REVISTA INTERNACIONAL
TECNOLÓGICA - EDUCATIVA DOCENTES 2.0
ISSN: 2665-0266 / ISNI: 0000 0005 0409 1664 / RINGGOLD ID 608948.
VOL. 17 (2), NOVIEMBRE 2024 | https://doi.org/10.37843/rted.v17i2.509

RTED Resiliencia aradigmática

The Contribution of Inferential Reading Strategies to Improve the Reading Comprehension Skill in an Online Private Lesson Context

The Contribution of Inferential Reading Strategies to Improve the Reading Comprehension Skill in an Online Private Lesson Context

Luis Antonio Sanhueza-Oyarzún[1] y Angie Quintanilla-Espinoza[2]

EDICIÓN: RTED Resiliencia aradigmática

Recibido: 9/enero/2024
Aceptado: 16/julio/2024
Publicado: 29/noviembre/2024

Páginas: desde 159-169

País
[1]Chile
[2]Chile

Institución
[1]University of Concepción
[2]University of Concepción

Correo Eletrónico
[1]lsanhuezao@udec.cl
[2]anquinta@udec.cl

ORCID
[1]https://orcid.org/0009-0003-1228-2113
[2]https://orcid.org/0000-0002-1027-0579

Citar así: APA / IEEE

Sanhueza-Oyarzún, L. & Quintanilla-Espinoza, A. (2024). The Contribution of Inferential Reading Strategies to Improve the Reading Comprehension Skill in an Online Private Lesson Context. *Revista Tecnológica-Educativa Docentes 2.0*, 17(2), 159-169. https://doi.org/10.37843/rted.v17i2.509

L. Sanhueza-Oyarzún y A. Quintanilla-Espinoza, "The Contribution of Inferential Reading Strategies to Improve the Reading Comprehension Skill in an Online Private Lesson Context", RTED, vol. 17, n.°2, pp. 159-169, nov. 2024.

Resumen

In response to the increasing importance of effective online learning strategies, the following study explored the contribution of inferential reading strategies to improving reading comprehension skills within an online learning framework. The research was based on the action research model, using a mixed approach that collects quantitative and qualitative data from four students between 16 and 18 years old who received strategic reading instruction during four sessions. By employing pre- and post-tests along with semi-structured interviews, the study assessed both quantitative and qualitative aspects of participants' understanding and perceptions. The results indicated a notable improvement in inferential reading comprehension at both the group and individual levels, although with some inconsistencies in performance on specific items. Participants understood learning strategies, inference, and their application in comprehension tasks. Furthermore, the participants' positive attitudes towards strategy instruction were evident, with many expressing comfort, engagement, and motivation. They particularly emphasized the role of lesson organization, reflection, and feedback in enhancing their comprehension skills. This research underscores the effectiveness of integrating inferential reading strategies in online learning environments, providing valuable insights into student perceptions and the impact of strategy instruction on reading comprehension.

Palabras clave: Reading comprehension, strategical instruction, inference, online learning.

Abstract

In response to the growing importance of effective online learning strategies, the following study aimed to explore the contribution of inferential reading strategies to improving reading comprehension skills within an online learning framework. Through an action research approach, four students aged 16 to 18 received strategic reading instruction across four sessions. By employing pre- and post-tests alongside semi-structured interviews, the study assessed both quantitative and qualitative aspects of the participants' comprehension and perceptions. Results indicated a notable improvement in inferential reading comprehension at both group and individual levels, albeit with some inconsistencies in performance across specific items. Participants demonstrated a robust understanding of learning strategies, inference, and their application in comprehension tasks. Furthermore, they emphasized the significance of lesson organization, reflection, and feedback in facilitating their comprehension skills. Overall, participants exhibited positive attitudes towards the strategic instruction, reporting feelings of comfort, engagement, and motivation. This research underscores the effectiveness of integrating inferential reading strategies into online learning environments, offering valuable insights into student perceptions and the impact of strategic instruction on reading comprehension enhancement.

Keywords: Comprensión lectora, instrucción estratégica, inferencia, aprendizaje en línea.

D.L:LA2017000128 / **ISSN:** 2665-0266 / **Ringgold ID**:608948
ISNI: 0000 0005 0409 1664
Noviembre 2024 - Volumen 17, Número 2, Ejemplar No. 39.

Introduction

In response to the increasing importance of effective online learning strategies. Reading comprehension is a skill in which learners develop a series of mental processes from which the ultimate purpose is constructing meaning. More specifically, reading activates a mechanical process to generate a visual representation of words, identify representations at the phonological, orthographic, and semantic levels, and connect words through syntactic rules until reaching a more complex process: inference generation (Bayat & Cetinkaya, 2020). In this sense, developing a proficient reading comprehension level in English represents a challenging endeavor, especially when learners face texts that contain unfamiliar lexical repertoire, narrow topic acquaintance, and limited or non-existent use of reading strategies. In addition, when reading, it is rare for texts to contain only literal information.

More specifically, a great deal of information demands inference generation; thus, texts require more analytical reading to integrate information from inside and across the texts, which means, going beyond word-by-word decoding and working memory saturation (Gómez et al., 2013). All in all, inferential reading conveys switching on a cognitive process to activate readers` background knowledge, identifying the structure of a specific text, and having a clear view of the author's purpose and generation of inference (Bayat & Cetinkaya, 2020). Under this scope, readers adopt a more analytical, critical, and perceptive way to comprehend information beyond literal (Lee, 2013).

In this line, and considering the aim of this study, the inferential reading strategies instructed during the intervention process of this action research are lexical inference (Nuttall, 2005), details search (William & Mary School of Education, 2002), text connecting (Hara & Tappe, 2016), relating text to personal knowledge (Hara & Tappe, 2016), and thinking aloud (Pacheco, 2019). It is in this context that the concern for this study was found. The cornerstone of the investigation of this research is the limited self-awareness of using reading comprehension strategies to tackle inferential comprehension gaps within texts. Reading comprehension problems were common when learners faced multiple-choice texts, texts requiring evidence to justify inferences given, and texts with specific passages with idiomatic expressions.

Therefore, the following study aims to explore the significant contribution of inferential reading strategies to improving reading comprehension skills in an online private lesson context. The study's objectives are not just academic exercises; but necessary steps towards enhancing reading comprehension. We aim to identify the extent to which the teaching of inferential reading strategies can help students improve their reading comprehension. We also seek to understand students´ perceptions of using reading strategies to improve their inferential reading comprehension and having received strategic instruction. Considering the study's objectives and the identified concern regarding the limited self-awareness of using reading comprehension strategies, the central research question guiding this investigation is: To what extent can inferential reading strategy training help students improve their reading comprehension in an online private lesson context?

Methodology

Due to the fundamentals of this study being a concern found in a reading comprehension context, this investigation follows the action research model. Burns (2010) describes action research as a method that sustains critical, self-reflective exploration of a problematic situation commonly found in a learning-teaching context in which the teacher-researcher is immersed in. The primary goal of action research is the improvement or innovation of teaching practices.

This study used a qualitative research paradigm for its framework. A purposive sample of four students (three females and one male) was used. Palinkas et al. (2013) define a purposive sample as a selection method that comes from experience in the field of knowledge and becomes a subject of interest for the researcher. The population selected is within reach and highly acquainted with the study. It is worth noting that the research population is a small-scale sample because this was an online intervention. Taft et al. (2019) emphasize that having smaller courses for online instruction poses several benefits, such as using hands-on methodologies that strictly align with the constructivist learning model, allowing a more individualized learning process and greater interactions between students and teachers.

Another benefit of a small-scale sampling in an online lesson is that teaching presence, cognitive presence, and social presence adopt a more protagonist role and facilitate learning climate settings, regulation of learning, and goal achievements (Garrison et al., 2000). The action plan for this study was framed starting with finding the pedagogical concern in the researcher`s teaching context. Next, the preliminary intervention started with administering a reading comprehension pre-test. Afterwards, four 90-minute sessions were implemented. During the sessions, participants were instructed on inference, inferential reading, and inferential reading strategies following a reading program scattered across the sessions.

The practice exercises presented during the sessions contained strictly multiple-choice reading activities, especially those for training for the PET test, narrative texts that required justification of an inference given, and narrative texts containing figurative language. As introduced above, five inferential reading strategies were instructed throughout the interventions, with the support of an extended variety of texts to have participants practicing, applying, and reflecting upon the strategies learned. After the participants completed the four sessions, a post-test and a semi-structured interview were administered. All sessions were conducted through a virtual teaching platform (Zoom) and with the support of multiple technological resources to display data and exercises.

This study's unique aspects include using the CALLA Model for instruction and online intervention. The CALLA Model, as described by Chamot & Robbins (2005), provided a scaffolding process that acted as a supportive learning resource, especially for this study, in which inferential reading comprehension strategies were taught explicitly. The four sessions were all designed under the same instructional format: preparation, presentation, practice, expansion, and evaluation, making the study unique and relevant to the field of language education and literacy.

As mentioned above, data collection instruments for this action research included a pre-test, a post-test, and a semi-structured interview. As Pan & Sana (2021) describes, pre-testing is an assessment instance whose goal is semantic activation generation and prompts cue-related knowledge with which targets are encoded. For this action research, pre-testing was used to have a clear picture of the level of skill that participants revealed before starting with the interventions. In the same line, post-testing supposes mechanisms for "retrieval practice" of semantic knowledge that was activated previously in the pre-testing (Pan & Sana, 2021, p. 11-12). Post-testing was used to evaluate the extent of improvement participants achieved after receiving strategic instruction. Both tests used in this study shared the same number of items, points, and exercise format.

The comprehensive approach of this study is highlighted using a semi-structured interview as a data collection instrument. This interview was administered after the participants received strategic instruction across all four sessions. It was used to gather qualitative information about participants` perceptions of using inferential reading comprehension strategies and strategic instruction. As Mwita (2022) points out, the semi-structured interview is a valuable tool for obtaining descriptive information through interaction between the interviewer and the interviewees. The semi-structured format was chosen to provide more flexibility to the questions, allowing for the expansion of questions to gain additional information or details on the subject.

The interview employed pre-established categories and subcategories, creating a structured framework delineating well-defined content areas and specific subthemes. Every subtheme was intended to provide information in concordance with using strategies and receiving strategic instruction. The pre-test and post-test scores were statistically coded for data analysis using arithmetical measures, mean, and standard deviation. Regarding the interview, data analysis was conducted using thematic analysis.

Results

As stated before, the foundational approach for this action research is qualitative, although quantitative data was also gathered through the pre-test and the post-test. As the pre-test and the post-test were reading comprehension assessment instruments with scored items, the results were analyzed by contrasting performance metrics in both tests. The resulting data from the comparative analysis of the pre-test and the post-test was presented to establish the extent to which Specific Objective 1 was met. Qualitative data obtained from the semi-structured

Sanhueza-Oyarzún, L. & Quintanilla-Espinoza, A. (2024). The Contribution of Inferential Reading Strategies to Improve the Reading Comprehension Skill in an Online Private Lesson Context. *Revista Tecnológica-Educativa Docentes 2.0*, 17(2), 159-169. https://doi.org/10.37843/rted.v17i2.509

interview was carefully transcribed for further analysis. Perceptions were taken from the sub-themes in the thematic chart for a more descriptive view to meet Specific Objective 2. Below, Table 1 shows the reading performance results obtained from the pre-test. The total score achievable was 60 points. Scores in brackets represent the maximum scores achievable per item. Table 1 also shows the achievement level attained by all four participants in every item.

Table 1

Pre-test Results.

Scores	Achievement level
Participant 1:	
Item I: 20 points (24) Item II: 15 points (16) Item III: 17 points (20) **Total:** 52 points	Item I: 83,3% Item II: 93,8% Item III: 85,0% **Overall:** 86,7%
Participant 2	
Item I: 20 points (24) Item II: 13 points (16) Item III: 14 points (20) **Total:** 47 points	Item I: 83,3% Item II: 81,3% Item III: 70,0% **Overall:** 78,3%
Participant 3	
Item I: 18 points (24) Item II: 14 points (16) Item III: 17 points (20) **Total:** 49 points	Item I: 75,0% Item II: 87,5% Item III: 85,0% **Overall:** 82,5%
Participant 4	
Item I: 14 points (24) Item II: 14 points (16) Item III: 14 points (20) **Total:** 42 points	Item I: 58,3% Item II: 87,5% Item III: 70,0% **Overall:** 70,0%
190 (overall) / 240 (total) **Mean:** 47,5 points **Standard deviation:** 3,6	Group performance: 79,3%

Note. Participants' scores and achievement level in the pre-test, own elaboration (2024).

As Table 1 illustrates, the group's achievement level in all three items was 79 %, with a total of 190 points out of a maximum of 240. The individual performance of each participant is noteworthy. Participant 1 scored 83% in item I, 93% in item II, and 85% in item III, with item II being the highest score achieved. Participant 2 scored 83% in item I, 81% in item II, and 70% in item III, with item I being the highest score achieved. Participant 3 scored 75% in item I, 87% in item II, and 85% in item III, with item II being the highest score achieved. Participant 4 scored 58 % in item I, 87% in item II, and 70% in item III, with item II being the highest score achieved. These individual achievements are a testament to their dedication and hard work.

Thus, it can be seen from Table 1 that the most descended item was item I, showing an average of 74,7% of achievement. The third item showed the second lowest level of achievement, which yielded a 77,5% average. Item II showed the biggest consistency in performance, showing 87,5% average. This refers to the fact that three participants (1, 3, and 4) obtained the highest scores in item II. The mean score was 47,5, from all the total scores of every participant every participant's total scores. The standard deviation was 3,6, calculated from the mean value and the total scores of every participant. Individual overall performance revealed that participant 1 achieved 86,7% (52 points), participant 2 achieved 78,3% (47 points), participant 3 achieved

82,5% (49 points), and participant 4 achieved 70% (42 points).

Table 2 presents the reading performance results from the post-test. Similar to the pre-test, the performance is shown separately into items. The total score achievable was 60 points, with the maximum scores achievable per item shown in brackets. The achievement level obtained by all four participants in every item is also shown. Notably, the post-test results show an improvement in the participants' performance, which is a promising sign of their progress.

Table 2

Post-test Results.

Scores	Achievement level
Participant 1:	
Item I: 24 points (24)	
Item II: 16 points (16)	Item I: 100%
Item III: 20 points (20)	Item II: 100%
Total: 60 points	Item III: 100%
	Overall: 100%
Participant 2	
Item I: 24 points (24)	
Item II: 15 points (16)	Item I: 100%
Item III: 20 points (20)	Item II: 93,7%
Total: 59 points	Item III: 100%
	Overall: 98,3%
Participant 3	
Item I: 24 points (24)	
Item II: 14 points (16)	Item I: 100%
Item III: 20 points (20)	Item II: 87,5%
Total: 58 points	Item III: 100%
	Overall: 95,8%
Participant 4	
Item I: 22 points (24)	
Item II: 12 points (16)	Item I: 91,6%
Item III: 16 points (20)	Item II: 75,0%
Total: 50 points	Item III: 80,0%
	Overall: 82,2%
227 (overall) / 240 (total)	
Mean: 56,7 points	Group performance: 94,5%
Standard deviation: 3,9	

Note. Participants' scores and achievement level in the post-test, own elaboration (2024).

Table 2 proudly displays the group´s overall performance of 94.5%, equating to 227 points out of a possible 240. This achievement was a mere 13 points shy of the maximum score. Individually, the results were equally impressive: participant 1 scored 100% (60 points), participant 2 scored 98.3% (59 points), participant 3 scored 95.8% (58 points), and participant 4 scored 82.2% (50 points). Notably, Participant 1 achieved 100% in item I, 100% in item II, and 100% in item III.

Participant 2 achieved 100% in item I, a commendable 93.7 % in item II, and 100% in item III. Participant 3 also showed significant improvement, scoring 100% in item I, 87.5% in item II, and 100% in item III. These results indicate a promising upward trend in achievement levels for items I and III. However, there was no improvement in item II, as both the pre-test and post-test scores remained the same. Participant 4 achieved 91. % in item I, 75% in item II, and 80% in item III. This represents a notable improvement in items I and III, but unfortunately, there was no improvement in item II, and the score was even lower than the pre-test score (87,5). This implies a setback in improving inferential comprehension for narrative texts, specifically in looking for evidence to support or justify an inference.

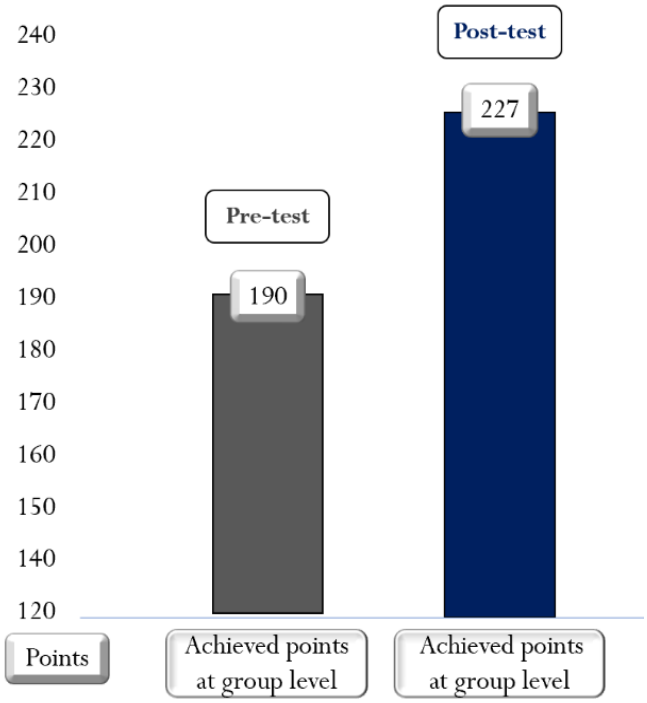
With these results, the most descended item was item II, which reached 89% of achievement,

Sanhueza-Oyarzún, L. & Quintanilla-Espinoza, A. (2024). The Contribution of Inferential Reading Strategies to Improve the Reading Comprehension Skill in an Online Private Lesson Context. *Revista Tecnológica-Educativa Docentes 2.0*, 17(2), 159-169. https://doi.org/10.37843/rted.v17i2.509

compared to item I, which reached an outstanding average of 97,9%, and item III, with 95% of achievement. A notable aspect was that several items reached the maximum level of achievement expected. The mean score was 56,7, calculated from every participant's total scores. The standard deviation was 3,9, calculated from the mean value and the total scores of every participant. Next, Figure 1 shows the difference in scores obtained at the pre-test and post-test group levels.

Figure 1

Contrastive Analysis of Points Gaps between Pre-test and Post-test.

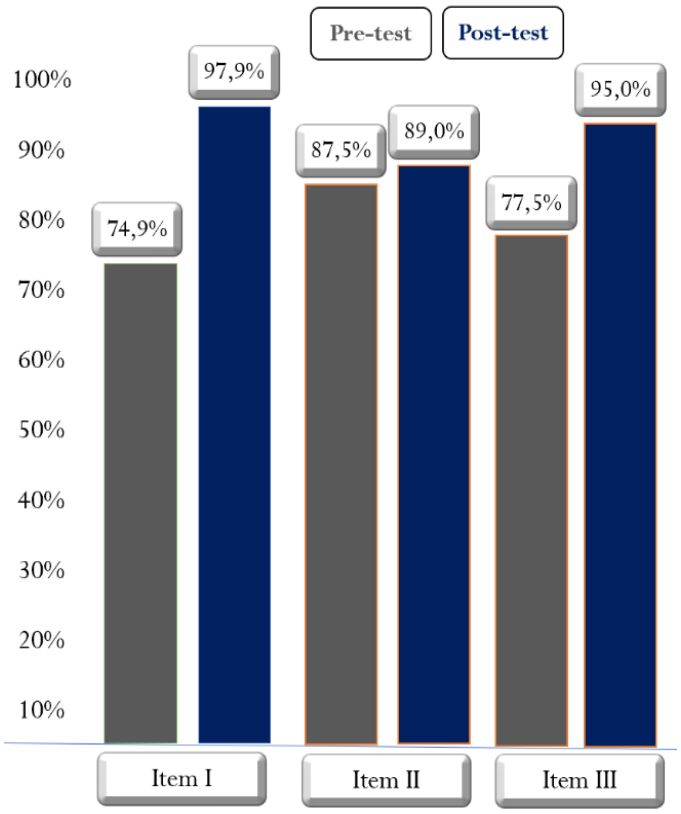


Note. Difference in scores pre-test and the post-test, own elaboration (2024).

As Figure 2 shows, the distance between the score obtained in the post-test and the pre-test is 37 points, which is certainly a high level of joint improvement. Having obtained 227 points as a group in the post-test, the distance between the score obtained and the total score achievable is only 13. Figure 2 below shows the performance differences per item obtained at the group level in the pre-test and the post-test.

Figure 2

Performance Differences at Item Level between Pre-test and Post-test.

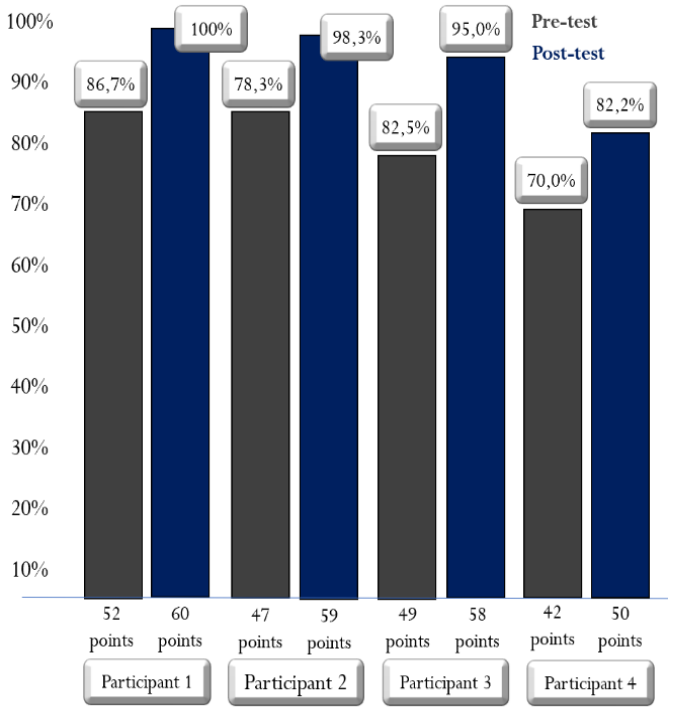


Note. Difference in scores per item, own elaboration (2024).

As Figure 2 shows, group performance reveals improvement in the three items, from which items I and III posed the highest levels of achievement. In item I, there was a 23% improvement compared with the pre-test performance results. Item III showed an 18,5% improvement compared with the performance results of the pre-test. Item II revealed the lowest level of improvement by reaching only 1,5% if compared with the performance of the pre-test. Figure 3 below shows the differences in levels of achievement at the individual level.

Figure 3

Differences in Levels of Achievement at Individual Level.



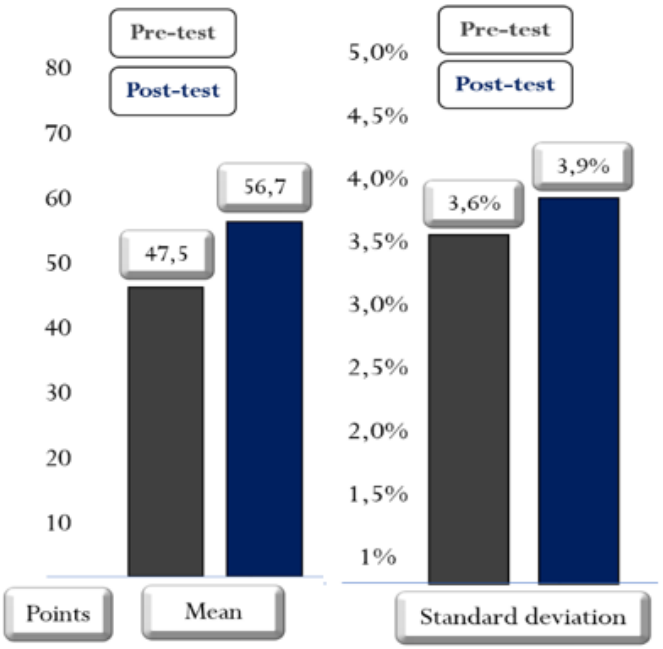
Note. Participants' levels of achievement, own elaboration (2024).

As Figure 3 shows, all participants exceeded their scores in the post-test. Participants 1, 2, and 3 achieved the highest levels of improvement. Participant 1 scored 60 points in the post-test, reaching the maximum level of achievement, supposing a 13,7% performance increase, if contrasted with the 52 points (86,7% of achievement), scored in the pre-test. Participant 2 obtained the second highest score in the post-test (59 points), representing 98,3% of achievement. The rate of improvement reached 20,0% and illustrates an important performance boost considering the 47 points (78,3% of achievement) scored in the pre-test.

Participant 3 scored 49 points in the pre-test, which, in turn, represents 82,5% of achievement, and 58 points, that is, 95,8% of achievement in the post-test. This supposes an increase of 13,3% in achievement. Participant 4 also managed noticeable performance achievement by scoring 50 points, that is, 82,2% of achievement in the post-test if compared with the 42 points (70% of achievement) obtained in the pre-test. The performance achievement was 12,2%. Figure 4 shows me the mean scores and the standard deviation behavior scored by the group in the pre-test and the post-test. The mean score in the pre-test reached 47,5 points, and 56,7 points in the post-test.

Figure 4

Mean and Standard Deviation in Pre-test and Post-test.



Note. Data's mean and standard deviation, own elaboration (2024).

As Figure 4 shows, the mean score in the post-test (56,7) is moderately higher than in the pre-test (47,5). A greater value in the mean score in the post-test poses a performance boost in reading comprehension. The standard deviation reached 3,6% in the pre-test, slightly augmenting the post-test, reaching 3,9%. The difference in the pre-test and post-test dispersion values is only 0,3%. Considering that the standard deviation in the post-test has a greater value than the standard deviation in the pre-test and supposes that participants` scores have a minimum rate of dispersion, it means, nonetheless, no negative dispersion concerning the mean score obtained in the post-test, which increased 9.2 points.

This evidence shows that the level of dispersion obtained in the post-test is low and reflects consistent performance improvement in all participants. A semi-structured interview was used to analyze students´ perceptions of using reading strategies and receiving strategic instruction to answer Specific Objective 2. Using the data from the transcription, perceptions were meant to be described following a thematic chart based on content areas that

Sanhueza-Oyarzún, L. & Quintanilla-Espinoza, A. (2024). The Contribution of Inferential Reading Strategies to Improve the Reading Comprehension Skill in an Online Private Lesson Context. *Revista Tecnológica-Educativa Docentes 2.0*, 17(2), 159-169. https://doi.org/10.37843/rted.v17i2.509

form the semi-structured interview. Every content area was divided into subthemes that concentrated on the questions that participants were asked to answer. Table 3 shows the four content areas and their sub-themes in which the semi-structured was organized.

Table 3

Semi-structured Interview Content Areas and Sub-themes.

Content Area General knowledge of reading comprehension strategies. **Sub-themes** **1)** Learning strategy**.** **2)** Inference knowledge**.** **3)** Impact of strategies for inferential comprehension**.** **4)** Purpose of reflection for inferential comprehension**.** **Examples:** *"It is something that helps you understand things in an easier and more understandable way... it is a technique that helps in this case to improve reading comprehension".* *"It is a technique that will help develop a particular area, in this case, as it pertains to learning strategies, it would be a technique that is learned developed..."* *"Inference is the ability to understand the implicit aspects of the text, it can be the background of the text, figurative language, or whatever the author wants to convey to us that is not explicitly stated…"* *"It is a conclusion created from one or several implicit premises, that is to say, it's not literal".*
Content Area Use of reading strategies for inferential comprehension. **Sub-themes** **1)** Strategies learned**.** **2)** Use of reading strategies for inference**.** **Examples:** *"Details, connecting prior knowledge, guiding oneself by the context to deduce words, connecting sentences, asking oneself questions…"* *"...connecting personal knowledge with the text and creating an inference from that... mmm I also remember reflecting aloud, like questioning the statement in search of inferences... looking for details in the text.".*
Content Area Instruction and feedback. **Sub-themes** **1)** Session organization to improve inferential reading comprehension **2)** Instances for reflection - discussion **3)** Feedback to tackle generation errors **Examples:** *"Yes, because the structure was like... it had cohesion, so it made sense for it to be in that order and it was easy to understand... and also the type of material that was presented... I think it was a Genially, it's more interactive like it had been a typical boring PowerPoint."* *"In the course of the classes the teacher let me use each of the techniques he had taught me for different types of situations... so I was able to reflect and recognize the most convenient technique depending on the context".* *"…The class in a certain way also gave those instances, that is, it raised the level gradually. While we were all through how to that moment later you (the student) were going to make a mistake or have a doubt, so the feedback would be there, and ... the level was gradually raised... you felt more and more challenged. So, the feedback, when you made a mistake, was good".*
Content Area Personal satisfaction and learning achievements. **Sub-themes** **1**) Learning objectives. 2) Feelings toward lessons. 3) Reading challenges. **Examples:** *"Yes, I think I was able to achieve the objectives, but there were some things that were very complicated in the items. Like in the first item I felt I had everything right, but in the feedback you made me notice details and key words that changed the whole meaning of the texts".* *"I felt comfortable, and I also liked that I could do these classes with someone else...because sometimes when we shared the exercises, in the last one I remember that I didn't know what something meant and my partner knew what it meant, and because of the participation".* *"I think so... they were like the ones in the text that said things like 'you can park here' and gave reasons why... and we had to select an alternative... because I am very literal, for me everything is very literal, so having to select an alternative based on something that wasn't said, sometimes it was difficult for me, but only that... but in the end, I was able to get to the right answer".*

Note. Content areas and sub-themes of the semi-structured interview and brief excerpts of participants' thoughts, own elaboration (2024).

As Table 3 shows, every content area was divided into sub-themes that concentrated on the questions that participants were asked to answer. In addition, content areas were focused mainly on content and instruction. For the content area *"*General knowledge on reading comprehension strategies," sub-themes revealed that three participants described a strategy as a technique used for learning enhancement. One participant referred to it as a methodology that entails research. The analysis also revealed that the four participants shared a common awareness of the concept of inference, referring to it as the ability to comprehend and interpret non-literal information by making guesses and drawing conclusions, with a strong base on reflection to understand texts from a critical and analytical view.

Participants understood the positive impact of reading using comprehension strategies on optimizing and enhancing comprehension, especially those texts that contain various forms of implicit information. For the content area "Use of reading strategies for inferential comprehension," information from sub-themes revealed that all participants could remember and mention the strategies; besides, when asked, all four participants could describe all five strategies thoroughly according to their function within the texts. For the content area "Instruction and feedback," the four participants highlighted the organization of lessons, which means the logical sequence of class structure, emphasizing the technological resources the researcher used to secure an effective understanding of the strategies presented and foster practice development.

While lessons were designed under the CALLA model, the four participants perceived that class space given for reflection (expansion stage) was a valuable opportunity for analytical and interactional skills development, especially when discussing what strategies were more likely to be used according to the texts presented. In this line, they emphasized that the design and organization of the lessons made them feel a sense of progression, and the reflection instances contributed to developing a sense of inclusion because all participants had the same opportunities to interact and share views about the texts with peers and the researcher. Furthermore, all four participants stressed the importance of receiving feedback and teacher modeling as learning resources to prevent the generation of errors and clarify the use of inferential reading strategies.

They do not perceive feedback as a negative way to highlight their mistakes but as an opportunity to realize what needs to be improved and how to use

reading strategies for inferential reading effectively according to the texts presented. Finally, for the content area “Personal satisfaction and learning achievements” three participants perceived that creating a friendly learning environment fosters comfort and engagement in participating in the lessons. One participant perceived motivation as an appealing attitude that facilitates understanding and applying the reading strategies learned after reporting that previous experience with reading comprehension lessons was tedious. It is equally important to highlight that all participants were to have developed positive feelings and attitudes and that they would take part in an online learning context, which tends to represent more challenge because of the intensive rate of participation it involves.

Besides, all four participants perceived a sense of achievement of the learning goals for every session. Nevertheless, two participants perceived that achieving the learning objectives took work, especially when practicing reading texts containing multiple-choice and idiomatic expressions. One participant referred specifically to the difficulty of applying reading strategies, perceiving the “thinking aloud” strategy as challenging, for it had been a new experience.

Discussions

This study addresses the question: "To what extent can inferential reading strategy training help students improve their reading comprehension in an online private lesson context?" The findings demonstrate that such training significantly enhances reading comprehension within online private lessons. Through a carefully designed intervention, participants show substantial improvements in inferential reading skills, as evidenced by pre-test and post-test analyses. Moreover, the intervention fosters a notable increase in mean values, indicating enhanced reading proficiency. Additionally, positive perceptions towards the strategies employed further reinforce the intervention's efficacy, highlighting its transformative potential in online learning environments.

The findings of this study align with a wealth of quantitative research in the field, which underscores the significance of inferential reading strategy training in improving reading comprehension outcomes. Fu (2012) and Younus & Khan (2017) provide empirical support for the notion that strategy-based instruction yields significant improvements in reading comprehension. Similarly, Lopera (2012) and Elleman (2016) report positive outcomes stemming from strategy-based interventions, corroborating the effectiveness of such approaches across diverse educational contexts. These studies underscore the consistent impact of inferential reading strategy training on both the cognitive and affective dimensions of reading comprehension, highlighting its importance in fostering not only proficiency but also a positive attitude towards reading, which is key for emotional well-being.

On the other hand, similar studies examining students' perceptions of strategic reading instruction offer additional insights. Dorman & Knightley (2006) found that students' positive perceptions of classroom assessment tasks significantly influenced their academic self-efficacy. Similarly, Cheng et al. (2015) highlighted the importance of involving learners in generating their perspectives on content selection and learning effectiveness. Additionally, Fälth, & Nord (2018) observed that peer discussions and interchanging ideas during reading activities fostered a sense of inclusion and engagement among students. These findings complement the positive perceptions reported by participants in this study, indicating a pattern of increased motivation, engagement, and perceived relevance of reading strategies.

Future research endeavors should prioritize expanding the sample size to enhance the generalizability of findings to further advance our understanding of effective reading instruction. Additionally, exploring the underlying mechanisms through which inferential reading strategy training influences reading comprehension outcomes could provide valuable insights into instructional efficacy. Furthermore, investigating the role of technology in facilitating strategy-based instruction and addressing individual differences in learning preferences and needs would contribute to the development of tailored instructional approaches.

Conclusions

The importance of the study lies in its investigation into the efficacy of inferential reading strategies in enhancing reading comprehension among students. The study reveals that all participants improved their inferential reading performance through four interventions. Comparing

Sanhueza-Oyarzún, L. & Quintanilla-Espinoza, A. (2024). The Contribution of Inferential Reading Strategies to Improve the Reading Comprehension Skill in an Online Private Lesson Context. *Revista Tecnológica-Educativa Docentes 2.0*, 17(2), 159-169. https://doi.org/10.37843/rted.v17i2.509

the results of the pre-test and the post-test, it is evident that the improvement is visible at both individual and group levels, as evidenced by the mean score in the post-test. Also, the dispersion rate is minimal in the post-test. While some performance inconsistencies are observed, such as maintaining item scores in both tests or obtaining lower scores in the post-test than in the pre-test, overall performance improvement is significant, with participants achieving the maximum score (100%) at the item level.

It is important to mention that, for this action research, all participants were exposed to text formats with language structures they had never seen before (PET reading activities, figurative language) and still managed to get moderate results in the pre-test without having received any instruction on inferential reading comprehension strategies in the past. A reflection that can be drawn is that participants may answer questions based on speculation without certainty of the meaning of those texts' passages. This assumption is later confirmed when participants point out that there were some texts they partially comprehended. This assumption may generate a deal of controversy about whether to use multiple choice or not to measure reading comprehension to avoid inaccurate results when tested.

Analyzing the transcriptions from the thematic chart of the semi-structured interview, participants` perceptions evidence a significant increase in their knowledge about reading strategies. They now have a more comprehensive understanding of how the strategies learned are to be used, and in what sort of text situation. All participants demonstrate knowledge to distinguish literal meaning from inferential meaning, giving a short description of how the inference-making process works. This increase in knowledge is a reassuring sign of the study's effectiveness.

Additionally, results reveal that comfortability, motivation, engagement, inclusion, and a sense of progression are the most common feelings and attitudes manifested by the participants during the whole intervention process. These attitudinal factors and feelings, primarily evoked from lesson organization, materials, instances for peer discussion and reflection, and feedback, are a testament to the positive impact of the study's recommendations. From these results, one significant advantage of using reading strategies for successful comprehension is that supporting learning resources such as dictionaries or online translators are not used at all.

The study offers valuable recommendations and suggestions for future research in reading comprehension. Firstly, to allow learners to show what they have, feedback should be continually given to promote discussion. Secondly, to let participants reflect on the texts, especially when peer discussing, because sharing reflections can sustain, argue, or alter another learner's views about the possible meaning of a certain passage. Finally, to create a learning environment that promotes learning and participation, i.e. material must be prepared according to the e-learning standards that participants expect to face. In this sense, it is pivotal to present clear texts with clear instructions and transitions between content and activities so as not to overwhelm learners and, most importantly, maintain a friendly and supportive attitude toward the students to increase their confidence and motivation to complete their tasks.

Considering the specific objectives of this research, its findings have significant implications for the future. The study paves the way for improved reading comprehension instruction methodologies by identifying the effectiveness of teaching inferential reading strategies. Enhancing comprehension skills resulting from strategic instruction can positively influence students' academic performance and overall literacy levels. Furthermore, students' perceptions regarding the use of reading strategies provide insights into their learning experiences and preferences, informing future instructional approaches tailored to students' needs and preferences.

Declaration of Conflicts of Interest

The authors declare no conflict of interest.

References

Bayat, N., & Çetinkaya, G. (2020). *The relationship between inference skills and reading comprehension.* Eğitim ve bilim. https://doi.org/10.15390/eb.2020.8782

Burns, A. (2009). *Doing Action Research in English Language Teaching: A guide for Practitioners.* https://n9.cl/ou9m1

Chamot, A., & Robbins, J. (2005). *The CALLA model: Strategies for ELL student success. Second Language Learning Consultants.* https://n9.cl/jjl8x

Cheng, L., Wu, Y., & Liu, X. (2015). Chinese university students' perceptions of assessment tasks and classroom assessment environment. *Language Testing in Asia*, 5(13). https://doi.org/10.1186/s40468-015-0020-6

Dorman, J. P., & Knightley, W. M. (2006). Development and validation of an instrument to assess secondary school students' perceptions of assessment tasks. *Educational studies*, 32(1), 47-58. https://doi.org/10.1080/03055690500415951

Elleman, A. M. (2017). Examining the impact of inference instruction on the literal and inferential comprehension of skilled and less skilled readers: A Metaanalytic Review. *Journal of Educational Psychology*, 109(6), 761-781. https://doi.org/10.1037/edu0000180

Fälth, L., & Nord, A. (2018). Reading strategies in high school: High school students' experiences of an inclusive education approach. *International Journal of Social Sciences*, 8(2), 29-37. https://n9.cl/hyoit

Fu, Y. (2012). A study on Strategies-Based reading instruction at College level. *Studies in Literature and Language*, 4(3), 50-54. http://dx.doi.org/10.3968/n

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *Internet and Higher Education*, 2 (2–3), 87-105. https://doi.org/10.1016/S1096-7516(00)00016-6

Gómez, Á., Devís, A., & López, V. S. (2013). Corrección de errores en comprensión lectora en inglés: una instrucción teóricamente fundamentada basada en estrategias macroestructurales. Tejuelo, 16(16), 88-107. https://n9.cl/35qmq

Hara, A. & Tappe, H. (2016). Inference generation and text comprehension in bilingual children: A case study', *Literator*, 37(2), a1287. https://n9.cl/9kwigh

Lee, H. C. (2013). Thinking Matters: Inferencing in ESL reading lessons. *TESOL Journal*, 4(4), 717-742. https://doi.org/10.1002/tesj.75

Lopera, S. (2012). Effects of strategy instruction in an EFL reading comprehension course: A case study. *Profile Issues in Teachers' Professional Development*, 14(1), 79-89. https://n9.cl/2gl2g

Mwita, M.K. (2022). Factors to consider when using qualitative interviews in data collection. *Social Sciences, Humanities and Education Journal* (SHE Journal), 3(3), 313 – 323. https://n9.cl/ocsp1s

Nuttall, C. (2005). *Teaching Reading Skills in a Foreign Language*. Oxford. Macmillan Education.

Pacheco, N. (2019). *How Effective is the Metacognitive Strategy of Thinking Aloud in Enhancing Reading Comprehension for Students with Special Learning Needs Working in a 10th Grade English Language Class*. https://n9.cl/meu0t3

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2013). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544. https://n9.cl/nghte

Pan, S., & Sana, F. (2021). Pretesting versus posttesting: Comparing the pedagogical benefits of errorful generation and retrieval practice. *Journal of Experimental Psychology: Applied*, 27(2), 237-257. https://doi.org/10.1037/xap0000345

Taft, S., Kesten, K., & El-Banna, M. (2019). One size does not fit all: Toward an evidence-based framework for determining online course enrollment sizes in higher education. *Online Learning*, 23(3), 188-233. DOI:10.24059/olj.v23i3.1534

William and Mary School of Education. (2002). *Inferential Reading Comprehension Packet.* https://n9.cl/qsh2nc

Younus, M., & Khan, I. (2017). The effects of strategy-based reading instruction on reading comprehension and reading strategy use. *Journal of Education & Social Sciences*, 5(2), 106-120. DOI:10.20547/jess0521705202

Sanhueza-Oyarzún, L. & Quintanilla-Espinoza, A. (2024). The Contribution of Inferential Reading Strategies to Improve the Reading Comprehension Skill in an Online Private Lesson Context. *Revista Tecnológica-Educativa Docentes 2.0*, 17(2), 159-169. https://doi.org/10.37843/rted.v17i2.509