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Artículos científicos

Las estrategias de lectura y su incidencia en la comprensión lectora de estudiantes de una universidad pública del noroeste de México

Reading Strategies and Their Impact on the Reading Comprehension of Students at a Public University in Northwestern Mexico

Estratégias de leitura e seu impacto na compreensão de leitura de estudantes de uma universidade pública no noroeste do México

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Resumen

Este trabajo presenta los resultados de una investigación que tuvo como objetivo indagar si es posible mejorar la comprensión lectora de los estudiantes de primer semestre de una institución pública del noroeste de México mediante estrategias de lectura. Se utilizó una metodología cuantitativa de carácter descriptiva. El tipo de diseño de investigación fue preexperimental con un solo grupo pretest y postest para la comprobación de la hipótesis planteada. El procedimiento fue evaluar con un pretest la comprensión lectora de los participantes para conocer el nivel en que se encontraban antes de la instrucción. Se continuó con la implementación de un taller de diez horas para instruir el uso de estrategias de lectura. Finalmente, se evaluó con un postest la comprensión lectora para comparar los resultados de ambos test y contar con elementos para determinar la efectividad o no de la intervención. Los resultados demostraron que después de la instrucción 38 % de los participantes avanzó de nivel y 50 % de los casos, aunque no logró cambiar de nivel,





mejoró su comprensión lectora al obtener mayor puntaje. Por lo anterior, se recomienda la instrucción en el uso de estrategias y con ello favorecer la formación de lectores competentes. **Palabras clave:** comprensión lectora, estrategias de lectura, formación universitaria.

Abstract

This work presents the results of a research that aimed to investigate whether it is possible to improve the reading comprehension of the students from the first semester of a public institution in the northwest of Mexico through reading strategies. A descriptive quantitative methodology was used. The type of research design was pre-experimental with a single pre-test and post-test group to check the hypothesis. The procedure was to assess the reading comprehension of the participants with a pretest to know the level they were in before the instruction. An intervention plan was continued: a ten-hour workshop was implemented to instruct the use of reading strategies. Finally, reading comprehension was evaluated with a post-test to compare the results of both tests and to have elements to determine the effectiveness or not of the intervention. The results showed that after the instruction on the use of strategies 38% of the study participants advanced in level and 50% of the cases, although they did not manage to change level, improved their reading comprehension by obtaining a higher score. Therefore, instruction in the use of strategies is recommended, and with this, the training of competent readers is encouraged.

Keywords: reading comprehension, reading strategies, university training.

Resumo

Este trabalho apresenta os resultados de uma pesquisa que teve como objetivo investigar se é possível melhorar a compreensão de leitura dos alunos do primeiro semestre de uma instituição pública no noroeste do México por meio de estratégias de leitura. Foi utilizada uma metodologia quantitativa descritiva. O tipo de desenho da pesquisa foi pré-experimental, com um único grupo de pré-teste e pós-teste para verificar a hipótese. O procedimento foi avaliar com um pré-teste a compreensão de leitura dos participantes para saber o nível em que estavam antes da instrução. A implementação de um workshop de dez horas continuou a instruir o uso de estratégias de leitura. Finalmente, a compreensão da leitura foi avaliada com um pós-teste para comparar os resultados de ambos os testes e ter elementos para determinar a eficácia ou não da intervenção. Os resultados mostraram que, após a instrução, 38% dos participantes avançaram em nível e 50%





dos casos, embora não tenham conseguido alterar o nível, sua compreensão de leitura melhorou com a obtenção de uma pontuação mais alta. Portanto, recomenda-se instruções sobre o uso de estratégias e, com isso, o treinamento de leitores competentes é incentivado.

Palavras-chave: compreensão de leitura, estratégias de leitura, ensino universitário.

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Introduction

In university education it is assumed that they have a good level of reading comprehension, given that it is one of the skills that they presumably should have honed in previous academic degrees. However, in my experience as a teacher I observe comprehension failures in readings assigned to students. Based on this, a question has been paving the way: what reading comprehension support strategies do the speakers of this level use?

The United Nations Educational, Scientific and Cultural Organization [Unesco] (2000, cited in Gutiérrez and Montes de Oca, 2016) proposes that knowing how to read constitutes a necessary capacity in itself, and is the basis of other skills vital: "Books and the act of reading constitute the pillars of education and the dissemination of knowledge, the democratization of culture and the individual and collective improvement of human beings" (p. 4). Reading is undoubtedly a pending task on the agenda of important institutions worldwide.

The Committee of Experts of the Organization for Economic Co-operation and Development [OECD] (2007) defines reading comprehension as "the capacity of an individual to understand, use and reflect on written texts, in order to achieve his personal objectives. , develop their knowledge and capabilities, and participate in society "(p. 7). For reasons like these, pointed out by said organization, it is that the reader must be clear with what intention she reads so that her reading is more effective.

In Mexico, several works have been carried out in relation to reading comprehension. Among them, that of Vidal and Manríquez (2016), who point out the deficiency in this competence on the part of those who enter the level of professional training. On the other hand, Gaeta (2015) highlights as part of her results the relevance of cognitive and motivational factors that are involved in the understanding of academic texts in the Mexican university context. Furthermore, it confirms that students use strategies to self-regulate learning. To achieve understanding, you must have prior knowledge and adopt intrinsic goals that promote skill and learning.





Cáceres, Pérez and Zúñiga (2018) They conclude that reading is a cognitive activity of great importance and complexity normally used for the acquisition of knowledge. This activity becomes the main learning tool for students, since most academic activities are based on reading. Therefore, academic success at all school levels and mainly in the field of higher education will depend, to a large extent, on the strategies and resources that a good reader possesses.

If we analyze the context prior to university education, that is, upper secondary education, it can be seen that the problem of reading comprehension comes from deficiencies not overcome in previous years of training. Evidence of this is the results obtained in the International Program for the Evaluation of Students (PISA), which is a study carried out by the OECD that evaluates the performance of 15-year-old students in the areas like math, science and reading. Of this last area is the information that is relevant to what is discussed here: Mexico showed a low reading performance, of the 65 participating countries, it ranked at number 52 (OECD, 2016).

University students are expected to have the ability of reading comprehension, and thus, can analyze, synthesize, evaluate and criticize information from various sources, which will provide them with sufficient tools for their academic development. Teachers, in vocational training, point out increasingly complex readings with the intention of strengthening student learning, but it is an arduous task when it is observed that students do not have this ability (Vidal and Manríquez, 2016). In an informal evaluation of reading comprehension, based on the results we obtained, he highlights that one of the problems of university students is their difficulty in selecting important information from texts, which is related to the fact that they do not use effective strategies to extract the main ideas (Guevara, Guerra, Delgado and Flores, 2014).

Osorio, Mendoza and Ballesteros (2018) affirm that reading is a means of accessing information and one of the ways to contribute to the generation of knowledge. Currently it has been shown that if the individual is trained and possesses reading skills, therefore, they will have better conditions to develop in today's society, which has been called information and knowledge, which, as we well know, is characterized by experiencing accelerated transformations through the generation, use and dissemination of information, raw material and essential human knowledge. And it is in these settings that reading becomes the key to a society that knows, understands, consolidates, analyzes, synthesizes, applies, builds and rebuilds the knowledge of humanity.

Cassany (2006) points out that reading is understanding and, specifically, is to elaborate meanings that are not explicitly mentioned in the text, a question called inference. The meanings are mentally constructed by the reader based on stimuli from the text and previous knowledge.





Reading comprehension has to do with the active participation of the reader, putting into play what he knows about the words and what they say between the lines, together with what he knows about the subject in order to give and expand the meaning that the text offers.

Reading is a process of interaction between the reader and the text to obtain the pertinent information according to the objectives that guide its reading (Solé, 2011). This process requires an active reader who processes and examines a text. Therefore, for reading comprehension to occur, those who read must have a clear interest and limited objective in order to extract from the text the information it provides. Felipe and Barrios (2017) affirm that reading is a key competence, the importance of which lies in the essential instrumental capacity to access knowledge and develop the capacities of university teaching.

While Valles (2005) points out that basic psychological processes such as:

- Selective attention: where the reader must focus his attention on the text according to his object of reading.
- 2) Carry out a sequential analysis: mental analysis process that consists of a continuous reading, word after word, connecting the meaning of each one of them.
- *3)* Synthesis: process where the reader recapitulates, summarizes and gives meaning to the linguistic units, so that the words take on coherent and meaningful unity, that is, the understanding of the text.
- 4) Memory: the reading process and its understanding is achieved through storage routines.

So it can be seen that comprehensive reading requires a more intentional process than what students normally attend.

As we have seen, reading comprehension is an active process where there is interaction between the text and the reader. But this interaction is not monochromatic, but involves different nuances, that is, the reader establishes different degrees of understanding regarding the text. Thus, Smith (1989, cited by Gordillo and Flores, 2009) speaks of three levels of understanding:

• Level of literal understanding. At this first level, the reader is able to recognize the words and phrases and grasps the structure of the text. The reader's intellectual and cognitive intervention is not very active.





- Level of inferential understanding. Second level where the reader relates and associates the meaning of the words, which allows him to read between the lines, presuppose and deduce the implicit, is able to relate what has been read with previous knowledge and draw conclusions.
- Critical level of understanding. At this last level, the reader is able to make a judgment by accepting or rejecting with arguments the information from the text read.

Knowing how to read and reach a deep degree of understanding is not an easy task; It can be achieved when the reader is willing to actively participate in the interaction with the text (Parodi, Peronard and Ibáñez, 2010). In the instruction, the students should be motivated with readings that are attractive and interesting, as well as ensuring that they manage to detect what the text contributes not only for their knowledge, but for their training in general. Likewise, in the act of reading it is important to know how to identify and previously determine the structure of the text, thus the reader will be able to understand the information contained in the document (Van Dijk & Kintsch, 1983). When students recognize the different textual structures, argumentative, narrative or descriptive, among others, they will have elements to interpret and organize textual information during the act of reading.

Finally, it should be noted that in this work we focus on expository texts. Corbacho (2006) defines them as documents that are associated with the analysis and synthesis of ideas and conceptual representations. These types of texts classify, explain and define concepts. These are texts that are linked to school assignments.

Methodology

In this investigation, a quantitative approach was used because the data was obtained with exact values, which ensures the quantifiable precision of the problem. This approach is often used when you want to estimate the magnitudes or occurrence of phenomena and test hypotheses. This through the approach of a study problem, delimited about the phenomenon of interest, in a specific context, in this case the reading competition in university students (Hernández and Mendoza, 2018).

The design was documentary, since it was intended to expand the information of the variables by collecting data from various research sources and thus provide new knowledge about





reading strategies, all with the intention of enhancing the reading comprehension of university students (Arias, 2012). The type of research used was descriptive, since the problem is addressed by detailing its characteristics and describing its variables. In addition, the information from the surveys is interpreted and specified to draw conclusions.

It began with a diagnosis, an instrument of own elaboration, through a questionnaire built with explicit questions to seek answers about the use of reading strategies. The above, being the first need to inquire if the study participants used reading strategies to support them to understand the texts that are assigned to them by their teachers at the university. Table 1 shows the results.





Tabla 1. Resultados de diagnóstico: encuesta basada en el Cuestionario sobre uso de Estrategiasde Lectura. Presentada en porcentajes. Total de la muestra: 33 estudiantes

| Pregunta | | Nunca | Casi | Algunas | Frecuentemente | Siempre |
|----------|--------------------------|-------|-------|---------|----------------|---------|
| | | | nunca | veces | | |
| 1) | ¿Realizas resúmenes o | 10 % | 30 % | 44 % | 10 % | 6 % |
| | síntesis para apoyar la | | | | | |
| | comprensión de los | | | | | |
| | textos que lees? | | | | | |
| 2) | ¿Elaboras mapas | 17 % | 47 % | 27 % | 8 % | 1 % |
| | conceptuales para | | | | | |
| | mejorar la comprensión | | | | | |
| | de tus lecturas? | | | | | |
| 3) | ¿Utilizas la técnica del | 5 % | 7 % | 27 % | 37 % | 24 % |
| | subrayado para apoyar | | | | | |
| | la comprensión lectora? | | | | | |
| 4) | ¿Identificas las ideas | 6 % | 7 % | 27 % | 36 % | 24 % |
| | principales y | | | | | |
| | secundarias de los | | | | | |
| | textos que lees? | | | | | |
| 5) | ¿Buscas la definición de | 5 % | 9 % | 21 % | 30 % | 35 % |
| | palabras desconocidas | | | | | |
| | en los textos que lees? | | | | | |
| 6) | ¿Planteas una hipótesis | 8 % | 31 % | 37 % | 20 % | 4 % |
| | en relación con lo que | | | | | |
| | leerás para orientar tu | | | | | |
| | lectura? | | | | | |
| 7) | ¿Reflexionas sobre lo | 2 % | 8 % | 36 % | 33 % | 21 % |
| | que lees? | | | | | |

Fuente: Elaboración propia

The diagnosis shows that the use of strategies is variable, but, in general, it is not a constant in the support for reading comprehension. With this information, the problem statement was formulated and a methodology was selected with which to counter this question, since, it





must be remembered, the interest of the research was based on helping students to improve their reading comprehension.

This approach was as follows: Does the instruction in the use of strategies have an impact on the reading comprehension of the first semester students of the Faculty of Pedagogy and Educational Innovation of the Autonomous University of Baja California enrolled in common trunk in the cycle 2019-1?

Hypothesis

Instruction on the use of reading strategies will have an impact on the reading comprehension of the participating first semester students.

- Independent variable: Reading strategies.
- Dependent variable: Reading comprehension.

Overall objective

Investigate if the instruction on the use of reading strategies has a positive impact on reading comprehension.

Specific objectives

- Diagnose the use of reading strategies by the first semester students of the Faculty of Pedagogy.
- 2) Establish the level of reading comprehension of the participants.
- 3) Define an intervention plan to instruct participants in the use of reading strategies.
- 4) Determine if the instruction on the use of reading strategies favors reading comprehension.

A pre-experimental design with a single pretest and posttest group was used to check the hypothesis proposed in the study. The execution of the design with a single pretest-posttest group implies, first, a measurement prior to the application of the dependent variable to be studied. O_1 (pretest); second, the introduction or application of the treatment of the independent or experimental variable (X), and third, a new measurement of the dependent variable O_2 (postest), which is diagrammed as $O_1 X O_2$ (Espinosa, 2016).





Buendía (2000) points out that the effect of the treatment of the pre-experimental design with a single group is verified when comparing the results O1 vs. O2. In this case, the posttest results were compared with the pretest results. This type of design requires that the application of both evaluations be as similar as possible to avoid varying the results. In accordance with this structure, the following table was outlined to clarify the design.

| O1 | Х | O2 |
|------------------------|------------------------------|------------------------|
| Pretest | Tratamiento | Postest |
| Cuestionario para | Plan de intervención. Taller | Cuestionario para |
| determinar el nivel de | sobre uso de estrategias de | determinar el nivel de |
| comprensión lectora | lectura | comprensión lectora |

Tabla 2. Tipo de diseño. Preexperimental con un solo grupo

Fuente: Elaboración propia

In this design the O_1 represents the group of 33 study participants prior to the application of the variable, which, as already indicated in this research, refers to the intervention plan represented by X, and the O_2 represents the same post-intervention group. The intervention plan was implemented through a workshop of five sessions lasting two hours each. Each session included instruction on the use of a reading strategy.

- 1st session. Reading strategy: underlining and identification of essential ideas.
- 2nd session. Reading strategy: clear gaps in understanding. Searching for unknown words.
- 3rd session. Reading strategy: graphic organizers: concept maps.
- 4th session. Reading strategy: the hypothesis as a reading strategy.
- 5th session. Reading strategy: reflection on what is read.

The pretest and posttest measurement assessed reading comprehension. For this, two questionnaires were designed, one for each of the measurements. These were constructed with multiple-choice questions to check understanding of the text. This instrument was chosen because it can be applied to a large number of students, in addition to reducing the selection of random responses (Pérez, 2005). In the preparation of the instruments, an adaptation of the Gordillo and Flores (2009) questionnaire was made, so two expository texts with 20 paragraphs were considered, from which questions were generated to determine the level of reading





comprehension: from one to the three measure the literal level, four to six the inferential and question seven and eight measure the critical level (see table 3).

| Niveles de | Categorías de análisis | Número de | Puntaje | Escala de |
|-------------|------------------------|-------------------|---------|-----------|
| Lectura | | pregunta según | | medición |
| | | las categorías de | | |
| | | análisis | | |
| | Léxico y vocabulario | 1 | 5 | |
| Literal | Conceptos y palabras | 2 | 5 | 5-15 |
| Literar | clave | | | 5-15 |
| | Ideas clave | 3 | 5 | |
| | Idea global | 4 | 5 | |
| Inferencial | Tema | 5 | 5 | 20-30 |
| | Propósito del autor | 6 | 5 | |
| Crítico | Toma de posición | 7 | 5 | 35-40 |
| | Intertextualidad | 8 | 5 | JJ-TU |
| Total | • | • | 40 | |

Tabla 3. Evaluación de los cuestionarios para evaluar los niveles de lectura

Fuente: Elaboración propia con base en Gordillo y Flórez (2009)

Regarding the population, first semester students from the common core of the Faculty of Pedagogy and Educational Innovation of the Autonomous University of Baja California were chosen. The above to have a representative sample of those entering the university. Specifically, a first-class group was preferred to, first, find out how much reading comprehension has been resolved in their previous academic training and, second, to be more opportune in countering the problem. The faculty was the ideal context for having easy access to study participants and, by collaborating in said institution, it would be more certain to carry out actions in the training of competent readers.

For the sample, group 103 was chosen for being the most numerous of the four existing, with a total of 33 students in the 2019-1 calendar, and for being a group with whom the intervention plan could be implemented. Regarding the sex of the participants, 79% were women and 21% men. Regarding age, 30% had 18 years, 43% with 19, 15% with 20 years and 12% with 21 years.





Regarding the techniques and instruments of data collection, a field investigation was selected in which the written-survey technique was used, for which questionnaires were designed as instruments constructed with items according to the information that was intended to be known from study participants (Arias, 2012).

Results

The research results were obtained by comparing the data obtained from the pretest and posttest tests (see table 4).

| | Resulta | ados pretest | Result | ados postest | Avance de | Mayor puntaje | |
|---------------|---------|--------------|---------|--------------|-----------|------------------|--|
| Participantes | Puntaje | Nivel de | Puntaje | Nivel de | nivel | | |
| | | lectura | | lectura | mvei | puntaje | |
| 1 | 20 | Inferencial | 30 | Inferencial | = | 10 | |
| 2 | 20 | Inferencial | 35 | Crítico | 1 | 15 | |
| 3 | 20 | Inferencial | 30 | Inferencial | = | 10 | |
| 4 | 30 | Inferencial | 40 | Crítico | 1 | 10 | |
| 5 | 15 | Literal | 25 | Inferencial | 1 | 10 | |
| 6 | 30 | Inferencial | 35 | Crítico | 1 | 5 | |
| 7 | 35 | Crítico | 35 | Crítico | = | 0 | |
| 8 | 20 | Inferencial | 35 | Crítico | 1 | 15 | |
| 9 | 35 | Crítico | 35 | Crítico | = | 0 | |
| 10 | 40 | Crítico | 40 | Crítico | = | 0 | |
| 11 | 20 | Inferencial | 30 | Inferencial | = | 10 | |
| 12 | 20 | Inferencial | 25 | Inferencial | = | 5 | |
| 13 | 10 | Literal | 35 | Crítico | 2 | 20 | |
| 14 | 25 | Inferencial | 30 | Inferencial | = | 5 | |
| 15 | 25 | Inferencial | 40 | Crítico | 1 | 15 | |
| 16 | 35 | Crítico | 40 | Crítico | = | 5 | |
| 17 | 20 | Inferencial | 30 | Inferencial | = | 10 | |
| 18 | 20 | Inferencial | 25 | Inferencial | = | 5 | |

Tabla 4. Resultados de la evaluación de niveles de comprensión lectora: pretest/postest



| | Revista Iberoamericana para la Investigación y el Desarrollo Educativo ISSN 2007 - 7467 | | | | | | | | |
|----|---|-------------|----|-------------|---|----|--|--|--|
| 19 | 15 | Literal | 30 | Inferencial | 1 | 15 | | | |
| 20 | 25 | Inferencial | 35 | Crítico | 1 | 10 | | | |
| 21 | 20 | Inferencial | 30 | Inferencial | = | 10 | | | |
| 22 | 35 | Crítico | 40 | Crítico | = | 5 | | | |
| 23 | 30 | Inferencial | 35 | Crítico | 1 | 5 | | | |
| 24 | 20 | Inferencial | 25 | Inferencial | = | 5 | | | |
| 25 | 35 | Crítico | 35 | Crítico | = | 0 | | | |
| 26 | 25 | Inferencial | 30 | Inferencial | = | 5 | | | |
| 27 | 40 | Crítico | 40 | Crítico | = | 0 | | | |
| 28 | 30 | Inferencial | 35 | Crítico | 1 | 5 | | | |
| 29 | 35 | Crítico | 40 | Crítico | = | 5 | | | |
| 30 | 15 | Literal | 35 | Crítico | 2 | 20 | | | |
| 31 | 35 | Crítico | 40 | Crítico | = | 5 | | | |
| 32 | 25 | Inferencial | 35 | Crítico | 1 | 10 | | | |
| 33 | 25 | Inferencial | 35 | Crítico | 1 | 10 | | | |

Fuente: Elaboración propia

For the analysis of the results, the frequency distribution table was constructed to measure the variables: table 5 for the pretest and table 6 for the posttest.



Dida



Tabla 5. Distribución de frecuencias para medición de variables de resultados pretest

| Niveles de comprensión lectora | Variables : puntaje obtenido | Frecuencia absoluta | Frecuencia absoluta acumulada | Frecuencia relativa | Frecuencia relativa acumulada | Porcentaje |
|-----------------------------------|------------------------------|---------------------|----------------------------------|---------------------|----------------------------------|------------|
| NCL | xi | fi | Fi | hi | Hi | % |
| Literal | 10 | 10 | 10 | 0.30 | 0.30 | 30 |
| Literal | 15 | 5 | 15 | 0.15 | 0.45 | 15 |
| Inferencial | 20 | 5 | 20 | 0.15 | 0.61 | 15 |
| Inferencial | 25 | 5 | 25 | 0.15 | 0.76 | 15 |
| Inferencial | 30 | 5 | 30 | 0.15 | 0.91 | 15 |
| Crítico | 35 | 3 | 33 | 0.09 | 1.00 | 9 |
| Crítico | 40 | 0 | 33 | 0.00 | 1.00 | 0 |
| | Totales | 33 | | 1.00 | | 100 |

Fuente: Elaboración propia





Tabla 6. Distribución de frecuencias para medición de variables de resultados postest

| Nivel de comprensión lectora | Variables: puntaje obtenido | Frecuencia absoluta | Frecuencia absoluta acumulada | Frecuencia relativa | Frecuencia relativa acumulada | Porcentaje | | | |
|---------------------------------|-----------------------------|---------------------|----------------------------------|---------------------|----------------------------------|------------|--|--|--|
| NCL | xi | fi | Fi | hi | Hi | % | | | |
| Inferencial | 25 | 4 | 4 | 0.12 | 0.12 | 12 | | | |
| Inferencial | 30 | 8 | 12 | 0.24 | 0.36 | 24 | | | |
| Crítico | 35 | 13 | 25 | 0.39 | 0.76 | 39 | | | |
| Crítico | 40 | 8 | 33 | 0.24 | 1.00 | 24 | | | |
| | Totales | 33 | | 1.00 | | 100 | | | |
| | Evente: Eleboración propia | | | | | | | | |

Fuente: Elaboración propia

The results of each test were plotted in percentages to clarify the information (see Figures 1 and 2).

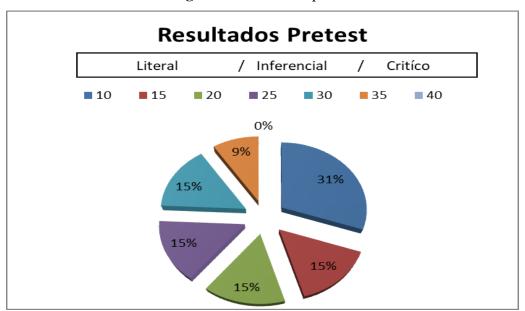


Figura 1. Resultados pretest

Fuente: Elaboración propia





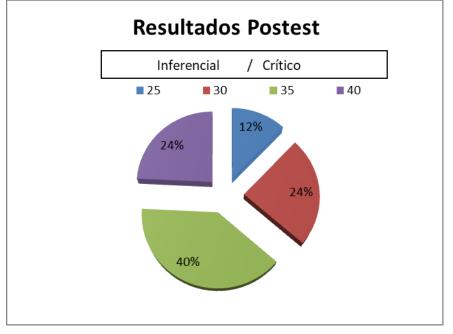


Figura 2. Resultados postest

Fuente: Elaboración propia

Discussion

Reading strategies, according to data obtained in the diagnosis, are not frequently used by study participants. The above is summarized as follows: they do not use underlining in 39% of cases; 40% do not identify essential ideas; summaries and summaries, on average 84%, are not usually used; 91% do not produce concept maps; 35% are not used to looking for the meaning of the words they do not know; 76% do not handle the hypothesis approach, and 46% do not use reflection as a process of information analysis. These results show that there is a need to train students, even at this stage of study, in the management of reading support strategies with the intention of promoting understanding.

The measurement of reading comprehension with the application of the pre-experimental design with a single pretest and posttest group allowed the testing of the hypothesis. Three moments were followed according to her procedure. First, the questionnaire (pretest) was applied to assess reading comprehension, which placed 45% of the students at the inferential level, 9% at the critical level and 46% at the literal level. The second step consisted of educational intervention. Here the study participants were instructed in the use of basic reading strategies, whose attendance at the workshop in each of the five sessions had more than 90% attendance.





And in the third step, the reading comprehension level (posttest) was re-evaluated, where it turned out that 64% reached the critical level and 36% stood at the inferential level; As is evident, no one was positioned on the literal level. Part of the analysis of the results was to calculate the measures of central tendency. And in this step it was obtained that the mean of the pretest evaluation score was 25 points, equivalent to the inferential level, and the mean of the posttest evaluation score reached 35 points, corresponding to the critical level, which shows the improvement of the level of reading comprehension of the students involved.

The obtained data refer that in the post-test evaluation 38% of the participants advanced in level; of these, 2% advanced two levels and 36% one level. Regarding the score, the result in favor was more forceful. Here, 88% improved with respect to the pretest results, since progress was observed with the increase in points as follows: 37% obtained five more points, 33% 10 more points, 12% 15 more points, 3% 20 more points, 3% 25 more points and 12% remained in the same score (of these, 6% obtained the highest score in both evaluations). It should be noted that 50% of the cases, although they did not manage to change their level, improved their reading comprehension by obtaining a higher score. These final data allowed us to accept the hypothesis presented.

Among the limitations of the study, it was found that the diagnosis was based on the opinion of the study participants, since, not having enough time and space, it was difficult to verify how they use reading support strategies, that is, there is no corroboration of the reality of their use or how effectively they are used, which could be the subject of future research. Another issue to take into account is that it was only possible to work with one group and not with the four enrolled in the first semester at the time the research was carried out. This could be solved by involving more teachers in instruction and authorities in joint attention to the problem. Likewise, an interesting line for other research work could be the incidence of reading literacy in university students' learning.





Conclusions

The results of the diagnosis show a deficit in the use of reading strategies by university students. Reading is one of the main and most important means of accessing knowledge. A constant task of the subjects is to read something, with the intention of understanding and, consequently, learning. Reading comprehension, as the PISA evaluations have shown, is not a skill developed by students upon entering universities, so it is important to continue supporting them with actions and strategies so that they can overcome deficiencies in this regard.

The evaluation of reading comprehension in the pretest installed most of the study participants at the inferential level, which indicates that, although they have sufficient reading skills such as reading between the lines, presupposing, deducing, relating what has been read to previous knowledge and draw conclusions, are not capable of making a judgment or argument of what is read. A low percentage did achieve the critical level, which shows that they can take a stand on what is read; that's where college students should be. Even more complicated was that some participants had the literal level, that is, they only recognized words, phrases and the context of what was read, according to the scale used here. With the instruction of reading strategies, although it was intervened with a single group, there was a difference for these students, since in the post-test it was found that several of them improved their understanding when advancing in score or level. The information obtained from the research results confirms that instruction on the use of reading strategies positively affects reading comprehension.

To achieve an effective reading, according to the level of university education, it is important to teach about reading strategies that support comprehension. To guide students in the use of these and thus to extract the implicit knowledge in the texts they read. Reading should be a regular practice and part of university instruction. Therefore, the teaching of strategies is recommended and thus favor the training of competent readers.





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