TECHNICAL UNIVERSITY OF COTOPAXI

UNDERGRADUATE PROGRAM

DEPARTMENT OF NATIONAL AND FOREIGN LANGUAGE PEDAGOGY
ENGLISH MAJOR

MODALITY: RESEARCH REPORT

THEME:

Didactic Strategies Based on ChatGPT to Improve the Reading Skills of A2.2 Level Students.

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

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Chango García Amira Paola
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Tutor:
MSc. Sandoval Vizuete Estuardo Vladimir

PUJILÍ-ECUADOR
AUGUST 2025

TUTOR'S ENDORSEMENT

In my capacity as a supervisor of the research report entitled "Didactic Strategies Based on ChatGPT to Improve the Reading Skills of A2.2 Level Students", and researched by Chango García Amira Paola, ID number 1751544295 & Lugmania Borja Kristin Dayane, ID number, 0503172520, for obtaining the bachelor's degree in National and Foreign Language Pedagogy, English Major.

I CERTIFY THAT:

This research report has been fully revised and has the requirements and merits to be submitted for evaluation by the assigned revision Committee and its presentation and defense.

Pujilí, August 2025

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MSc. Sandoval Vizuete Estuardo Vladimir
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COMMITTEE APPROVAL

The research report entitled "Didactic Strategies Based on ChatGPT to Improve the Reading Skills of A2.2 Level Students", has been revised, approved and authorized for printing and binding, before obtaining the bachelor's degree in National and Foreign language Pedagogy, English Major; this meets the substantive and formal requirements to hand in for the presentation and defense.

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GRATEFULNESS

We are deeply grateful to God for granting us health and life, which allowed us to successfully complete this process. We also express our gratitude to the Technical University of Cotopaxi for opening the doors of its institution and supporting our professional training. We sincerely thank our tutors for their patience and dedication throughout all the classes. Especially, MSc. José Ignacio Andrade Morán and MSc. Sandoval Vizuete Estuardo Vladimir, for their guidance and valuable collaboration in the development of our research project. Finally, we thank our family for being a constant source of inspiration and perseverance in pursuing our dreams.

Amira & Kristin

DEDICATION

I dedicate this work to God, whose infinite grace, wisdom, and strength have guided me throughout this academic journey. To my mother, Margarita García, for her unconditional love, constant support, and the sacrifices she has made to help me achieve this goal.

To my sister, my grandmother, and my aunts, for their encouragement and for always being a source of motivation. I also extend my deepest gratitude to all those who, in one way or another, contributed to the completion of this work.

Amira.

DEDICATION

I offer this project in honor first to God for allowing me to get to the end despite all the adversities, to my mommy, for her unconditional love, her constant support, and her strength that inspires me every day to be better and to my daddy for having guided me along the way, for being an example of struggle, hard work and dedication. To my nephew Liham and niece Scarleth, for their joy and love, which motivate me to keep going. To Cristina, Micaela & Josue, for their company, support, love, and for sharing this process with me. To all my family for their time and understanding every step of the way. This achievement is as much mine as it is yours, because it is the result of the love and support of those around me. Thank you for being an essential part of the process, being my motor and refuge.

***Kristin*.**

TECHNICAL UNIVERSITY OF COTOPAXI

UNDERGRADUATE PROGRAM

DEPARTMENT OF NATIONAL AND FOREIGN LANGUAGE PEDAGOGY

ENGLISH MAJOR

THEME: DIDACTIC STRATEGIES BASED ON CHATGPT TO IMPROVE THE READING SKILLS OF A2.2 LEVEL STUDENTS.

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ABSTRACT

Artificial intelligence is transforming educational contexts, providing innovative tools for language learning and instructional design. The objective was to analyze the effectiveness of using ChatGPT to improve the reading skills of A2.2 level students in the English Major of the National and Foreign Language Pedagogy program at the Technical University of Cotopaxi. A quantitative descriptive methodology was applied, involving a purposive sample of twelve students. The intervention consisted of five didactic sessions, during which five ChatGPT based strategies scanning, guided reading, vocabulary support, prompt creation, and interactive questioning were implemented to strengthen both literal and inferential reading comprehension. Pre-test and post-test assessments, administered through Google Forms, revealed a notable improvement in students' reading performance: the average score for literal comprehension rose from 6.5 to 9.83, and inferential comprehension increased from 5.17 to 9.67. These results analyze that ChatGPT fosters autonomous learning, critical thinking, and personalized feedback. The findings underscore the pedagogical value of integrating AI into language education, highlighting improvements in student motivation, engagement, and digital literacy key components for developing more effective and learner-centered teaching practices.

Keywords: ChatGPT, Reading, Strategies, Artificial Intelligence, Skills**.**

TECHNICAL UNIVERSITY OF COTOPAXI

UNDERGRADUATE PROGRAM

DEPARTMENT OF NATIONAL AND FOREIGN LANGUAGE PEDAGOGY

ENGLISH MAJOR

TÍTULO: ESTRATEGIAS DIDÁCTICAS BASADAS EN CHATGPT PARA MEJORAR LA COMPETENCIA LECTORA DE ALUMNOS DE NIVEL A2.2

Autoras:
Chango García Amira Paola
Lugmania Borja Kristin Dayane
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RESUMEN

La inteligencia artificial está transformando los contextos educativos al proporcionar herramientas innovadoras para el aprendizaje de idiomas y el diseño instruccional. El objetivo de este estudio fue analizar la efectividad del uso de ChatGPT para mejorar las habilidades de lectura de los estudiantes de nivel A2.2 de la carrera de Pedagogía de los Idiomas Nacional y Extranjero de la Universidad Técnica de Cotopaxi. Se aplicó una metodología cuantitativa de tipo descriptivo, con una muestra intencional de doce estudiantes. La intervención consistió en cinco sesiones didácticas, durante las cuales se implementaron cinco estrategias basadas en ChatGPT: escaneo, lectura guiada, apoyo de vocabulario, creación de prompts y preguntas interactivas, con el fin de fortalecer la comprensión lectora literal e inferencial. Las evaluaciones pre-test y post-test, aplicadas mediante formularios de Google, revelaron una mejora notable en el rendimiento lector de los estudiantes: el promedio en comprensión literal aumentó de 6,5 a 9,83, y en comprensión inferencial de 5,17 a 9,67. Estos resultados analizan que ChatGPT fomenta el aprendizaje autónomo, el pensamiento crítico y la retroalimentación personalizada. Los hallazgos destacan el valor pedagógico de integrar la inteligencia artificial en la enseñanza de idiomas, evidenciando mejoras en la motivación, el compromiso y la alfabetización digital de los estudiantes, componentes clave para desarrollar prácticas educativas más eficaces y centradas en el estudiante.

Palabras clave: ChatGPT, Lectura, Estrategias, Inteligencia Artificial, Habilidades.

INDEX

1. GENERAL INFORMATION

Theme:

Didactic Strategies Based on ChatGPT to Improve the Reading Skills of A2.2 Level Students.

Starting Date:

April 2025

Ending Date:

August 2025

Place of Research:

Pujilí - Cotopaxi - Technical University of Cotopaxi

Sponsoring Faculty:

Extension Pujilí

Sponsoring career:

National and Foreign Language Pedagogy English

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Knowledge area:

Education

Research line: Education, communication, and design for human and social development

Research line of the career: Education, linguistics, literature, interculturality, and society

2. PROBLEM STATEMENT

The development of reading comprehension skills is a fundamental component of learning English, especially at the A2.2 level, where students are expected to understand simple texts, identify main ideas, and make basic inferences. However, even though reading activities are included in most English as a foreign language curriculum, many students at this level continue to struggle with vocabulary, sentence structure, and understanding meaning in context. These difficulties lead to low motivation, limited reading practice, and poor academic performance in language learning. In recent years, technological tools have become increasingly relevant in addressing pedagogical challenges. One such tool is ChatGPT, an artificial intelligence-powered language model developed by OpenAI. ChatGPT has the potential to support students' reading processes through personalized interaction, vocabulary clarification, text summarization, and instant feedback. However, in English as a foreign language class, this resource remains largely unexplored or poorly integrated into teaching strategies.

The central problem addressed by this research is the limited reading comprehension skills among A2.2 level students, which affects their overall language acquisition. This problem is attributed to the use of traditional teaching methods that lack student-centered interaction and a lack of digital tools that encourage autonomous learning. As a result, students develop a passive attitude toward reading and rely heavily on the teacher rather than building their strategies for understanding texts.

This research proposes to examine the effectiveness of ChatGPT-supported teaching strategies in improving reading comprehension in A2.2 level students. The basis of this approach lies in the need to innovate classroom practices with tools that can foster student autonomy, motivation, and active engagement with texts. By analyzing how ChatGPT can be integrated into lesson planning through strategies such as guided reading, vocabulary prediction, and reflective discussion, this study offers a practical perspective on how artificial intelligence can complement teacher instruction, provide differentiated support, or strengthen

students' reading skills in real educational contexts. Based on this context, the study addresses the following research question: How effective is ChatGPT as a strategy for improving reading comprehension skills in A2.2-level students?

3. OBJECTIVES

3.1 General Objective

To analyze the effectiveness of using ChatGPT to improve the reading skills of A2.2 level students in the English Major of the National and Foreign Language Pedagogy program at the Technical University of Cotopaxi.

3.2 Specific objectives

- To identify the theoretical framework on the use of ChatGPT to support reading comprehension in A2.2-level students.
- To determine the level of reading comprehension in A2.2 students.
- To describe how ChatGPT supports independent reading skills development in A2.2 level students.
- To establish in conclusions and recommendations

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

Tabla 1

Specific objective	Activities	Result of the activity	Verification Means

To identify teaching strategies that integrate the use of ChatGPT in teaching reading to A2.2 level students.	Analyze lesson plans Review the theoretical framework	A list of ChatGPT based teaching strategies used in reading instruction for A2.2	Theoretical Framework
To determine the level of reading comprehension in A2.2 student.	Apply a pre-test and a post-test Analyze students reading	A comparison of reading comprehension levels before and after the intervention	Pre-test and Post-test Results
To describe how ChatGPT supports reading comprehension development in A2.2 level students.	Categorize and interpret the results. Describe and discuss the results.	Analysis of ChatGPT's role in developing reading comprehension.	Analysis and discussion of results.
To establish in conclusions and recommendations	Compare results with theoretical literature.	Compare results with theoretical literature.	Final Report

5. JUSTIFICATION

Reading comprehension is a critical skill in learning English as a foreign language, particularly at the A2.2 level, where students are required to identify main ideas, understand vocabulary in context, and make basic inferences. Many students in this category struggle due to limited strategies for approaching English texts, which negatively impacts their academic performance, motivation, and active participation (El Hassan & Alsalwah, 2025). Therefore, it is essential to rethink traditional methodologies and integrate innovative tools that support dynamic, autonomous learning.

In this context, artificial intelligence tools like ChatGPT offer a novel and relevant solution. A recent meta-analysis of 51 studies found a large positive effect ($g = 0.867$) of ChatGPT on students' learning performance and moderate positive effects on learning perception and higher-order thinking (Wang & Fan, 2025). These findings justify the need to evaluate ChatGPT-supported reading strategies for students in the A2.2 level, contributing to both methodological innovation and updated teaching practices adapted to current educational needs.

From a theoretical perspective, the study draws on autonomous learning frameworks, the communicative approach, and social constructivism, which endorse active learner engagement, meaningful interactions with texts, and individualized feedback. The practical contribution lies in the design and execution of targeted activities that integrate ChatGPT as an interactive tutor providing immediate, personalized, and engaging feedback.

Activities developed with ChatGPT included strategies designed to enhance various reading skills. For instance, students practiced scanning, a rapid reading technique that enabled them to locate specific information in texts quickly, thereby improving their ability to identify explicit details essential for literal comprehension. They also engaged in guided reading sessions, where ChatGPT provided structured support by breaking down texts into manageable parts and clarifying complex vocabulary and ideas, helping reduce cognitive overload. To expand their lexical knowledge, students employed vocabulary support with ChatGPT, identifying unfamiliar words during reading and requesting context-based definitions and examples. Furthermore, learners developed metacognitive and digital literacy skills through prompt creation for reading comprehension, formulating literal and inferential questions which they inputted into ChatGPT to evaluate and refine the quality of the answers. Lastly, students participated in interactive inferential questioning, where ChatGPT facilitated deeper comprehension by encouraging logical inferences and critical analysis of the texts.

The direct beneficiaries are the students in the National and Foreign Language Pedagogy program at the Technical University of Cotopaxi, and the results are transferable to similar educational settings. The feasibility is demonstrated by the use of personal mobile devices and free ChatGPT accounts, leveraging accessible internet connectivity inside and outside the academic context.

6. SCIENTIFIC AND TECHNICAL FOUNDATION

6.1 Background

Previous studies conducted worldwide strongly support this project, providing a valuable frame of reference. Gonzabay and Robles (2024) A study titled *"ChatGPT in Personalized Teaching in the Development of English Language Reading Skills"* aimed to create a teaching guide that assists educators in designing reading materials adapted to students' individual interests. Through the integration of ChatGPT, the researchers employed a mixed-methods approach combining surveys and interviews to collect insights from both students and

teachers. Findings revealed that ChatGPT plays a meaningful role in supporting personalized learning by enhancing interactivity and engagement in the reading process. The study concludes with practical recommendations for incorporating the ReAI guide into English language instruction

Yayasan and Lembaga Penelitian dan Pengabdian Kepada Masyarakat (LPPM) Universitas PGRI Semarang, (2025) They research titled *Enhancing English Reading Skills through ChatGPTOpenAI: A Study on Vocational High School Students*. The objective was to examine the famous application called ChatGPT-OpenAI to determine whether this application can develop students' reading skills. To carry out the study, the classroom action method was used to collect and analyze the data. The cycles of this method are planning, acting, observing, and reflecting with the planning procedure, problem identification, implementation of actions, observation, reflection, review, next action cycle, documentation, data and results analysis, and conclusion and recommendation. The result of implementing ChatGPTOpenAI to improve English reading skills among vocational high school students provides rapid advances in artificial intelligence. To use action research in the classroom, measure the effectiveness of ChatGPTOpenAI through pre-tests, post-tests, and student feedback. The results indicate a significant improvement in reading skills, and students demonstrate greater understanding and engagement, suggesting that ChatGPT-OpenAI is a valuable educational tool for promoting English reading proficiency in vocational training.

Mohamed and Fahad (2025) A study titled *Exploring the Impact of ChatGPT on EFL Reading Practices: Opportunities and Challenges* examined the use of ChatGPT in English as a Foreign Language (EFL) reading instruction. The research focused on the obstacles encountered by educators and the effects on student engagement. Findings indicated that ChatGPT had a positive impact on learners' reading comprehension, vocabulary acquisition, and classroom participation. Nonetheless, its success was influenced by the cultural and educational context of Saudi Arabia. The authors suggested implementing teacher training programs, establishing ethical frameworks for AI use, and developing strategies for its

integration into the existing curriculum. They also emphasized the need to promote innovation among educators and conduct ongoing evaluations of student performance to optimize the use of AI technologies in language teaching. Overall, the study offers practical insights into how ChatGPT can enhance reading instruction and enrich the EFL learning experience.

Macias and Sosa (2024) The study titled *ChatGPT-Based Didactic Strategies to Improve Students' English Language Reading and Writing Skills* focused on developing instructional strategies supported by ChatGPT to enhance high school students' literacy abilities in Esmeraldas during 2023. Employing a mixed-methods approach, the researchers utilized techniques such as analysis and synthesis, hermeneutic interpretation, descriptive statistics, and both inductive and deductive reasoning. The study was descriptive in scope and non-experimental in design. It involved a sample of 60 English teachers from both public and private institutions in Esmeraldas. Results revealed that 70.5% of participants faced considerable challenges in fostering literacy skills in the classroom, while 84.7% expressed strong interest in integrating ChatGPT into their teaching practices. Key content areas identified for strategy development included expressing opinions, organizing ideas, leisure activities, environmental topics, short stories, and personal reflections. Based on this diagnostic phase, the researchers proposed a set of instructional strategies structured around three stages: preparation, immersive activities, and autonomous language use, each supported by specific objectives, procedures, and tasks

Aliyata (2024) A study titled *The Effectiveness of Using ChatGPT to Improve Students' Reading Comprehension Skills* aimed to examine the impact of integrating ChatGPT into English language instruction within the context of modern, multimedia-based educational practices. The research employed a quantitative, quasi-experimental design and involved 8th-grade students from MTS Miftahul Huda Madiun. To assess learning outcomes, the researchers administered pre- and post-tests, analyzing the results through ANCOVA using SPSS version 25. The Shapiro-Wilk test confirmed normal data distribution for both the experimental and control groups, as all p-values were above 0.05. Levene's test indicated

homogeneous variances (p = 0.468), and the test for interaction between the group and pre-test (p = 0.290) confirmed the homogeneity of regression slopes. Additionally, the covariate showed a significant linear relationship with the dependent variable (p = 0.004). The ANCOVA results revealed a significant difference between the groups (p = 0.001), leading to the conclusion that students who received instruction supported by ChatGPT demonstrated significantly greater improvement in reading comprehension compared to those who used traditional textbook-based methods.

6.2 Theoretical Framework

6.2.1 English Language

The English language originated in England and is currently spoken as a first language, second language, or foreign language all over the world. Proficiency in English allows students to access academic resources, participate in multicultural contexts, and improve their professional opportunities. Learning English involves developing the four main language skills: speaking, listening, writing, and reading, with reading comprehension being one of the key competencies for accessing knowledge and academic training.

Graddol (2006) mentions, “The English language has become a global means of communication not because of its intrinsic linguistic features, but due to historical, political, economic, and technological developments. Today, it functions as a lingua franca across continents, allowing people from different language backgrounds to interact and access information. In educational contexts, English plays a crucial role in providing access to scientific knowledge, academic resources, and global opportunities” (p.87).

The English language covers a wide range of areas, from the basics of grammar and vocabulary to more advanced topics such as linguistics, literary analysis, and the difficulty of reading different texts. Key areas include parts of speech, sentence structure, verb tenses, and punctuation, as well as broader concepts such as communication, perspective, and identity.

6.2.2 Languge adquisition

In the field of language teaching, language acquisition is a conscious process through which a student acquires knowledge of a language through grammatical rules, vocabulary, and linguistic structures, and typically occurs in educational contexts such as the classroom, developing the ability to use a language through natural exposure and communicative use. Krashen (1982), “Language acquisition is a subconscious process similar to the way children acquire their first language. It occurs when learners are exposed to meaningful and comprehensible input in low-anxiety environments” (p.10). In English, as in all languages, there are language skills that are classified as productive, such as speaking and writing, and receptive, such as listening and reading.

Reading is a fundamental tool for language acquisition, especially for developing vocabulary, grammar, and comprehension skills. It helps students relate written words to their meanings and then relate them to the sounds they represent, allowing them to develop a wide range of vocabulary, which enables them to acquire new elements of the language naturally.

6.2.3 Reading

Reading is a fundamental receptive skill in foreign language learning, involving decoding written symbols to construct meaning. It is not just about recognizing words, but understanding ideas, interpreting the author's intentions, and relating the text to the reader's prior knowledge. Grabe and Stoller (2011), “an active process of comprehending written text, which involves the reader, the text, and the interaction between the two. Skilled reading includes recognizing words quickly, integrating new information, making inferences, and applying reading strategies to achieve a purpose.” (p.6)

Within reading, we have different skills that encompass a range of abilities that enable people to understand and interpret written texts. These skills are based on fundamental components such as phonetics, phonological awareness, vocabulary, and fluency, which together enable comprehension.

6.2.4 Reading comprehension

The ultimate goal of reading comprehension is to learn to read to achieve understanding. It also involves the ability to understand, process, and extract meaning from a written text, as it is a multifaceted and effective process based on a variety of skills and strategies, including decoding, fluency, vocabulary, and the activation of prior knowledge. The ability to understand what one is reading transforms individuals from superficial readers to deep and reflective critics. Betts (2024) mentions, “Reading comprehension is defined as the ability to deeply understand and grasp text using prior knowledge, educated analysis, and predictions, among other techniques.”

For this reason, reading comprehension strategies focus on understanding written texts, which allows students to acquire techniques that enable them to understand the meaning of what they read. These techniques include inferring meaning from context, summarizing or identifying key points, and using graphic or semantic organizers. Reading comprehension also involves the development of critical thinking, language awareness, and autonomous learning skills. When students improve their reading comprehension, they become more capable of analyzing texts, evaluating information, and making connections between ideas. As a result, they are better prepared to succeed in academic tasks, expand their vocabulary, and enhance overall language proficiency.

6.2.5 Reading comprehension and digital tools

Reading comprehension is challenging at A2.2 due to a limited vocabulary, poor inference abilities, and inefficient reading techniques. Most contemporary learners prefer reading lessons that adhere to a strict textbook-based curriculum with little room for customization, interaction, or cooperation. Digital tools like ChatGPT offer quick feedback and adaptive scaffolding, which, in contrast to conventional reading instruction, enables students to interact with the text at a more analytical level. This enhances comprehension.

Analyzing the characteristics of technological tools to improve educational practices based on gamification is imperative to motivate students to promote reading comprehension from a dynamic perspective (Lugmaña Achig, 2024)

Providing interactive and customized learning possibilities, digital tools are transforming how we teach and exercise reading comprehension. Among the tools that can help to increase engagement and fit a variety of learning styles are text-to-speech applications, digital dictionaries, and collaborative annotation platforms. Though digital reading has particular difficulties, purposeful utilization of these tools will enable students to enhance their critical digital literacy and become better readers.

6.2.6 Artificial Intelligence

Artificial Intelligence refers to the simulation of human cognitive processes by machines, particularly computer systems. These processes include learning, reasoning, problem-solving, and understanding language. In educational contexts, AI tools are designed to support teaching and learning by adapting to learners' needs, providing personalized feedback, and automating tasks such as assessment or content generation. Luckin (2016) mention "Artificial Intelligence in education refers to computer systems that are capable of performing tasks that would normally require human intelligence, such as interpreting natural language, adapting learning content, and offering real-time support to learners".

Artificial intelligence, which focuses on creating systems that can perform tasks that normally require human intelligence, is transforming the landscape of reading. AI-based tools are improving reading comprehension, providing personalized learning experiences, and offering support to struggling readers. However, there are concerns about the potential impact on critical thinking skills and the authenticity of learning.

6.2.7 Technology of Artificial Intelligence

Artificial intelligence technology refers to the broad set of computational methods, systems, and tools designed to simulate human cognitive functions such as reasoning, learning,

problem solving, perception, and language comprehension. AI technologies combine disciplines such as computer science, linguistics, neuroscience, and mathematics to create intelligent agents capable of analyzing data, adapting to new inputs, and performing complex tasks autonomously. In education, these tools enhance personalized learning, provide immediate feedback, and support teachers and students by automating repetitive tasks, analyzing student behavior, and fostering critical thinking skills. However, challenges such as ethical considerations, risks of dependency, and inequalities in digital access must be addressed to ensure responsible integration. Russell and Norving (2011) "Artificial Intelligence (AI) technology refers to the development of computer systems capable of performing tasks that typically require human intelligence. These include natural language processing, problem-solving, learning, perception, and decision-making."

6.2.8 OpenAI

OpenAI is a research organization whose main objective is to develop artificial intelligence technologies safely and beneficially for all of humanity. It is known for creating advanced language models, such as GPT (Generative Pre-trained Transformer), which enable machines to understand and generate natural language. One of its most notable applications is ChatGPT, a conversational tool that simulates human language and has been widely used in educational contexts to improve skills such as writing, reading, comprehension, and critical thinking. "OpenAI is an AI research and deployment company. Our mission is to ensure that artificial general intelligence benefits all of humanity" (OpenAI, 2023)

Since it can potentially improve language learning outcomes by offering personalized learning experiences, improving speaking and listening skills, and increasing student engagement, it addresses some of the major challenges in education today. This allows for innovation in teaching and learning practices and accelerates student progress.

6.2.9 ChatGPT

ChatGPT is a language model developed by OpenAI, based on the GPT (Generative Pre-trained Transformer) architecture, which has been trained with large amounts of textual data to understand and generate natural language. Its main feature is the ability to hold coherent conversations with users, answer questions, explain concepts, write texts, and assist in learning tasks, all through written interaction. In the educational context, ChatGPT has become an emerging tool that facilitates autonomous language practice, improves reading comprehension, supports idea generation, and provides immediate feedback, contributing to the development of language skills in students of different levels. "ChatGPT is a conversational AI system developed by OpenAI that responds to user prompts in natural language. It has applications in education, including personalized learning, content creation, and language practice*"* (OpenAI, 2023).

6.2.10 ChatGPT and learning

In recent years, language acquisition has become a challenge for many students**,** particularly English. This language is one of the most popular globally, and thanks to advances in technology and artificial intelligence, new opportunities have emerged to optimize language teaching and learning. ChatGPT performs exceptionally well in disseminating factual content, demonstrating an impressive accuracy in specifying names and dates. Interestingly, ChatGPT refrains from providing information about itself, and it is evident that its knowledge is bounded (Shahriar & Hayawi, 2023)

As a result, these virtual assistants can offer a variety of activities, including immediate feedback and corrections, as well as providing opportunities for practice in different scenarios that mimic authentic situations. The system also offers explanations, examples, and references, which help language learners explore a variety of topics and enrich their cultural understanding.

Building on these capabilities, ChatGPT supports a range of practical reading strategies that help students improve their comprehension skills. The following strategies illustrate how this tool can guide learners through different aspects of reading.

6.2.11 Scanning with ChatGPT

Scanning is a rapid and purposeful reading technique that enables learners to locate specific pieces of information in a text without reading every word or sentence. This strategy is particularly useful for improving literal comprehension, as it trains students to focus on explicit details such as names, dates, and key facts. By practicing scanning, learners become more efficient readers, capable of quickly identifying relevant information, which is essential for academic tasks and real-life reading situations (Grabe, 2009).

6.2.12 Guided Reading Sessions with ChatGPT

Guided reading involves providing structured support where either the teacher or an intelligent digital tool like ChatGPT facilitates the comprehension process. During these sessions, texts are broken down into manageable segments, and complex vocabulary or ideas are clarified as students progress. This scaffolding approach helps to reduce cognitive overload and builds confidence in learners as they engage with challenging material. Guided reading promotes active interaction with the text and develops strategies that students can later apply independently (Fountas & Pinnell, 1996).

6.2.13 Vocabulary Support with ChatGPT

One of the most significant barriers to reading comprehension is unfamiliar vocabulary. The strategy of vocabulary in context exploration encourages students to identify unknown words during reading and seek their meanings based on contextual clues. Using ChatGPT, learners can request definitions, examples, and explanations tailored to the specific context of the text, which enhances retention and meaningful learning. This approach aligns with Nation's (2001) emphasis on the importance of context in vocabulary acquisition, fostering deeper lexical knowledge and better comprehension outcomes.

6.2.14 Prompt Creation for Reading Comprehension

The creation of prompts for reading comprehension refers to the educational practice of designing specific entries or questions, known as prompts, that guide students to actively interact with a text to develop and assess their comprehension skills. Prompts can be literal, inferential, or critical, and their main purpose is to stimulate cognitive processes such as prediction, summarization, analysis, and concluding. In the context of AI-assisted learning, creating prompts involves developing specific and strategic questions or instructions directed at AI tools such as ChatGPT to support students' comprehension of a reading passage. This interaction improves not only reading comprehension but also digital literacy, metacognitive awareness, and student autonomy. According Holmes (2016) Prompt engineering enhances learner interaction with AI tools, guiding output towards meaningful comprehension."

6.2.15 Interactive Inferential Questioning with ChatGPT

Interactive inferential questioning involves students generating and answering questions that require them to interpret implicit meanings and draw conclusions beyond the explicit content of texts. This practice enhances critical thinking and deeper reading comprehension. As Cain and Oakhill (2014) argue, inferential comprehension is a vital component of skilled reading, and AI tools like ChatGPT can scaffold learners' development in this area by providing personalized prompts and feedback.

6.2.15 Literal and Inferential Reading Comprehension

Reading comprehension is a complex cognitive process that involves understanding both explicit and implicit meanings in a text. Two primary categories of comprehension are literal comprehension and inferential comprehension, both essential for effective reading development.

Literal comprehension is the ability to recognize and recall explicit information directly stated in the text, such as names, dates, places, and specific facts. This foundational skill

enables learners to grasp the basic content and details necessary for further interpretation (Alyousef, 2005).

Inferential comprehension, on the other hand, goes beyond the surface meaning, requiring readers to interpret implicit ideas, make logical connections, and draw conclusions based on the text and prior knowledge. This level of comprehension fosters critical thinking and deeper engagement with texts (Ahmad, Khasawneh, & Alomash, 2020).

7. METHODOLOGY

7.1 Research approach

This study follows a quantitative research approach, as it involves the systematic collection and analysis of numerical data to analyze the effectiveness of using ChatGPT to improve the reading skills of A2.2 level students in the Pedagogy of National and Foreign Languages, English program at the Technical University of Cotopaxi."Quantitative research involves the collection and numerical analysis of data to identify patterns, test hypotheses, and evaluate results" (Creswell, 2009, p.59).

7.2 Research Method or level

The researchers applied descriptive research, as the main purpose data collected was to describe and measure the students' performance in reading comprehension before and after applying ChatGPT based didactic strategies. This design allowed for systematic collection and analysis of numerical data to assess the effectiveness of the intervention. In this way, McCombes (2022) mentions that "Descriptive research aims to accurately and systematically describe either a population, situation or phenomenon and focuses on answering questions such as where, when and how, but not on why" (para. 1).

7.3 Research Context

The population of the project was 12 third-level students with an A2.2 level of English from the Pedagogy in National and Foreign Languages English career at the Technical University of Cotopaxi. These students were selected because their academic tutor observed that they had a low level of reading skills. For that reason, a purposive sample was used, as it allowed the researchers to intentionally select participants based on specific characteristics relevant to the study. Bullard, Eric (2024) states that "Purposive sampling, also known as judgmental, selective, or subjective sampling, is a non-probability sampling technique where researchers intentionally select participants based on specific characteristics relevant to their study".

7.4 Data collection procedure

For this study, the researchers used a pre-test and a post-test adapted from Cambridge English materials, specifically aligned with the A2.2 level of the Common European Framework of Reference for Language. Both instruments were digitized using the Google Forms platform, which facilitated their distribution, administration, and data collection. The corresponding links were shared with the students during in-person class sessions, ensuring that the tests were completed under the direct supervision of the researchers.

Before administering the post-test, five pedagogical interventions were carried out as part of the didactic strategy supported by the use of ChatGPT, aimed at strengthening reading comprehension skills.

Each instrument consisted of 10 multiple-choice questions, divided into two types. Some questions assessed literal comprehension, aimed at measuring students' ability to identify and recall explicit information presented in the texts, such as names, dates, places, and specific actions. The other questions focused on inferential comprehension, designed to evaluate students' ability to make logical inferences, interpret implicit ideas, and extract meanings that are not explicitly stated in the text.

The initial population consisted of 20 students. However, the final sample included 12 students from class "B" of the third level in Pedagogy of National and Foreign Languages – English, at the Technical University of Cotopaxi. These participants were selected through purposive sampling, as their academic tutor had identified persistent difficulties in their reading comprehension skills

7.5 Data analysis

For the analysis, data collected through Google Forms was used. The responses to the 10 questions from both instruments, pre-test and post-test, were transferred sequentially to Excel, where separate tables were created for each assessment.

The questions were pre-categorized into two groups to assess specific reading skills: literal comprehension and inferential comprehension. This classification allowed the identification of areas where students showed significant progress and those where difficulties persisted, enabling a more detailed interpretation of the effectiveness of the implemented strategies.

8. ANALYSIS AND DISCUSSION OF RESULTS

After applying the pre-test and post-test instruments to 12 students from the English Major of the Pedagogy in National and Foreign Languages program at the Technical University of Cotopaxi, the results revealed a marked improvement in both literal and inferential reading comprehension.

Table 2.

Pre-test and Post test Results Students

Criteria of Reading	Literal Comprehension	Inferential Comprehension
Average score in the Pre-test (over 10 points)	6,5	5,17
Average score in the Post-test (over 10 points)	9,83	9,67
Improvement	3.33	4.50

Discussion

The data analysis indicates a significant advancement in the reading skills of A2.2 students following the implementation of five didactic lessons using ChatGPT. Initially, the pre-test results showed that students faced greater difficulty with inferential comprehension questions, reflecting challenges in making inferences, deducing implicit information, and identifying author's intentions. Literal comprehension had a slightly better performance, which suggests that learners could recognize explicit information but lacked critical engagement with texts.

After the intervention, post-test scores improved notably across both categories. The average increase of 4.5 points in inferential comprehension and 3.33 points in literal comprehension demonstrate the effectiveness of the ChatGPT-based strategies. These improvements align with Wang and Fan (2023), who concluded that the integration of ChatGPT in reading instruction enhances students' engagement and understanding through immediate feedback and adaptive dialogue. Furthermore, the improvement in inferential comprehension supports Zhou (2023), who stated that AI tools, when properly scaffolded, can foster higher-order thinking and reflective reading. The current findings also align with Vasconcelos and dos Santos (2023), who described AI tools like ChatGPT as cognitive companions that promote deeper comprehension through conversational interaction and clarification of complex concepts.

This study's results are consistent with similar research. For instance, Alshammari and Alharthi (2024) conducted an experimental study with EFL learners and reported that students exposed to AI-supported reading tasks outperformed their peers in post-tests focused on inferential comprehension. Similarly, Ruan and Liu (2023) found that learners who used ChatGPT in guided reading sessions developed greater autonomy and reading confidence, particularly in tasks requiring inferential skills.

The effectiveness of the didactic strategy can also be linked to the alignment between task design and student level. The activities implemented (prompt creation, scanning, vocabulary support, and interactive questioning) were well-suited to the cognitive and linguistic characteristics of A2.2 students, as suggested by Cambridge Assessment (2020).

In conclusion, the results not only fulfill the general objective of the research but also verify the outcomes of the task system: ChatGPT was a valuable tool to improve reading comprehension, both in terms of retrieving information and making logical inferences.

9. RESEARCH IMPACTS

The incorporation of ChatGPT into educational practices helped improve students' reading comprehension skills, vocabulary, and confidence. Additionally, it promoted the development of autonomous learning, active participation, and a student-centered environment. This integration also contributed to enhancing digital literacy and the effective use of emerging technologies, complementing traditional teaching methods. By allowing students to work at their own pace and receive personalized feedback, it helped promote equity and inclusion. Finally, ChatGPT boosted communication skills and collaborative learning through shared activities that encouraged peer interaction and group reflection.

10. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The use of ChatGPT appeared to contribute to the improvement of reading skills in A2.2-level students in the English Major at the Technical University of Cotopaxi, as shown by the observed increases in literal and inferential comprehension scores after the intervention.

The results obtained in the tests show a significant improvement in students' literal and inferential reading comprehension skills after the implementation of teaching strategies supported by the use of ChatGPT. In the initial assessment, students scored 6.5 in literal comprehension and 5.17 in inferential comprehension, which reflected difficulties in both identifying explicit information and interpreting implicit content. However, after the pedagogical intervention, the post-test results showed remarkable progress, with a score of 9.83 in literal comprehension and 9.67 in inferential comprehension.

ChatGPT helped promote the development of more autonomous reading practices, offering personalized and scaffolded learning opportunities that may enhance students’ engagement and metacognitive awareness.

Recommendations

English language educators are encouraged to consider integrating ChatGPT-based strategies as a supplementary tool in reading instruction to support improvements in literal and inferential comprehension for A2.2-level learners.

Curriculum designers and institutions should explore incorporating AI tools such as ChatGPT in language programs to complement traditional teaching methods and promote learner-centered approaches.

Teacher training programs must include comprehensive instruction on how to effectively implement AI tools like ChatGPT. Providing educators with practical skills and pedagogical knowledge will maximize the benefits of technology integration and support varied learning styles. Educational institutions should consider investing in digital infrastructure and resources to support the widespread and equitable use of AI in language education, ensuring all students can benefit from innovative teaching strategies.

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