

Strengthening reading comprehension through didactic tools

Fortalecimiento de la comprensión lectora a través de herramientas didácticas

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ABSTRACT

The present study arose from the need to improve reading comprehension for students in a rural school in the department of Cesar in Colombia. The general objective was to strengthen reading comprehension in fifth grade students through the implementation of innovative didactic tools and student-centered pedagogical strategies, to achieve this we worked theoretically on four fundamental categories based on reading comprehension, collaborative work, work in the classroom and social interaction; In addition, in the methodological factor, a qualitative Participatory Action Research design was taken into account, in which tests were designed with selection questions, documentary review and field diaries, the first of which were applied to students and parents, the second under review of theoretical strategies and the third executed by the teacher-researcher in charge, Among the main findings, it was found that the reading comprehension processes need to integrate the school, the family and the context in their process, in this way the student manages to understand that reading has different components that require special attention, at the end it consolidated a space called Bibliolaboratorio: Chimichagua in the classroom that integrated diverse activities focused on the student's own needs and adapted to their own environment.

Key words: rural environment, didactics, education, social interaction, reading techniques.



RESUMEN

El presente estudio surgió bajo la necesidad de permitir mejoras en la comprensión lectora para estudiantes de una escuela rural del departamento del Cesar en Colombia, tuvo como objetivo general el fortalecimiento de la comprensión lectora en estudiantes del grado quinto, mediante la implementación de herramientas didácticas innovadoras y estrategias pedagógicas centradas en el estudiante, para lograr ello se trabajaron teóricamente sobre cuatro categorías fundamentales basadas en comprensión lectora, trabajo colaborativo, trabajo en el aula e interacción social; adicional, en el factor metodológico ello se tuvo en cuenta un diseño de Investigación Acción Participativa de tipo cualitativo, en el que se diseñaron test con preguntas de selección, revisión documental y diarios de campo, las cuales las primeras fueron aplicadas a estudiantes y padres de familia, las segunda bajo revisión de estrategias teóricas y la tercera ejecutada por el docente-investigador encargado, dentro de los principales hallazgos se encontró que los procesos de comprensión lectora necesita integrar en su proceso a la escuela, la familia y el contexto, de esta manera el estudiante logra comprender que la lectura tiene diferentes componentes que requieren especial atención, al final consolidó un espacio denominado Bibliolaboratorio: chimichagua en el aula que integraba diversas actividades enfocadas en las necesidades propias del estudiante y que se adaptan a su propio entorno.

Palabras clave: Ambiente rural, didáctica, educación, interacción social, técnicas de lectura

Introduction

This article shows the progress made in the reading comprehension of fifth grade students in rural areas of Colombia, in which the reading levels and comprehension of the students were contemplated, since, as Sanchez P, (2022) states, this plays a fundamental role in the processes of academic management of which the reading comprehension processes are a part.

Considering the above, this article arises from a research that had as its central foundation the strengthening of reading comprehension in fifth grade students, through the implementation of innovative teaching tools and student-centered pedagogical strategies, in order to analyze the role of culture in rural areas, in which the causes that lead to low reading comprehension in the target community were identified, for the design of a set of didactic tools that achieve the improvement of the reading comprehension, in which a set of tools that allowed significant improvements were determined.

The study was carried out considering the limitations in rural areas, such as access to education and information, which negatively affects the quality of education. Moreno

and Leonardo (2022), state that in rural areas people are not reading in a way in which they have access to texts, nor in hypertext language, the latter is the one that is implicit through the internet and networks, which by not having these accesses extralimits reading comprehension since students do not have external motivations beyond those offered by teachers; Taking this into account, we seek to solve the question: How to strengthen reading comprehension in fifth grade students in which innovative processes and strategies are involved?

Later, in the city of Lima, Peru, a program was carried out in an educational institution in Callao by Cáceres (2022), where it was found that elementary school students had difficulties in reading and writing skills. To address this, the virtual environment ICON was used; two groups were conducted, one experimental and one control, and 10 sessions were carried out, the results showed that the use of technology improved reading comprehension, inferential reasoning and organization in the educational context, this research contributes under a need that should be contemplated by the state in rural areas such as the integration of technologies in these areas.

On the other hand, one of the effective methods within the evaluation for the improvement of the development and skills in the reading area, developed written activities made by Aguas (2023), in Spain, with the objective of implementing and promoting reading in primary school, finding that traditional stories, They found that very few students know how to describe and interpret the text despite being traditional or popularly recognized, which is why this tool not only promotes the interpretive development of the student, but also generates teamwork by opening imaginative scenarios, and concluded that strengthening the interpretive language allows the integration of the group and cultural diversity.

On the other hand, in the national character Montolla (2021) highlights that fifth grade students in Cartagena presented educational problems focused on reading, therefore, a platform to help them improve their literary skills and text comprehension, this technology complemented the knowledge of students and highlighted the importance of teachers in imparting their knowledge, from there the skills that teachers should have in various educational environments and the ability to create scenarios that lead to significant contributions for educational quality are extracted.

Giving continuity, the Research by Arango et al, (2015) showed the relationship between reading comprehension and strategies through the application of metacognition in language teaching in elementary school in Medellin, they suggested that it is important to intervene early in learning difficulties in Spanish in the early

grades, the study was qualitative and descriptive, concluding that teachers support a metacognitive culture in the classroom to promote the development of knowledge in students; Likewise, the use of strategic questions facilitated the evaluation of students' reading comprehension and interpretative and explanatory skills.

In other research contexts, Tavera et al (2022), establish the importance of evaluating literacy learning and comprehension through research in public schools in Colombia, identifying the need for children to access the world of knowledge through books, texts or any other type of document where they can experience the reading process through activities and digital educational resources; in this sense, they located a platform that allows students to develop reading and writing skills, strengthening comprehension and writing skills.

In monitoring the rural educational context, it was evidenced the lack of reading comprehension and low depth in writing, in primary education, that is why Coral (2020), in his study of strengthening reading skills through the understanding of images, using a mixed methodology, with action research design, achieved with the observation of students the analysis of the information resulting in the use of images to open skills in reading comprehension, in this sense, the tools used highlighted on average reading comprehension from 51 to 71% in the students evaluated; inferring that for the strengthening of academic skills in students it is necessary to know and use them from the initial education.

Taking into account the above, reading comprehension is determined as all those capabilities such as understanding, interpreting and analyzing a written text, in this sense Avendaño (2020); identifies the literal or inferential level of reading comprehension highlighting the academic responsibility that exists behind the educational context; that is why, establishing didactic tools through guided reading, which promotes comprehension and analysis; promotes in its research the analysis of the group to understand the texts read, through discussion and academic debates, as this further strengthens the participation of the group; likewise, the use of audiovisual material among other strategies that were implemented to conclude that the accompaniment and use of strategies favor the development of this skill.

On the other hand, the development of educational competencies and strengthening of the teaching staff allows the students to understand, evaluate, and identify texts with critical and literary capacity, for Guzmán (2019), the development of different activities within the classroom such as the use of stories, crossword puzzles and academic guides favor reading comprehension in elementary school students;

Consequently, learning to read is not an option, but a necessity, reading comprehension is not achieved without academic effort and guidance; therefore, coherence and commitment are required from home and school, because the gradual and incremental process of information acquisition is activated in the long-term memory, which favors learning.

Followed by the academic context, the educational system of many countries focuses on a guided and quality education, Alegre (2019) evaluates cultural diversity and the teaching of information through reading comprehension in virtual classrooms. Reading training emphasizes syntactic processing for an effective understanding of reading and writing, the information read must be structured, clear and related to writing for an adequate understanding of reading and writing, this makes clear an immediate need to integrate these processes in rural areas.

Subsequently, the research of collaborative work in the academic classroom is supported by what indicates, Alvarez and Lopez (2018), it is identified as a factor in favor for early childhood reading comprehension, is the beginning of the reading processes through the use of stories and children's stories, since the use and implementation of these strategies will leave as a result the strengthening of the imagination, the story and the improvement of the processes of memory and description of the students, as well, being a story guided by the teacher will present more interest and concentration in the educational classrooms.

Closing the category of reading comprehension, López (2020) described that initial educational training is related to reading comprehension and interpretation of the text or writing presented by the teacher, knotting the previous category, it gives way to collaborative work which was approached from different perspectives where he established through the participation of students within the academic classroom, developing programs, guides, readings and identifying the deficiencies that each student presents in his or her reading and writing training process and the development provided in the classroom, which is why Muñoz (2021), identified collaborative work as that which arises from Social Interaction, with other people in the academic classroom as strengthening teamwork favors the learning of peers and the student's own.

Now, there are some theories described by Balarezo (2020), where he described collaborative work as a set of techniques, instruments, and instructions that allow the student to take a training, said this, it is related as the direction given by a teaching figure to students to perform a certain type of activity, in this sense, collaborative work

will account, of a comparative analysis, of a project and discussion in working groups, yielding as a subsequent result, a description and adequate interpretation of the context worked from the academic classroom, providing an answer to the guidance given by the teacher.

In addition to the previous interpretation, Lopez (2020) highlights collaborative work as a set of knowledge that includes activities, such as debates, according to the culture and topic to be worked on, likewise, in order to perform an adequate reading and written comprehension, a story that is easy to handle between students and teachers is determined, This will promote the participation, interpretation and programming of new educational strategies to strengthen reading comprehension through collaborative work that is carried out according to each activity, which is developed either in class or virtually, since the latter tool is booming through the use of information and communication technologies.

Continuing with the categorization scheme gives way to the work in the classroom includes all educational activities and processes within the classroom, Godoy (2021) enunciated that teaching and learning in the classroom involves planning and execution of lessons, interaction between teachers and students, group dynamics, learning assessment, behavior management, adaptation to individual needs, use of educational resources and design of materials; in addition to creating a positive learning environment that fosters active participation, the exchange of ideas, critical thinking, problem solving and the development of social skills.

In theory, the assignment of classroom work would again be delegated by the teaching function, since it would be the ideal personnel in charge of promoting the use of mechanisms, guiding the creation of new concepts and projects according to the case to be developed, for the above, knowledge and strengthening of the necessary skills is required to achieve the achievement of interpretation and comprehension reading that will finally end up promoting the use of these tools as an evolutionary factor of information (Samboni 2020).

Another role that resulted important classroom work was the collection of information within the working group, since the strengthening of reading comprehension are fundamental aspects in education; all this, try to implement as a strategy to activities that allow students to understand what they read and assimilate information effectively; Duran et al (2022), decreed that activities such as reading aloud, group discussions on texts, the use of visual resources, among other methods that promote reading comprehension, allowing the work within the classroom.

In addition, the Ministry of Education (2020) launched strategies for the reactivation of reading and implemented programs to evaluate reading fluency and comprehension in students, as well as tutorials have been highlighted as a key educational policy to improve learning, and turn it into a significant strategy for change in educational processes.

Another category that was relevant to highlight was social interaction, which, according to Arias et al. (2022), is a crucial factor for the existence of components that lead to improve reading comprehension, since the social interactions of the students themselves, taking into account that this is an element that implicitly has dimensions that must be addressed, such as the interests of the children themselves.

This same, defined by Correa (2017), as a complex process that involves the active participation of all members of society, the above, indicates that it should be regardless of their ethnic, cultural, economic, religious or any other origin; referring to this process, which aims to eliminate barriers and prejudices that may limit the full participation of people in social and community life, according to the author will be taken as that, tool, which supports participation and gives rise to the opinion of students through a didactic process for strengthening their educational skills.

On the other hand, social interaction is related to equitable access to educational, employment, health and recreational opportunities, therefore, for all people can make use of this social skill, which allows intercultural dialogue, respect for diversity and the construction of inclusive communities where each individual feels valued and respected. Astudillo, Chávez & Oviedo (2020); according to the authors, the social participation of students, through cultural information allows social development understanding and improves the dialogue between academic peers, which is favorable for the acquisition of knowledge and reading comprehension.

Adding to the social support of Krieguer (2021), he states that social interaction from educational classrooms, not only allows alliances in the classroom, but also broadens educational inclusion, the development of critical thinking, soft skills, in turn generate alliances which allows to achieve the objective of the study to strengthen knowledge in reading and writing comprehension of students.

Materials and methods

Previously published methods should be indicated with their references and only relevant modifications should be described. Considering that the reading comprehension process of each student is different and also that the reading process of a person is very difficult to study and measure numerically due to its complexity, for this reason it was decided to carry out this project from a qualitative research, from the Postulates of Hernandez S. (2018) which allows to study the cases in more depth; since, it allows to know more in depth the qualities of each member of the studied population and its culture, The study is of participatory action research type, taking into account that the teacher was a participant in the process that linked him in the study as one of the fundamental actors.

Taking into account the above, a measurement test with Yes and No answers was designed with the participation of fifth grade students from a rural educational institution, in this zonal context it is highlighted that the educational institutions are multigrade, which means that in a single classroom, in the case of primary school, there are students from first grade to fifth grade, therefore a focus group is taken to work with the participation of fifth grade students.

Another instrument designed is based on the field diary, where the teacher took the pertinent notes of the activities carried out with the participants, in the same way the parents of the participants were involved in the process, in order to involve the categories previously discussed.

In order to apply the instruments, the focus group of a rural school was selected, given that in these schools there are multigrade classrooms with students in a single classroom from first to fifth grade, where a single teacher directs all the processes in an integrated manner, a group of students was selected, who in their totality under the described context, add up to a total of 7 students, these were chosen because they are students who take knowledge tests and need more reinforcement in reading comprehension components, given that at the end of this cycle they begin their secondary school studies.

Of the population, the parents and inhabitants of the village where the school is located are dedicated to livestock and agricultural work, most of these families only have an education up to third grade, this was a key factor to highlight the components of the lack of reading comprehension in the students of the focus group, the data collection, given the limitations, was done manually, which were subsequently digitized for their respective analysis and understanding. This material was collected

and systematized by the researchers, who in turn are the ones who direct the processes within the school.

Results

The results should be presented in a logical sequence in the text, tables and illustrations. In order to obtain the results of the present research, a survey type measurement was initially carried out and applied to the fifth grade focus group, which consisted of 16 questions with Yes and No answers, taking into account that it can be used to evaluate the level of comprehension, knowledge or attitudes of the students towards the subject of reading comprehension.

In this sense, the first results are provided in fulfillment of the first objective by percentageing the answers later synthesized in a table, in this case we sought to adapt the questions to the categories of reading comprehension, work in the classroom, collaborative work and social interaction, which are shown in the following way:

Table 1. *Causes of low reading comprehension by categories*

Category	Factor	Percentage
Reading comprehension	Lack of defined hours for reading	83,3%
	Lack of books, magazines, treatises, newspapers or other materials to read.	100%
Classroom work	Absence of a school library	100%
	Apathy for reading in the school library	100%
Collaborative work	Absence of a place to read at home	83,3%
	Lack of motivation to read at home	66,7%
Social interaction	Absence of reading from early childhood	100%
	Apathy for reading alone	66,7%

Note: The results are obtained from the test applied to the students.

Once the factors that needed to be addressed in terms of the gaps that existed in each of the categories that caused low reading comprehension were detected, the researchers took into account some of the activities mentioned in the literature review, in which they created a space to work in the classroom that they called

Bibliolaboratory: Chimichagua in the classroom in which didactic tools were determined for each category with their respective creative name and main action to be performed, this is summarized as follows:

Table 2. Didactic tools by category

Category	Didactic tool	Creative name	Main action to be performed	Time of execution
Reading comprehension	Literary selection	The enchanted word corner	The teacher makes a selection of stories that have reading comprehension activities that will be shared with the students to read at fixed times every other day.	Wednesdays and Fridays
Classroom work	Literary creation workshop	The creative pen	According to the readings shared by the teacher, students are invited to use their imagination and creativity to write stories of magical stories that occur in their daily lives (each student will have their own folder or notebook to file them). These are done on the day that does not correspond to reading.	Tuesdays and Thursdays

Collaborative work	Reading reinforcement at home	The garden of stories	The teacher instructs parents to tell stories from their oral tradition to their children, which should be transcribed in the folder or traveler's notebook and then the child reads them aloud with the family.	Weekend
social interaction	Literary gatherings	Chimichagua in the classroom	At the beginning of each week there is a space where fifth graders read to their classmates in lower groups some of the stories created individually in previous days or the one created with their parents on the weekend, where the younger children ask questions to the classmate who is reading and try to solve them together.	Every Monday

Note: The activities are planned by the researchers based on some theoretical references, however, they are of their own design.

The various activities were put into practice by the teacher, which were recorded in the field diaries. The main gains for the reading comprehension category were to provide fixed times for reading every third day, in which the students showed their interest not only in the readings given by the teacher, but they themselves were now proposing readings that arose from their own interest; Likewise, when performing reading comprehension activities based on word games, the students were progressively solving them with greater ease decreasing the time of execution of the same and significantly correcting the answers to be extracted from the reading.

Following this, in the category of work in the classroom, it had been determined that there was no library inside the institution, which is why the traveling notebook that

was used in the activities served as a bibliographic element that allowed the creation of a space inside the classroom created with recyclable materials that would now serve as a corner in which the material created by the students and the readings offered by the teacher were filed, This material was projected to be used and implemented for future generations of fifth graders and to continue to be nurtured by them based on this project.

As for the category of collaborative work, it was possible to integrate families in the processes, significantly increasing the levels of reading comprehension that were intended to work not only in the classroom but also at home; additionally, in the category of social interaction it was discovered that students are able to understand more easily what they read if they are sharing with their peers their own literary creations that allow them to understand basic ideas, main ideas and secondary ideas, expanding the axes of textual, inferential and critical reading.

Given the results presented, a generalized discussion is generated taking as a reference the data collected and the categories approached, thus detecting some gaps that should be taken into account for the articulation of a strategy that allows for improvements in the educational quality of fifth grade students in rural areas, which were established thanks to some theoretical references, such as those of Obregon et al. (2023) who based a series of strategies, especially for the fifth grade, as alternatives of knowledge in reading comprehension, thus allowing discussion under the main findings of the study.

In the first instance, the point was reached of the need to have specific schedules for reading, since this helps to develop a reading habit in students and to motivate them to read on their own; given that, the lack of defined schedules can lead to postponing or not dedicating enough time to reading, causing problems in the comprehension and enjoyment of reading; likewise, it hinders the incorporation of reading as part of the daily routine, limiting the intellectual and emotional benefits that this activity can provide.

On the other hand, it was understood that the importance of having a library in a rural school goes beyond simply having access to books, a school library is a fundamental space to foster the love for reading and autonomous learning, by not having it, students are limited in their ability to access research material, This directly affects their academic development and their ability to acquire knowledge in a self-taught manner, the absence of this resource can also lead to a lack of intellectual and creative

stimulation, since reading and research are fundamental for the development of critical and analytical skills in students.

Now, it became evident that the lack of support and motivation at home damaged the student's self-esteem and confidence in their reading ability, taking into account that low motivation caused a negative impact on academic performance due to the importance of incorporation in families in reading processes for optimal learning and greater comprehension at various reading levels.

Added to the above, the importance of reading in company was highlighted as an axis of social interaction that promoted the reading comprehension process, this was supported under the postulates of Simbaña and Bendón (2021) who argued that reading in company has important benefits, promotes interaction and emotional connection between the reader and the child by sharing the reading experience; it was inferred that reading in company helps children to formulate questions, express opinions and improve comprehension.

Conclusions

As teachers who work in rural contexts in Colombia, there was evidence of shortcomings that should be addressed in a discreet manner, given that these sectors are totally neglected by the State, preventing an adequate educational management that is in accordance with what was stated by Guaqueta (2021) who argued that there should be action plans to address the needs of each context, in order to generate policies that aim at an educational quality that generates social change and greater participation of environments with diverse needs, as is the case of rural schools.

It is necessary to create school libraries in rural schools because spending time in a school library helps children to develop skills that they can apply in any situation; it also allows them to have access to a variety of books and reading resources, which broadens their knowledge and helps them to develop skills.

On the other hand, it was concluded that the teacher plays a fundamental role in the development of reading comprehension, so it is important that he/she has an interest in curiosity and thus integrate effective strategies to teach reading and its comprehension, as well as provide tools for the evaluation of his/her students' progress, in this sense, the teacher must be updated in processes that are in accordance with the challenges and needs that occur in rural environments, given that

in this type of context, adaptations must be made to the curriculum adjusting to the needs of the environment.

This implies that when thinking about transforming education, it is essential to take into account the diversity of students, their individual needs and the barriers they face in accessing a quality education, not only in a focus on a single subject, but when a student is able to understand what he/she reads, he/she will be able to improve in all areas of the various areas.

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