

# Reading comprehension strategies in elementary school students: Review Article

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## Abstract

The purpose of this review article is to analyze publications made on reading comprehension strategies in primary school students in a pandemic. To carry out this work, 36 articles that were found in the databases were analyzed: Scopus, ProQuest, Ebsco and Scielo in English and Spanish, between the years 2017 and 2021, to carry out the search of the present investigation, the following were used Equations in the databases indicated above: strategies AND reading comprehension AND primary school students, pandemic strategies AND reading comprehension AND elementary school students AND pandemic, a double entry table was used to organize important information from each article found. The results showed that the knowledge and development of reading comprehension strategies promote reading competence.

**Keywords:** Reading comprehension, training strategies & resources, Literacy in the elementary school, collaborative, e-learning.

## I. Introduction

Reading comprehension is embedded in different areas of our lives, from reading a text message on mobile devices to reading a literary work with many pages, we are understanding the text. Pelosi et al. (2019) in this regard, believes that one of the most important requirements and at the same time necessary for the progress of the person is reading comprehension, since this not only allows the development of curricular areas in the educational system, but also in the different spaces where it unfolds.

### Reading comprehension

Roldan (2019) affirms that reading and writing are fundamental requirements to access learning; They are the main tools to guarantee the exercise of a responsible person with a critical level, who actively participates in the society where it develops. Furthermore, Blasco et al. (2019) states that the students who are in the classrooms receive academic content that is transmitted through texts, it is for this reason that the development of reading is an important means of learning for all human beings. Along the same lines, Munayco (2018) argues that a true reading comprehension occurs when the reader goes beyond the literal, must advance to inferential understanding to end up successfully expressing a position on the read text that implies a critical analysis.

On the other hand, the specialists of PISA (2018) conclude; that, over the years, reading has evolved from the printed text that could be found in books to the digital text; due to the great diffusion and boom of information and communication technology (ICT). In this digital age, readers must have knowledge about ICT to be able to apply it in the use of mobile devices and applications found on the internet.

Fonseca et al. (2019) considers that reading comprehension is an activity developed in the mind of the human being, it is there where the meaning of what he reads is built, based on what the author of the text raises, it is also the primary purpose of reading, this understanding is broader when the clues offered by the author, that is, implicit information, are taken into account.

Along the same lines, Gottheil et al. (2019) state that to develop reading comprehension, skills and abilities of a high cognitive level must be put into practice, such as inferences from what is not read in the text; These are fundamental components to reach comprehension, as well as an important element is the reading fluency that the readers reach, not only staying in the decoding but developing the reading speed.

### Reading competence

According to the experts of PISA (2018), reading competence is related to the goals that the person must develop throughout his life, in it he acquires knowledge, unfolds his potential and participates in society, for all this he must acquire and develop reading skills, this is the use, evaluation and reflection.

Likewise, Robledo et al. (2019) indicates that reading competence has continuous and permanent effects on the curricular areas in which students travel, that is where its importance lies in the school context, therefore the application of reading comprehension strategies to students is relevant, these they are directly explained by the teacher to the students, this implies a

specific instructional process, dependent on the teacher; Hence, the role played by the teacher as a model and in turn transmitter of knowledge is relevant and fundamental, this implies providing guidance and support to the student, emerging as one of the main columns to benefit the development of reading competence.

On the other hand, Romo (2019) expresses that reading comprehension and reading competence are different but at the same time complementary terms widely used in the pedagogical field, reading comprehension is the ability that people have to use cognitive and metacognitive strategies when facing to a text to understand it, while reading competence is the skills and abilities that are manifested in the human being when facing a text at different times of our lives, it is social unlike reading comprehension that is individual, These two components constitute important elements for the integral education of the student, since it includes the comprehension of a text and the strategies that a reader can apply in favor of his community.

### **Reading comprehension processes**

Pinzas (2017) states that the development of phonological skills constitutes the first period for learning to read and they are important because there is a close relationship between them. Likewise, he mentions about the skills or abilities called metalinguistics, through these the child can use his own native language to be able to analyze it, as a means of learning and reach knowledge; These skills are prior to formal reading, so they must be developed in initial education, therefore, phonological awareness is one of the main components of metalinguistic skills, in addition, phonological awareness is the ability of every reader to identify and use sounds oral competence, and from this, skills are built and developed in children to learn to read and write.

### **Reading comprehension levels**

Mercer and Mercer (1993, cited in Pinzas, 2017) mentioned that the reading process implies having developed fundamentally two skills: decoding and comprehension; within the latter they mention, among others, literal understanding, inferential understanding and evaluation (critical understanding); Furthermore, in the opinion of Pinzas, literal comprehension skills refer to the child's ability to understand the information that the written text brings with it explicitly; questions that can be used to assess this understanding are: what, how, who, where and when; In this type of question the answers are exact, that is, the readers do not vary the answers.

With reference to inferential understanding, Pinzas (2017) affirms that this understanding has its starting point in literal understanding, that is, it relies on it, but very different at the same time; implicit information is found in the text; that is to say, that the textual content is not possible to perceive it with the naked eye, but we make it ours when one is able to analyze and reflect on that content; which allows to establish and express hypotheses and predictions about the text read; This type of comprehensive reading is linked to questions such as: why, what for, what else, among others; Likewise, unlike literal comprehension where the answers do not vary from person to person, here they will vary, since it will vary in the skills as a reader and the experiences that it brings, with respect to the evaluation or critical understanding. To the analysis, reflections and judgments that the reader outlined about the text, the recurring questions in this understanding are: what would you do, what do you think, do you agree? Why? what values does the writer want to communicate to us, why do you think the character acted that way, etc. Here the answers will depend on the values and experiences of the reader, that is, they vary from person to person.

### **Strategies to develop reading comprehension**

Bogaerds-Hazenberg et al. (2021) state in their research work the recognition of the structure of the text as a reading comprehension strategy or they also call it an approach at the paragraph level, this refers to the fact that the student must develop a broad vision and observation in the internal structure of texts or paragraphs explicitly, after this visualization they can actively complete or create maps and graphic organizers.

Likewise, Castellana & Lucisano, (2021) mention dimensions or strategies as a procedure to promote reading comprehension, which are: identify the purpose proposed by the text, the knowledge that the reader brings with it must be activated and related to some situation that has happened to you, that is, to instantly mobilize them to create a connection between the new with the previous, while reading you must create hypotheses and ask questions about a situation that is read in the text, select and choose the main ideas expressed in summaries, use textual graphic organizers such as tables, maps where summaries are expressed in a hierarchical way, without neglecting the use of connections between them, being aware of one's own learning, that is, recognizing whether the text has been understood or not, if in If the latter is to reformulate the summaries.

Furthermore, Blasco et al. (2019) express in their research work the importance of mediation as a strategy in the development of student learning, this mediation can be given through classmates and the teacher; In these collaborative processes, students support their classmates to be able to identify their errors and, based on them, they can overcome those difficulties and acquire reading skills. Likewise, the teacher participates in the student's learning as a mediator, a guide to their learning; where mediation acts as a central axis and learning is built on a social interaction.

Also, Halim et al. (2020) proposed metacognitive reading strategies: global reading strategy, supportive reading and problem-solving reading and peer help produce important effects on the development of the reading process, peer tutoring, or also known as assisted learning by peers is understood as the acquisition of knowledge actively with the help of a friend, this approach requires that students work together in pairs, so that one student will act as a tutor and the other as a tutor, by assuming these roles, the Students will help each other and improve their learning.

## Strategies to develop reading comprehension through ICT

Due to the pandemic that is hitting the entire world; In many countries of the world, students have had to take their learning to their homes, having their families as mediator, due to this the information and communication technology has become the main engine that moves all the institutions of the world especially educational institutions; In them, families found it necessary to use a mobile device, tablet, computer or laptop to be able to take their remote classes, in reference to this, UNESCO experts (2013) state that the use of mobile devices provides learning at any time and place, people connect with others, as in the case of education where the relationship is students-teachers; Likewise, they can be found through the browsers or search engines contained in which data, information and knowledge are involved; in addition, create content through tools provided by the internet to create pages, games and others as a teaching strategy.

In this regard, Peña-García (2019) stated the importance of strategies in the development of reading comprehension; In his research, he found results that allow observing the importance that the teacher as a model and generator of reading promotes in students to have the clear objective of reading, in addition to inferring, summarizing, interpreting and extracting relevant information from the text, Likewise, it was demonstrated that students feel motivated to read narrative and lyrical texts through the computer; therefore, it can be deduced that they find visual and interactive texts interesting in virtual spaces.

In addition, Neva (2021) in her research to develop reading comprehension proposes the use of digital texts as a means of teaching, such as reading stories, riddles, fables and digital books, as well as applications in cell phones for educational use, environments interactive virtual learning, augmented reality, virtual learning objects (OVA) among others, all this opens a field of possibilities for the student to achieve strategies that will help them in their learning. Therefore, it can be assumed that digital texts increase motivation towards reading, facilitate reading comprehension and promote collaborative learning.

The objective of this research is to analyze and reflect on the importance of reading comprehension and how teachers can apply strategies to improve this competence.

## 2. Method

The method used in the article is the analytical one, because the context was described in a general way, this knowledge of everything that happened allows us to know and explain peculiarities of each of its basic components and the relationships that they preserve among themselves (Cervera, 2014).

The investigation was carried out in the months of August and September 2021, the population consisted of 36 articles and these were found in "open access" and full text located in the Scopus, ProQuest, Ebsco and Scielo databases in English and Spanish. Descriptors in two languages, Spanish and English, and the equations strategies AND reading comprehension AND primary school students; was limited to the 2017-2021 range.

Within the inclusion, experimental investigations with a quantitative, qualitative, mixed approach, at the primary level were considered, some investigations that were for university and secondary level students were considered for exclusion and others that when reviewed were not related to the variables, In addition, the information was systematized in a scheme where the title, problem, methodology, result and summary were taken into account, these were added to the Mendeley manager. 112 were found, of which 36 articles were selected.

## 3. Results

The review of the literature related to reading comprehension in primary school students in a pandemic situation has allowed the analysis and reflection of each of the articles, finding in general that reading comprehension is involved with a set of strategies such as: reading aloud, guided, silent, in pairs, choral, echo, the use of technological tools to face the new teaching situation in a virtual context, among others.

Swidan & Hermans (2019) proposed a reading aloud strategy, to determine what was the effect on reading comprehension in elementary school students, 25 students participated in the experimental group and 24 students in the control group, the evaluation it was based on Bloom's taxonomy at the levels of remembering and understanding; The results showed that the experimental group showed a better performance in the variable to remember; However, when comparing the reading comprehension variable with the Mann-Whitney U statistic, no significant differences were found between the two groups; Furthermore, it was observed that the control group had a better mean (0.92) in relation to the experimental group (0.90). These results show some bias in the research process that could be focused on the strategies, the sample or the number of sessions scheduled for carrying out the research.

In addition, Ceyhan & Yıldız (2021) proposed as an objective to examine the effect of interactive reading aloud (IRA) lessons on students' reading comprehension levels, reading motivation and reading fluency skills; for which there was a sample of 62 second-grade students: 22 in the first experimental group, 20 in the second experimental group, and 20 in the control group; The research was carried out in 11 weeks, a difference in the corrected mean scores of the groups for reading comprehension was obtained as a result after the test, it was statistically significant  $p < 0.1$ ;  $p < 0.05$ ; The results of the post hoc test carried out to find the sources of difference revealed that the statistical difference was in favor of the students in the experimental groups between experimental 1 (R) and control, and experimental 2 (T) and control, with Based on this finding, it is concluded that IRA practices positively affect the reading comprehension scores of second grade students.

Likewise, Lastre et al. (2018) carried out an investigation within the quantitative approach, of quasi-experimental design, they proposed a “program to stimulate reading aloud” to improve reading comprehension. The results showed significant differences in literal comprehension with  $p = 0.000$  and at a confidence level of 95%; Likewise, significant differences were observed in inferential understanding with  $p = 0.01$ ; Likewise, evidence of significant differences in criterial reading comprehension was found between both groups with  $p = 0.034$ . In conclusion, the research showed that the participants submitted to the research program were able to perform analytical readings up to the highest level, which is critical understanding.

On the other hand, Flores (2019) set the objective of analyzing the contributions of m-Learning in the development of reading comprehension in third grade students, with a mixed approach, and experimental design, for the qualitative approach the data was taken interviews with the director, teachers and parents, obtaining as findings better teaching spaces and the result of accompanying the teacher; While in the quantitative approach, pre-test and post-test evaluations were taken into account, applied to the experimental and control group and, in the results of the post-test of the experimental group, an increase in the means that reached 73.5% for responses was observed. for reading, 78.1% related to vocabulary and 69.0% for reading comprehension; Likewise, evidences of important differences were found between the control group and the experimental group in the use of the interactive book for reading comprehension with  $p = 0.02 < 0.05$ ; In conclusion, evidence was found that the m-Learning program facilitated the monitoring of commands, influenced the improvement to predict reading comprehension, mainly in lexical skills and in the speed and effectiveness of writing.

Also, Tsuei et al. (2020) express the purpose of improving the participation in reading and literacy of fifth grade students, they participated in this study for twelve weeks, using a quasi-experimental design, two classes were assigned as an experimental group, one of 48 students and one class as control group of 25 students, in the experimental group a tutoring instruction strategy was carried out between pairs of electronic books, the findings obtained show that the strategy significantly benefited the reading of electronic books by children, the students of the experimental group showed increases significantly higher in reading comprehension, the result of which was: ( $F = 4.27$ ,  $p < 0.05$ ) compared to the group of control students.

So Also, Tzu Chien et al. (2019) proposed as an objective in their research if the written or spoken text is more appropriate to learn and have a higher performance in retention, comprehension of the text and transfer of real objects in a mobile learning environment, the sample was with 58 children from the primary level, a single factor experimental design was used, regarding the results the following findings were obtained: they did not indicate any significant difference in the presentation format of the learning materials in the retention test  $p > .05$ , or the text comprehension test  $p > .05$ , however in the transfer test there was a significant effect  $p < .05$ , which indicates that the text spoken through a tablet-type iPad does not significantly influence the comprehension of texts spoken.

In addition, Çetinkaya & Akyol (2021) maintain as a study objective to examine the effect of reading activities based on augmented reality, to optimize reading comprehension, motivation, attitude towards reading and participation in class of the students of fourth grade of primary school, this research was carried out with 54 fourth grade students, with a quantitative approach, in which a mixed design was used, it was carried out with a quasi-experimental design with a control and experimental group, the students were subjected to reading activities based on augmented reality and the following results were found:  $t(52) = 5.67$ ,  $p < 0.05$ ,  $r = 0.61$  the reading activities based on augmented reality explain 61% of the reading comprehension of the students, where the calculated  $r$  value is considered an important effect, in conclusion the proposed strategy had an important result in the development of text comprehension.

Likewise, Montenegro et al. (2020) set the objective of optimizing the reading comprehension of fourth grade primary school students, through an intelligent tutor with augmented reality, the findings based on the Wilcoxon statistical tests, with regard to the interest in the Reading was  $Z = -4.483$  lower than the 5% level of significance, that means that 100% of the students were interested in reading, in addition to the identification of the elements of the comprehension activities, it increased substantially, This was demonstrated by the statistical  $t$  student test, obtaining a value of  $T = -10.261$  lower than the significance level of 5%, obtaining 100% of the students who managed to identify the activities of the comprehension tasks, also, in the elaboration of In the reading comprehension tasks, the Wilcoxon statistical test was used, achieving a value of  $Z = -4.435$  lower than the significance level of 5%, obtaining 96.2% of students who elaborated 1 Comprehension activities appropriately. It was concluded that the strategy proposed by the authors improves text comprehension.

In addition, Schmidt & Tiba (2021) indicated as the main purpose to explicitly teach higher-order comprehension strategies to a second-grade student who had difficulty reading for meaning, the study was qualitative, to obtain data, the researcher at the beginning administered a week of previous tests, an intervention program (IP) that was maintained for four weeks and a week of subsequent tests, the results that were reached were two aspects, the first is referred to the development of comprehension skills: recover explicitly stated information, making simple inferences, deciphering and integrating ideas and information, evaluating and examining content, language and textual elements, everything was developed to answer higher order questions, resulting in the following: "make direct inferences", the error rate was reduced from 65.5% to 12.5%, and the "focus on recovering explicitly stated information" was also reduced from 12.5% to 0%, it was concluded that the strategy outlined by the authors had a significant influence on the student.

Duran (2019) presented an investigation in relation to inferential reading comprehension, through the use of discontinuous texts, aimed to find the skills that students have in the inferential comprehension process, for which he exposes developing strategies in which it improves The reading process, in the methodological aspect, action research was taken as a basis, with a qualitative approach, the sample was made up of 25 fifth-grade children, it reaches the following conclusions: prior knowledge is important to

develop inferential understanding, use In the reading process, a great variety of texts that are related to daily activities carried out by students, teamwork develops communication skills and the participation of the educational community strengthens reading comprehension.

So too, Blything et al. (2020) set objective to determine if primary school teachers used types of questions that differ in the level of challenge, with a specific focus on low and high challenge questions, they worked with a quantitative orientation, experimental design, 126 students participated of primary school with their respective teachers, in this study a statistically significant effect was found for the type of question in which teachers asked more confirmation questions, also called low-challenge or lower-level questions than word questions, also called questions questions. higher challenge, higher level or high challenge  $F(1, 15) = 14.85$ ,  $p = .01$ , partial  $\eta^2 = .50$ ; the interaction between the two factors was not statistically significant,  $F(4, 15) = 1.13$ ,  $p = .38$ , partial  $\eta^2 = .23$ , the teachers of students who attend schools in areas of low socio-level recruitment economically asked more word questions than the teachers of students who attend schools in regions of higher socioeconomic level, on the contrary, there was no statistically significant effect of SES in the formulation of confirmation questions,  $t(18) = 0.87$ ,  $p = .39$ ,  $r = .20$ , likewise, another finding was found: more cognitively challenging questions were related to greater linguistic complexity in the students' responses: the word questions had a positive correlation from small to median with MLU ( $r = .27$ ) and a medium to large positive correlation with causal subordinates ( $r = .49$ ), in contrast, less cognitively challenging questions were related to less linguistically complex responses, with correlation statistically significant but negative relationships with lexical variability and MLU (both  $r = -.25$ ), what is concluded is that high-level questions constitute a challenge for the student and that they will develop higher levels of understanding.

Bulut (2017) raised the objective of using the SQ3R strategy to progress in relation to reading comprehension skills in elementary school students for a period of 10 weeks, under a qualitative approach and action research design. SQ3R reading is a technique that has been developed by educators to provide a more fruitful and favorable reading process, this is proposed at the beginning: survey, question, reading, recitation, review

Tokgöz & Işık (2020) developed a quantitative and quasi-experimental design research; applied a KWL strategy to improve the reading process of students in informational and narrative texts, K is What do I know? W is What do I want to learn? and L is What will my learning be? The study sample was third grade primary school students; The implementation plan lasted 6 weeks, a significant increase in the informative texts of the experimental group was obtained as a result ( $z = -3.825$ ,  $p < 0.050$ ), and this result shows that the students of the experimental group increased their understanding of the informative texts, with respect to the comprehension of narrative texts in the experiment group ( $z = -3.725$ ,  $p < 0.050$ ), which means that there was a significant difference, which represents that the applied strategy significantly improved reading skills in the students of the group experimental, thus improving the understanding of narrative and informational texts.

Orozco et al. (2019) in their research proposed the use of virtual learning objects to develop reading comprehension in primary school students, with a quantitative approach and an experimental, quasi-experimental design, the students included in the sample were 52 of the third grade, the experimental group obtained standard deviation that ranged between 0.732 and 0.989, while the control group is between 1.093 and 1.206, which shows that the application of the strategy of using the virtual object called Mangus Classroom significantly improved reading comprehension in students. students.

Gonzales et al. (2019) proposed a study to strengthen the reading comprehension of elementary school students through the virtual tool called Mangus Classroom, the research was quasi-experimental through a field design, the study was applied to 70 elementary school students, After applying the strategy, significant improvements could be observed in the experimental group in the results of the post-test. 48.57% of the students in the experimental group were in low performance, 31.42% in basic and 20% in high; However, in the control group 85.71% of the students achieved a low performance and 14.28% a basic level, which is concluded is that the strategy proposed by the authors improves the students' reading comprehension.

Sadeghi et al. (2018) proposed as a study purpose to combine the perspective of social cognition and self-regulated learning to optimize students' understanding and motivation to read, it was quasi-experimental, it was applied to 51 primary school students, to find results in the Reading comprehension the authors used components or indicators, in relation to reading comprehension it was found that the experimental group in the comprehension post-test are higher than the average of students in the control group, the effect size in the focus component and recover plain text information (1/18); direct inference component (1/24); the component of interpreting and integrating ideas and information (11/1) and the review component and an evaluation of content, language and textual elements (21/1) was obtained, which is moderate based on the Cohen scale, and in relation to motivation was obtained as follows: students in the experimental group achieved higher scores in post-test motivational reading, the amount of effect on the reading challenge component (1/21); curiosity component in reading (1/29); The conflict component was obtained in reading (47.1) and the component of social reasons for reading (28.1), which is evaluated as an average based on the Cohen scale, in light of the results it can be conclude that the integrated training of self-control strategies and metacognitive sequencing had a positive and significant effect on all components of reading comprehension and motivation.

Akyol & Çoban Sural (2020) aimed to develop reading, reading comprehension and reading motivation through the strategies presented in the study, the research was of a qualitative approach, the action research design, which was carried out in a period of one semester, in relation to the first variable that was the development of reading, strategies such as: repetitive reading, echo reading, paired reading, shared reading, choral reading, among others, were obtained as a result greater reading fluency while the Reading time decreased so the planned strategies were effective, regarding the second variable, reading comprehension, pre-reading strategies were used: such as leafing through the text, identifying key words, determining the reading objective, using previous knowledge,

among others. others, reading: defining words, establishing relationships, visualizing, seeking answers to questions, among others, and after reading the strategies of summarizing, answering the questions, synthesizing, among others and finally in the reading motivation variable, interesting texts were used and the teacher praised the successes of the students, all the strategies proposed in the research contributed to the research having as It resulted in important achievements in the student as the level of frustration increased at the instructional level.

Escobar & Sánchez (2019) developed a program called "We all learn in a virtual learning environment" under a quasi-experimental approach, in which they planted activities developed with technological tools in a virtual classroom, a significant improvement in reading fluency and The comprehension of texts at the three levels, literal, inferential and criterial, in addition to learning in an interactive and playful environment, favored the motivation and enthusiasm of the participants. Only results with percentages, it was found as a result in the literal level that 95.8%; 79.1% answered it satisfactorily; responds correctly at the inferential level and at the critical level 50%; It is concluded that the strategy proposed by the authors is significant for the development of reading comprehension, and what should be worked with more emphasis is on the bad high level, which is when the student expresses an opinion on a specific topic or fact.

Pečjak & Pirc (2018) presented a research whose purpose was summary skills in fourth grade primary school students, 190 students participated in the study, the plan had a duration of 5 months, it was a research with a quantitative approach and experimental design, it was found as a result that the experimental group achieved an improvement that shows significant progress ( $t(101) = 5.975$ ;  $p < 0.001$ ) than the control group that obtained a ( $t(68) = 1.901$ ;  $p = .061$ ), It is concluded that the strategies used in the present investigation were effective to summarize texts, which is one of the important strategies that improve reading comprehension.

Beck & Condry (2017) propose, an investigation to improve the comprehension skills of the reader, it was a case study that was carried out with a ten-year-old boy of grade 4 who presented difficulties to understand the texts, a plan was designed intervention that lasted 6 weeks, developed reading strategies such as: preview, visualize, monitor, self-question, make connections, know how words work, summarize and evaluate, and the student was asked questions of the type: focus on explicitly stated information and retrieve it, make direct inferences, and examine and evaluate content, language, and textual elements; managing to significantly improve the comprehension of texts. The results that were obtained were that they developed the skills for good understanding.

#### 4. Discussion

In all the activities that people carry out daily, reading comprehension is immersed, and even more so in this time when technology is developing with great speed due to the pandemic and education needs it to continue developing, in that sense they have found several studies that show the importance of reading comprehension.

Swidan & Hermans (2019) proposed an evaluation at the beginning of the research based on Bloom's taxonomy, which focuses on the levels of memory and comprehension, after applying the instruments it was obtained as a result that the participants in the experimental group score significantly higher in the memory level questions, however, the two groups performed similarly in the comprehension level questions, that is, there was no significant difference. However, Ceyhan & Yıldız (2021) differ from the previous research, they carried out an analysis and they revealed that practices based on the skill of interactive reading aloud increased the reading comprehension levels of second grade students, Teachers modeled reading for students by reading at the appropriate pace, pronouncing accurately, and observing intonation and punctuation marks, and with an appropriate pause, they let the students repeat the words they had difficulty pronouncing. In the same vein, the program to stimulate reading aloud was developed, to improve reading comprehension at the literal, inferential and critical levels, satisfactory results were demonstrated (Lastre et al. 2018)

Likewise, Flores (2019) investigated how m-Learning contributes to the development of reading comprehension using interactive books through an application that students downloaded to their cell phones, it was a mixed type investigation and quasi-experimental design, The author obtained as a qualitative result that the teachers considered that the innovative management of technology was relevant in teaching and learning and in the quantitative results they were positive in reading comprehension, especially in vocabulary and reading fluency. Also, Tsuei et al. (2020) in their research obtained results in which they show that the integration of peer tutoring in the reading of e-books downloaded on their mobile devices such as: annotations, highlighting, audio recording, taking pictures and bookmarks results in a effective educational model to improve student reading. In contrast to previous research, Tzu Chien et al. (2019) exposes that the spoken text strategy can be applied in a mobile learning environment through the tablet-type iPad, and that it brings significant effects in relation to the transfer of knowledge, however in regard to the understanding of the text and knowledge retention was not a significant effect.

In addition, Çetinkaya & Akyol (2021) in their mixed type research to improve variables such as reading comprehension, they used tablets with the augmented reality mobile application. The findings obtained revealed that there was a significant difference in favor of the experimental group in reading comprehension. Along the same lines, Montenegro et al. (2020) conducted an investigation on the application of a strategy of an intelligent tutor with augmented reality to optimize reading comprehension; For this, they proposed the use of Mobile-D, through their mobile devices, obtaining significant results in the development of reading comprehension.

Also, Schmidt & Tiba (2021) carried out a research work in which they raised the teaching of reading explicitly using strategies such as "My turn - Your turn", this developed prediction, reasoning and thinking skills when asking questions of Higher

order, questions develop active thinking during reading to gain deeper meaning from the reading passage. The findings found indicate that inferential questions, also called higher order, develop reading comprehension. Accordingly, Blything et al. (2020) express in their research work a strategy in which teachers ask high and low challenge questions, the latter requires answers that go beyond the explicit meaning of a text, that is, a deep reading comprehension of the text is encouraged. In addition, Duran (2019) affirms that in order to achieve a deep understanding of the text, answering questions of high challenge or inferential level, it is very important to provide the student with strategies or procedures that can help them understand the text.

In addition, Bulut (2017) in his research considers the SQ3R strategy which is: survey, question, reading, recitation and review for the progress of reading comprehension; In the survey stage the student presents their previous knowledge, seeing the visual elements and studying the keywords before reading, in the question and reading stages the student predicts and answers questions from images, then they perform the reading and Finally, in the reciting and revising stages, the student summarizes, revises and carries out some evaluation activities, along the same lines, Tokgöz & Işık (2020) in their research developed to improve text comprehension uses the KWL strategy which are the next questions: What do I know? which is related to the survey stage What do I want to learn? which is related to the question and reading stages and What did I learn? which corresponds to the stages of reciting and revising that it raises (Bulut, 2017).

Digital tools have become a valuable strategy for teaching-learning in all courses and their use is accessible on the internet, one of them is Mangus Classroom, which through interactive games promotes motivation among students, as well as acquisition of data, information and knowledge developing in a positive way the strengthening of reading comprehension (Orozco et al. 2019; Gonzales et al., 2019).

Sadeghi et al. (2018) stated in their study that reading motivation contributes in a relevant way to the comprehension of texts, therefore, they applied a combined strategy of the cognitive-social perspective and self-regulated learning, reaching a satisfactory answer for students, in Along the same lines, Akyol & Çoban Sural (2020) considered using strategies to improve reading, reading comprehension and motivation, with respect to the latter they proposed strategies such as presenting interesting texts for the student, rewarding demonstrated effort and praising with words appropriate the achievements obtained by the student.

## 5. Conclusions

The current situation in the world has brought important changes throughout the world, these changes have been seen in all fields of work and study, the educational field has had to drastically modify teaching and learning; Thus, the entire educational community has had to change the way they work and study, and even more so the teachers who had to change the way they teach students suddenly.

Reading comprehension is a cross-sectional component that encompasses the field of study and spheres of life, hence the importance of moving through levels of understanding until reaching value judgments or giving an opinion on a certain fact or topic, teachers have that responsibility to mediate and accompany in this process. Reading comprehension strategies are ways that people can use to understand a text, these must be adequately oriented in the classroom from the beginning of the study of the human being and reinforced at home by family members.

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