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UNDERGRADUATE PROGRAM

**DEPARTMENT OF NATIONAL AND FOREIGN LANGUAGE PEDAGOGY
ENGLISH MAJOR**

MODALITY: RESEARCH REPORT

THEME:

**“THE USE OF METACOGNITIVE STRATEGIES IN READING
COMPREHENSION IN EFL”**

Research report before obtaining the bachelor degree in National and Foreign
Language Pedagogy, English Major

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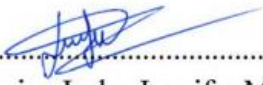
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MARCH 2025**


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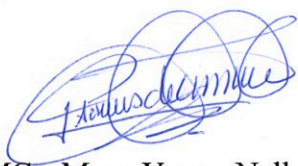
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ENDORSEMENT OF THE TUTOR OF THE RESEARCH PROJECT

As Tutor of the Research Project titled:

“The Use of Metacognitive Strategies in Reading Comprehension in EFL”, by Requelme Díaz Nilma Anahí and Guanoquiza Jacho Jennifer Milena, from the major of Pedagogy of National and Foreign Languages English, I consider that said Research Report meets the methodological requirements and sufficient scientific-technical contributions to be submitted to the evaluation of the Project Validation Tribunal that the Directive Council of the Pujilí Extension of the Technical University of Cotopaxi designates, for its corresponding study and qualification.

Pujilí, February 25, 2025



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ENDORSEMENT OF APPROVAL OF THE DEGREE TRIBUNAL

As the Readers' Tribunal, approved the present Research Report according to the regulations issued by the Technical University of Cotopaxi, and by the Pujilí Campus; because, the postulant: Requelme Díaz Nilma Anahí and Guanoquiza Jacho Jennifer Milena, with the title of the Research Project: **“THE USE OF METACOGNITIVE STRATEGIES IN READING COMPREHENSION IN EFL”**, has considered the recommendations issued in a timely manner and meets the sufficient merits to be submitted to the act of sustaining the degree work.

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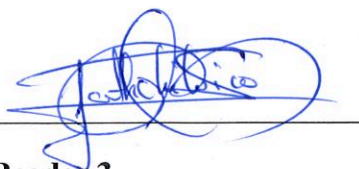
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GRATEFULNESS

I am deeply grateful to God for guiding me on the right path, supporting me, and inspiring me to be a good person.

I thank all my family, who support me economically and emotionally. Principally my parents, Luis and Margarita, who were my inspiration to study and get a degree in this major.

I thank all my friends who gave me their advice and every day made me laugh when I felt lonely. I thank all the professors at the Technical University of Cotopaxi who were part of my training for sharing with me their knowledge and their experiences that motivated me to continue studying when I felt that I could not achieve that goal.

Finally, I want to thank my tutor, Mena Vargas Nelly Patricia, MSc., who made it possible for me to finish that research. Her suggestions, advice, and guidance helped us to improve our investigation.

Nilma

DEDICATION

To God, my dear parents, friends, and siblings. To my father, Luis Requelme, my inspiration to continue on that hard path, who taught me the importance of getting a degree to improve my life, and who encouraged me in this process despite the economic difficulties. To my mother, Margarita Díaz, a strong, clever, and strict woman. She instilled in me the most precious values to improve my life such as humility, sincerity, responsibility, loyalty, and love for every person. Also, it taught me the importance of sacrifice to get a better life.

To my brothers and sisters, my inspirations and confidants in my life. To my grandparents, Israel, José Miguel, and Victoria, who despite not being with me here, I remember them every day. Their experiences inspired me to work hard and rely on God.

To all my friends, who taught me to be brave, accompanied me when I needed them more, and helped me in class when I did not understand; I hope God bless them and guide their lives on the right path.

Nilma

DEDICATION

To God for giving me strength and guidance throughout this journey.

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To my grandmother, whose memory continues to inspire me and whose love will always remain in my heart.

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And especially to my brother Erik, whose constant belief in me has been a source of inspiration and motivation.

This achievement would not have been possible without all of you.

Jennifer

TECHNICAL UNIVERSITY OF COTOPAXI

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DEPARTMENT OF NATIONAL AND FOREIGN LANGUAGE PEDAGOGY

ENGLISH MAJOR

THEME: THE USE OF METACOGNITIVE STRATEGIES IN READING
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Authors:

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ABSTRACT

The use of metacognitive strategies in EFL education significantly enhances students' reading comprehension and language proficiency. These strategies enable students to become aware of and regulate their learning processes, making easier for them to plan, monitor, and evaluate their reading activities effectively. By setting reading goals, self-questioning, summarizing, and using contextual clues, EFL students can better understand and retain new language material. This study aims to identify the most frequently used metacognitive strategies by students in reading comprehension. A quantitative descriptive method was employed, involving 31 fourth-semester Pedagogy of the Nacional and Foreign Language English (PINE) students at the Technical University of Cotopaxi. Data were collected using the Metacognitive Awareness of Reading Strategies Inventory questionnaire. In this way, this questionnaire evaluates students' awareness and understanding of their reading strategies, dividing them into global, problem-solving, and support reading strategies. The data obtained were analyzed quantitatively using descriptive statistical analysis, focusing on measures of central tendency, particularly the mean. The data collected demonstrated that problem-solving strategies are the most frequently employed by PINE students. It's likely that problem-solving strategies, which include techniques like read slowly to ensure understanding and try to get back when students lose concentration, will emerge as the most commonly used strategies, consistent with previous research findings by Annury, et. al (2019); Daguay-James & Bulusan (2020) and Wallace, et. al (2021). This study has an educational impact. The findings reveal relevant knowledge about the use of metacognitive strategies among students. The use of these types of strategies can help students to improve their reading skills and reading comprehension. In addition, these enhance students' knowledge about the application of these strategies permitting them to monitor and control their learning process. In turn, these allow them to get more vocabulary and grammar knowledge to develop proficiency in productive language skills.

Keywords: Metacognitive, Reading comprehension, Strategies

UNIVERSIDAD TÉCNICA DE COTOPAXI

DEPARTAMENTO DE LA CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS INGLÉS

TÍTULO: EL USO DE ESTRATEGIES METACOGNITIVAS EN LA COMPRESION
LECTORA EN EFL

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RESUMEN

El uso de estrategias metacognitivas en la enseñanza de inglés como lengua extranjera mejora significativamente la comprensión lectora y la competencia lingüística de los estudiantes. Estas estrategias permiten a los alumnos tomar conciencia de sus procesos de aprendizaje y regularlos, lo que les facilita planificar, supervisar y evaluar eficazmente sus actividades de lectura. Mediante el establecimiento de objetivos de lectura, la autopregunta, el resumen y el uso de pistas contextuales, los estudiantes de EFL pueden comprender y retener mejor el nuevo material lingüístico. Este estudio pretende identificar las estrategias metacognitivas más utilizadas por los estudiantes en la comprensión lectora. Se empleó un método cuantitativo descriptivo, en el que participaron 31 estudiantes de cuarto semestre de Pedagogía de los Idiomas Nacional y Extranjera Inglés (PINE) de la Universidad Técnica de Cotopaxi. Los datos fueron recolectados utilizando el cuestionario Metacognitive Awareness of Reading Strategies Inventory. De esta manera, este evalúa la conciencia y comprensión de los estudiantes sobre sus estrategias de lectura, dividiéndolas en globales, de resolución de problemas y de apoyo. Los datos obtenidos se analizaron cuantitativamente mediante análisis estadístico descriptivo, centrándose en las medidas de tendencia central, en particular la media. Los datos recogidos demostraron que las estrategias de resolución de problemas son las más empleadas por los alumnos del PINE. Es probable que dichas estrategias, que incluyen técnicas como leer despacio para garantizar la comprensión e intentar regresar cuando los alumnos pierden la concentración, surjan como las estrategias más utilizadas, acorde con los resultados de investigaciones anteriores de Annury, et. al (2019); Daguay-James & Bulusan (2020) y Wallace, et. al (2021). Este estudio tiene un impacto educativo. Los hallazgos revelan conocimientos relevantes sobre el uso de estrategias metacognitivas entre los estudiantes. El uso de este tipo de estrategias puede ayudar a los estudiantes a mejorar sus habilidades lectoras y su comprensión. Además, estos aumentan los conocimientos de los estudiantes sobre la aplicación de estas estrategias, lo que les permite supervisar y controlar su proceso de aprendizaje. A su vez estas les permiten adquirir más conocimientos de vocabulario y gramática para desarrollar la competencia en destrezas lingüísticas productivas.

Palabras clave: Metacognitivo, Comprensión Lectora, Estrategias

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UNDERGRADUATE DEGREE WORK STRUCTURE

1. General Information

Theme: The Use of Metacognitive Strategies in Reading Comprehension in EFL

Starting Date: October 16, 2024

Ending Date: March, 2025

Place of Research: Campus Pujilí

Sponsoring Faculty: Extension Pujilí

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Macro Project of the Major: Formative Processes in English Language Teaching Learning and its Academic Discourse.

Research Group: Jennifer Milena Guanoquiza Jacho, Nilma Anahí Requelme Díaz, and, MSc. Nelly Patricia Mena Vargas.

Knowledge Area: Education

University Research Line: Academic discourse: a transdisciplinary study of education and linguistics in linguistic-communicative contexts for English language teaching.

2. PROBLEM STATEMENT

Reading comprehension is an essential skill in learning a foreign language, and its development can be enhanced through the use of metacognitive strategies. At the Technical University of Cotopaxi, fourth-semester students take the Intensive and Extensive Reading subject, whose objective is to improve their reading skills in English. However, there is no clarity about the level of use and application of metacognitive strategies in this process.

Various studies have highlighted the importance of metacognition in reading, indicating that students who consciously use these strategies tend to understand texts better. However, in the context of the Technical University of Cotopaxi, specifically in the PINE major there is a gap in research on how students integrate these strategies into their learning. Without concrete information about this, it is difficult to determine whether students are taking full advantage of their potential to improve their reading comprehension.

In line with Bouknify (2023), the lack of use of metacognitive strategies can affect negatively to improvement of students because it can generate poor reading comprehension. In terms of professionalism, it can limit the students' future careers since they need to take proficiency tests such as the Test of English as a Foreign Language (TOEFL) and the International English Language Testing System (IELTS) to find an appropriate job.

Also, in the process, students can present low self-esteem and self-confidence when reading difficult texts. This problem affects students who are not English native speakers but are studying a major in English. It happens at all levels of the major and impacts the quality of professional teachers that the university offers. The stakeholders involved in this study are especially the students of English major who are affected by this problem and the teachers who are interested in teaching the use of these strategies.

Understanding the use of metacognitive strategies in this group of students will allow us to identify possible deficiencies and opportunities for improving students' reading skills. This could provide valuable information for the design of more effective methodologies, helping

to optimize student learning and strengthen their academic performance in the development of reading skills in English.

3. RESEARCH QUESTION

- Which are the most frequently metacognitive strategies used by the fourth-semester students of PINE career from the Technical University of Cotopaxi in reading comprehension?

4. OBJECTIVES

4.1. General Objective

- To identify the most frequently metacognitive strategies used by the fourth-semester students of PINE career from the Technical University of Cotopaxi in reading comprehension.

4.2. Specific Objectives

- To explore theories related to the importance of metacognitive strategies in reading comprehension.
- To analyze the use of Metacognitive strategies in reading comprehension.
- To establish conclusions and recommendations of the use of Metacognitive strategies in reading comprehension.

5. ACTIVITIES AND TASK SYSTEM IN RELATION TO THE OBJECTIVES PROPOSED

Specific Objective	Activities	Activity result	Verification Means
To explore theories related to the importance of metacognitive strategies in reading comprehension.	Look for bibliographic resources. Review information about metacognitive strategies.	Choose relevant information.	Theoretical framework
To analyze the use of metacognitive strategies in reading comprehension in the fourth-semester students of PINE career from the Technical University of Cotopaxi.	Apply the metacognitive awareness of reading strategies inventory questionnaire. Analyze the data.	Data collection	Questionnaire Tables
To establish conclusions and recommendations of the use of Metacognitive strategies in reading comprehension.	Write conclusions and recommendations based on the results of the questionnaire.	Results	Conclusions and recommendations

6. JUSTIFICATION

This study focuses on the use of metacognitive strategies to improve the reading skills and reading comprehension in PINE major students. Contemplating that are fundamental constituents to acquire a language. Considering that there are no previous studies about the use of these strategies applied to this major. Furthermore, this research offers a vast theoretical framework that illustrates the relevance of reading comprehension in EFL learners and the use of metacognitive strategies to have a valuable understanding of the reading.

It is necessary to mention there are direct and indirect beneficiaries in this study: The direct beneficiaries belong to the four-semester Pedagogy of National and Foreign

Language major, which is made up of 31 students, for those who hardly use metacognitive strategies. According to the result got in the research, it will be necessary that students focus on the application of the less used strategies such as global and supporting strategies because their ability help students to improve their processing, analysis, and retention of information. They are part of metacognitive processes and help students become more autonomous and efficient readers. Whereas the indirect beneficiaries are teachers since they can include these strategies in their classrooms to improve reading comprehension in their students.

In conclusion, this study highlights the importance of reading skills since it recognizes that as a receptive skill, it plays an important role in the acquisition of a language. Because at the time of reading students acquire vocabulary and grammar knowledge that will help them produce the language.

7. SCIENTIFIC AND TECHNICAL FOUNDATION

7.1 Background

According to the international studies carried out for different researchers show a variety of results. Wallace, et. al (2021) conducted a study with 137 EFL university students in China, using the MARSII questionnaire to assess the use of metacognitive strategies. This study provides evidence on how EFL learners use metacognitive strategies and how these vary according to their reading ability. The findings indicated that students most frequently employed problem-solving strategies, followed by global strategies, and to a lesser extent, supporting strategies. Furthermore, students with higher reading ability were found to rely less on supporting strategies compared to those with lower ability. In addition, this study suggests that reading ability level influences the selection and use of metacognitive strategies, highlighting the importance of investigating how these strategies impact student performance in different educational contexts. This information may be useful for designing teaching strategies that encourage a more balanced use of metacognitive strategies, helping students improve their reading comprehension in English.

Köse, & Güneş, (2021) conducted a study with 236 university students in Turkey to examine the relationship between the use of metacognitive strategies and reading comprehension level. The results indicated that the overall use of metacognitive strategies was high, with a preference for problem-solving strategies and global reading strategies. Furthermore, significant differences in strategy use were found based on gender and academic level, where females and students at higher levels tended to employ more metacognitive strategies.

Moreover, students with better reading comprehension performance were found to more frequently use global and problem-solving strategies, while those with lower performance relied more on support strategies. These findings reinforce the importance of assessing the use of metacognitive strategies in university students, as it may influence their ability to comprehend English texts. The importance of this study lies in its ability to provide a deeper understanding of the use of metacognitive strategies in reading, especially in EFL students, and how these findings can be applied to improve teaching and academic performance in reading comprehension.

The results obtained by Daguay & Bulusan (2020), exposed how first-year ESL students employ metacognitive strategies when they read academic texts in English, supporting the importance of these strategies in improving reading comprehension. Using an explanatory sequential design, the authors found that students primarily use problem-solving strategies, such as re-reading or making inferences, to overcome reading difficulties. Furthermore, the use of these strategies was found to vary by field of study, suggesting that discipline-tailored metacognitive instruction could improve reading comprehension. These results reinforce the idea that awareness and use of metacognitive strategies are critical to optimized academic performance in learning English as a foreign language.

In line with different studies applied regionality mentions the relevance that have the metacognitive strategies in reading comprehension. A study conducted by Guerrero (2022), on metacognitive strategies to improve reading comprehension, supports the importance of incorporating these strategies into the teaching process, as it shows that explicit instruction of metacognitive techniques, such as self-questioning, clarification, and prediction, significantly improves the comprehension of the text read. The researcher conducted her

study with students of English as a foreign language in the context of the Liceo Moderno del Sur, a public school in Ciénage, Magdalena.

The results show that students who used self-regulation and comprehension monitoring strategies showed better results compared to those who did not use such strategies. This finding reinforces the premise that the development of metacognitive skills can enhance students' reading comprehension, which is essential in the academic context of English as a foreign language. In the context of this research, this result underlines the relevance of integrating metacognitive strategies in teaching, since they are not only feverous the immediate understanding of texts, but also encourage autonomy and critical reflection, fundamental aspects for effective and sustainable learning.

Furthermore, according to Chica, et. al (2019), in which involve 32 students immersed in an EFL classroom, all of whom were in the 10th grade of public institutions in Rionegro, Antioquia. The research aimed to investigate in depth how metacognitive strategies were commonly used in the EFL classroom. In their study, 63% of students obtained the medium range overall. This shows that the majority of learners have knowledge of metacognitive strategies (as global, problem-solving, and supporting strategies) but use them infrequently, showing a gap between knowledge and practice. This analysis suggests a need for more targeted instruction and practice in applying these strategies regularly to improve reading comprehension and effectiveness.

In addition, the study by Gutierrez (2020) titled "Exploring Metacognitive Awareness of reading strategies and Reading Comprehension Performance of intermediate and advanced learners of English as a Foreign Language" was conducted with 10 intermediate and 10 advanced students who were enrolled in a four-year academic program in English Language and Literature. The main objective of the research was to explore the relationship between students' metacognitive awareness of reading strategies and their performance in a reading comprehension test. The results indicate that, surprisingly, the intermediate group performed better in the questionnaire and the reading test compared to the advanced group. Furthermore, no significant relationship was identified between perceived metacognitive awareness of reading strategies and reading comprehension performance in either group. However, both groups perceived the use of different subscales or factors of metacognitive strategies, which

is important for the development of their reading comprehension skills and for becoming more autonomous language learners.

In the study conducted by Arteaga, et.al (2017), titled *The Effects of Metacognitive Strategies, Instruction on Intermediate Students' Reading Comprehension Skills in an Ecuadorian EFL Class*, has shown that integrating metacognitive strategies into EFL reading instruction helps students become more active and reflective readers, potentially improving their comprehension and learning autonomy. However, the research did not explore how students perceive the use of metacognitive strategies, explaining that additional studies are needed to understand students' perceptions.

Similarly, Changuán (2022) whose study involved forty-four senior students and four English teachers, whose main purpose was to promote the use of metacognitive strategies to improve reading comprehension skills, explains that English teachers can use these types of strategies to improve reading comprehension skills. Each strategy has specific objectives and works differently depending on the type of reading task. Therefore, students must apply these techniques in line with the purposes of the tasks, the teacher's aims, and their own goals. It is necessary to point out that in this study, the researcher did not apply a questionnaire of metacognitive strategies. However, it supports the originality and feasibility of the current research by emphasizing the need for explicit instruction, targeted approaches, and deeper understanding and application of metacognitive strategies among EFL students. They highlight the importance of addressing demographic influences, bridging the gap between knowledge and practice, and exploring students' perceptions of strategy use.

7.2 Theoretical Framework

7.2.1 Language Skills

Language skills allow us to express thoughts coherently and communicate effectively, providing structure and relevance to the message. Reading, listening, writing, and speaking skills, which are the four essential abilities that make up basic linguistic competence, and they are often combined when interacting. The choice of these skills depends on factors such as urgency, audience, and formal or informal context. They are interdependent: listening

provides information that can be transformed into speaking, while writing is the result of reading, understanding, and interpreting (Indeed Editorial Team, 2023).

7.2.1.1 Receptive skills

According to Irma (2020), receptive skills are those that involve understanding instead of producing language, in which the students just perceive, decode, and understand the meaning of the language without using it actively. In this sense, receptive skills include listening and reading, both of which are essential in comprehending the language input. Like productive skills, receptive skills are significant in English learning, as such strategies emphasize the comprehension and interpretation of the language. In this way, receptive skills can be used in contrast with productive skills, such as writing and speaking, which involve active language use.

Receptive skills play a fundamental role in learning a foreign language. Since these abilities help to improve vocabulary, structures, and comprehension of the language that is being learned. Furthermore, these skills can be influenced by different factors, which include effective pedagogical strategies, short-term memory, and learner's vocabulary knowledge. Likewise, both listening and reading are fundamental skills that learners develop first, before moving on to productive skills. Therefore, the combination of these skills, productive and receptive helps with the proficiency of overall language. However, there is a key difference point between reading and listening as receptive skills, which is that listening has more challenges when learners need to review information whereas in written texts they can do so over and over again (Magyar, et. al 2022 & Rakhimova, 2024).

7.2.1.2 Reading

Reading requires a complex mental and visual process to decode, recognize, and understand the meaning of a document. It is a method through which readers can cultivate language fluency and boost their vocabulary insight, as well as their ability to build sentences. Furthermore, reading skills incorporate three components: the text, the reader, and the activity related to a specific context. Therefore, unlike speaking, which can be learned

depending on the amount of exposure students have to the language, reading cannot be learned in such a way because it is an acquired skill that starts with the association of letters, symbols, and sounds.

Rivers (as cited in Irma, 2020) establishes that there are various processes of reading that readers need to follow, such as:

- They should identify the combination of certain sound patterns represented by symbols.
- Also, they should recognize the different linguistic elements existing in the language.
- They should distinguish the words grouping from each other.
- And, can mind what can occur after the previous reading.

So, reading is much more than grasping the meaning of a text through the combination of letters and sounds. It implies active participation on the reader's part, being able to internalize what the text is trying to convey deeply.

7.2.1.3 Types of Reading

Conforming to Panes (n.d), there exist four types of reading: Intensive, Extensive, Skimming, and Scanning. In agreement with Rashid et. al (2021) report, Intense reading is a reading where readers should be aware of and concentrate on text context and semantics. This type of reading focuses on identifying keywords, the grammatical tenses, the semantic meaning of the words, and some details that contain the text. In other words, intense reading made learners search for the words, recognize their meanings, and identify an accurate reading.

Under MacLeod (2018) mentions some Intensive reading exercises such as:

- Looking at main ideas versus details
- What is implied versus stated
- Making inferences
- Looking at the order of information and how it affects the message
- Identifying words that connect one idea to another

- Identifying words that indicate a change from one section to another

Extensive reading is used to practice or train the students' reading. According to Panes (n.d), the goal of this kind of reading is to train the students directly and fluently in the target language. In addition, extensive reading can be the basis for oral reports, to the rest of the class, or full class discussions.

The activities that teachers can apply to practice extensive reading according to MacLeod (2018) are:

- Reading combined with a speaking component. Learners can ask questions to each classmate about the content of the lecture.
- Reading combined with writing activities. By way of illustration, when students finish reading a newspaper, they can be asked to write a summary about that newspaper.
- Learners might establish their aims for the next session.
- Read a text and have a discussion or debate.
- Group discussion about a specific topic.

In scanning, the comprehension of the text content of the reader is so superficial, and also the knowledge of some words is low. This is used to find specific details in the text that could be a character's name, a specific date, places, or keywords to complete an activity. Rashed (2021) comments that the researcher believes the scanning strategy is used to find out particular information.

Some activities that teachers can apply are:

- True or False (read a paragraph and answer true or false)
- Answer questions
- Multiple choose
- Complete the sentence
- Gap fill

On the other hand, skimming is different because the reader comprehends the text and tries to generate a general idea about the text. Rashed (2021) exposes that skimming is essential to having a clear idea about the text, comprehending how it is formatted, the parts of the text, and comprehending the author's intentions. The reading in students is more thorough to understand all the elements and the main idea. The activities that could be applied are opening questions, writing opinions about the text, etc.

7.2.2 What is reading comprehension?

Comprehension is an essential factor that engages students to develop language skills. Every skill needs that element to get knowledge and feed the vocabulary insight and relevant information that helps students to understand the meaning of every word that compounds the text.

In compliance, Smith (2005) cited in Abdulmini (2021) argues that there exist four levels of comprehension: literal comprehension, inferential comprehension, critical reading comprehension, and creative reading. The first is considered the most basic level of understanding that involves a grasp of the information presented in the text. This level depends on understanding and recognition of the principal idea of sequence and order events. The second level helps the reader to develop a capacity to go beyond only knowing the content of a text and read between the lines to make predictions and establish tentative conclusions. Subskills at this level include interpreting outcomes and reviewing causes and effects when these are not stated.

The third involves a critical judgment of quality, value, accuracy, and truthfulness of what is reading, or detecting bias or overstatement that can affect the reader's comprehension. Finally, at this level, the reader goes beyond to discover the message that is presented in the text to develop new ideas or insight. Developing reading skills entails a big process and responsibility of preparation for students since students must enrich their knowledge in vocabulary that allows them to understand clearly the content shown in a text.

Reading comprehension is a method used to understand reading. In this process, students use linguistic and background insight to build an unambiguous interpretation of the content. In reading comprehension, learners can use interesting strategies that allow them to understand

all the details presented in the text. Based on Liou (2021), it is an active process that permits guessing, understanding the principal idea, questioning one's predictions, and comprehending ambiguous concepts. In addition, this is considered a principal component of English language education because there are several reasons, which are high-stakes exams including a reading comprehension section.

Also, it is considered a result of a complex interchange between the sources of a text and what the readers contribute to the reading process. Hence, the readers should have significant knowledge about word decoding, text-based in real situations focused on different contexts, competency in a variety of reading strategies, and metacognitive skills, among others. Additionally, Butterfuss (2020) said that reading comprehension needs a logical mental illustration of the content. Furthermore, the process of reading contains three main elements: the reader, the writing, and the activity, all connected in a sociocultural context. Other models and frameworks aspects that constitute reading comprehension are decoding, vocabulary, and language comprehension.

7.2.3 What is a strategy?

The term strategy can be difficult to understand and define, as it has been used in various fields of study, such as business, politics, and education, over the years. So, it can be interpreted in several ways, but regarding education specifically in language learning, it refers to the actions that learners take to achieve a specific objective, which is related to the development of the language that is being learned.

In this regard, according to Oxford (1999, as cited in Aziz & Shah, 2020) strategies refer to “specific actions taken by the learner to make learning easier, faster, more enjoyable, more autonomous, more productive, and more movable to new situations” (p. 72). Another definition of strategies is proposed by Sukying (2021), who states that learning strategies allow students to develop their learning in specific situations in which they engage in an active thinking process.

7.2.3.1 Importance of Strategies

Strategies are significant in language learning because through them students can master a new language successfully, becoming experts in each skill, in this case, reading. Therefore, as many strategies students use, more odds exist to improve their proficiency in language learning (Mahib, 2020).

7.2.3.2 Types of strategies

According to Oxford (1990 as cited in Sukying, 2021), strategies can be divided into two groups: direct and indirect. Direct strategies directly impact students' learning process since they involve an active mental process. These strategies include memory strategies, cognitive strategies, and compensation strategies.

- **Memory strategies:** These types of strategies help students store and retrieve information in their long-term memory so that they can use it later. They involve various techniques such as the using new words in context, clues, and the representation of the sounds in the memory.
- **Cognitive strategies:** These aid students in comprehending the language by interpreting the message with mental representations and then producing it. Various techniques included in these strategies are summarizing texts, inferences, and reasoning
- **Compensation strategies:** These types of strategies permit students to cope with different problems through the prediction of the meaning of unknown words. Thus, making predictions, gesturing, and rephrasing are some of the techniques included in this type of strategy.

On the contrary, indirect strategies facilitate understanding of the target language without the need to engage directly with it. Within the indirect strategies are metacognitive, affective, and social strategies.

- **Metacognitive strategies:** these strategies enable students to think about their methods of learning by structuring, scheduling, and assessing their learning process.

Furthermore, it embraces the use of prior knowledge in conjunction with a cognitive process to understand the target language.

- **Affective strategies:** These strategies help students overcome emotional issues related to language learning, including feelings, behaviors, attitudes, and anxiety.
- **Social strategies:** these kinds of strategies allow students to acquire input through different interactions which can be helpful in communication and the use of the language.

7.2.4 Metacognitive strategies

Reading is considered a complex process that results in difficulty for many students. Despite it, reading is a requisite skill that helps readers to get important details, and vocabulary that they can use to enhance their language acquisition. Although, it is difficult for some students because they do not have a strong basis of insight into the language failing when they want to understand the text. Al-Kiyumi et.al (2021) mention that poor reading can block academic success in many second language learners who may have difficulties comprehending content presented in academic subjects.

It is usual for learners to commit errors when trying to respond to questions that require the complete interpretation of all the text like making inferences about someone's words or phrases, understanding the writer's message, etc. Therefore, people need to understand that reading includes comprehending every internal and external part of the text. Furthermore, teaching successful reading skills not only means preparing students to get a high score in international exams but also getting great success in real life in circumstances where reading skills are relevant. For this reason, the authors mention that reading is not only reading and comprehending the text but going beyond it and making inferences that build a different scenery that opens doors to new knowledge.

For this reason, different researchers have investigated this problem and proposed using language learning strategies that help pupils comprehend the content presented in a reading. Khellab et. al (2022) explain that reading skills require employing specific techniques or procedures that allow them to interact with the text. Every student has his methods that are

applied at the moment to read and these strategies could be the same or different, depending on which they feel comfortable with and help to understand the text's main ideas.

Bouknify (2023) states that L2 learning strategies are divided according to Oxford's Strategy Inventory for Language Learning (SILL) classification into cognitive, metacognitive, memory, compensatory, affective, and social strategies. Also, Anderson (2003, as cited in Bouknify, 2023) divides them into seven main categories: cognitive, metacognitive, mnemonic, compensatory, affective, social, and self-motivating strategies. Every strategy is important for improving reading skills and helping learners comprehend the message transmitted through the text.

7.2.4.1 What is Metacognitive?

The Academic Support Center (2021) defines metacognition as “thinking about thinking.” This is related to the regulation that successful learners possess, that is, they are conscious of their comprehension and can evaluate their efficiency. Metacognition has two simultaneous levels of thought: the learning focused on a particular subject content and the student’s thinking about his learning.

Kend Educational Psychology Service (2022) argues that metacognition is more than just thinking. This term also signifies insight and comprehension of the mental processes and competencies, and the ability to measure or control these processes. This is fundamental to becoming an autonomous learner (knowing the strengths, areas of need, and strategies to acquire and learn a language).

The story of this word was born with Flavell. Flavell (1979), as cited in Ozcakmak et. al (2021) argues that metacognitive awareness is cognition about cognition. Also, Ozcakmak et. al (2021) establish that metacognitive is about self-knowledge and cognitive processes and knowledge about how these processes work. Additionally, Hornby & Greaves (2022) mention that when students develop their metacognitive awareness, they can understand and be conscious about how they can retain the main information and deal with problems. In this way, they can apply this knowledge, assess their weaknesses, and implement different activities to achieve their learning objectives established at the beginning of the activity. For

this reason, these types of strategies are techniques used to support learners in comprehending how they learn and do this more effectively.

7.2.4.2 What are Metacognitive Strategies?

The acquisition of knowledge is essential to acquire a language. For this reason, schools ensure that students get a lot of knowledge in vocabulary and other skills that strengthen their productive process in the language. Reading skill is one of these skills that gives students a range of insight into grammar and vocabulary. The use of these strategies in that process is crucial to understanding all the information and learning at the same time.

Over the years great researchers have updated and created different strategies and techniques that facilitate the acquisition process in learners who learn a language as a foreign language, into these known strategies are metacognitive strategies that are cataloged for different researchers as a useful tool that allow pupils to reach a process of clear understanding of a text when they read.

Metacognitive strategies permit learners to comprehend and generate strategies to understand a text. Especially when learners possess metacognitive awareness since they can think about practices and techniques, they always use to help them comprehend the content and handle possible difficulties. Additionally, learners can evaluate their development and set up the next work needed to achieve their desired outcome.

In line with Ajayi (2024), metacognitive strategies involve techniques that help individuals understand and manage their learning processes. These strategies involve two principal constituents; metacognitive knowledge and metacognitive regulation. The first one is related to consciousness of one's thought processes, such as understanding what strategies work better for every task. In addition, it is categorized into three groups: Knowledge focused on learners, the learning task, and the learning process. In scholarly words, these groups are named person, task, and strategy knowledge.

Additionally, metacognitive regulation includes planning, monitoring, and evaluating individual development activities.

- **Planning:** This involves establishing first-hand, clear objectives and determining the steps and tools needed to achieve them. This step helps learners organize their thoughts and approach tasks methodically.
- **Monitoring:** In this step, students constantly evaluate their understanding and performance. They can apply techniques like self-questioning and keeping track to be conscious of their performance and identify whatever problem involves their cognitive processes.
- **Evaluating:** This last step helps students detect which strategies are effective in their reading process and what others need to improve, promoting constant learning and improvement.

These components help to polish their skills and become more self-aware, and independent learners. Fostering autonomous learning that can boost their knowledge to another level. Using metacognitive strategies, learners can set clear goals, assess their progress, and adjust their approaches to improve efficiency and effectiveness in learning. These strategies are essential for developing self-directed, reflective, and adaptive learners.

Different research has been carried out and has confirmed the efficiency of this type of metacognitive strategy. Al-Kiyume (2021) describes in his findings that were applied to Omani EFL pre-intermediate foundation students that metacognitive strategies have benefited learners in their reading process. Students showed a notable distinction between the group that received the metacognitive treatment and those that received conventional reading instruction.

Also, Rajasagara & Ismail (2022) state that teaching metacognitive strategies has a favorable influence on improving ESL and EFL students' skills. According to these researches, it can

be mentioned that there is a remarkable impact of employing metacognitive strategies on the reading process and the efficiency with which they can enhance the learners' skills. Putra (2024) mentions that according to findings shown in other research, there is a valuable connection between reading performance and the use of metacognitive awareness.

As stated in Mokhtari and Sheorey (2002, cited in Putra, 2024), the Survey of Reading Strategy (SORT) shows that there are three main categories, named global reading strategies (GLOB), Problem-solving strategies, and supporting strategies. The first deals with planning techniques or strategies to monitor their reading. The second deals with the readers' problems that they can face at the moment to read. This kind of strategy helps readers understand the content while working nonstop with the text. Some problems could be: adjusting reading speed to read difficult material or guessing the meanings of unknown words. Finally, the third is an instrument used to help readers understand a text. Students can use a dictionary, stick notes, and underline main ideas.

In addition, focusing on supporting strategies, learners can use tools to infer a text, using a variety of these such as dictionaries, notes, or highlighting the text. In contrast, Kend Educational Psychology Service (2022) mentions in his book titled *Metacognition in the Primary Class* that metacognition has a great impact on learning because it gives them a variety of benefits:

- Shape active learners who are motivated for the learning process by participating in class.
- Give students control over their learning.
- Inculcate deep learning and how to learn.
- Impact both learning and learning outcomes.
- Receive a positive impact when facing challenges and failures.

In addition, Ajayi (2024) mentions other benefits that are given if students use the metacognitive strategies:

- **Improve learning outcomes:** Using self-awareness and self-monitoring, learners can monitor their process, identify weaknesses, and establish solutions. This can help them enhance their deeper understanding and develop their problem-solving skills.
- **Improve Critical Thinking:** allow learners to engage in reflective thinking, and analyze and evaluate the effectiveness of their learning strategies, fostering critical thinking skills and helping them to develop a sophisticated comprehension of complex readings.
- **Increased motivation:** fulfill goals giving students a sense of instruction and purpose in their learning.
- **Creating independence in students:** Metacognition encourages pupils to take control of their learning process, teaching them how to plan, monitor, and assess their learning. These powerful strategies prepare students for lifelong learning beyond the classroom.
- **Allow them to obtain skills** such as self-awareness, establishing objectives, and problem-solving applied in different contexts.

In the application of metacognitive strategies teachers play a relevant role in categorizing useful techniques, classroom activities, and strategies that let learners reach the understanding process. According to Ajayi (2023), the teacher's role is compound by three components:

- **Give instructional techniques:** Teachers can use modeling to establish goals, monitoring, and self-assessment. They can direct students to identify or recognize the learning outcomes, plan their tasks, and analyze the learning process at the end.
- **Apply activities:** These activities can be individual or in groups. Some examples are group discussions, debates, and peer feedback. Students can incorporate questionnaires that encourage self-reflection and critical thinking.
- **Teacher's role:** Support the students by giving feedback and guidance. By allowing students to navigate cognitive development, they could become independent learners.

Some activities that teachers can apply to develop metacognitive strategies in students are:

- Reflective writing when students are kept writing essays helping them to reflect on their experiences, formulate their comprehension, and identify areas that need treatment.
- Pair group when students need to think and reflect individually about the variety of questions or problems, expose their thoughts with a partner, and share their points of view. This activity promotes self-reflection, peer feedback, and shared insight.
- Peer feedback is when students give and receive feedback on each other's work. It helps to develop evaluation skills and gives them a different perspective on their learning process.
- Goal-setting workshops: This activity includes creating action plans and debate strategies to overcome possible obstacles. It helps them to monitor and review their academic and personal goals.
- Self-assessment activities: Students can use checklists, rubrics, and self-assessments to evaluate their process. It helps them to identify their strengths and weaknesses areas independently.

The improvement of reading skills has a significant impact on understanding a foreign language. When pupils read, they acquire a variety of vocabulary, and grammar that help them to develop productive skills, and get more insight improving their skills. Özçakmak et. al (2021) explain in their research that teachers need to have knowledge of these techniques and teach them to learners to enrich their learning. In conclusion, the application of metacognitive strategies is important but it allows students to enhance their reading process in a better way.

8. METHODOLOGY

This research aims to identify the most frequently metacognitive strategies used by the students. To address the objective, quantitative research was applied since it helps collect and analyze the data numerically. As mentioned by Rana, et.al (2021) and Ghanad (2023), quantitative research requires gathering, examining, and understanding numerical data to respond to the research questions and assess the hypothesis of a study. Furthermore, it helps in describing the specific qualities to write the conclusions and present the results in graphs, tables, and figures.

Moreover, its results are more reliable. Likewise, the descriptive method was used to describe what metacognitive strategies are the most used in reading comprehension. “It is used for statistics of data, average and frequencies” (Pawar, 2020, p. 52). Additionally, this research was based on previous findings from other authors; Annury et al. (2019), Köse & Güneş (2021), and Wallace, et. al (2021). The participants were 31 students in the fourth semester of the Pedagogy of National and Foreign Language, English major from the Technical University of Cotopaxi. They were chosen based on the criteria that they are not native English speakers and had been studying for at least one year the English language.

Data was collected using the quantitative method which the instrument was the Metacognitive Awareness of Reading Strategies Inventory (MARSI) questionnaire. It is broken down into three parts; global reading strategies, problem-solving strategies, and supporting reading strategies. This questionnaire contains 30 items, of which 13 come under the global reading strategies, 8 to problem-solving strategies, and 9 to the category of supporting reading strategies. It was applied physically in which each student received a printed sheet with all the items on the questionnaire.

Additionally, they were given a brief explanation about what metacognitive strategies are in reading comprehension before they fill out the questionnaire. Also, it was explained to them how they should answer it using a scale from 1 to 5. This was carried out in an estimated time of 30 minutes. Furthermore, to score the questionnaire, the Likert scale from 1 to 5 was used, in which the number one means I never or almost never do this, the number 2 means “I do this only occasionally”, 3 means “I sometimes do this”, 4 means “I usually do this”, and 5 means “I always or almost always do this”.

On the other hand, the data obtained were examined quantitatively using the descriptive statistical analysis based on the central tendency measures (mean) “the sum of all measurements divided by the number of observations in the data set” (Chakrabarty, 2021, p. 18194) where the mean is related to the average in of a set of numbers. This analysis was

carried out using the Excel program where all the data were analyzed and classified into variables.

A general data table was made with all the answers given by the students to calculate the mean of all the data in general. Finally, a data table was created for each category of the questionnaire, from which the mean of each of them was calculated. In this way, it was possible to identify which strategy was the most and least used in general in the entire questionnaire and which strategy was the most and least used in each category. The questionnaire that was used in this research was developed by Mokhtari & Reichard (2002) belonged at the Oklahoma University from the U.S.A

This was designed to measure how well the students use the strategies to comprehend an academic or school text. The validity of this instrument that was used in this study is based on its use in other research and also, this instrument was validity for the UTC University. Finally, data was managed according to the institutional guidelines to protect the integrity and confidentiality of the participants.

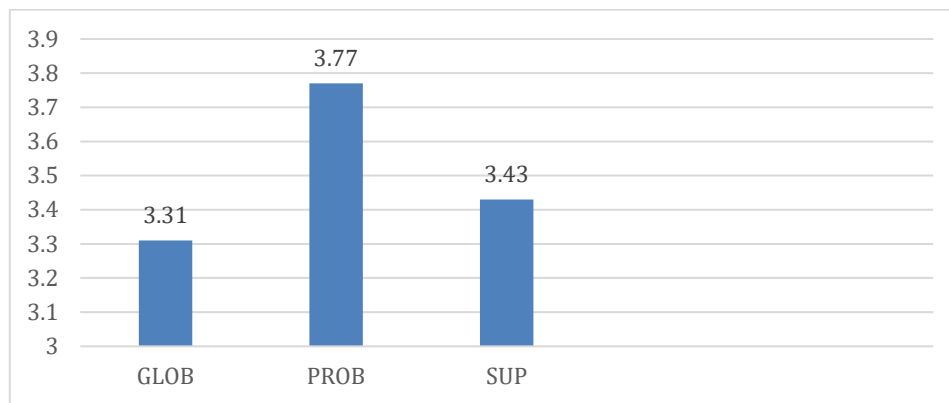
8.1 Analysis and Discussion of Results

The data gathered was analyzed in 3 tables, each corresponding to every categorization: global strategy, problem-solving strategy, and supporting reading strategies. The tables show the scale that every participant chose in the questionnaire, as well as the mean score that every item had. In addition, four graphics were incorporated, the first shows the strategies most frequently used by the participants in a general way. The other three show the mean score of every item by category. All of these, present the final result of the frequent use of metacognitive strategies in reading, forming the basis for future discussions.

Table 1*Mean Range*

Mean	Interpretation
3.5 or higher	High
2.5 - 3.4	Medium
2.4 or lower	Low

Note: The mean score that every item got to know if this is high, medium, or low. **Source:** Mokhtari, K., & Reichard, C. (2002). Assessing students' metacognitive awareness of reading strategies. *Journal of Educational Psychology*, 94 (2), 249-259.

Graphic 1*General Scores of every metacognitive Strategies*

Authors: Requelme, N. & Guanoquiza, J.

The graphic 1 shows the general mean score of every metacognitive strategy. According to the data collected, the global strategies had a mean of 3,31, the problem-solving a mean of 3,77, and the supporting strategy got a mean of 3,43 respectively. It means that participants employ more strategies that support them in comprehending all the text, especially when it becomes difficult to get or it is ambiguous. In compliance with Par (2020) Problem-solving and other reading strategies are steps that learners apply when they work directly with the text. These are techniques that are used when problems arise in understanding textual information.

Research by Kose & Gunes (2021) showed a different result in which students' mean scores in the three categories of reading strategies were 3.53, 3.87, and 3.53 indicating a high level of use of strategies. The mean in every category was over 3.50. However, in a study by Batac (2024) the majority of indicators obtained a medium score and only one of them got a low score. This shows that the results can change, but the most frequent score means that participants get is medium level in using metacognitive strategies.

Table 2

Global Strategies

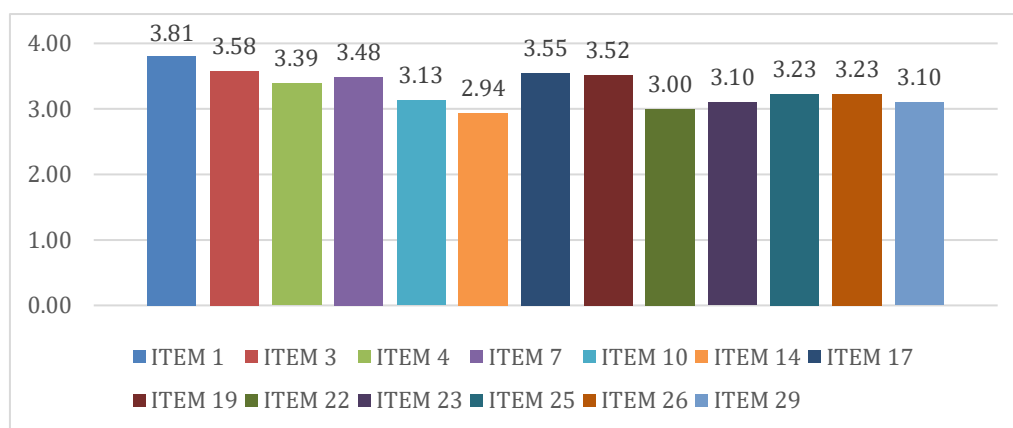
PART	IT. 1	IT. 3	IT. 4	IT. 7	IT. 10	IT. 14	IT. 17	IT. 19	IT. 22	IT. 23	IT. 25	IT. 26	IT. 29
1	4	3	3	3	2	2	4	4	2	4	3	3	3
2	5	4	3	5	4	3	5	3	4	4	3	4	4
3	5	4	4	4	2	2	4	3	3	2	2	3	3
4	5	3	2	2	2	2	5	4	2	1	2	3	3
5	3	4	2	4	2	3	5	3	1	3	4	2	2
6	2	5	5	5	4	4	3	5	5	2	3	4	2
7	3	3	4	3	2	4	3	3	2	2	3	3	3
8	3	3	3	4	3	2	3	3	2	3	2	3	3
9	5	4	4	4	3	4	4	3	4	4	2	2	4
10	4	4	4	3	4	3	5	5	4	4	4	4	4
11	4	4	5	3	4	5	2	5	4	4	4	4	4
12	3	2	4	3	3	3	3	3	3	2	3	2	3
13	4	4	5	4	2	5	1	4	1	3	3	3	3
14	3	4	4	3	3	3	1	3	4	3	5	2	3
15	2	3	4	3	4	3	3	2	2	2	2	3	3
16	3	3	3	3	3	3	3	3	3	2	3	3	3
17	5	4	2	4	4	3	4	4	4	4	4	5	4
18	4	4	1	4	4	2	5	4	4	3	3	3	3
19	5	4	4	5	4	1	5	5	4	5	5	4	3
20	5	4	4	4	4	2	3	2	2	4	3	3	3
21	5	4	2	4	4	3	5	5	4	4	4	4	4
22	2	3	3	3	4	3	4	2	3	4	4	4	3

23	4	5	5	4	3	3	3	4	3	2	3	5	2
24	5	4	3	4	3	4	4	4	3	4	4	4	4
25	4	3	2	3	2	2	3	4	2	4	3	3	2
26	4	4	3	2	3	2	3	3	2	2	3	2	2
27	4	4	5	3	3	3	4	3	4	4	4	4	4
28	4	3	5	3	3	4	4	4	4	4	4	4	4
29	2	3	2	3	3	2	4	3	3	2	3	2	3
30	3	2	3	3	3	3	4	3	3	3	2	3	2
31	4	3	2	3	3	3	1	3	2	2	3	2	3
PROM . ITEM	3,81	3,58	3,39	3,48	3,13	2,94	3,55	3,52	3,00	3,10	3,23	3,23	3,10
PROM. CATE	3,31												

Note: This table shows the scales chosen by every participant in each item. At the end, it presented the mean score of every item. **Source:** Requelme, N. & Guanoquiza, J.

Graphic 2

The Mean Score of Global Strategies



Authors: Requelme, N. & Guanoquiza, J.

According to the elements belongs global strategies, the greater part of learners got a high and frequent usage rate reaching 11 out of 13 where the grade was 3,31. It shows that pupils can plan and monitor their reading process. The students usually have a purpose in their minds when they read a text (M=3,81). It could be to answer questions, complete their homework, understand someone's topic, or other purposes. Students mention that they firstly

are conscious about what they know to comprehend what they read (M=3,58) and also, they usually use charts, graphics, and illustrations to increment the variable of understanding (M=3,55).

Answers show that learners used context clues to understand better the content (M=3,52), think about how the content fits with their purposes (M=3,48), or make a preview before reading (3,39). Pupils reading analyses evaluating the text and make guessing after they find out if their suppositions were correct (M=3,10), and check their understanding when they find issues in the middle of the lecture (M=3,23). In line with the results, larger numbers of participants use these types of metacognitive strategies to monitor their learning process through reading skills, but these are not frequently used for them.

Compared to the results obtained in the study by Batac (2024) these are different. The most frequent strategies were previewing the text to contemplate the content prior to reading it and using different types of tools that permit taking relevant notes of important details, one of them could be using boldface and italics. This strategy got a mean of 3,47; located in the ranked 1st. It means that students plan their reading before beginning once. In the 2nd place is located the strategy of checking if the content of the lecture is related to the purpose of reading with a mean of 3,38; in the 3rd place is examining and assessing the content read getting a score of 3,25. Finally, getting a clear objective in mind when they read got an average of 2,76 located in the 4th rank. All the components obtained a medium level while in this investigation 11 of 13 components got a high level of use.

Table 3

Problem-Solving Strategies

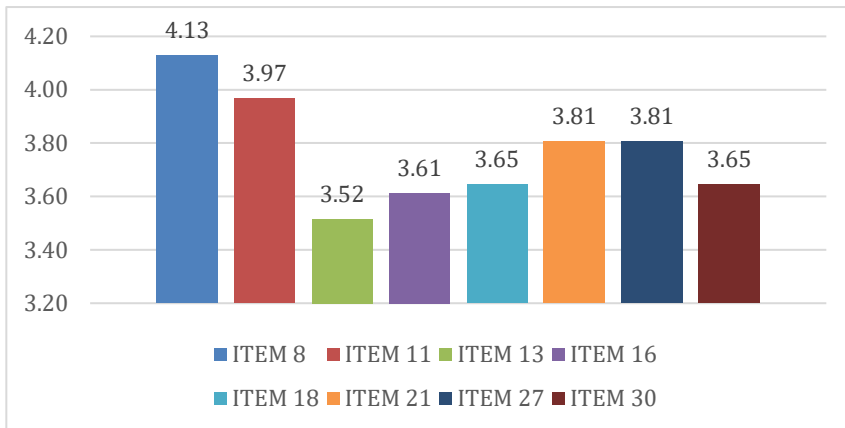
PART.	IT. 8	IT. 11	IT. 13	IT. 16	IT. 18	IT. 21	IT. 27	IT. 30
1	4	3	3	2	4	3	4	4
2	5	5	4	3	5	5	4	5
3	4	3	2	3	3	3	3	2
4	5	2	1	2	5	4	5	2
5	5	5	5	4	4	5	4	4

6	4	5	5	5	4	3	4	5
7	3	4	2	3	3	2	4	5
8	3	3	4	2	3	3	3	4
9	5	3	4	4	2	4	4	4
10	4	5	4	5	5	5	5	5
11	5	4	4	4	4	5	5	4
12	5	4	3	4	3	3	4	2
13	3	5	4	4	5	4	5	4
14	4	4	5	3	2	5	4	4
15	4	3	2	3	3	3	3	2
16	4	3	3	3	2	3	2	3
17	5	5	4	5	4	4	4	4
18	5	5	3	4	5	5	3	4
19	5	5	4	5	5	5	5	5
20	4	3	4	4	3	3	3	3
21	5	5	3	3	5	5	5	4
22	3	4	4	4	3	3	2	3
23	4	5	2	3	5	5	5	1
24	4	4	4	4	4	4	4	4
25	4	4	4	3	3	2	2	4
26	4	4	3	5	3	2	3	3
27	4	4	4	5	4	5	5	4
28	5	5	5	5	5	5	5	5
29	4	3	3	2	2	3	3	3
30	2	3	3	3	2	3	3	3
31	3	3	4	3	3	4	3	4
MEAN	4,13	3,97	3,52	3,61	3,65	3,81	3,81	3,65
G. A	3,77							

Note: this table shows the scales chosen by students for the item belonging to problem-solving reading strategies. Also, at the end is presented the mean score of each one. **Authors:** Requelme, N. & Guanoquiza, J.

Graphic 3

The Mean Score of Problem-Solving Strategies



Authors: Requelme, N. & Guanoquiza, J.

The problem-solving strategies are used to help readers to solve problems that they can find in the text. Most of the components of these strategies are usually used for students. Seven out of eight are applied in their reading process. The greater part of the participants read slowly to understand all the content (M=4,13), and then if they lost concentration they back and read again the fragment of the text (M=3,97). Also, someone stops from time to time to analyze the story or content, making guesses about the possible meanings of unknown words that appear in the text (M=3,65). In addition, they try to visualize relevant information that helps them to remember the content, but when the text becomes hard they re-read to reach to the understanding (M=3,81) or pay close attention at the text or document that they read (M=3,61). These strategies allow students to performance comprehension when the text becomes difficult or ambiguous, for this reason, these strategies are the most used by the students getting a mean of 3,77 between global and supporting strategies.

In this sense, these results seem to be the same with respect to a study by Wallace, et.al (2021), who found that the metacognitive strategies most used by Chinese EFL university students fell within the problem-solving category. Such strategies are re-reading to increment the comprehension of the text, when they lose focus, they try to go back on the text and being attentive when the content become difficult to understand.

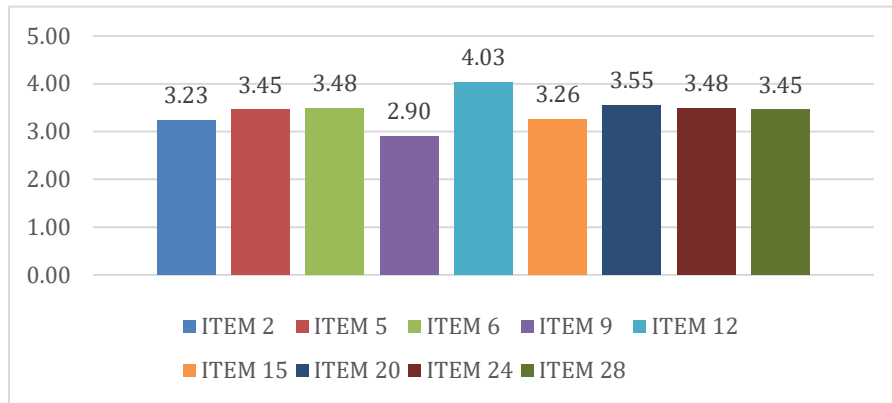
Table 4*Supporting Strategies*

PART.	IT. 2	IT. 5	IT. 6	IT. 9	IT. 12	IT. 15	IT. 20	IT. 24	IT. 28
1	5	3	4	4	5	4	5	3	4
2	2	4	4	3	5	3	5	3	3
3	4	3	4	3	4	1	1	3	3
4	5	3	2	2	5	4	4	2	3
5	2	3	3	2	1	2	4	4	4
6	3	4	3	1	5	1	4	4	5
7	2	4	2	2	4	2	2	3	3
8	2	3	3	4	3	5	3	3	2
9	4	3	4	1	5	2	4	4	2
10	4	4	3	4	5	5	4	3	4
11	4	5	3	4	5	4	5	4	5
12	3	2	3	3	4	3	4	3	2
13	2	3	3	1	2	2	5	5	5
14	2	4	2	1	1	1	1	4	5
15	3	3	4	3	4	3	3	2	2
16	3	3	3	5	5	5	3	3	3
17	3	4	5	3	5	5	4	4	4
18	3	3	5	4	5	5	2	4	4
19	5	5	4	5	5	5	5	4	2
20	3	5	4	5	5	3	2	4	3
21	3	5	5	4	5	4	4	4	5
22	3	3	4	3	4	4	4	3	3
23	3	1	3	3	3	1	2	4	4
24	4	4	4	4	4	3	4	3	4
25	3	3	3	2	3	3	3	2	3
26	4	3	4	3	5	2	2	3	3
27	3	4	4	3	4	4	5	5	4
28	4	4	5	3	5	5	5	5	4
29	4	3	3	1	4	5	5	3	3
30	3	3	2	2	4	4	4	4	3
31	2	3	3	2	1	1	2	3	3
MEAN	3,23	3,45	3,48	2,90	4,03	3,26	3,55	3,48	3,45
A	3,43								

Note: this table presents the scales chosen by every student. Additionally, it presented the mean score of each one and the general score of that category. **Source:** Requelme, N. & Guanoquiza, J.

Graphic 4

The Mean Score of Supporting Reading Strategies



Source: Requelme, N. & Guanoquiza, J.

The supporting strategies are used to improve the understanding and memory of essential information that arises in the text. According to the results, six out of nine had a high frequency of use with a score of 3,40 and above. Learners always highlight or encircle relevant details to remind them ($M=4,03$). Others use paraphrasing to understand the information ($M=3,55$), summarize it to reflect on relevant information, or go back and forth to relate the content of the text ($M=3,48$). Additionally, participants mention that they read aloud to comprehend in a better way the content or ask questions themselves about the content of a text to remember important information ($M=3,45$). In conclusion, students usually use these strategies that help them understand and remember it before reading or when they are reading.

This study got similar results to the research of Batac (2024), who reported that the learners frequently use strategies like highlining or encircling key content on the text obtaining a mean score of 3,98 and oral interpretation of a predominant level. Par (2020) said that support strategies aid students to understand the text utilize different tools like a dictionary, stick notes, writing down in a notebook, highlighting, or encircling relevant information. The principal purpose of these kinds of strategies is to clear information or write down relevant ideas to use them or remember them more easily.

9. RESEARCH IMPACTS

The present study has educational impacts, as its findings reveal important knowledge about the use of metacognitive strategies among students. It offers significant implications for

classroom instruction and educational practices. That is, teachers can use these findings to apply instructional methods that emphasize the use of students' least preferred strategies to create stability in the utilization of metacognitive strategies. Additionally, this research provides critical data on the less frequent use of global and supportive strategies, which calls for future research to investigate how these strategies can be more effectively incorporated into learning environments.

Furthermore, as students demonstrated that a great number of participants use problem-solving strategies over global and supportive strategies, this suggests the necessity to train pupils in the utilization of these kinds of strategies. For instance, global strategies can assist students to create a clear organization, and scanner and evaluate their reading process, in addition to establishing a clear purpose for it. On the other hand, by using supporting strategies, students can memorize, structure, and delve deeper into key information from the text.

According to Daguay-James & Bulusan (2020), despite the differences existing in the application of metacognitive strategies in different educational fields, as well as the variety of texts depending on the different disciplines, students should make extensive use of all metacognitive strategies, which are global, supporting and problem-solving. In this way, learners will be capable of enhancing their reading comprehension abilities.

Therefore, there is a need to design and test interventions aimed at promoting the balanced utilization of all metacognitive strategies that can further enhance students' reading comprehension abilities and contribute to broader educational achievements. By addressing these gaps, teachers as an indirect beneficiary can foster students' understanding, allowing them to effectively engage with texts and improve their overall academic performance, not just in terms of reading. Additionally, students can become more independent and efficient readers by encouraging the development of a comprehensive set of strategies and the application of these strategies allow them to improve their acquisition of the foreign language.

10.CONCLUSIONS AND RECOMMENDATIONS

10.1 Conclusions

- The use of metacognitive strategies is contemplated as a relevant question that can help students enrich their understanding at the moment to interact with a text. These types of strategies permit learners to apply different techniques to improve their insight and comprehension. Into these kinds of strategies, there are three main classifications: global, problem-solving, and supporting reading strategies. Each one has a function of monitoring, solving problems, and guiding the reading process through of use of different tools that help learners to understand a text.
- The most frequently metacognitive strategies used by students according to the data gathered in the collecting process were problem-solving reading strategies. So, in this classification, the strategies most used are reading slowly to comprehend the text, when they lose focus they back and read again the fragment. Trying to visualize relevant information that helps to remember the content, re-reading to increase understanding, and paying attention to what they are reading. Those strategies they prefer to use to comprehend the reading presented.
- Analyzing the result, the supporting reading strategies are sometimes used by students. Some of them like to apply these kinds of strategies because these techniques permit them to improve their vocabulary and grammar knowledge, highlight relevant information that could be useful later, and acquire more insight into different fields. In line with the data, these strategies are sometimes used by PINE students in their learning process.
- The strategies less used by students were global. So, it means that students do not make plans when they start reading. They only begin something if it looks interesting to them, but the fact is that they are perfect to read and could be in the middle making guesses or thinking about the context and all the contrast that surrounds the text. In

conclusion, not all students apply that strategy that permits planning and monitoring their reading process.

10.2 Recommendations

- Learners should prioritize the utilization of metacognitive strategies with the intention that these can help them enhance their reading process. As was mentioned before, the strategies are relevant tools that open the door to new knowledge that is presented in the text. Also, it is important to emphasize that with the recent technology that is applied to the educational field, students can find new strategies that can help them boost their opportunities to acquire a language easily. It is necessary to apply these types of strategies to enhance the reading skills of learners and make it easier for them to reach comprehension.
- The relevant that is the application of metacognitive strategies in the problem-solving categorized helps the students to persist and face the problems that are presented in the middle of a text. In addition, it is relevant to mention that these strategies have an important weight because a few learners feel disappointed or frustrated when they do not understand fragments or all the reading, and they stop to try, but if these types of strategies are taught in class, they can upset these strategies and adapted to them and find out a way to face, so continued reading until reaching to the comprehension that is the main aim when a reader read.
- Students should realize the significance that is the use of supporting reading strategies. It is special for students that it is hard for them to remember relevant information, or words that you just read. When it comes to acquiring a foreign language, pupils have to every time to take notes about new words or phrases that are hard to remember, and research their meaning in the dictionary, or the internet. In this subject these kinds of strategies are essential. Additionally, teachers must teach this kind of knowledge to students in their classes because sometimes appears unknown words in the content taught, and might be necessary that students bring a dictionary,

stick notes, or highlights that allow them to interact with the new vocabulary and know their meaning.

- Students should learn to plan when they read and monitor their learning process. It could appear unnecessary for some readers, but it helps to select and discriminate irrelevant lectures that can look interesting but cannot have the information that students need. It can confuse the readers giving fake information. Therefore, it is necessary to teach global strategies to learners to help them distinguish that content is worth reading and avoid unclear information. It would be interesting if these kinds of strategies could be taught to students in universities, especially in those who are training to become English teachers with the intention that students can learn to distinguish the really important information and what is not important.

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