cobeña-Anchundia

Universidad Laica Eloy Alfaro de Manabí, Extensión Chone, Ecuador

Maestría en Educación con mención en Lingüística y Literatura, Cohorte II

Corresponding author email: helen.cobena@pg.ulead.edu.ec

Abstract---*The low level of reading comprehension among students has triggered a series of challenges that affect their cognitive, academic, and professional development. This deficit has compromised students' ability to understand texts, thus limiting their ability to learn and apply concepts and skills in different educational contexts. The objective was to analyze the performance of high school students in the area of reading comprehension to boost their cognitive development at the Amazonas Educational Unit, located in the Chone Canton, Manabí province, during the 2023-2024 school year. For the development of the research, a methodology with a mixed quantitative-qualitative approach was used, in which the survey and observation sheet were applied as research techniques. The sample consisted of 243 high school students and 10 teachers from the Language and Literature department at the Amazonas Educational Unit in the Chone canton. The sample was a random sample of 100 high school students and 10 teachers from the Language and Literature department at the Amazonas Educational Unit in the Chone canton. The results showed a diverse and well-established educational practice among teachers, with a strong emphasis on integrating reading into their teaching.*

Keywords---*cognitive development, pedagogical strategies, reading comprehension, students.*

Introduction

At an international level, [Sotelo \(2023\)](#) suggests that there is a significant correlation between students' motivation and their reading performance. Intrinsically motivated students tend to show greater interest in reading and are more willing to actively engage with the text. This increased disposition towards reading can lead to a significant improvement in content comprehension. In addition, it has been observed that motivated students tend to approach reading with a more positive attitude, allowing them to face challenges and overcome obstacles more easily. Therefore, fostering students' motivation can be an effective strategy to improve not only their reading comprehension but also their overall academic performance.

In the Latin American context, reading comprehension stands out as a fundamental pillar in the educational development of secondary school students, as [González \(2021\)](#) highlights, this ability not only involves the ability to decode words and phrases, but goes further, allowing students to interpret and reflect on the content of the texts, by understanding a text, students not only acquire specific knowledge, but also develop key cognitive skills, such as reasoning and critical thinking.

In Ecuador, it was concluded that reading comprehension plays a fundamental role in enabling students to interpret and reflect on the content of literary texts. This process not only promotes the development of academic skills but also contributes to the cultural and emotional enrichment of young people, fostering a deeper and more meaningful understanding of diverse aspects of life and society ([Aldaz et al., 2023](#)).

The problem of poor academic performance in relation to reading comprehension has been a complex and multifaceted phenomenon that has significantly impacted students' educational performance. Low levels of reading comprehension among students have resulted in a series of challenges that have affected their academic and professional development. This deficit has compromised students' ability to access the knowledge contained in texts,

thus limiting their ability to learn and apply concepts and skills in different educational contexts. Furthermore, the lack of reading comprehension has hindered effective participation in classes, debates, and group activities, which has potentially negatively affected social interaction and the development of communication skills (Moghadam et al., 2012).

Given this problem, a study was conducted to analyze the performance of high school students in reading comprehension in order to boost their cognitive development at the Amazonas Educational Unit, located in the Chone Canton, Manabí province, during the 2023-2024 school year.

The research was carried out at the Amazonas Educational Unit of the Chone Canton, Manabí province in the 2023-2024 school period, where it has been shown that high school students face challenges about reading comprehension and their cognitive performance in the area of Language and Literature, which significantly affects their academic performance, therefore, to demonstrate the aforementioned, a methodology with a mixed quantitative-qualitative approach is used, which includes the application of surveys and observation sheets for both students and teachers, to collect quantitative information on the perceptions, attitudes and experiences of students and teachers to reading comprehension and their cognitive performance (Andrade & Azogue, 2023).

On the other hand, observation sheets have offered the opportunity to collect qualitative data on the behavior and performance of students and teachers in reading and teaching situations. Through direct observation, it has been possible to capture aspects such as the level of attention of students, their reading strategies, the degree of participation in reading activities, as well as the techniques and approaches used by teachers in teaching reading comprehension (Cedeño et al., 2023).

The population of this research consisted of 243 high school students and 10 teachers from the Language and Literature area of the Amazonas Educational Unit in the Chone canton. The sample corresponded to 100 high school students and 10 teachers from the Language and Literature area of the Amazonas Educational Unit in the Chone canton. The results obtained from the surveys of students and teachers, together with the observations made, provided a comprehensive view of the situation of reading comprehension and cognitive performance at the Amazonas Educational Unit during the 2023-2024 school year. The widespread commitment of students to the development of reading comprehension skills was highlighted, supported by the consensus on the importance of the pedagogical strategies employed by teachers (Sampaio & Almeida, 2016).

Furthermore, teachers have demonstrated a diverse and well-established educational practice, with a strong emphasis on integrating reading into their teaching. Regarding student performance, areas of strength have been identified in reading comprehension skills, although there is still room for further growth, especially in vocabulary management and text analysis, and synthesis. However, proficiency in oral and written expression has been demonstrated, suggesting a good level of communication (Carson et al., 2016).

These findings have provided a solid foundation for the design and implementation of effective interventions that boost the development of reading comprehension skills and cognitive performance among high school students at the Amazonas Educational Unit.

Materials and Methods

Surveys were administered to students and teachers in the Language and Literature area. These surveys allowed for the collection of quantitative information on students' and teachers' perceptions, attitudes, and experiences regarding reading comprehension and their cognitive performance (Andrade & Azogue, 2023). As part of the survey's methodological approach, pens and other writing utensils were distributed to both students and teachers.

In addition, observation sheets were used for both students and teachers, allowing for the collection of qualitative data on participants' behavior and performance in reading and teaching situations. Through direct observation, it was possible to capture aspects such as students' attention level, their reading strategies, their level of participation in reading activities, as well as the techniques and approaches used by teachers in teaching reading comprehension (Cedeño et al., 2023).

Together, both the surveys and the observation sheets provided a comprehensive view of the status of reading comprehension and cognitive performance at the Amazonas Educational Unit. This helped to understand the perceptions, experiences, and practices related to reading in the educational context analyzed, which allowed us to identify areas of strength and opportunities for improvement in the development of reading comprehension skills and cognitive performance among high school students (Mendoza-Pinargote & Reyes-Meza, 2022).

In this study of reading comprehension and its impact on cognitive performance in the area of Language and Literature among high school students, a mixed-methods research approach was used, combining qualitative and quantitative elements. This approach involved the collection and analysis of both types of data, followed by their

integration and joint discussion to obtain a more complete understanding of the phenomenon studied (Hernández & Mendoza, 2018).

Analysis of Results

To research "Comprehensive reading in the cognitive performance of Language and Literature in high school students," A specific population and sample were defined. The research population consisted of 243 high school students and 10 teachers from the Language and Literature department at the Amazonas Educational Unit in the Chone canton. The random sample consisted of 100 high school students and 10 teachers from the Language and Literature department at the Amazonas Educational Unit in the Chone canton.

The results of surveys conducted with high school students at the Amazonas Educational Unit in the Chone Canton during the 2023-2024 academic year are shown. The frequency of pre-reading activities, such as activating prior knowledge, before approaching a new text in class is surveyed in Table 1. The pre-reading activities are shown.

Table 1
Pre-reading activities

Alternative	Frequency	Percentage (%)
Frequently	95	95
Always	5	5
Total	100	100

Resource. High school students from the Amazonas Educational Unit in the Chone Canton

The complete absence of responses in the "Never" and "Occasionally" categories suggests consistency in pedagogical strategies, indicating a consensus on the importance of pre-reading activities. The 95% of responses in the "Frequently" category demonstrate a clear intention to nurture reading comprehension. The 5% in the "Always" category indicates a deeper commitment, suggesting more specific pedagogical practices or a conviction in their effectiveness. Table 2 shows the results of surveys conducted with teachers to determine whether they encourage the ability to infer the meaning of unknown words from the context in which they appear in the text.

Table 2
Skills for inferring the meaning of words

Alternative	Frequency	Percentage (%)
Occasionally	95	95
Frequently	3	3
Always	2	2
Total	100	100

Resource: High school students from the Amazonas Educational Unit in the Chone Canton

Ninety-five percent of students indicated that teachers occasionally encourage this skill, suggesting that inferring meaning from context is not constant; it is still incorporated at certain times. Teachers may choose to address this skill in specific situations, such as when they encounter keywords that could enrich their overall understanding of the text. On the other hand, 3% responded "Frequently" and 2% "Always." Although these percentages are modest, they suggest that there is a group of teachers who prioritize and regularly reinforce the skill of inferring meaning from context. Teachers were asked about reading comprehension in the cognitive performance of Language and Literature in high school students, asking if they use teaching strategies that promote reading comprehension. The results are shown in Table 3.

Table 3
They apply teaching strategies that promote their students' reading comprehension

Alternative	Frequency	Percentage (%)
Yeah	10	100
Total	10	100

Resource: High school teachers from the Amazonas Educational Unit in the Chone Canton

100% of the teachers surveyed used strategies to improve reading comprehension, reflecting a strong consensus on their importance. This indicates a deep-rooted and diverse educational practice, from active reading techniques to reflective and discursive activities, prioritizing the development of reading comprehension skills. The survey also asked whether teachers included reading activities in their Language and Literature classes.

Table 4
Inclusion of reading activities

Alternative	Frequency	Percentage (%)
Always	8	80
Sometimes	2	2
Total	10	100

Resource: High school teachers from the Amazonas Educational Unit in the Chone Canton.

Eighty percent of teachers always include reading activities in their Language and Literature classes, reflecting a majority consensus on its importance. Twenty percent do so only sometimes, showing some variability. None select "Rarely" or "Never," demonstrating a widespread commitment to integrating reading into teaching. An observation sheet was administered, providing a unique window into the reality of students' cognitive performance. The results reflect a comprehensive assessment of various skills related to reading comprehension and language arts performance, as shown below.

1. Reading comprehension skills (4/5 points):

The score of 4 out of 5 in reading comprehension indicates solid performance. This suggests that students have an outstanding ability to understand and process information in texts, although there is still room for further growth. The focus should be on further strengthening this ability for overall excellence in reading comprehension.

2. Oral and written expression (3/5 points):

With a score of 3 out of 5 in oral and written expression, the students demonstrate proficiency, but there is room for improvement. This could indicate that while written and oral communication is effective, some aspects can still be refined to achieve a more refined and effective expression.

3. Vocabulary management (3/5 points):

The score of 3 for vocabulary management suggests that students have adequate word knowledge but could benefit from expanding and applying their vocabulary more richly in varied contexts.

4. Analysis and synthesis of texts (3/5 points):

With a score of 3 in Text Analysis and Synthesis, students demonstrate a moderate ability to break down and reorganize information. This area could be strengthened to foster deeper analytical skills.

- Results of the observation sheet for high school teachers at the Amazonas Educational Unit in the Chone Canton regarding reading comprehension and cognitive performance in Language and Literature among high school students at the Amazonas Educational Unit during the 2023-2024 school year.

An observation sheet was applied to high school teachers at the Amazonas Educational Unit. This provides an enlightening view of the pedagogical practices focused on reading comprehension and cognitive performance in Language and Literature during the 2023-2024 school year, as shown below:

1. Planning activities appropriate to the students' level (4/5 points):

A score of 4 indicates that activity planning is exceptionally aligned with the students' level. This suggests a keen understanding of students' abilities and needs, ensuring that activities are challenging yet achievable, which can significantly contribute to the development of reading comprehension.

2. Use of effective teaching strategies (4/5 points):

With a score of 4 for the use of effective teaching strategies, teachers demonstrate strong pedagogical skills. This result suggests the application of methods that optimize learning, fostering deep understanding and active student engagement.

3. Variety of teaching resources used (3/5 points):

Although a score of 3 indicates an acceptable level, it could suggest an opportunity to further diversify teaching resources. Incorporating a variety of media and tools could enrich the learning experience and address different learning styles.

4. Promoting active student participation (3/5 points):

The score of 3 for encouraging active participation suggests that there is an acceptable level of classroom interaction, but additional strategies could be explored to maximize student participation and contribution.

Discussion of Results

Reading comprehension is an interactive process that involves the active construction of meanings by the reader (Mendoza, 2022). According to Núñez (2023), this skill goes beyond understanding the superficial content of a text, requiring reflection and connection with prior knowledge. Theories of information processing, such as that of Mera (2022), and meaning construction, such as that of Mora (2023), offer perspectives on how readers interact with the text and construct meanings. Furthermore, the role of reading comprehension in students' cognitive and lexical development is highlighted (Agüero, 2021; Ayala & Martínez, 2024).

Student motivation and attitude are crucial for their reading comprehension (Sotelo, 2023; Bustillos, 2023). Greater mastery of decoding skills and reading fluency, as well as a broad vocabulary and prior knowledge, also influence comprehension (Tirado, 2024; Martínez, 2022). Quiroga (2023) highlights the importance of teaching specific strategies to improve comprehension, while Saravia (2023) emphasizes the need to analyze literary elements for in-depth interpretation.

The introduction of recreational activities can increase motivation and improve reading comprehension (Arias, 2022). Reading comprehension not only improves language skills but also enriches understanding of the world and promotes critical thinking (Chica, 2022; Pailiacho, 2023). The digital age has introduced new dynamics to reading, with digital tools that can enhance comprehension (Suarez, 2022). Furthermore, reading comprehension correlates with academic performance in various areas of knowledge (Salinas, 2023).

Metacognition, understood as the ability to monitor and regulate one's thinking process, is fundamental to reading comprehension and written expression (Cataño, 2023; Franco, 2024). Students who develop metacognitive skills are better able to plan, monitor, and evaluate their learning, which translates into a deeper understanding of texts and more precise and reflective written expression.

Conclusions

The exhaustive review of the literature on reading comprehension and cognitive performance in the area of Language and Literature provided a solid foundation for understanding the relevant influencing factors. This first step allowed us to identify and contextualize the key aspects that could affect the academic performance of high school students at the Amazonas Educational Unit in the 2023-2024 school year.

The assessment conducted to determine the level of influence of the identified factors on the development of students' reading comprehension and cognitive performance provided a clear view of the institution's areas of strength and weakness in the educational setting. This analysis allowed the identification of critical points requiring intervention to improve students' academic performance.

The specific identification of the factors that exerted a significant influence on the development of reading comprehension and the cognitive performance of high school students allowed for the establishment of a logical and progressive chain of research. This final phase of the study not only deepened the understanding of the factors that affected academic performance but also provided a framework for the design of specific educational interventions aimed at improving the quality of teaching and learning in the educational institution.

References

- Aldaz, A., Espin, P. M. A., Bonilla, A. C. C., De la Cruz Quinteros, G. E., & Quishpe, M. R. P. (2023). La Importancia de la Mediación Lectora en los Textos Literarios para Estudiantes. *Ciencia Latina: Revista Multidisciplinar*, 7(5), 5611-5625.
- Andrade, S., & Azogue, T. (2023). Estrategia cognitiva para el desarrollo de lectura comprensiva en estudiantes de educación básica. Ambato: Repositorio PUCESA.

- Arias, H. (2022). Gamificación una herramienta pedagógica para motivar la lectura en los niños y niñas de cuarto año de Educación General Básica. Tesis de maestría, Universidad Tecnológica Indoamérica.
- Ayala, D., & Martínez, J. (2024). Las rimas para el desarrollo de la expresión verbal en niños y niñas de 3 a 4 años de edad en el centro de educación inicial “Carlota Noboa de Durango” del cantón Guaranda, provincia Bolívar, año 2023. Universidad Estatal de Bolívar.
- Bustillos, M. (2023). Motivación a la lectura como estrategia didáctica en el ámbito de Comprensión y Expresión del lenguaje en los niños y niñas de 4 a 5 años. Tesis de maestría.
- Carson, V., Hunter, S., Kuzik, N., Wiebe, S. A., Spence, J. C., Friedman, A., ... & Hinkley, T. (2016). Systematic review of physical activity and cognitive development in early childhood. *Journal of science and medicine in sport*, 19(7), 573-578. <https://doi.org/10.1016/j.jsams.2015.07.011>
- Cataño, G. (2023). Prácticas de escritura desde el formato impreso y digital, cualificando los procesos de comprensión lectora y competencia escritural en el ámbito escolar. Un estudio de caso. Antioquia: Repositorio Institucional Universidad de Antioquia.
- Cedeño, C., Córdova, K., & Verdezoto, F. (2023). Técnicas de estudio utilizadas por los docentes durante el proceso de intervención educativa para fortalecer la lectoescritura en los alumnos del séptimo año de la escuela de educación básica “Luis Aurelio González” de la ciudad de Guaranda, provincia Bol. Repositorio Universidad Estatal de Bolívar.
- Chica, M. (2022). Polo del conocimiento. <https://polodelconocimiento.com/ojs/index.php/es/article/view/5610>
- Franco, G. (2024). Plan de estrategias metacognitivas para mejorar la comprensión lectora en estudiantes de educación básica superior. Piura.
- Gonzales, R. (2021). Perspectivas y retos del pensamiento crítico: nivel de desarrollo en estudiantes de pregrado. Universidad Nacional Pedro Ruiz Gallo, Perú.
- Hernández, R., & Mendoza, C. (2018). Metodología de la investigación: Las rutas cuantitativa, cualitativa y mixta. Mc Graw Hill Education.
- Martínez, J. (2022). Adaptación del modelo de comprensión lectora directo y de la mediación inferencial para hispanohablantes: una revisión sistemática. Elsevier.
- Mendoza, E. (2022). Estrategia metodológica para el desarrollo de la comprensión lectora en estudiantes de inglés del centro de idiomas de una universidad de Lima. Universidad San Ignacio de Loyola, Lima.
- Mendoza-Pinargote, R. L., & Reyes-Meza, O. B. (2022). Language learning in the reading comprehension of elementary school students. *International Journal of Social Sciences*, 5(2), 124-130. <https://doi.org/10.21744/ijss.v5n2.1900>
- Mera, F. (2022). Estrategias cognitivas y metacognitivas para mejorar “reading comprehension” en estudiantes de Pedagogía del Inglés en la Universidad de Guayaquil, 2021. Universidad César Vallejo. Repositorio de la Universidad César Vallejo.
- Moghadam, S. H., Zainal, Z., & Ghaderpour, M. (2012). A review on the important role of vocabulary knowledge in reading comprehension performance. *Procedia-Social and Behavioral Sciences*, 66, 555-563. <https://doi.org/10.1016/j.sbspro.2012.11.300>
- Mora, R. (2023). Lectoras y lectores digitales. Cualificación de la lectura crítica de contenidos digitales con estudiantes de séptimo grado. Bogotá.
- Núñez, O. (2023). Lectura comprensiva de textos literarios en el proceso de enseñanza y aprendizaje en el área de lengua y literatura de los estudiantes de octavo año de educación general básica paralelo “A” de la “unidad educativa Galo Plaza Lasso” del cantón Echeandia. Universidad Estatal de Bolívar.
- Pailiacho, H. (2023). Relación entre los estilos de aprendizaje y el rendimiento académico en estudiantes de tercero de bachillerato de la Unidad Educativa Juan Francisco Yerovi, (Tixán, Alausí, Chimborazo) periodo 2021-2022.
- Quiroga, Y. (2023). Fortalecimiento de comprensión lectora de los niños de grado primero de la sede Gabriela Mistral del colegio Santo Domingo Savio por medio estrategias pedagógicas. Universidad Nacional Abierta y a Distancia UNAD.
- Salinas, A. (2023). Comprensión Lectora y Rendimiento Académico en Estudiantes del noveno grado de la Unidad Educativa "Pérez Pallares" Quito, Ecuador, año lectivo 2022-2023. Unidad Educativa "Pérez Pallares", Quito.
- Sampaio, D., & Almeida, P. (2016). Pedagogical strategies for the integration of Augmented Reality in ICT teaching and learning processes. *Procedia Computer Science*, 100, 894-899. <https://doi.org/10.1016/j.procs.2016.09.240>
- Saravia, K. (2023). Literatura e interculturalidad: presencias y ausencias de las voces culturales en la antología “Baúl de las palabras”. Quito: Repositorio Digital FLACSO Ecuador.
- Sotelo, M. (2023). La comprensión lectora basada en la sensibilización en estudiantes de la Educación Primaria. Centro Nacional de Control de Energía, México.

Suarez, M. (2022). Incentivar el acercamiento a la lectura de cuentos en los estudiantes de grado sexto de la Institución Educativa San Joaquín, a través del RED “Ocho Recursos para mejorar la Comprensión Lectora”. Trabajo de grado.

Tirado, M. (2024). Dime cómo lees y te diré cuánto aprendes: ¿qué nos aporta la investigación a la enseñanza de la lectura?