Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

Reading strategies for college English language learners

Estrategias de lectura para estudiantes universitarios del idioma inglés

Mónica Cecilia Cruz-Zambrano
moniccecilia2020@gmail.com
Universidad Laica Eloy Alfaro de Manabí, Manta, Manabí
Ecuador
https://orcid.org/0009-0001-2864-5295

Rocío Carolina Delgado-Morán
carolina6delgado@hormail.com
Universidad Laica Eloy Alfaro de Manabí, Manta, Manabí
Ecuador
https://orcid.org/0000-0001-8335-002X

Jenny Elizabeth Quiroz-Cevallos
jennyquiroz1989@gmail.com
Universidad Laica Eloy Alfaro de Manabí, Manta, Manabí
Ecuador
https://orcid.org/0000-0003-2085-6503

Rodrigo Alexander Rincón-Zambrano
rodrigo-rincon93@hotmail.com
Universidad Laica Eloy Alfaro de Manabí, Manta, Manabí
Ecuador
https://orcid.org/0000-0002-2713-5111

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

ABSTRACT

This research focused on determining the effectiveness of reading strategies for English university students, such as previewing, scanning, skimming, prediction and inference, with the purpose of perceiving the changes in their reading comprehension and other skills after the application of these strategies. As methodology, a quantitative approach based on a quasi-experimental design was used. For this purpose, a sample of 60 students from the Metropolitan University of Quito, Ecuador, were subdivided into 30 for the control group and 30 for the experimental group, to whom pretest and posttest were applied. The results revealed that the students in the control group did not achieve considerable improvements but those in the experimental group did. The skills developed were: vocabulary, interpretation, comprehension, identification of main and secondary ideas, fluency and summarizing.

Descriptors: Reading strategies; reading skills; college students; English Language. (Tesauro UNESCO).

RESUMEN

Esta investigación tuvo su enfoque en determinar la efectividad de las estrategias de lectura para estudiantes universitarios de inglés, tales como: previewing, scanning, skimming, predicción e inferencia, con el propósito de percibir los cambios en su comprensión lectora y otras habilidades luego de aplicadas dichas estrategias. Como metodología, se empleó la perspectiva cuantitativa bajo un diseño cuasiexperimental. Para ello, se trabajó con una muestra de 60 estudiantes de la Universidad Metropolitana de Quito- Ecuador, subdivididos en 30 para el grupo control y 30 para el experimental, a quienes se les aplicó pretest y posttest. Los resultados revelaron que los estudiantes del grupo control no lograron una mejora considerable pero el grupo experimental sí. Las habilidades desarrolladas fueron: vocabulario, interpretación, comprensión, identificación de ideas principales y secundarias y resumen.

Descriptores: Estrategias de lectura; habilidades lectoras; estudiantes universitarios; idioma inglés. (Tesauro UNESCO).

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

INTRODUCCIÓN

Strategies have been a great option to choose when teaching a language. Worldwide, teaching and learning have represented the key in the educational process since they are the essential goals to achieve when applying different pedagogical techniques and activities. In this sense, it is convenient to resort to the different alternatives that may improve the performance of teachers and students by carrying out all the appropriate actions that facilitate the understanding between them.

As is well known, learning a language implies a hard work that requires a great effort from both parties, that is, educators and students, because they need to focus on the four skills (speaking, writing, listening and reading) to reach an effective proficiency in that language. However, when we talk about English for Specific Purposes, teachers usually focus their teaching process on reading skills, which consists of adjusting various procedures that help students develop their knowledge and understand the different texts related to each area of work. In this regard, (Gamboa, 2020, p. 112) expressed that: "Students should adopt the application of strategies in the reading of technical texts for their better comprehension". In this sense, teachers have strived to create and use the best approaches for improving the competencies of people, especially those who work in specific areas, such as engineering, education, politics, among others.

Given this, (Loayza, Gallarday & Arana, 2022, p. 1355) "proved that teaching strategies do have a positive effect on the acquisition and/or improvement of reading comprehension skills, which is related to the student's academic performance in other subjects or courses". Therefore, the educator reflects on this reality and seeks relevant methods to improve students' vocabulary, inference, comprehension, fluency and point of view through the use of a language.

In the case of this study, we emphasize English as the language of general use because it is in universal demand throughout the world and is also the most widely used for communicating with other people. Moreover, most of the texts are set out in this code and

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

it is necessary for professionals to be prepared in their understanding in order to facilitate this skill. (Rodriguez, 2021, p. 234) stated that "reading is one of the most significant skills for school and life since it allows readers to expand knowledge of language, especially grammar and vocabulary, and of the world around them". Thus, it is necessary to continue applying precise strategies that contribute to the development of people's competencies in reading skills, since it will help them face different challenges in the areas in which they perform their functions. To this respect, (Perry, 2013) affirmed the following assertion:

> The ability to comprehend written texts is essential in order to gain access to the vast amount of written information available today. This is especially true for university students who, in the context of their studies, often need to search for and use information in English. However, it is also the case that the English proficiency level of many students renders this task a laborious and frustrating experience. (p. 75)

In consequence, to avoid that laborious and frustrating situation, teachers must select the best alternatives to help students learn vocabulary and develop their reading skill. (Chávez, Menacho, Orielle & Asto, 2021) expressed that inference could influence positively in the learners' ability to understand texts. Therefore, it could be one of the most effective choices for the development of learners' knowledge. Likewise, (Izquierdo & Jiménez, 2014) exposed that:

> The use of the three reading strategies (skimming, scanning, and making predictions) is a very enriching process to guide learners along the path of autonomy, particularly in terms of decision making for learning and doing assigned homework, increasing awareness of their own reading learning process, and promoting motivation. (p. 76)

As teachers will not be with university students all the time to guide them in understanding the language, educators need to think about using learning strategies that lead to students' independence when interpreting texts in their areas. College students are the

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

protagonists of this study, since they represent the future professionals who will effectively perform their functions in their field of work. To this end, professors must work on developing learners' comprehension skills, in order to help them defend themselves when interpreting texts. On this matter, (Gómez y Ávila, 2009, p. 55) defined comprehension as "the understanding of the meaning of written material and involves the conscious strategies that lead to understanding".

All the above does not mean that students will be perfect in their reading comprehension, but at least, they will have the best tools to understand the texts, among them, the use of the dictionary. In this respect, (Lopera, 2023, p. 136) said that: "When students cannot guess words from the context, and they verify that these words are essential in the reading, they have to look them up in their dictionaries". On the other hand, (Vargas & Zuñiga, 2018) worked on an investigation related to the implementation of graphic organizers as another strategy to facilitate text comprehension:

> The study concluded that repeated implementation of graphic organizers has a positive impact on reading comprehension by helping students to read more strategically. However, accompanying strategies such as summarizing and discriminating main ideas from supporting details are necessary to complement the work with graphic organizers and improve their effectiveness. (p. 1)

Consequently, through the use of the graphic organizers the student may extract main ideas as well as secondary ideas and summaries that could facilitate the task of the college students and even for professionals in various areas. Likewise, the variety of topics could be an alternative to raise students' motivation; in this regard, (Echeverry & McNulty, 2010) declared that:

> In classrooms, teachers can bring interesting readings based on students' interests and language ability. They can prepare their students to read and develop their thinking by showing attractive visual aids related to the topic and

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

content, modeling predictions, asking students' questions to guide their prediction, and encouraging student discussion. (p. 121)

By being creative, innovative and interactive, a teacher may awaken students' interest in learning through reading. Based on the above, this research had as a general objective to determine the effectiveness of reading strategies for English college students, such as previewing, scanning, skimming, prediction and inference, with the purpose of perceiving the changes in their reading comprehension after the application of these strategies. This purpose arises due to the learners have paid little attention to the reading skill, which has been essential to interpret texts efficiently according to the consideration of the cited authors and also, other experiences.

To conclude, a research hypothesis was proposed, stating that reading strategies for English college students positively influence their texts comprehension. In the same way, a null hypothesis was established, declaring that reading strategies for English college students influence negatively in their comprehension of texts.

METHODOLOGY

The methodology used was a quantitative approach based on a quasi-experimental design. For this purpose, we worked with a sample of 60 English students from the Metropolitan University of Quito, Ecuador, who were subdivided into 30 for the control group and 30 for the experimental group. A pretest and a posttest were applied to determine the changes in the students' reading proficiency. Finally, the results are presented through charts and tables.

RESULTS

Here, a comparison of the students' improvement between the control and experimental groups is shown in order to expose the most important advances achieved by them in the posttest. All the results focused on the reading strategies applied by the teacher, such as:

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

previewing, scanning, skimming, predicting and inferring, which were significant in developing the students' reading skill.

Accordingly, the charts and tables show learners' progress in vocabulary, interpretation, comprehension, identification of main and secondary ideas, fluency and summarizing.

Table 1.
Increase in vocabulary.

Increase in English vocabulary							
Control group				Experimental group			
Pretest		Posttest		Pretest		Posttest	
Yes	No	Yes	No	Yes	No	Yes	No
5	25	10	20	8	22	25	5

Source: Authors' table as a result of the pretest and posttest.

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

Figure 1.
Increase in English vocabulary.
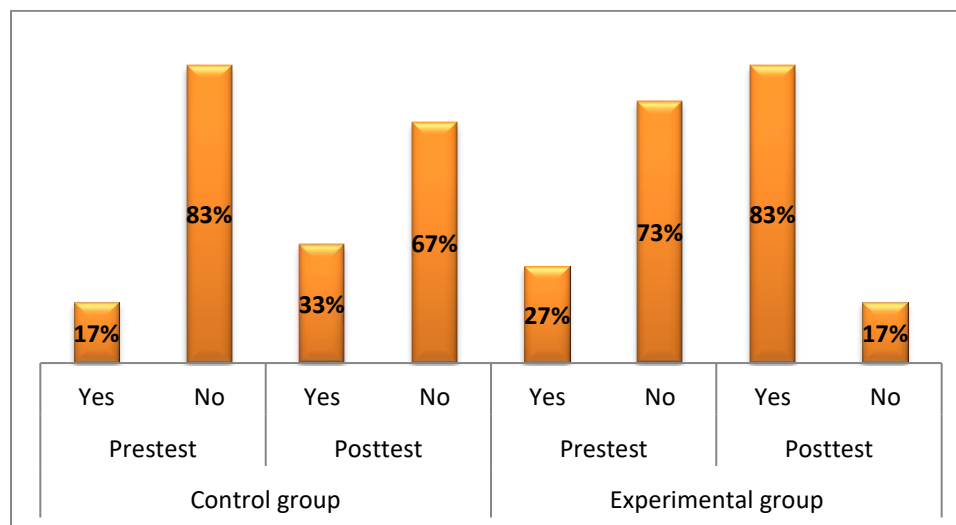
Source: Authors' chart as a result of the pretest and posttest.

Figure 1 shows that the control group, which was taught with the teacher's usual strategies, had a poor vocabulary in the pretest, with 17% of students having sufficient vocabulary to interpret written texts and 83% having little input to comprehend texts. After the pretest, the students showed a small difference in the posttest, where only 33% improved their vocabulary and 67% still had problems understanding texts fluently.

However, as can be seen, there is a big difference in the experimental group, which was trained with the reading strategies, meaning that 27% had good vocabulary knowledge, while 73% had low proficiency in the pretest. However, in the posttest the improvement was impressive, where 83% of the students showed high vocabulary proficiency and 17% did not. These results allowed us to affirm that the reading strategies were effective for vocabulary development. This gives importance to the opinion of (Perry, 2013, p. 75) who stated that: "The ability to comprehend written texts is essential in order to gain access to

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

the vast amount of written information available today". For this, it is necessary to have sufficient vocabulary to interpret texts fluently. Based on this, interpretation is the next aspect to be analyzed.

Table 2.
Interpretation.

Interpretation							
Control group				**Experimental group**			
Pretest		Posttest		Pretest		Posttest	
Yes	No	Yes	No	Yes	No	Yes	No
10	20	15	15	12	18	25	5

Source: Authors' table as a result of the pretest and posttest.

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

Figure 2.
Interpretation.
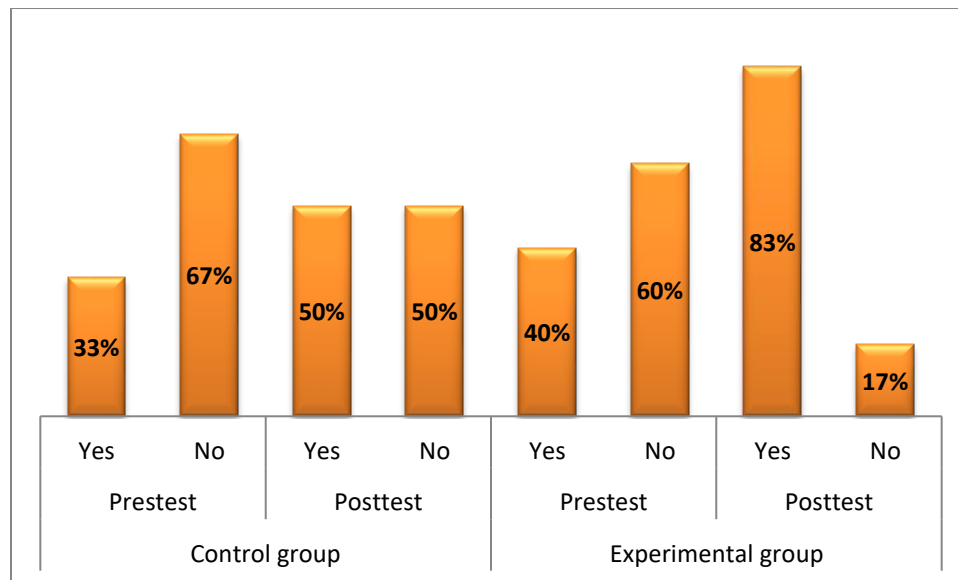
Source: Authors' chart as a result of the pretest and posttest.

As Figure 2 shows, 33% of the students in the control group interpreted texts effectively and 67% did not. In the posttest, 50% of them understood the texts fluently, while the remaining 50% did not. On the other hand, 40% of the experimental group had difficulty interpreting the texts given by the teacher in the pretest and 60% did not. But in the posttest, 83% of the students achieved a great interpretation of texts and 17% did not. Such results agreed with the consideration of (Loayza, Gallarday & Arana, 2022, p. 1355) who stated that "…teaching strategies do have a positive effect on the acquisition and/or improvement of reading comprehension skills, which is related to the student's academic performance in other subjects or courses". In this regard, the next chart describes the students' progress in comprehension.
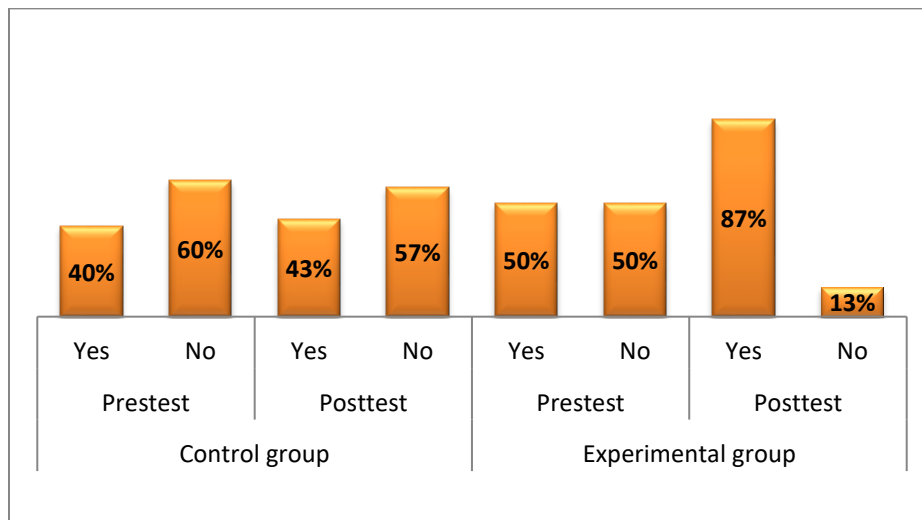
Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

Table 3.
Comprehension.

Comprehension							
Control group				**Experimental group**			
Pretest		Posttest		Pretest		Posttest	
Yes	No	Yes	No	Yes	No	Yes	No
12	18	13	17	15	15	26	4

Source: Authors' table as a result of the pretest and posttest.

Figure 3.
Comprehension.

Source: Authors' chart as a result of the pretest and posttest.

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

Figure 3 indicates that 40% of the students in the control group had good comprehension in the pretest, but 60% did not. In the posttest, there was not a big difference because only 43% of them developed good comprehension, while 57% did not. With respect to the experimental group, 50% had good comprehension and 50% did not. On the contrary, in the posttest, they achieved a better understanding; that is, 87 did and 13 did not. Once we have studied comprehension, we will continue with the analysis of the main and secondary ideas.
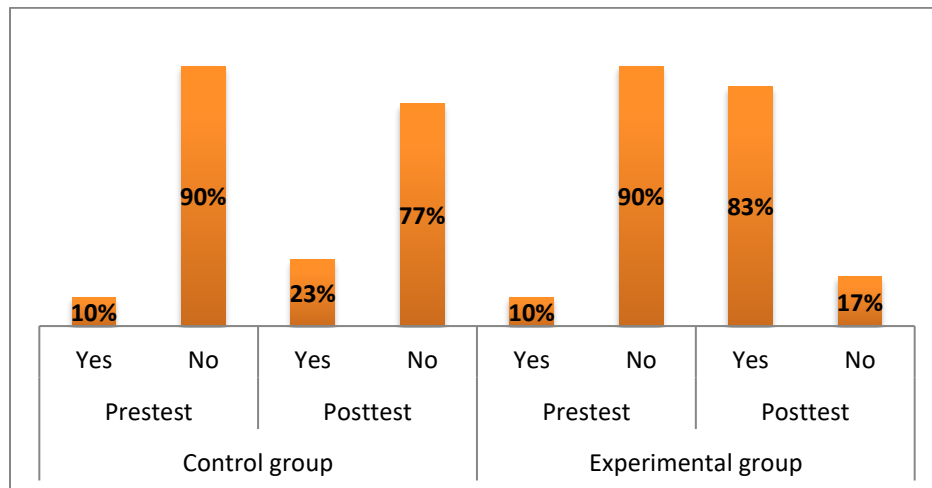
Table 4.
Fluency.

Fluency							
Control group				Experimental group			
Pretest		Posttest		Pretest		Posttest	
Yes	No	Yes	No	Yes	No	Yes	No
3	27	7	23	3	27	25	5

Source: Authors' table as a result of the pretest and posttest.

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

Figure 4.
Fluency.

Source: Authors' chart as a result of the pretest and posttest.

Figure 4 reveals that 10% of the English students in the control group read a text fluently; in contrast, 90% did not. In the posttest, there was a small difference represented by 23% of students who read fluently and 77% who did not. In opposition to these results, 10% of the experimental group read fluently and 90 did not read well in the pretest, but significant progress was observed in the posttest, with 83% of the students reading fluently and only 17% not reading fluently. This means that the reading strategies applied were effective. Next, we will analyze the students' identification of main and secondary ideas.
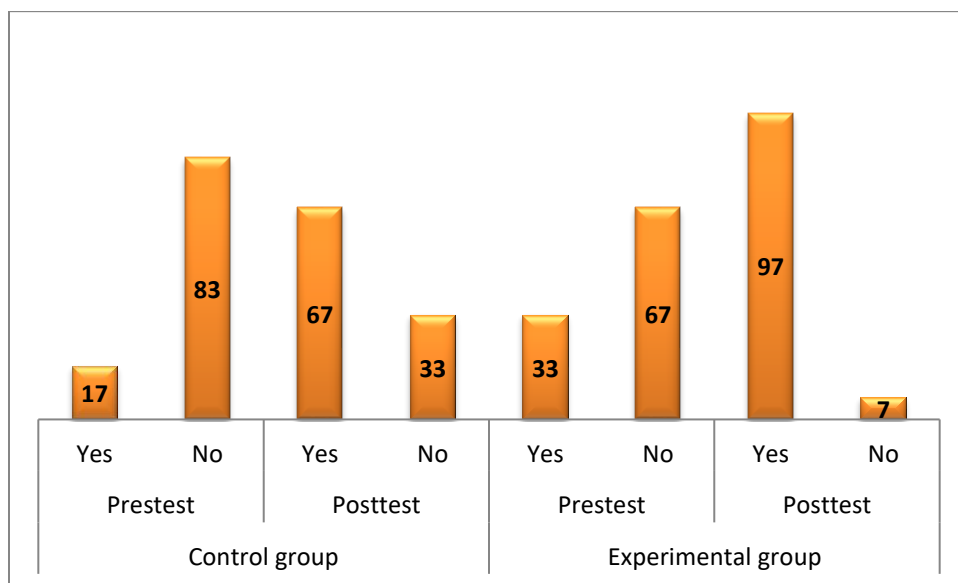
Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

Table 5.
Main and secondary ideas.

Main and secondary ideas							
Control group				Experimental group			
Pretest		Posttest		Pretest		Posttest	
Yes	No	Yes	No	Yes	No	Yes	No
5	25	20	10	10	20	28	2

Source: Authors' table as a result of the pretest and posttest.

Figure 5.
Main and secondary ideas.

Source: Authors' chart as a result of the pretest and posttest.

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

Figure 5 illustrates that 17% of the English learners in the control group could recognize main and secondary ideas, while 83% could not. In the posttest, there was a considerable change, since 67% improved, but, despite this, 33% did not. On the other hand, 33% of the experimental group interpreted main and secondary ideas in the pretest, while 67% did not. However, in the posttest, 97% were able to extract the main and secondary ideas, while 7% were not. This means that the reading strategies contributed to the students' improvement. After evaluating the main and secondary ideas, we will study the students' capacity for synthesis.
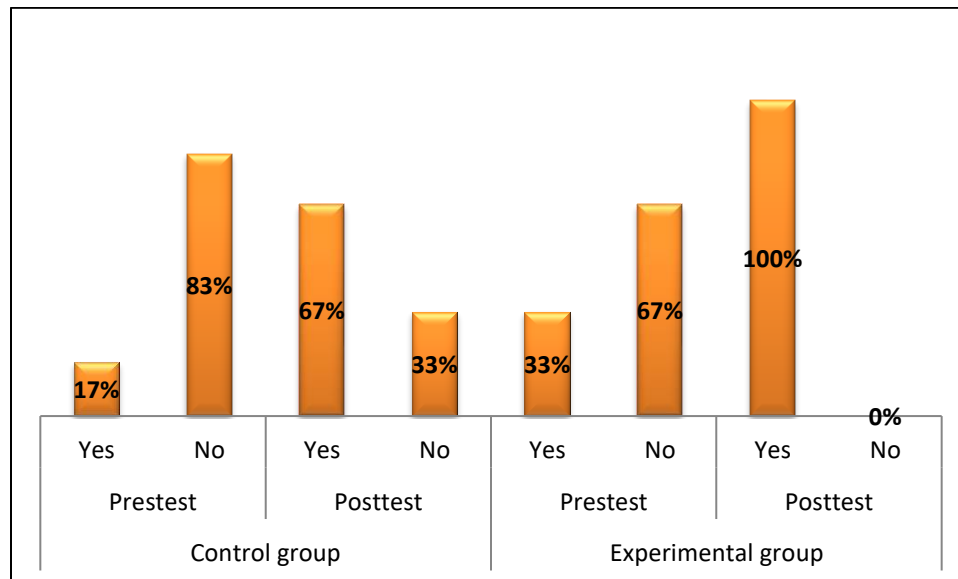
Table 6.
Summarizing.

Summarizing							
Control group				Experimental group			
Pretest		Posttest		Pretest		Posttest	
Yes	No	Yes	No	Yes	No	Yes	No
7	23	21	9	10	20	30	0

Source: Authors' table as a result of the pretest and posttest.

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

Figure 6.
Summarizing.

Source: Authors' chart as a result of the pretest and posttest.

Figure 6 reveals that 17% of the English students in the control group could summarize a text; in contrast, 83% could not. In the posttest, 67% improved and 33% did not. With reference to the experimental group, 33% were able to summarize, while 67% were not. However, in the posttest, 100% showed great ability to summarize.

With these results the research hypothesis is affirmed and the null hypothesis rejected.

CONCLUSIONS

Once all the results have been analyzed, we will reflect on the meaningful aspects of this research. First of all, it is important to point out that although there were changes in the control group; they were not as considerable as in the experimental group. For example, with respect to the pre and posttest of the control group related to vocabulary, the students

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

improved from 17% to 33%; in contrast, the experimental group improved from 27% to 83%; therefore, we may affirm that the reading strategies were effective in this skill.

Likewise, in the *interpretation* ability, the students in the control group progressed from 33% to 50%, while the experimental group advanced from 40% to 83%, which means that all the strategies applied helped the learners to understand the texts globally.

In relation to the *comprehension* ability, the students in the control group improved from 40% to 43%, a very small difference. However, the experimental group improved from 50% to 87%; such a result represents a great advantage and reaffirms the effectiveness of the reading strategies applied by the teacher.

On the other hand, the students in the control group improved their *fluency* from 10% to 23%, but the experimental group did a good job on the posttest, overcoming deficiencies from 10% to 83%.

With respect to the *main and secondary ideas*, the control group improved from 17% to 67%, that is, a good difference between their pretest and posttest, but the experimental group obtained better results, going from 33% to 97% in the identification of these ideas.

Finally, when summarizing, the control group advanced from 17% to 67%, which meant a good performance; however, the experimental group had an excellent progress, from 33% to 100%. Hence, these results confirmed the research hypothesis that stated the following: reading strategies for English college students positively influence their texts comprehension; consequently, we reject the null hypothesis that stated the opposite.

Autonomy was another important aspect that students of the experimental group achieved in their tasks, due to they did not depend on the teacher to interpret and summarize the texts. This is in agreement with (Izquierdo & Jiménez, 2014, p. 76) who declared that "the use of the three reading strategies (skimming, scanning, and making predictions) is a very enriching process to guide learners along the path of autonomy…"

In the same way, it was easy for most of the students in the experimental group to organize their ideas after understanding a text, so they used different types of graphic organizers

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

to express the ideas taken from the arguments read. This agrees with (Vargas & Zuñiga, 2018) who affirmed that graphic organizers facilitates text comprehension.

Based on the above, it should be noted that this study allows the development of other research related to graphic organizers or other qualitative investigation to reflect on each of the strategies used here, in order to deepen the experiences of both teachers and students.

FINANCING

ACKNOWLEDGEMENTS

REFERENCES CONSULTED

Chávez, P., Menacho, I., Orielle, Y. & Asto, E. (2021). Inference strategy in reading comprehension in high school students through virtual environments. *Horizontes Revista de Investigación en Ciencias de la Educación*, vol.5, n.21 pp.83-96. Available from: https://n9.cl/2mzxy

Echeverri, L. & McNulty, M. (2010). Reading strategies to develop higher thinking skills for reading comprehension. *Profile Issues in Teachers' Professional Development,* vol. 12, núm. 1, abril, 2010, pp. 107-123. Universidad Nacional de Colombia. Bogotá, Colombia

Gamboa, C. (2020). Metacognitive Strategies for improving Students' Reading Skills. *Península Península*, vol.15, n.2, 99-115. Available from: https://n9.cl/hui09

Gómez, N. & Ávila, J. (2009). Improving Reading Comprehension Skills through Reading Strategies Used by a Group of Foreign Language Learners. *HOW*, vol. 16, núm. 1, diciembre, 2009, pp. 55-70. Colombian Association of English Teachers. Bogotá, Colombia. Available from: https://n9.cl/r4i56p

Mónica Cecilia Cruz-Zambrano; Rocío Carolina Delgado-Morán; Jenny Elizabeth Quiroz-Cevallos;
Rodrigo Alexander Rincón-Zambrano

Izquierdo, A. & Jiménez, S. (2014). Building up Autonomy Through Reading Strategies. *Profile Issues in Teachers' Professional Development,* vol. 16, núm. 2, pp. 67-85. Colombia National University. Bogotá, Colombia. Available from: https://n9.cl/gd6uk

Loayza, M., Gallarday, S. & Arana, P. (2022). Impact of pedagogical strategies on reading comprehension skills. *Horizontes Research Journal in Educational Sciences*, vol.6, n.25, pp.1355-1366. Available from: https://n9.cl/bbmp8

Lopera, S. (2023). Effects of Reading Strategy and Dictionary Instruction in an Undergraduate Foreign Language Reading Comprehension Group. *Folios*, n.50, pp.127-138. Available from: https://n9.cl/10dsg

Perry, D. (2013). Comprehension strategies while reading expository texts in Spanish (L1) and English (L2). *Educational Psychology. Journal of Educational Psychologists,* vol. 19, núm. 2, pp. 75-81. Official School of Psychologists of Madrid. Madrid, España. Available from: https://n9.cl/8btlb

Rodríguez, M. (2021). Cognitive strategies for developing students' reading comprehension skills using short stories. Revista de estudios y experiencias en educación. *Rev. estud. exp. educ.*, vol.20, n.44, pp.233-253. Available from: https://n9.cl/on5n6

Vargas, J & Zuñiga, R. (2018). Graphic organizers as a teaching strategy for improved comprehension of argumentative texts in English. Volumen 18, Número 2. Mayo-Agosto, pp. 1-22. *INIE.* Available from: https://n9.cl/gy20p