



ORIGINAL

Reading comprehension levels in mestizo children from La Guajira: a comparative analysis between literary and scientific texts

Niveles de comprensión lectora en niños mestizos de La Guajira: un análisis comparativo entre textos literarios y científicos

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ABSTRACT

This study analyzes the levels of reading comprehension, both literal and inferential, in white mestizo children of 11 and 12 years of age from schools in the Department of La Guajira, Colombia. The results obtained in two types of texts are compared: artistic-recreational and techno-scientific. A sample of 106 children in 5th grade of elementary school, from 14 schools distributed in 5 zones of the department, were given 424 reading tests. The evaluation instruments were based on the approaches of authors such as Ramos Chagoya, De Zubiría, Martínez and Cuentas. The results reveal that the averages of literal comprehension in artistic-recreational texts are significantly higher than those of inferential comprehension in these texts. Similarly, a significant difference is observed in favor of literal comprehension in artistic-recreational texts compared to literal comprehension in techno-scientific texts. As for the comparison between literal and inferential comprehension in techno-scientific texts, no significant difference was found. However, a significant difference was found between literal comprehension of artistic-recreational texts and low literal comprehension in techno-scientific texts. In relation to the percentage of students who passed the reading comprehension tests, it was observed that this was higher in the cases of literal comprehension in both artistic-recreational and techno-scientific texts, compared to inferential comprehension in techno-scientific texts. The study shows significant gaps in the reading comprehension levels of mestizo children from La Guajira, according to the type of text and the level of comprehension (literal or inferential). These findings suggest the need to implement pedagogical strategies that strengthen inferential comprehension of texts, particularly in the scientific and technical fields.

Keywords: Reading Comprehension; Mestizo Children; Literary Texts; Scientific Texts; Ethnic Groups.

RESUMEN

Este estudio analiza los niveles de comprensión lectora, tanto literal como inferencial, en niños blancos mestizos de 11 y 12 años de edad de escuelas del Departamento de La Guajira, Colombia. Se comparan los resultados obtenidos en dos tipos de textos: artísticos-recreativos y tecno-científicos. Se aplicaron 424 test de lectura a una muestra de 106 niños de 5° grado de educación básica primaria, provenientes de 14 escuelas distribuidas en 5 zonas del departamento. Los instrumentos de evaluación se basaron en los planteamientos de autores como Ramos Chagoya, De Zubiría, Martínez y Cuentas. Los resultados revelan que los promedios de la comprensión literal en textos artísticos-recreativos son significativamente más altos que los de la comprensión inferencial en dichos textos. De igual manera, se observa una diferencia significativa a favor de la comprensión literal en textos artísticos-recreativos en comparación con la comprensión literal en textos tecno-científicos. En cuanto a la comparación entre la comprensión literal e inferencial en textos tecno-científicos, no se encontró diferencia significativa. Sin embargo, sí se evidenció una diferencia significativa entre la comprensión literal de textos artísticos-recreativos y la baja comprensión literal en textos tecno-científicos. En relación al porcentaje de estudiantes que aprobaron los test de comprensión lectora

se observó que este fue mayor en los casos de comprensión literal tanto en textos artísticos-recreativos como en textos tecno-científicos, en comparación con la comprensión inferencial en textos tecno-científicos. El estudio evidencia brechas significativas en los niveles de comprensión lectora de los niños mestizos de La Guajira, según el tipo de texto y el nivel de comprensión (literal o inferencial). Estos hallazgos sugieren la necesidad de implementar estrategias pedagógicas que fortalezcan la comprensión inferencial de textos, particularmente en el ámbito científico y técnico.

Palabras clave: Comprensión Lectora; Niños Mestizos; Textos Literarios; Textos Científicos; Etnias.

INTRODUCTION

The role of the teacher in teaching reading is fundamental for the integral development of students. Reading is not only an essential skill for learning but also contributes to the individual's personal, social, and cultural formation. Through reading, students can access much information, develop their imagination and creativity, expand their vocabulary, strengthen their memory, and understand different world perspectives.

In the Department of La Guajira context, reading comprehension presents a particular challenge. While reading artistic-recreational texts is expected in the classroom, including techno-scientific texts remains limited. In addition, the ethnic diversity of the region, with a predominance of the white mestizo population, raises the need to consider different cultures and identities in the teaching-learning process.

Authors such as Ramos Chagoya (2008) point out that reading comprehension goes beyond simply deciphering words. It is a complex process that involves a deep understanding of the meaning of the text, including implicit ideas, linguistic turns of phrase, and contextual references. In this sense, the teacher plays a crucial role in guiding students in the construction of meanings and the critical interpretation of texts.

La Guajira is characterized by its rich cultural diversity, with the presence of ethnic groups such as mestizo whites, Afro-descendants, blacks, Indigenous people, and Syrian-Lebanese. This cultural diversity should be considered in education, as it can enrich the learning process and promote respect for different identities.

However, there are also challenges associated with interculturality. In some cases, there is a tendency to privilege the culture of the white mestizo ethnic group, which can lead to the exclusion and marginalization of other cultures. In this sense, the school is responsible for promoting an intercultural education that values diversity and encourages the inclusion of all ethnic groups in the region.

METHOD

The present research is framed based on the community or ecological design (Supo, J. 2015), but it was enriched by documentary research, intertextual criticism, observation, and own experience. It was based on reading workshops where students answered literal and inferential comprehension tests using a quantitative approach and a descriptive, transversal, and relational design.

This approach allows for describing the characteristics of reading comprehension in mestizo children from La Guajira, determining the prevalence of different comprehension levels, and establishing relationships between these levels and variables such as the type of text and the educational context.

The research design is based on a community or ecological model (Supo, J. 2015), enriched with elements of documentary research, intertextual criticism, observation, and experience.

This combination of methods allows us to obtain a comprehensive view of reading comprehension in the specific context of La Guajira.

The main instrument for data collection was reading workshops in which children participated in reading comprehension activities. Within these workshops, literal comprehension and inferential comprehension tests were applied to evaluate the children's comprehension levels in two types of texts: artistic-recreational and techno-scientific.

The target population of the research comprises white mestizo children of 11 and 12 years of age who are in the 5th grade of elementary school in the Department of La Guajira, Colombia.

The sample consisted of 106 white mestizo children randomly selected from 14 schools distributed in 5 zones of the Department of La Guajira: Riohacha, Maicao, Uribía, Manaure, and Dibulla (as shown in table and figure 1).

Selection of participating zones and schools: areas and schools in the Department of La Guajira that met the inclusion criteria for the research were identified.

Obtaining permissions: the necessary permissions were obtained to conduct the research in the selected schools and to work with the participating children.

The instruments

The instruments were two tests: one to capture the level of literal comprehension of artistic-recreational texts and the other to investigate inferential comprehension of these texts.

Table 1. Municipalities and their townships in which the sample was collected

Zones	Jurisdiction	Locations
North	1 Uribia	Uribia
Center	1 Riohacha	Riohacha, Camarones, Barbacoa, Cerrillos, Juan y Medio, Pelechua
	2	Arrollo Arena, Las Flores
	3 Maicao	Maicao
	4 Manaure	Manaure
South	1 Dibulla	Dibulla, Mingueo, La Punta

Source: Accounts, R and Accounts, G.



Figure 1. Distribution of the 15 zones of the Department of La Guajira

Upon visiting these schools, 106 white mestizo children were found to meet the requirements: 11- and 12-year-old children in the 5th grade of primary school (see table 2).

Table 2. Selected localities where the workshops on inferential and literal comprehension among white mestizo children were held

Municipalities/Corregimientos	Children Whites
Manaure, Uribia, Maicao	28
Barbacoa, Cerrillo, Juan y Medio and Arroyo Arena	24
Las Flores, Camarones, Riohacha, Palomino, Mingueo, la Punta and Pelechua	54
Total	106

Data collection and analysis: the data obtained from the reading comprehension tests were collected and analyzed using statistical techniques appropriate for the type of data and the research objectives.

The research was conducted following the ethical principles of scientific research, emphasizing respect for the participating children’s autonomy, confidentiality, and well-being. Informed consent was obtained from the parents or guardians of the children before they participated in the research.

Both the literal comprehension test (which consisted of 9 true/false questions) and the inferential comprehension test (which contained ten actual/false questions) were administered to the mestizo whites who met the requirements (see tables 3 and 4).

Table 3. Comprehension tests applied in recreational artistic texts and in scientific texts

Ethnicity	Literal comprehension tests	Inferential comprehension tests	Total
Mixed-race whites	106	106	212

Table 4. Comprehension questions applied according to comprehension types to artistic-recreational texts

Ethnicity	Total number of literal comprehension questions	Total number of inferential comprehension questions	Total, of questions in general
Mixed-race whites	954	1060	2014

Application of the reading workshops: The reading workshops were applied to the children in the sample, following an established protocol that guaranteed the validity and reliability of the data.

RESULTS

The present study analyzed literal and inferential reading comprehension in white mestizo children of 11 and 12 years of age from schools in the Department of La Guajira, Colombia. The results obtained in two texts were compared: artistic-recreational and techno-scientific.

The inferential reading comprehension of artistic-recreational texts among white mestizo children in 5th grade of primary education in the Department of La Guajira (with an average of 3,03) is superior to the inferential reading comprehension of techno-scientific texts (with an average of 2,96) of these children (see tables 5 and 6).

Table 5. Descriptive analysis of literal comprehension among white-mestizo children in techno-scientific texts in the Department of La Guajira

Literal comprehension of techno-scientific texts	N		Media		Standard deviation		Variance	
	Statistician	Statistician	Statistician	Standard error	Statistician	Statistician	Statistician	Statistician
	106	3,0346	,07360		,75777		,574	

Table 6. Descriptive analysis of inferential comprehension among white-mestizo children in techno-scientific texts in the Department of La Guajira

Inferential comprehension of techno-scientific texts	N		Media		Standard deviation		Variance	
	Statistician	Statistician	Statistician	Statistician	Statistician	Statistician	Statistician	Statistician
	106	2,9683	,08832		,90936		,827	

One of the findings was the low performance in reading comprehension. Deficiencies were observed in the children's reading comprehension processes in both text types. However, literal comprehension in techno-scientific texts was significantly lower than in artistic-recreational texts.

There were no significant differences between inferential comprehension in artistic-recreational texts and techno-scientific texts. This indicates that children have similar difficulty understanding implicit ideas and inferring information in both text types.

The results of this study reveal significant gaps in the reading comprehension of mestizo children from La Guajira, according to the type of text and the level of comprehension (literal or inferential). These findings coincide with previous research that points to low performance in reading comprehension in different educational contexts (PISA, 2018).

CONCLUSIONS

The findings of this study have important implications for educational practice in La Guajira. Specific pedagogical strategies are needed to strengthen children's reading comprehension, particularly in the techno-scientific domain. These strategies could include the use of more accessible texts, the teaching of comprehension strategies specific to techno-scientific texts, and the promotion of reading in different contexts.

RECOMMENDATIONS

Implement pedagogical strategies that promote children's familiarity with techno-scientific texts.

Teach comprehension strategies specific to techno-scientific texts. Encourage the reading of techno-scientific texts in different contexts.

Conduct further research to understand the causes of gaps in reading comprehension and develop more effective pedagogical strategies.

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CONFLICT OF INTEREST

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