UNIVERSIDAD HISPANOAMERICANA

Faculty of Education

School of Language Teaching

English Teaching

Thesis Submitted to Obtain the Licentiate Degree in

English Language Teaching

Implementing ChatGPT-3.5 as a Pedagogical Tool to Improve EFL Students' Fluency and Accuracy During Impromptu Speeches at Centro de Estudios de Idiomas Conversacionales (CEIC) during the Third Quarter 2023

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July 2024

UNIVERSIDAD HISPANOAMERICANA

CENTRO DE INFORMACION TECNOLOGICO (CENIT)

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Sede: Heredia

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Estimados señores:

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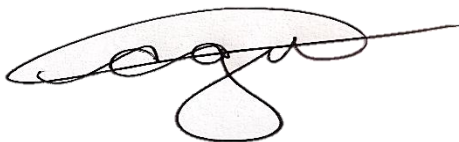Licenciatura en la Enseñanza del Inglés

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De los resultados obtenidos por el postulante se obtienen la siguiente calificación:

	Descripción	*%*	*% Obt*
a	Originalidad del tema	10%	10%
b	Cumplimiento de entrega de avances	20%	20%
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DEDICATORY

To my father, Minor Campos, who taught me that education opens doors to unimaginable knowledge and opportunities. To my mother, Aurora Bermúdez, whose unwavering love has carried me through the toughest moments. To my siblings, Minor, Ania, and Karla, my constant cheerleaders who have always stood by my side, and to Mauricio Mora, my boyfriend, whose encouragement reminds me never to give up. To all of you, thank you for believing in me. I love you all.

ACKNOWLEDGEMENT

Thank you to all those who made this project possible. First, I would like to express my gratitude to Universidad Nacional for being the institution where my dreams first began to materialize and for playing a fundamental role in shaping the professional I am today. To my colleagues and dear friends, Nicole Suárez and Andrés Álvarez, thank you for your cooperation and support throughout this research process. To Mauricio Mora, who was the first to hear about my thesis idea and encouraged me to pursue it despite its novelty and challenges. Finally, a special thank you to my tutor, Yanory Arguedas, for her immense kindness and support throughout this journey.

ABBREVIATIONS

CEIC: Centro de Idiomas Conversacionales

AI: Artificial Inteligence

EFL: English as a Foreign Language

GPT: Generative Pre-trained Transformer

ABSTRACT

This study explores the effectiveness of using ChatGPT-3.5 as a pedagogical tool to enhance the fluency and accuracy of EFL students during impromptu speeches. The methodology involves a qualitative approach, including a pre-test and a post-test checklist, a questionnaire, and a Likert scale. Results indicate significant improvements in students' accuracy and overall speaking skills after four weeks of using ChatGPT-3.5. Vocabulary, grammar, and pronunciation were the skills that improved the most during the process. The findings suggest that ChatGPT-3.5 supports the Communicative Language Approach by providing students with a conversational partner for authentic practice and immediate, personalized feedback. Future research with a larger sample could offer deeper insights into the tool's effectiveness across different proficiency levels.

Keywords: Artificial Intelligence (AI), ChatGPT

Resumen

Este estudio explora la efectividad del uso de ChatGPT-3.5 como herramienta pedagógica para mejorar la fluidez y precisión de los estudiantes de inglés como lengua extranjera (EFL) durante discursos improvisados. La metodología incluye un enfoque cualitativo, que abarca una lista de verificación previa y posterior, un cuestionario y una escala de Likert. Los resultados indican mejoras significativas en la precisión y las habilidades generales de habla de los estudiantes después de cuatro semanas de uso de ChatGPT-3.5. El vocabulario, la gramática y la pronunciación fueron las habilidades que más mejoraron durante el proceso. Los hallazgos sugieren que ChatGPT-3.5 apoya el Método Comunicativo al proporcionar a los estudiantes un compañero de conversación para práctica auténtica y retroalimentación inmediata y personalizada. Investigaciones futuras con una muestra más

grande podrían ofrecer una comprensión más profunda sobre la efectividad de la herramienta en diferentes niveles de competencia.

Keywords: Inteligencia Artificial, ChatGPT

INTRODUCTION

Acquiring fluency and developing accuracy in a foreign language requires students to be exposed to the target language and to actively engage in real-life conversations; however, for many English as a Foreign Language (EFL) students, meeting these requirements can be difficult. This challenge is particularly evident among a group of EFL students at Centro de Estudios de Idiomas Conversacionales (CEIC), an English institute located in the province of Heredia, Costa Rica. This group of learners has trouble communicating their ideas fluently and with accuracy in spontaneous conversations.

Furthermore, the limited integration of technology in boosting speaking competence also represents a challenge in EFL classrooms. In today's digital era, technology plays a significant role in students' lives, and integrating technological tools into the language-learning process can benefit pupils by enhancing fluency and accuracy, providing additional speaking practice opportunities, and fostering engagement in a digital learning environment.

Acknowledging both, the challenges faced by EFL students in achieving fluency and accuracy during spontaneous interactions and the lack of technology to improve EFL students' speaking skills, this paper aims to contribute to the broad area of English as a Foreign Language (EFL) by providing teachers and students with the idea of using an innovative tool called ChatGPT-3.5 to improve students' fluency and accuracy when presenting impromptu speeches, a type of speech in which learners do not require previous preparation. Through a four-week plan involving conversations with a chatbot powered by Artificial Intelligence (AI) to simulate human-like conversations, this research seeks to determine the effectiveness of implementing ChatGPT-3.5 as a pedagogical tool to improve EFL students' fluency and accuracy during impromptu speeches.

CHAPTER I:

RESEARCH PROBLEM

1.1.   Problem Statement

1.1.1. Background of the Problem

With the rapid advancement in Artificial Intelligence (AI) in the past years, the interest in exploring the benefits of using chatbots to simulate human-like conversations to improve the oral and written skills of students in EFL classrooms has increased.

The origin of chatbots can be traced back to the 1960s when Joseph Weizenbaum created Eliza at the Massachusetts Institute of Technology (MIT) while experimenting with the computer's capacity to manipulate words and language. Coniam (2014). Many chatbots capable of simulating human-like conversations have existed after Eliza, catching the interest of researchers in education and opening room to the discussion of using chatbots as tools to address challenges faced by both teachers and learners in the EFL classroom.

Several papers talk about the benefits of using chatbots to improve aspects like writing and grammar. However, speaking is fundamentally one of the most useful but frustrating skills to practice for students. Hea-Suk et al. (2021) aimed to examine the impact of AI chatbots on students' speaking skills as well as to analyze how these chatbots shape students' speaking experiences in an EFL classroom. The two main research problems of the study were to find out if there would be a significant difference in students' communication skills between low and intermediate proficiency levels after experiencing AI communication as well as to evaluate pupils' perceptions toward AI communication to improve speaking skills. The research involved 49 university students who were enrolled in a general English course and were divided into two proficiency levels. A pre-test and a post-test design were used to assess the students' improvement in their English-speaking abilities both within and between the two proficiency levels. The results of the study revealed a significant improvement in both groups in aspects like reading aloud, responding to questions, intonation, stress, and fluency. The study also included a questionnaire to explore students' perspectives on the use of AI chatbots in English classes

and the potential benefits of incorporating AI chatbots into language learning and EFL classrooms.

In line with the previous article, Kim (2017) investigated the impact of two types of chatbots, voice-based and text-based chatbots, on the speaking skills and perceptions of Korean EFL learners. The two main research problems of the study were to discover some of the effects of two different types of chatbots on Korean EFL learners' speaking competence and their perceptions of English learning. The study involved 80 first-year students enrolled in an English-speaking course at a Korean university, randomly assigned to one of two experimental groups. Over a 16-week period, participants engaged in 10 chat sessions with each type of chatbot. A TOEIC speaking test was taken by learners before and after the examination as well as structured surveys. The findings of the study show that both voice-based and text-based chatbots were effective in improving the speaking skills of the individuals who were part of the experiment suggesting the potential of using chatbots in EFL classrooms as a pedagogical tool. Kim (2017). Her findings confirmed this research's initial assumption of believing that even when using text-based chatbots, there is an improvement in students' speaking skills. It also suggests that teachers should consider incorporating chatbots into educational settings, specifically, in teaching and learning a foreign language.

Other authors have also found potential usefulness in the implementation of chatbots in EFL classrooms but have shown concerns regarding aspects like predictable or redundant responses, lack of personality, and having no memory of previous responses. Jia (2004) and Chantarotwong (2005) express these concerns in their respective articles. However, chatbots have become considerably more sophisticated. The arrival of ChatGPT-3.5 in November 2022 has revolutionized the field of AI by overcoming the limitations of prior AI technologies through the utilization of vast amounts of data. Additionally, its versatile capabilities that can be applied in learning have provoked significant interest in the education field" (Sunyoung et al., 2023).

Taking into account the necessary to explore the usage of AI in EFL classrooms and the limited studies related to the utilization of ChatGPT-3.5 to enhance speaking skills, this paper focuses on the implementation of ChatGPT-3.5 as a pedagogical tool to improve EFL students' fluency and accuracy in speaking.

1.1.2. Problematization

As stated by Al Hosni (2014), speaking is, without a doubt, one of the most common but highly difficult activities during the process of learning English as a foreign language. He also states that the four conditions that should exist for language learning to take place are exposure, opportunities to use the language, motivation, and instruction (p. 23). However, meeting these conditions is particularly challenging among a group of students at Centro de Estudios de Idiomas Conversacionales (CEIC). As noticed by the teachers, students have limited exposure to English outside of the classroom. They live in a country where Spanish is the official language, and it is the language used to communicate and socially interact with others in their day-to-day activities. Moreover, participants' class schedule limits their opportunity to keep regular conversations outside the classroom. CEIC offers English regular courses with 13 levels in three different schedules. Students enrolled in this course modality have five weekly hours of practice in class. This number of hours is distributed in the development of grammar, pronunciation, speaking, reading, writing, and listening. The three schedules offered by the institution are Mondays and Wednesdays from 6:00 PM to 8:30 P.M., Tuesdays and Thursdays from 6:00 PM to 8:30 P.M. and Saturdays from 8:00 A.M. to 1:00 P.M. The population of this particular study receives classes only on Saturdays. In addition, adhering to only English during the lessons is sometimes difficult for students since they tend to use their native language to communicate with their classmates. Ur cited in Al Hosni (2014) mentions that mother-tongue use is one of the factors that causes speaking difficulties for EFL students. He says that "learners who share the same mother tongue tend to use it because it is easier and

because learners feel less exposed if they are speaking their mother tongue." (as cited in Al Hosni, 2014, p. 23). Without regular practice and authentic interactions, students struggle to achieve fluency and accuracy during impromptu speeches in class.

Another challenge found in EFL classrooms is the limited use of technology to develop speaking competence. In today's digital era, technology plays a vital role in students' lives, and teachers could take advantage of this by applying technological apps in the learning process to help students practice and engage with the target language. An example of a useful technological tool that has been shown to help students boost their speaking competence is chatbots. As Roos (2018) suggests "a chatbot can be used as a tool to learn and practice a language" (p. 3) since it allows students to practice their language skills anytime, and it would not mind repeating the same material several times. Chinedu & Abejide (2021) also mention that "chatbots are increasingly being used to improve student interaction in this current world of technology where communication and many other activities rely heavily on online platforms." (p. 1). Nevertheless, even when chatbots have been used in previous research in EFL classrooms to help students acquire vocabulary, practice their reading and writing skills, practice speaking, and grammar, ChatGPT-3.5 is a type of chatbot that has revolutionized how chatbots are used and perceived:

Therefore, for this research, a chatbot, specifically ChatGPT-3.5, will be implemented as a pedagogical tool to improve EFL students' fluency and accuracy during impromptu speeches at Centro de Estudios de Idiomas Conversacionales (CEIC) following the Communicative Language Teaching (CLT) approach. This approach emphasizes the importance of meaningful communication in language learning. As mentioned in Nimid's article, language learning happens through communication; thus, authentic and meaningful materials and activities are important. Fluency is also needed during the process of communication, for this reason,

integrating different language skills and allowing students to make mistakes during creative processes is vital. Nimid (2012)

ChatGPT-3.5 can serve as a conversation partner for students in and outside of the classroom by giving them the opportunity to engage in authentic conversations, practice grammatical topics studied in class, and receive immediate feedback, which aligns with the principles of CLT.

In summary, the lack of fluency and accuracy of EFL students during impromptu speeches at CEIC due to limited opportunities to practice the target language outside of the classroom, use of Spanish during the classes among students, insufficient speaking practice, and limited use of technology to improve speaking competence will be addressed by using ChatGPT-3.5 three times a week for ten minutes for a period of four weeks.

1.1.2. Justification

.   Becoming fluent and accurate in a foreign language can be challenging for EFL learners. However, with the rapid advancement of technology, it is now possible to take advantage of technology to improve speaking competence. As the Communicative Language Teaching Approach (CLT) suggests, students need to engage in meaningful communication inside and outside of the classroom as well as to talk about experiences and topics of their day-to-day life in order to be able to become proficient in the target language.

This paper proposes using ChatGPT-3.5, an innovative tool that uses Artificial Intelligence (AI) to simulate human-like conversations, as a pedagogical tool to enhance EFL students' fluency and accuracy during impromptu speeches. "ChatGPT is a powerful tool that has the potential to transform the way we interact with technology, enabling more natural and intuitive communication between humans and machines." Božić (2013).

Implementing ChatGPT-3.5 in EFL classrooms could have several benefits. This chat provides pupils with the opportunity to engage in authentic conversations that closely resemble

real-life interactions. In this sense, ChatGPT-3.5 acts as a conversational partner to students offering a simulated conversational experience for a certain amount of time and using the topics they are studying. This allows learners to apply their language skills in practical contexts and to practice with conversations similar to the ones they might encounter in real life.

Another possible benefit of using ChatGPT-3.5 is that it provides students with immediate feedback on the grammatical topics they are trying to practice. This allows students to later feel more confident with the structures and vocabulary they are using during impromptu speeches since they have already been engaging in scenarios similar to the ones they might see in an impromptu speech in class; it also allows students to focus on their specific areas of improvement.

ChatGPT-3.5 can be used at any moment, so students have someone to practice with at any time, wherever they are. As long as students have access to the Internet, they will be able to have someone with whom they can practice their speaking skills outside of the classroom in a regular way, which is crucial for developing fluency and accuracy over time.

Finally, ChatGPT-3.5 aligns well with the principles of the Communicative Language Teaching (CLT) approach, for it emphasizes meaningful communication and authentic language use. By engaging in conversations with ChatGPT-3.5, students have the opportunity to practice English in an interactive way, which can later be reflected in an improvement of fluency and accuracy during impromptu speeches.

Moreover, previous studies have shown the benefits of using chatbots in language-learning contexts. For example, research by Hea-Suk et al. (2021) demonstrated that AI chatbots significantly improved students' speaking skills, including fluency, intonation, stress, and reading aloud. Kim (2017) found that text-based chatbots effectively enhanced speaking skills among EFL learners. These studies support the potential use of chatbots, including ChatGPT-3.5, as effective pedagogical tools to boost fluency and accuracy during impromptu speeches.

The results found in this paper can serve as a way to encourage teachers to start implementing innovative technological tools in their EFL classrooms to boost student's speaking competence.

In sum, students need to be able to gain fluency and accuracy in the target language during their language-learning process as well as to engage in meaningful conversations similar to the ones they might encounter in real life. Using ChatGPT-3.5 as a pedagogical tool considers the principles of the CLT and combines it with the opportunity for students to have extra practice outside of the classroom by previously engaging in conversations where they practice topics studied in class. This study aims to prove that by engaging in authentic conversations, practicing grammatical topics covered in class, and receiving immediate feedback, students can boost their fluency and accuracy in impromptu speeches.

1.2. Problem Formulation

What is the effectiveness of implementing ChatGPT-3.5 as a pedagogical tool to improve the fluency and accuracy during impromptu speeches that EFL students have during English lessons at Centro de Estudios de Idiomas Conversacionales (CEIC) in the third quarter of 2023?

1.3. Objectives

1.3.1. General Objective

To determine the effectiveness of implementing ChatGPT-3.5 as a pedagogical tool to improve the fluency and accuracy during impromptu speeches that EFL students have during English lessons at Centro de Estudios de Idiomas Conversacionales (CEIC) in the third quarter of 2023.

1.3.2. Specific Objectives

1. To assess EFL students' fluency and accuracy while developing oral tasks in an English lesson at CEIC.

2. To explore the acceptance range of EFL students regarding the use of a four-week plan with ChatGPT-3.5 as a pedagogical tool to improve their fluency and accuracy during impromptu speeches.

3. To identify potential benefits or limitations of implementing ChatGPT-3.5 as a pedagogical tool to improve fluency and accuracy during impromptu speeches in EFL students at CEIC.

a. Scope and Limitations

1.4.1. Scope

This research focuses on the effectiveness of implementing ChatGPT-3.5 as a pedagogical tool to improve the fluency and accuracy of English as a Foreign Language (EFL) students during impromptu speeches at Centro de Estudios de Idiomas Conversacionales (CEIC).

The study examines the benefits of implementing a four-week plan of conversations with ChatGPT-3.5, a chatbot that uses Artificial Intelligence (AI) to simulate human-like conversations.

The population involved is a group of 32 EFL students at CEIC from three different levels, level 2, level 5, and level 13. Students in this group are part of the regular courses offered by the institution to teenagers and adults. Their age range is from 13 to 55 years old. Students enrolled in these courses have to complete a 13-level program with a duration of approximately 2 years and 6 months. After completing the program, learners are expected to reach a B1+ / B2 level of English according to The Common European Framework of Reference for Languages (CEFR).

The Communicative Language Approach (CLT) is also considered to support the implementation of ChatGPT-3.5 to practice authentic real-life conversations.

The study assesses the students' fluency and accuracy through a pre-test and a post-test checklist, a questionnaire, and a Likert Scale to gather data about the possible benefits and/or limitations of implementing ChatGPT-3.5 in an EFL classroom in addition to the students' perception about using this chatbot.

This study is carried out during the third quarter of 2023 beginning in November and ending in December, 2023.

1.4.2. Limitations

Even though this study aims to provide teachers and students with valuable insights into the possible benefits of implementing ChatGPT-3.5 in an EFL classroom, it is fundamental to acknowledge some of the limitations presented in this paper. First, the study uses the free version of ChatGPT-3.5 which only allows students to engage in written conversations; however, the paid version offers the opportunity for oral conversations, which could potentially improve students' intonation, stress, and pronunciation in addition to fluency and accuracy. Another limitation is that the investigation is carried out with a population that has easy access to Internet, computers, and cell phones. Working with different settings could be done in future research. Finally, this study primarily focuses on the potential benefits of implementing this technological tool in the EFL classroom, but it does not address potential moral implications. Future research should consider investigating the possible negative results of using ChatGPT-3.5. Despite these limitations, this study serves as a foundation for future research in the field and provides valuable insights that can guide further investigations.

Chapter II

THEORETICAL FRAMEWORK

This section explores some key aspects that support the study, including a general examination of artificial intelligence (AI), an overview of ChatGPT-3.5 some relevant definitions, and the benefits of impromptu speeches. Chatbots have been used in education for many years to enhance the speaking skills of learners of a foreign language. In this sense, many researchers have explored the different benefits and challenges that using technology has in boosting students' speaking skills. This chapter provides a foundation for understanding the effectiveness of the implementation of a specific chatbot, ChatGPT-3.5, as a pedagogical tool to enhance EFL students' fluency and accuracy during impromptu speeches at Centro de Idiomas Conversacionales (CEIC).

2.1. Historical Context

Supported by Escuela de Literatura y Ciencias del Lenguaje (ELCL) and Oficina de Vinculación Externa de la Universidad Nacional, Centro de Estudios de Idiomas Conversacionales (CEIC) was established by academics of Universidad Nacional in 1993. The project was born to give the opportunity of learning English to members of the community of Heredia. For 30 years, classes were offered at Campus Omar Dengo; however, in 2010, CEIC began offering courses at Sede Interuniversitaria de Alajuela. Currently, children, young people, and adults from all over Costa Rica can take courses offered by CEIC remotely or face-to-face. In 2022, French and Italian were also added as language options that users can choose from to compete in the national and international job market. (Arroyo, 2022).

CEIC offers three different modalities: regular conversational programs in English, French, and Italian, a semi-intensive English program, and an intensive English program. In the case of the English courses, users can reach a level of B1+ according to The Common European Framework of Reference for Languages (CEFR) and, in some cases, depending on the user and their previous contact with the language, up to B2. Moreover, since the institution meets all the requirements of CEFR, which is a widely recognized framework used to describe

and assess language proficiency levels, students who complete the conversational English program can certify their language proficiency. (Arroyo, 2022).

Based on the official website of Escuela de Literatura y Ciencias del Lenguaje, CEIC's vision is to successfully position users in the national and international educational and professional spheres. Their mission is to benefit children, teenagers, young adults, and adults with high-quality language learning and economically accessible alternatives. All teachers aim to guide learners towards language acquisition through the Communicative Language Teaching (CLT) approach. This approach ensures that users learn by being producers, not just receivers, during the class.

2.2. Conceptual Framework

In this section, relevant concepts to understand this research are explained.

2.2.1. Definition of Artificial Intelligence (AI)

Recently, Artificial Intelligence (AI) has gained significant importance in the field of education due to its potential to transform teaching and learning processes. Understanding what it is and how it works is the first step to understanding how ChatGPT-3.5 can be used as a pedagogical tool to help EFL students improve their speaking skills. Tuomi (2018) mentions that AI is frequently defined as "a computer system with the ability to perform tasks commonly associated with intelligent beings" (p. 7); however, he highlights that this definition could have a certain degree of ambiguity since it is complicated to define what an intelligent being is. Grewal (2014), on the other hand, defines intelligence as "a general mental ability for reasoning, problem-solving, and learning" (p. 9) and after analyzing several definitions and how the concept of AI has changed throughout the years, he proposes that "artificial Intelligence is the mechanical simulation system of collecting knowledge and information and processing

intelligence of the universe." (p. 13). In other words, "artificial Intelligence (AI) is intelligence shown by machines". (Travaglioni, 2019, p. 1).

2.2.2. Definition of ChatGPT

A chatbot is a computer program that is designed to simulate a conversation with its users. It is not "an actual thinking machine, but rather a machine feigning intelligence after imitating human conversation patterns." (Roos, 2018, p. 7). ChatGPT-3.5 is an advanced language model developed by OpenAI that belongs to the Generative Pre-trained Transformers family. It has gained popularity based on its ability to generate human-like text responses. "ChatGPT uses deep neural networks to process large amounts of text data and learn patterns in language, allowing it to generate coherent and grammatically correct sentences" (Božić, 2023, p. 1), which makes it useful for English learners and teachers. "It contains over 175 billion parameters and has been trained on a vast amount of Internet text data, making it one of the most powerful language models currently available." (Božić, 2023, p. 1). This makes ChatGPT-3.5 an excellent choice for tasks that require understanding and generating natural language, including supporting EFL students in practicing before impromptu speeches. Božić (2023) advocates that ChatGPT can be used for a variety of natural language processing tasks, such as language translation, text, summarization, question-answering systems, writing prompts, providing feedback on student writing, or even creating personalized learning experiences." (p. 1).

2.2.3 Definition of Pedagogy

Armour and Gordon (2013) define pedagogy as "a broad range of elements in curriculum, assessment, and instruction that teachers orchestrate and use to promote student learning." (p. 1). Based on this definition, ChatGPT-3.5 can be integrated into the EFL classroom to support teachers in administrative tasks and students during the learning process.

2.2.4 Definition of Fluency

While learning a foreign language, developing fluency is essential for ESL students to be able to actively engage in conversations and effectively express their thoughts and ideas in the language they are acquiring. Therefore, becoming fluent in the target language is usually one of the main goals of EFL learners. Jones (2020) defines fluency as "being able to communicate comfortably and easily in another language." (p. 1). Developing fluency helps pupils feel more confident using English in a variety of personal and professional contexts since they feel more comfortable communicating in the target language and participating in conversations in English when they can understand others and make themselves understood. Tavakoli (2018), in the same way, defines fluency as "a key characteristic of speaking ability and mainly refers to ease, and automaticity of speech." (p. 3). Fluency allows students to convey their message clearly and without so much hesitation. Koponen & Riggenbach (2000) define fluency as "flow, continuity, automaticity, or smoothness of speech" (p. 6).

For the purpose of this study, Jones' (2020) definition of fluency will be used to understand why developing fluency is relevant in an EFL classroom.

2.2.5. Definition of Accuracy

Accuracy is a fundamental aspect to improve when learning English as a Foreign Language since it allows learners to effectively communicate and to be easier understood. Accuracy can be defined as "the extent to which the language produced conforms to target language norms" (Yuan & Ellis, 2003, p. 2). It includes the correct use of pronunciation, vocabulary, and grammar in order to produce language that conveys messages clearly and avoids misunderstandings. "Mispronouncing a single sound causes the listener's misunderstanding, and various uses of stresses as well as intonations result in totally different

Meanings." (Wang, 2013 p. 111). Speaking with accuracy also involves the correct use of grammar and syntax since as suggested by Wang 2023 "grammar plays a key role in learning the structure of English" (p. 111). ChatGPT-3.5 can be used to create diverse exercises based on the grammatical topics students are learning. This helps them reinforce the different structures and practice the target language with exercises including vocabulary that might be useful for day-to-day interactions.

2.2.6. Definition of Impromptu Speech

Babulkar (2020) defines Impromptu Speech as a speech in which a speaker talks without any previous preparation on a topic assigned. This type of exercise can have numerous benefits for students' development of fluency and accuracy; however, it is also challenging to express ideas confidently when there is no previous preparation, and learners have to deliver spontaneous speeches.

Impromptu speeches are great since they require students to show their ability to organize thoughts and ideas in a logical and coherent way and to use the current knowledge of the language they are learning in real-time. This enhances spontaneity and fluency since they have to think quickly. Engaging in prior conversations with ChatGPT-3.5 can reduce the level of stress or anxiety that this type of activity can cause and could make pupils feel prepared to deliver these types of speeches and achieve confidence in the target language. Students have to also be flexible and adapt to the random topics they could get in an impromptu speech. Even if students are not into the topic, they should be able to adapt and communicate ideas on various topics. This helps learners to be prepared to be involved in different contexts of conversations.

2.3. Theoretical Framework

In this section, previous studies related to the use of Artificial intelligence in education are reviewed to gain valuable insights into the diverse ways in which AI, and specifically ChatGPT-3.5, can be and have been employed to enhance the learning of a second language.

2.3.1. Artificial Intelligence (AI) in Education

In recent years, Artificial Intelligence (AI) has revolutionized various industries, and the field of education is no exception. AI has the potential to transform traditional teaching and the different methodologies that are used in EFL classrooms for both teachers and students. As Tuomi (2018) suggests, AI provides new ways of learning and teaching in more effective ways; however, it is necessary to be open to change and adopt technology inside EFL classrooms. There are various reasons why artificial intelligence can be beneficial and can play a revolutionary role in education, specifically in the field of English as a Second Language; for instance, it can provide students with a personalized learning experience, it can give learners immediate feedback, and it simulates human-like conversations.

As suggested by Rebolledo and Gonzales, AI has the capability to give learners a personalized learning experience based on their needs and progress. In Chen et al.'s article, personalized learning is understood as "an instruction that optimizes the pace, approaches, objectives, content, and activities of learning according to the interests and needs of individual language learners." (p. 205). Students can interact with chatbots that use artificial intelligence asking as specific or broad questions as they need; for example, students can ask questions related to grammar topics using questions like "Can you give me three sentence examples using Simple Present?" or "Can you explain the difference between Simple Past and Present Perfect?" These questions can also be made into commands such as "Give me three sentence examples using Simple Present." or "Explain the difference between Simple Past and Present Perfect." Since teachers are in charge of big groups of students, it is sometimes difficult for them

to give learners a personalized learning experience; thus, students can use AI to ask questions about topics they did not understand during the lesson, and then ask the teacher for validation of what they learned. It is important to highlight that artificial intelligence is just a tool that can complement the work that teachers do inside the classroom, but it should not be seen as the ultimate source of information.

An example of AI used as a tool for a personalized experience is the one that Haristiani and Danuwijaya (2019) developed. They created a chatbot-based grammar dictionary application called Gengobot to integrate it into LINE, which is a mobile instant messaging app. When users send a grammar item in their second language, Gengobot automatically interprets the message, identifies its intent, and answers with relevant information in the user's first language, including examples, usage patterns, and translations. This personalized experience allows users to learn at their own pace and to learn based on their needs and preferences. The chatbot also allows users to access grammar information without leaving LINE, eliminating the inconvenience of switching between apps or having to go to a dictionary every time they need to understand a word. This feature proves beneficial when users communicate with foreign speakers and require instant grammar assistance. It also allows students to choose their preferred language from the available options. Based on the user's language preference, the chatbot provides translation options and content specific to their chosen language.

Another example of chatbots used to give a personalized experience is the one proposed by Pham et al. (2018). They built a mobile English learning application with an integrated chatbot that serves as a virtual personal assistant that responded to informal conversations. It also recommended personalized learning content according to user requests, and explanations for problem-solving, and reminded target users to review the previously learned content as well as to help them with new vocabulary and topics. This interaction

between human beings and chatbots provides a personalized experience for EFL learners. The researchers suggested doing further research and exploring the development of chatbots as personal assistants to support personalized language learning.

Regarding ChatGPT, Božić (2023) notices that "ChatGPT can be used to create personalized learning experiences for students by analyzing a student's learning patterns and preferences." (p. 2). Along the same line, Holmes et al. (2019) state that AI can offer students a personalized learning experience in several ways. First, chatbots can be used to answer users' questions on specific topics. (Roos, 2018). Students can ask as specific questions as they want, and ChatGPT-3.5 will adapt its answer. If learners are not happy with the response the chat gives them, they can re-formulate the question by asking for other details or ask for a specific section of the answer given by ChatGPT-3.5. Students can keep their chats available and get back to them whenever they need. This one-on-one interaction between the student and the chat is always personalized since every student asks the chat what they want or need to know. ChatGPT-3.5 remembers previous interactions with the students during a session. This allows it to build on prior knowledge and provide continuity in the learning process. It can recall past discussions, which creates a more personalized and consistent experience for the student. In addition, ChatGPT-3.5 can give answers based on students' level of English or based on the objectives of the class. It can adapt its explanations, examples, and exercises to match the student's proficiency, ensuring that the answers will be meaningful for the student process. It also has the quality to adapt to the learner's own pace for it operates in real-time. Pupils can explore a huge variety of topics in depth or move quickly through the same grammatical topics they are already familiar with. This allows them to have a more personal experience. Last but not least, ChatGPT-3.5 is available for students at any time, so students can practice whenever their schedules allow them.

On the other hand, after analyzing fourteen papers, Roos (2018) mentions giving feedback to students as one of the characteristics of chatbots. AI allows learners to get immediate feedback while practicing the target language, they just need to request feedback and the artificial intelligence will help them. In this sense, ChatGPT-3.5 offers real-time feedback, which is especially valuable in language learning. EFL students often struggle with fluency and accuracy, and getting feedback could significantly improve their language proficiency. Roos (2018) explains that chats have the ability to provide feedback and correct errors. This can be useful for both teachers and students since students can follow their process individuality and see how they are doing in the topics they are studying while at the same time, it helps teachers "to make sure no one falls behind in a large group and to allow the teacher utilize his/her resources accordingly." (Roos, 2018, p. 30). In the same way, she suggests that if students get immediate feedback from a chatbot, teachers can focus on those concepts that require more expertise and real human interaction.

Finally, AI simulates human-like conversations. Chatbots like ChatGPT-3.5, can simulate interactive conversations, enabling students to practice their language skills in scenarios similar to the ones they might face in real life. This gives students a safe space to practice their grammar and vocabulary skills before facing real-life scenarios. This also helps them to boost confidence. Roos 2018 states that "there are many perks of having a chatbot as a conversational partner when learning language, for example, it could allow a student to practice their language skills anytime, it would not mind repeating the same material several times. (p. 3).

A study carried out by Belda and Calvo (2022) aimed to explore how conversational AI agents could be integrated into language learning and how it is perceived by future educators. For the study, 115 undergraduates from Spain and 61 undergraduates from Poland interacted autonomously with three conversational agents (Replika, Kuki, Wysa) over a four-week period. A Chatbot–Human Interaction Satisfaction Model (CHISM) was used by the teachers who

participated in the research to evaluate the different linguistic and technological features (semantic coherence, lexical richness, error correction, interface, design, etc.) of the three conversational agents. Kuki was developed in 2005 in the UK and has won several Loebner awards (an annual competition in artificial intelligence that awards prizes to the computer programs with the most human-like characteristics). Replika was created in San Francisco, USA in 2017. This bot has the ability to learn from the users the more it interacts with them, looking more human with time. (Belda, 2022). The third chatbot called Wysa was developed in Bangalore, India in 2016. "This is a specialized type of program as it is an AI-based emotionally intelligent bot that uses evidence-based cognitive behavioral techniques (CBTs) for well-being purposes." (Belda and Clavo, 2022, p. 6). The results show that Wysa shows empathy and emotions, which makes conversations enjoyable and calm for students. Besides, a participant mentioned that "as it stores information about what you tell, you can pick up where you left it, and that contributes to the feeling of reality in interaction." (p. 12). This is the same case of ChatGPT-3.5, which saves the progress of the conversation. In general, the findings revealed positive perceptions among the participants regarding the integration of conversational agents in language learning, demonstrating their usefulness and easiness. In addition, "human-to-human communication was prioritized among future educators although they are willing to learn more about this breakthrough technology." (Belda and Clavo, 2022, p. 13) and as explained by the authors "EFL students may not be willing just to chat with a chatbot, they will also expect to interact with a comprehensive partner that can converse, entertain and provide any supplemental information whenever it is required." (p.13).

In summary, the integration of AI and chatbots in EFL classrooms presents exciting opportunities for personalized learning, getting immediate feedback, and human-like conversations. As technology continues to advance, teachers and students should be open to adopting emerging technologies like AI to enhance the acquisition of fluency and accuracy in EFL classrooms.

2.3.2. ChatGPT-3.5 as a Pedagogical Tool

In recent years, the integration of Artificial Intelligence (AI) language models like ChatGPT-3.5 into educational settings has grown. ChatGPT-3.5 could offer unique opportunities as a pedagogical tool, particularly in language learning environments, such as assisting English as a Foreign Language (EFL) students in improving their fluency and accuracy during impromptu speeches.

Bommarito II, as cited in Božić (2023), mentions some of the possible advantages of using ChatGPT-3.5 in testing. He says that teachers can use AI to automate the process of grading. It is without a doubt known that teachers spend several hours grading tests and since most teachers do not only have one group of students but several, this process can be a little bit slow. Bommarito II, as cited in Božić (2023), also mentions that ChatGPT can be used to create tests with a level of difficulty adapted to students' level, which could be a more accurate way to assess knowledge and skills. He also refers to real-time feedback as another advantage of how learners can use ChatGPT-3.5 to identify and correct errors as they work. Finally, ChatGPT-3.5 can be used to create alternative assessment methods, such as interactive simulations or chatbots, that can provide a more engaging and authentic assessment experience for students.

Williamson (2023) also agrees that ChatGPT-3.5 can be used to automate the grading process for teachers. Checking essays and other written assignments automatically can save teachers a lot of time. As Bommarito II, as cited in Božić (2023), Williamson (2023) suggests ChatGPT-3.5 can be beneficial in providing a personalized learning experience by providing recommendations based on each student's particular needs and likes. He also adds that ChatGP-3.5 can be used to simulate real-life conversations and provide students with instant feedback on their grammar, pronunciation, and vocabulary. He also adds that it can support students during the development of their writing skills since this AI can provide feedback on grammar, punctuation, and spelling.

In conclusion, ChatGPT-3.5 has the potential to revolutionize education and teaching methods. Even though it was not created exclusively for education, it can be a promising pedagogical tool to support both teachers and students in the improvement of fluency and accuracy during impromptu speeches.

2.4. The Communicative Learning Approach (CLT)

From the 1950s to the 1980s different teaching methods emerged, including Situational Language Teaching, and Audio-Lingualism. These two were later promoted to Silent Way, Suggestopedia, Community Language Learning, and Total Physical Response. In the 1980s, these methods were replaced by a more interactive teaching method called the Communicative Learning Approach. (Nimit, 2012). This approach emphasizes the importance of communication as the ultimate goal of language learning.

The foundation of the Communicative Approach lies in the belief that language is a tool for communication rather than a set of isolated grammar rules and vocabulary. Its focus is to have meaningful interactions where language learners actively engage in real-life situations, exchanging thoughts, ideas, and emotions. In essence, the approach aims to bridge the gap between classroom learning and practical language use, preparing learners to effectively navigate the complexities of authentic communication. As explained by Nimit (2012), some of the principles of this approach are that language learning happens through communication, focusing on authentic and meaningful materials and activities, emphasizing fluency, integrating different language skills, and allowing students to make mistakes during creative processes. This approach aligns with the main goal of this study, which is using ChatGPT-3.5 as a pedagogical tool so that students can engage in conversations similar to the ones they would have in real life before presenting impromptu speeches.

Furthermore, the Communicative Learning Approach (CLT) emphasizes the importance of students as the center of education. It encourages teachers to act as facilitators, guiding students through communicative tasks that are meaningful for their learning process.

In the context of CEIC, implementing ChatGPT-3.5 as a pedagogical tool offers a unique opportunity to combine the principles of the CLT approach with the benefits that technology, in this case an AI, has to offer.

In conclusion, the Communicative Approach prioritizes communication and authentic conversations to develop proficiency in the target language, which could be combined with the use of ChatGPT-3.5 as a pedagogical tool to enhance students' fluency and accuracy during impromptu speeches.

2.5. Difficulties while Developing Fluency and Accuracy

Developing fluency might be difficult for both teachers who aim to teach fluency and for learners who want to develop fluency. A study carried out in 2024 by Hosni aimed to gain a comprehensive understanding of when students have difficulties speaking English and in which contexts these problems arise. The two main research problems of the study were to find out the main speaking difficulties encountered by grade 5 students in basic education schools in Oman and to discover the factors that contribute to the existence of these speaking difficulties. The study involved four grade five teachers and three classes of students from a school in Oman. The case study was carried out during one cycle of basic education. Lesson observations, four semi-structured interviews, and curriculum analysis of fifth-grade students were used during this investigation. The results indicate that fifth-grade students face challenges when it comes to speaking, but these obstacles can be overcome by placing greater emphasis on developing this skill. Furthermore, as stated in this study, it is necessary to involve students in extracurricular activities where learners can practice the target language outside of the classroom. Hosni, S.A., (2014). On the other hand, developing accuracy in EFL students is a

complex process that involves overcoming several challenges. While accuracy improvement is crucial for effective communication, teachers must be aware of the obstacles that learners may encounter in the process. One of the first challenges that EFL students have to face before achieving accuracy is avoiding letting their mother tongue affect what they are producing in English. This can be difficult to do, especially for adults who tend to translate everything into Spanish. Ur cited in Al Hosni (2014) mentions that mother-tongue use is one of the factors that causes speaking difficulties for EFL students. He says that "learners who share the same mother tongue tend to use it because it is easier and because learners feel less exposed if they are speaking their mother tongue." (as cited in Al Hosni, 2014, p. 23). However, relying on Spanish can lead to grammatical mistakes, a lack of vocabulary and confidence, and pronunciation errors. To overcome this interference of Spanish in the learning process, it is essential for students to be exposed to the target language and to engage in real-life conversations. Al Hosni (2014) advises involving students in extracurricular activities where learners can practice the target language outside of the classroom as well as identifying students' speaking difficulties to create appropriate tasks for students to improve their accuracy inside and outside of the classroom.

2.6. Impromptu Speeches

Impromptu speeches have numerous benefits for students' development of fluency and accuracy in speaking but can be challenging for learners since there is no previous preparation. By using ChatGPT-3.5, learners can develop fluency and accuracy by engaging in interactive conversations with a chat that simulates human responses. ChatGPT-3.5 also gives students feedback that helps students understand what types of errors they are making and correct them. Students can get involved in daily interactions that might improve their fluency and accuracy with time. In addition, learners can practice their fluency and accuracy with real-life scenarios. This is relevant because students need to be capable of keeping conversations in different

contexts and using different vocabulary, expressions, and even grammar structures. With regular practice and authentic interactions, students can achieve fluency and accuracy during impromptu speeches in class.

In conclusion, improving fluency and accuracy in an EFL class involves navigating various challenges, an example of these challenges is overcoming L1 interference. By recognizing some of the challenges students may face, teachers can provide materials and practice to encourage them to improve their accuracy while practicing a natural use of the language.

Chapter III

METHODOLOGICAL FRAMEWORK

In this chapter, the methodology used in the research is explained. In contrast to the previous chapter, which mainly focused on the theoretical aspects of the topic such as definitions, characteristics, and approaches, this chapter allows readers to understand how the author applies the research and its objectives to the studied population.

To start, the author explains the type of investigation of the research, determining whether it is theoretical or applied. Moreover, it specifies the temporal dimension, transversal or longitudinal, the study presents, which indicates the period during which the phenomenon under study is examined. The framework is also addressed, explaining the size and scope of the research and the reasons behind these choices. The nature of the study is also crucial, as it guides how data collected from the research is analyzed and presented. Finally, the type of character is described, which conveys the purpose of the investigation, and how it is transmitted to the reader.

On the other hand, it is essential to mention the sources of information since they support the paper's arguments. These sources are categorized into first, second, and third-hand sources. The study's sample is also explained, providing details about the population and giving insights into the quantity and quality of the objects of the study. In addition, descriptions of the techniques and instruments used to collect data are provided in order to show the reader how the instruments were designed and how they can show the needs and context of the observed population.

The general and specific objectives of the research are included to demonstrate the necessity of the study and its main purpose, followed by the corresponding variables of these objectives. Furthermore, the conceptual, operative, and instrumental definitions of these variables are indicated as well as the operationalization chart is included.

3.1 Type of Investigation

3.1.1. Purpose

Describing the characteristics of a research project is relevant to comprehend the nature and purpose of the study, and how it could be meaningful for a certain population or for a certain field. It could also inspire other researchers to use the study for further investigation in the future about the issue being approached and to identify limitations or problems in an area. Similarly, mentioning the characteristics of the project could help the reader to understand the reason why certain approaches, instruments, and populations were selected, giving more credibility to the work and a guide to analyzing the results.

There are two different types of investigation. The first one, called the theoretical investigation, aims to review existing theories, principles, and frameworks to better understand existing knowledge and even create new ones. "Models that focus on providing a theoretical contribution are usually developed to explain phenomena rather than to achieve change." (Gooyert and Größler, 2018, p. 578). The applied investigation, in contrast, centers on achieving social change, solving real-world problems, or making practical improvements. As expressed by Gooyert and Größler (2018), an applied investigation "aims at finding a solution to real, practical problems. (p. 576). He also expresses that these two types of investigations have different purposes, one could be to understand a phenomenon, and the other one to solve a problem. (p. 581).

This research is classified as an applied investigation because its focus is to address a problem happening in an educational context (real-world problem) and to provide a possible solution for it. It also involves collecting and analyzing data through observations and a questionnaire, which are methods commonly used to collect data in this type of investigation.

3.1.2 Temporal Dimension

When talking about the time aspect of the study, it is important to note the existence of two dimensions, transversal and longitudinal. They both involve examining diverse types of problems with the purpose of providing responses to research questions. Transversal studies collect data at a specific point in time. Hernández et al. (2018) explain that the "purpose is to describe variables and analyze their occurrence and interrelationship at a given moment. It's like 'taking a photograph' of something that is happening." (p. 154) while longitudinal studies intend "to analyze changes over time in specific categories, concepts, events, variables, contexts, or communities, or alternatively, the relationships among them. (Hernández et al, 2018, p. 159). In other words, data collected in longitudinal studies is not gathered at a single point in time but rather during different moments or periods of time with the purpose of making inferences among the variables over time.

This research has a specific point in time for its application and collects data from a sample of participants at a single point in time; therefore, it is considered a transversal study. It also gathers information about a particular population at a specific moment. In this transversal study, the researcher aims to examine the effectiveness of integrating ChatGPT-3.5 as a pedagogical tool during the third quarter of 2023. During a four-week plan, learners will interact with ChatGPT-3.5 to practice topics studied in class to improve their fluency and accuracy. Instruments will also be applied during a specific class. This shows that the study has a limited period of time.

3.1.3. Framework

The framework of a research paper could operate on a micro, macro, or mega level, enabling the researcher to explain the size and range of the study. Ramírez (2020) explains that if the size of the population studied is small, a micro framework is needed. If the size is large but

applied to specific groups of a population, the macro framework is required, but on the other hand, if the size of the population is large at a social level, a mega framework is essential.

This research project adopts a micro framework since it focuses on a specific and limited population. The target participants are EFL students enrolled in the regular course of CEIC, allowing for a detailed examination of their language learning experiences and performances. By adopting a micro framework, the study will provide in-depth insights into how ChatGPT-3.5 influences the fluency and accuracy of EFL students within the specific educational context of CEIC and will allow the researcher to apply the best pedagogical approaches to boost the fluency and accuracy of the target population.

3.1.4. Nature

Regarding the nature of the study, it is possible to talk about three different forms of gathering information and data: quantitative, qualitative, or mixed. In quantitative studies, data is collected through numbers and statistics that are later analyzed. According to Campos (2017), as cited in Ramírez (2020), quantitative studies "employ techniques of counting and measuring phenomena, and it is based on sample studies such as tests and statistical techniques." (p.12). This type of research method uses numbers to create patterns or relationships among the elements studied and aims to "quantify the participant responses and subsequently interpret them to make decisions." (Arghode, 2012, p. 156). On the other hand, qualitative studies focus on analyzing perceptions, opinions, beliefs, and/or values of the subject under investigation. (Arghode, 2012, p. 159). It aims to understand and interpret the complexity of human experiences, behaviors, and perspectives. Campos (2017), as cited in Ramírez (2020), explains that qualitative research "employs techniques such as unstructured interviews, videos, recordings, and participant observation." (p. 12). Combining these two types of forms of collecting data leads to the creation of mixed research, which is "a relatively new approach that

involves combining quantitative and qualitative methods in the same study. " (Hernández, 2020, p. 30).

This paper's nature is mixed but predominantly qualitative since it attempts to understand the perceptions and experiences of EFL students regarding the utilization of ChatGPT-3.5 as a pedagogical tool to improve their fluency and accuracy during impromptu speeches. Through observations and a questionnaire, the study aims to collect insights about the benefits of using this technological tool in an EFL classroom; however, it also intends to quantify the observed improvements through the obtention of numbers and statistical information that reflect the improvement of fluency and accuracy of EFL students through a four-week plan. Using a mixed nature looks to prove the effectiveness of using ChatGPT-3.5 as a pedagogical tool to improve the fluency and accuracy of EFL students during impromptu speeches at CEIC.

3.1.5. Character

The character of a research paper refers to the way information is gathered and presented. It could be classified as exploratory, descriptive, correlational, and/or explicative, but other classifications could be also mentioned. Hernández (2018) emphasizes that "visualizing the scope that our research will have is important to establish its conceptual and methodological boundaries. (p. 89).

This research started as exploratory research since it was necessary to inspect different chatbots that have been used in the setting of education and to determine if using them as a pedagogical tool could be beneficial. "Exploratory studies are conducted when the objective is to examine a little-researched topic or issue, for which there are many uncertainties, or it has not been addressed before. (Hernández, 2018, p. 91).

As the study moved forward, the research became correlational and explicative. As explained by Hernández (2018), correlational studies focus on understanding "the relationship

or degree of association that exists between two or more concepts, categories, or variables in a

particular sample or context. (p. 92). This does not mean that more than two variables cannot

be analyzed. In the particular case of this paper, there is one independent variable, ChatGPT-

3.5, and two dependent variables, fluency and accuracy. The study seeks to comprehend if

there is a relationship between using ChatGPT-3.5 and the improvement of fluency and

accuracy. The primary utility of correlational studies is to understand how a concept or variable

can behave by knowing the behavior of other related variables. (Hernandez, 2018, p. 92).

Moreover, this research is explicative since it aims to explain students' perceptions and

opinions about the implementation and use of ChatGPT-3.5 in the classroom as well as the

benefits of it. Explicative studies focus on "explaining why a phenomenon occurs and under

what conditions it manifests or why two or more variables are related." (Hernandez, 2018, p.

95).

In summary, this research paper is correlational and explicative.

3.2. Subjects and Sources of Information

3.2.1. Subject

It is necessary to define the population to be analyzed in a study in order to understand

its particular characteristics and needs. The individuals in the research can be categorized into

the universe and the sample. According to Ramirez (2020), "if you work with the entire

population, you will be working with the universe, and if you work with a portion of the

population, you will have a subset of the population." (p. 15).

In the case of this study, the universe involves all students from Centro de Idiomas y

Estudios Conversacionales (CEIC) in the regular modality; however, the investigation uses a

sample of 32 EFL students enrolled in levels 2, 5, and 13. These learners are the ones involved

in the utilization of ChatGPT-3.5 as a pedagogical tool and are the ones directly affected by the

research. By choosing a sample, the researcher pretends to gain valuable insights and in-depth analysis of the population while keeping a limited population of individuals to be studied.

3.2.2. Sources

According to Ramirez (2020), secondhand sources are "based on primary information, but they provide reorganized and synthesized data." (p. 15).

Table 1. Secondhand sources used in the research process:

Author's Name	Book or Article Title	Year
Al Hosni, S.	Speaking Difficulties Encountered by Young EFL Learners	2014
Hea-Suk, K., Cha, Y., & Na-Young, K.	Effects of AI Chatbots on EFL Students' Communication Skills.	2021
Kim, N.	Effects of Different Types of Chatbots on EFL Learners' Speaking Competence and Learner Perception	2017
Sunyoung, K., Shim, J., & Shim J.	A Study on the Utilization of OpenAI ChatGPT	2023
Roos, S	Chatbots in Education: A Passing Trend or a Valuable Pedagogical Tool?	2018

3.3. Population and Sample

Hernández (2018) states that it is fundamental to clearly limit the population of the study. He defines population as the "set of all cases that match certain specifications." (p. 174). Thus, the population of this investigation is all students enrolled at CEIC.

3.3.1. Probabilistic or Non-probabilistic

The sample is the "subset of the universe or population from which data is collected and which must be representative of it." (p. 173). The sample of this study is a group of 32 EFL students enrolled in the regular modality at CEIC, which is made up of 8 students from level 2, 12 students from level 5, and 12 students from level 13 with ages ranging between 13 and 55 years old. This sample was chosen based on factors like practicality and willingness from the participants to be involved in a four-week plan, which is essential for the study since students have to engage in conversations with ChatGPT-3.5 three times a week. In addition, the 32 students have classes on Saturday's schedule, which adapts to the availability of the researcher, allowing her to visit whenever she needs or to contact them. Finally, a specific sample allows the investigator to gather valuable data about the population under study and to carefully analyze it to determine the effectiveness of the technological tool being used. Regular courses at CEIC have a duration of 2 years and 6 months. This study could benefit other levels of students enrolled in the same modality to achieve their learning goals.

Samples can be categorized into non-probabilistic samples and probabilistic samples. "In probabilistic samples, all elements of the population have the same chance of being chosen" (Hernandez, 2018, p. 176). while in non-probabilistic samples, the selection of elements does not depend on probability. In this study, elements of the population were chosen by the researcher, who decided to only choose one of the groups of the regular modality based on representativeness, practicality, and relevance.

3.4. Techniques and Instruments

To collect valuable data related to the implementation of ChatGPT-3.5 as a pedagogical tool to improve EFL students' fluency and accuracy during impromptu speeches at CEIC, participants of the study have to complete four instruments, including a pre-test and a post-test checklist, a questionnaire, and a Likert scale. Before implementing the AI tool in the classroom, a pre-test is applied. It looks to assess pupils' fluency and accuracy while developing impromptu

speeches. This checklist consists of nine different items that help the researcher analyze learners' performances and level of English during impromptu speeches before any intervention. The items on the list consider aspects such as hesitation, pace, coherence, grammar, vocabulary, and pronunciation. The instrument is applied in the class by the teacher. Students get one topic related to the contents of the class assigned randomly. They have 30 seconds for preparation and two minutes to present their impromptu speeches in the case of students at level 2, students at level 5 have 30 seconds for preparation and three minutes to present their impromptu speeches, and finally, students at level 13 get 30 seconds for preparation and four minutes to present their impromptu speeches. It is important to consider that the distribution of the time was carefully thought considering that participants of the study are from three different levels.

After implementing ChatGPT-3.5 as a pedagogical tool in the classroom, a post-test is applied with the purpose of establishing the potential benefits and/or limitations of using ChatGPT-3.5 as a pedagogical tool to improve EFL students' fluency and accuracy during impromptu speeches. This checklist consists of nine different items that help the investigator determine if there were any improvements in learners' performances during impromptu speeches after using ChatGPT-3.5. The items on the list consider aspects such as hesitation, pace, coherence, grammar, vocabulary, pronunciation, and transitions. The instrument is applied in the class by the teacher. Students get one topic related to the contents of the class assigned randomly.

Furthermore, a questionnaire is applied to explore the acceptance range of EFL students regarding the use of a four-week plan with ChatGPT-3.5 to improve their fluency and accuracy during impromptu speeches. It contains nine close-ended questions and one open-ended question. The questionnaire is to be done in class. Questions are related to the experience of using ChatGPT-3.5; for instance, how often students used it, how comfortable they felt, what benefits they obtained, or what improvements they noticed after using the chat.

Finally, to complement the results of the study and to explore the acceptance range of using ChatGPT-3.5 as a pedagogical tool, a Likert scale is used. Learners have to rate statements among "agree" "partially agree" "neither agree nor disagree" "somehow disagree" and "disagree" based on their experiences. The Likert scale has 8 items.

3.5. Operationalization of Variables

Variables are characteristics of people, objects, facts, phenomena, and other living things that can be measured or observed. (Hernandez, 2018, p. 105). The operationalization of variables is relevant because, in this way, researchers can get observable and quantifiable variables from abstract or complex concepts. In the chart shown below, it is possible to find the general objective, variables of each specific objective, a conceptual definition, instruments and techniques to collect information, and an operational definition that can help the reader to better comprehend the validity of the variables and instruments used in the study.

Table 2

Title: Implementing ChatGPT-3.5 as a Pedagogical Tool to Improve EFL Students' Fluency and Accuracy During Impromptu Speeches at Centro de Estudios de Idiomas Conversacionales (CEIC) during the Third Quarter 2023

VARIABLES CHART

General Objective: To determine the effectiveness of implementing ChatGPT-3.5 as a pedagogical tool to improve the fluency and accuracy during impromptu speeches that EFL students have during English lessons at Centro de Estudios de Idiomas Conversacionales (CEIC) in the third quarter of 2023.

Specific Objective	Variable	Conceptual Definition	Instrumental Definition	Operational Definition
To assess EFL	Student's fluency	The ability to	Instrument:	The variable is valid

students' fluency and accuracy during impromptu speeches in an English lesson at CEIC.	and accuracy during impromptu speeches.	communicate ideas with automaticity and smoothness while using grammar and syntax correctly during speeches without previous preparation.	Checklist Technique: Observation The checklist was designed to be used before implementing ChatGPT-3.5 with students during impromptu speeches. It contains nine different items related to aspects such as hesitation, pace, coherence, grammar, vocabulary, and pronunciation.	based on the teacher's observation of students' performance during impromptu speeches.
To explore the acceptance range of EFL students regarding the use of a four-week plan with ChatGPT-3.5 as a pedagogical tool to improve their fluency and accuracy during impromptu speeches.	ChatGPT-3.5 as a pedagogical tool to improve fluency and accuracy during impromptu speeches.	An advanced language model that simulates human-like conversations to be used in curriculum, assessment, and instruction to promote student learning during speeches without previous preparation.	Instruments: Questionnaire, Likert Scale Technique: Interview The questionnaire was designed to explore how students feel after a four-week plan using ChatGPT-3.5 as a pedagogical tool three times a week to improve	The variable is valid if 70% of the participants mark one of the first options for each question in the questionnaire and "agree" or "partially agree" on the Likert Scale.

			their fluency and accuracy during impromptu speeches. It contains nine close-ended questions and one open-ended question related to how often students used the chat, how comfortable they felt while using it, what benefits they obtained, or what improvements they noticed after using ChatGPT-3.5. The Likert Scale was designed for students to their level of satisfaction after using ChatGPT-3.5 for four weeks.	
To identify potential benefits or limitations of implementing ChatGPT-3.5 as a pedagogical tool to	Benefits or limitations of implementing ChatGPT-3.5 as a pedagogical tool.	Serving as a conversation partner for students to practice before speeches without previous	Instrument: Checklist Technique: Observation This post-test was designed to be	The variable is valid based on the teacher's observation of students' performance during impromptu speeches.

improve fluency during impromptu speeches in EFL students at CEIC.		preparation.	applied after implementing ChatGPT-3.5 for four weeks, three times a week. Every student gets one topic related to the class assigned randomly. The results of this post-test will be compared to the results of the pre-test to determine any improvement in students' fluency and accuracy.	

CHAPTER IV

RESULTS AND ANALYSIS OF DATA

In this chapter, the data collected through the application of four different instruments, a pre-test and a post-test checklist, a questionnaire, and a Likert scale, is analyzed. These instruments were used to gather valuable data from 32 EFL students at CEIC, 8 of those students were from level 2, 12 from level 5, and 12 from level 13. All answers given by participants are carefully examined in order to determine the effectiveness of incorporating ChatGPT-3.5 as a pedagogical tool into the EFL classroom and to gain a better understanding of learners' perception towards the use of AI during their learning process.

4.1. Pre-test Checklist

Before the implementation of ChatGPT-3.5 for four weeks, a pre-test was applied to the 32 participants of the study. A checklist was created to assess pupils' fluency and accuracy while developing impromptu speeches. It consisted of nine different items that helped the researcher analyze learners' performances and level of English during impromptu speeches before any intervention. The items on the list consider aspects such as grammar, vocabulary, pronunciation, hesitation, pace, coherence, usage of the second language, and speech duration. The instrument was applied in the classroom by the teacher of each level on October 28th, 2023.

Students got randomly assigned one topic related to the contents of their current level. Students at level 2 had topics related to places around town, movies, being sick, daily life, and parts of the house while learners at level 5 talked about department stores, nature, food, moving in, eating out, and technology. On the other hand, students at level 13 were assigned topics related to short stories, fairy tales, legends, supernatural events, cultures around the world, natural wonders of the world, consumerism, globalization, and environmental issues. During the impromptu speech, participants at level 2 had 30 seconds for preparation, where they could brainstorm ideas and write down key words to guide themselves during the speech, and 2 minutes to present their impromptu speeches. Students at level 5 had the same preparation

time but had 3 minutes to present their impromptu speeches. Finally, students at level 13 had

30 seconds for preparation and 4 minutes to present their impromptu speeches. It is important

to mention that the distribution of the time was carefully selected considering participants' level.

Table 3 shows the topics for the impromptu speeches for each level and the time

assigned to each one.

Table 3. Topics for the impromptu speech and speech duration

Level	Impromptu Speech Topics	Preparation Time	Speech duration
2	Places around town Movies Being sick Daily life Parts of the house	30 seconds	2 minutes
5	Department stores Nature Food Moving in Eating out Technology	30 seconds	3 minutes
13	Short stories Fairy tale Legends, Supernatural events Cultures around the world Natural wonders of the world Consumerism Globalization Environmental issues	30 seconds	5 minutes

Note: The topics for each level are based on the contents from the curriculum taught at CEIC

regular courses.

The results obtained from the checklist used to assess participants' performance prior the intervention of ChatGPT-3.5 are shown in Figures 1 through 9.
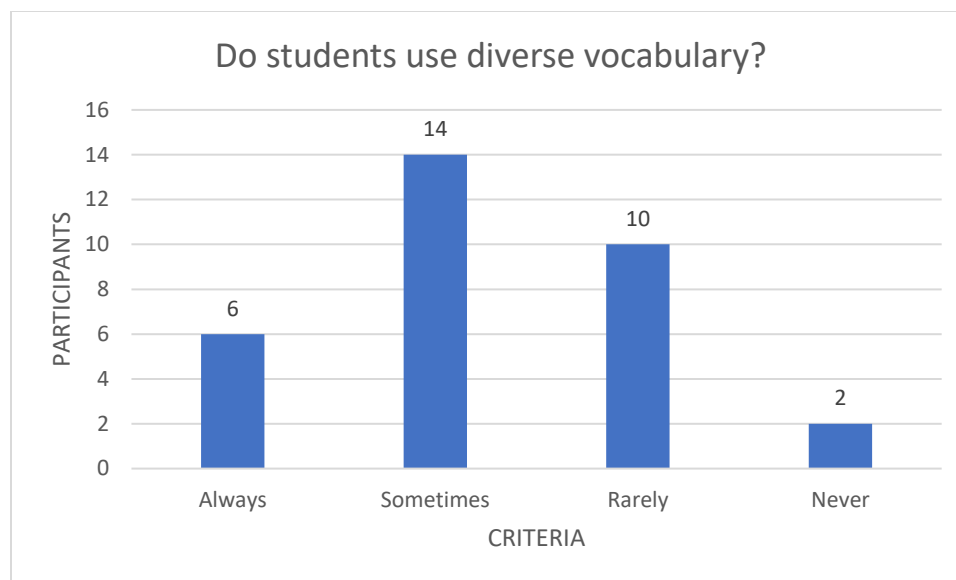
Figure 1. Do students use correct grammar structures?
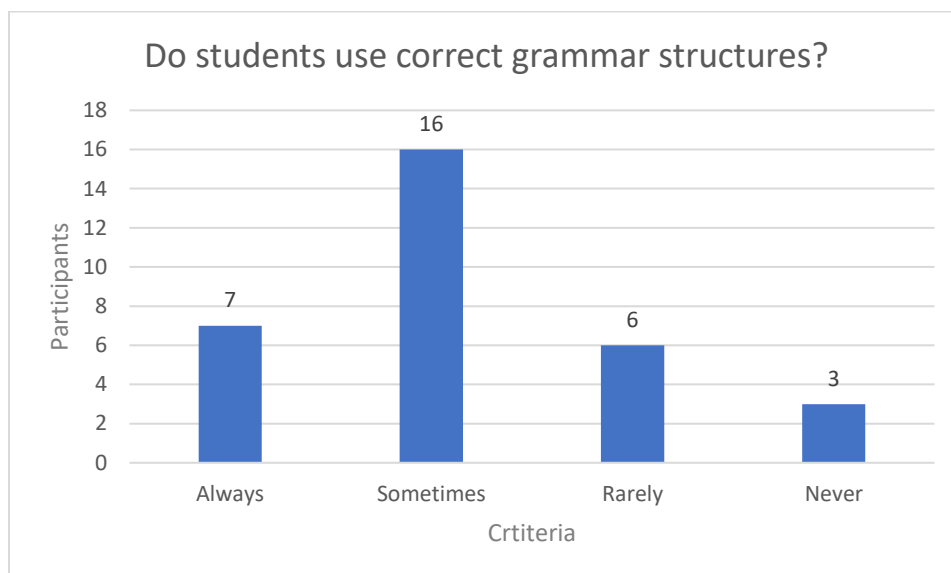
Source: Data taken from the pre-test applied to 32 students at CEIC during October 2023.

Figure 1 illustrates the frequency of correct grammar structure usage among participants during the first impromptu speech. The collected data reveals that seven students, accounting for 22% of the data, consistently used correct grammar structures during the whole speech, whereas 16 students, representing 50% of the data, tended to make certain grammatical mistakes. On the other hand, six students, 19% of the data, had difficulties to accurately employing grammar structures, and three participants, accounting for the last 9%, made several grammatical mistakes during the spontaneous speech. These findings suggest that more than half of the students need to improve their grammar skills to some extent.

Figure 2. Do students use diverse vocabulary?

Source: Data taken from the pre-test applied to 32 students at CEIC during October 2023.

Figure 2 illustrates the diversity of vocabulary used by participants of the study during the first impromptu speech. The collected data reveals that six students, accounting for 19% of the data, consistently used different vocabulary throughout the speech while 14 students, representing 44% of the data, used different words but not consistently. In contrast, 10 students, representing 31% of the data, used only a limited range of words related to the class content. Finally, two participants, accounting for 6% of the data, did not use any vocabulary related to class topics. These findings suggest that most students need to boost their vocabulary skills to some extent.
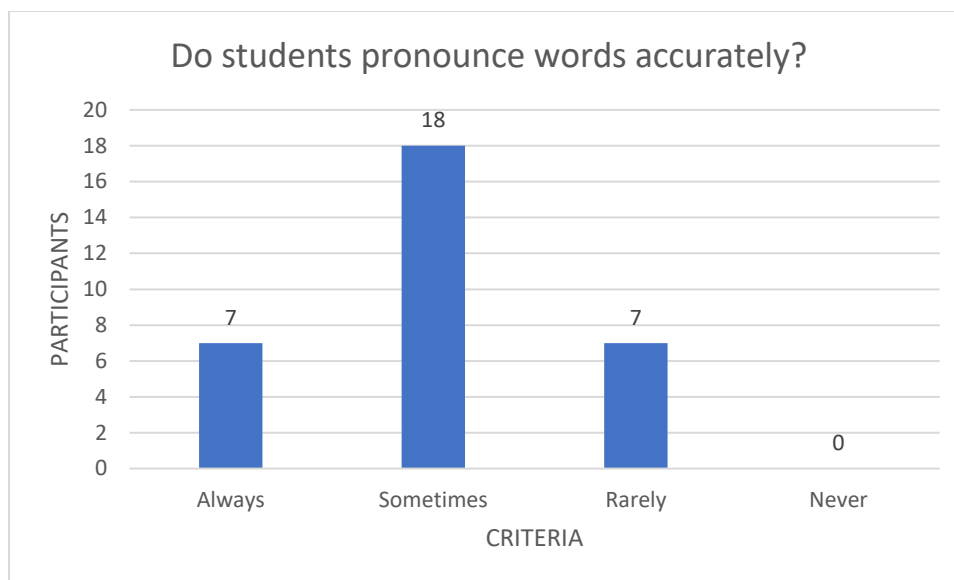
Figure 3. Do students make use of Spanish while presenting?
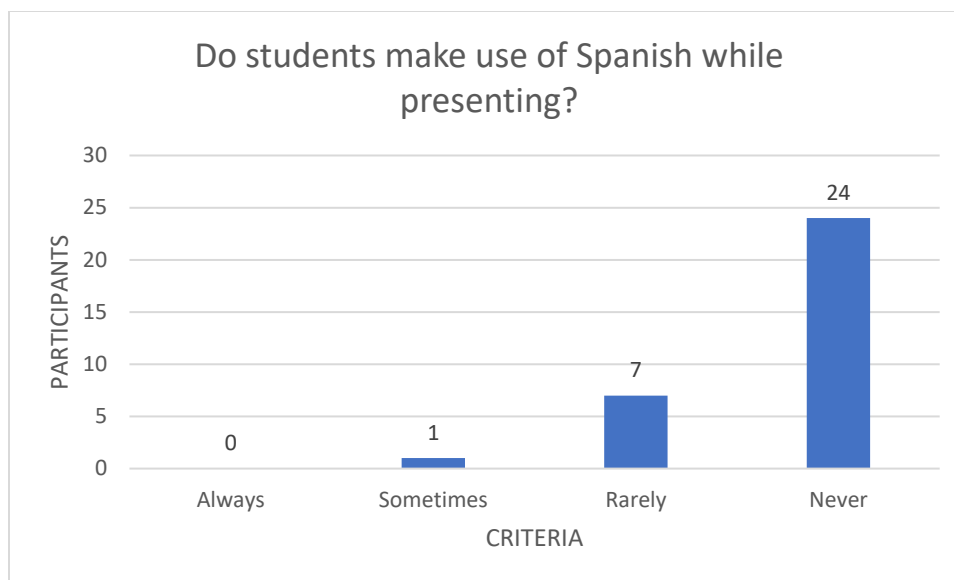
Do students make use of Spanish while presenting?

Source: Data taken from the pre-test applied to 32 students at CEIC during October 2023.

Figure 3 illustrates how often participants of the study relied on Spanish during the first impromptu speech. The collected data reveals that one student, accounting for 3% of the data, sporadically relied on Spanish in some parts of the speech, whereas seven students, representing 22% of the data, rarely used Spanish. Additionally, a significant majority of 24 students, representing 75% of the data, did not feel the necessity to incorporate Spanish during their impromptu speeches. These findings suggest that the majority of students do not feel the need to rely on Spanish during a spontaneous speech.
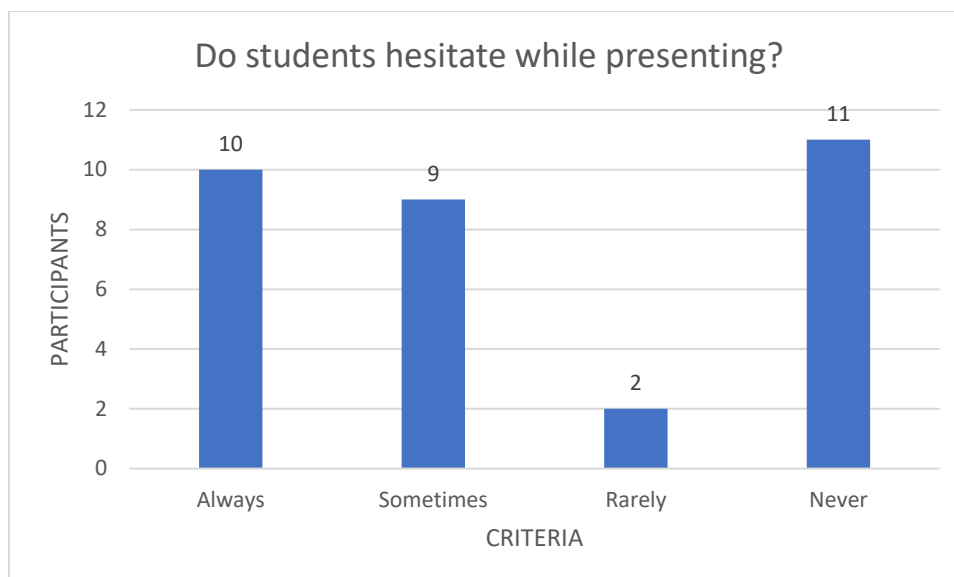
Figure 4. Do students pronounce words accurately?

Source: Data taken from the pre-test applied to 32 students at CEIC during October 2023.

Figure 4 illustrates how often participants pronounce words accurately during the first impromptu speech. The collected data reveals that seven students, accounting for 22% of the data, consistently pronounced words accurately during the whole speech, whereas 18 students, representing 56% of the data, mispronounced certain words. On the other hand, seven students, accounting for 22% of the data, encountered difficulties in pronouncing words. These findings suggest that more than half of the students need to improve their pronunciation skills to some extent.
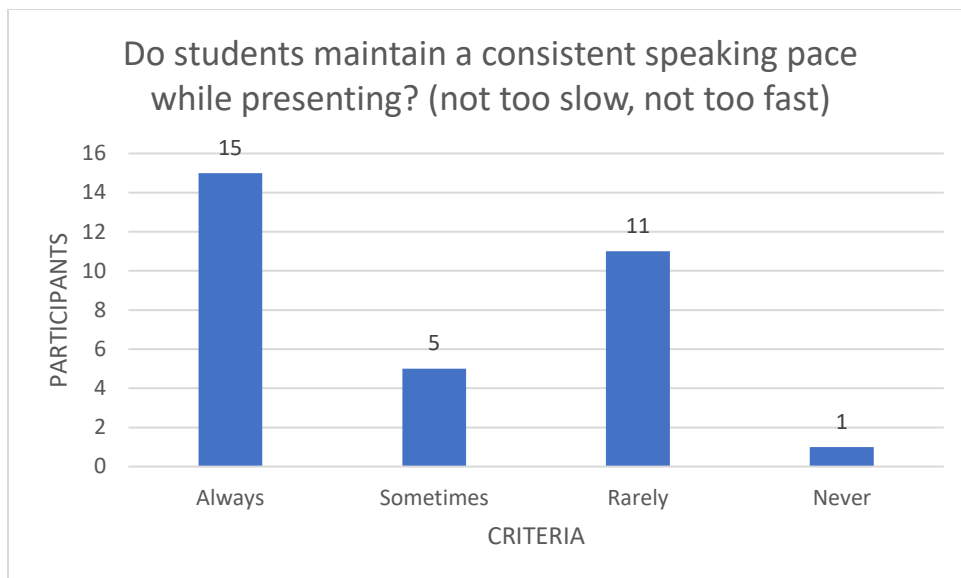
Figure 5. Do students hesitate while presenting?

Source: Data taken from the pre-test applied to 32 students at CEIC during October 2023.

Figure 5 illustrates how often participants of the study hesitate during the first impromptu speech. The collected data reveals that 10 students, accounting for 31% of the data, consistently hesitated during the speech. Similarly, nine students, representing 28% of the data, hesitated on some occasions. On the other hand, two students, representing 6% of the data, rarely hesitate during their impromptu speeches. Finally, 11 learners, accounting for 35% of the data, did not hesitate while presenting. These findings suggest that more than half of the students, specifically 19 of them, should reduce hesitation to some extent.

Figure 6. Do students maintain a consistent speaking pace while presenting? (not too slow, not too fast)

Do students maintain a consistent speaking pace while presenting? (not too slow, not too fast)

Source: Data taken from the pre-test applied to 32 students at CEIC during October 2023.

Figure 6 illustrates how often participants of the study maintain a consistent speaking pace during the first impromptu speech. The collected data reveals that 15 students, accounting for 47% of the data, consistently maintain the fluency of their speech. during the speech. Similarly, five students, representing 16% of the data, reduced the consistency of their speech on some occasions. On the other hand, 11 students, representing 34% of the data, changed the consistency of their speech on several occasions. Finally, 1, accounting for 3% of the data, spoke too slowly during the speech. These findings suggest that a little bit more than half of the students, specifically 17 of them, should work on the fluency of their speech to some extent.
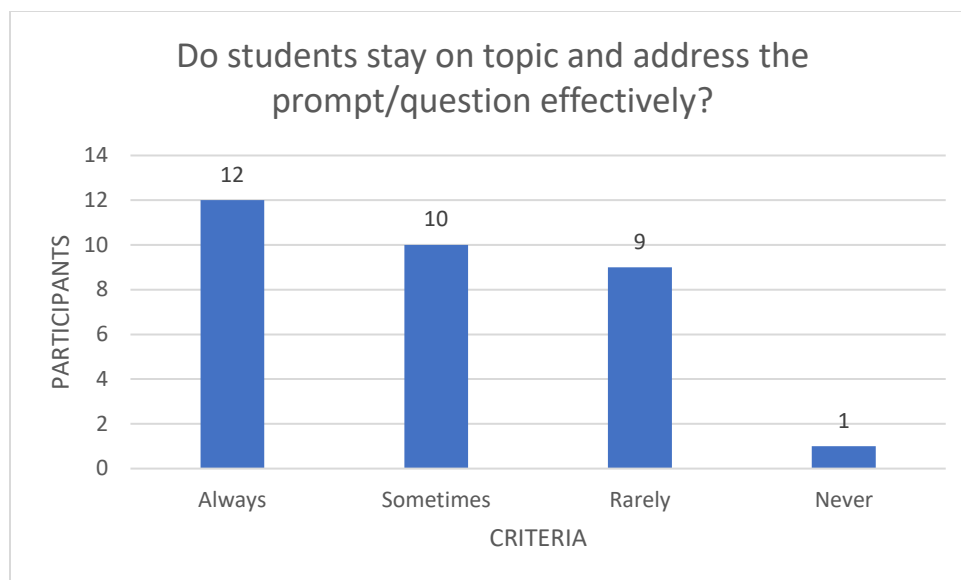
Figure 7. Do students develop their ideas clearly and with detail?
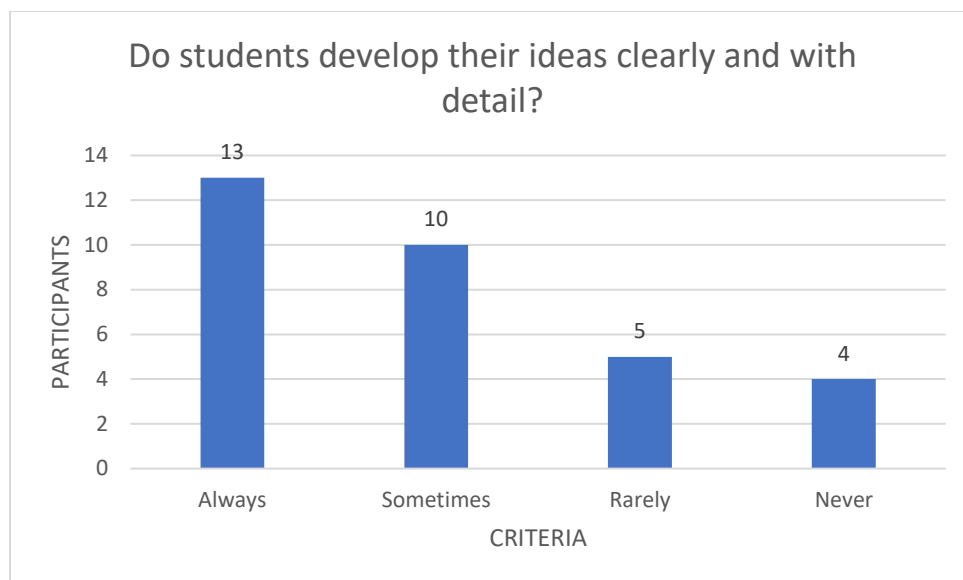
Source: Data taken from the pre-test applied to 32 students at CEIC during October 2023.

Figure 7 illustrates the clearness with which participants of the study develop the first impromptu speech. The collected data reveals that 13 students, accounting for 41% of the data, consistently articulated ideas clearly and with detail during the speech. Similarly, 10 learners, representing 31% of the data, developed ideas clearly but lacked detail in their explanations. On the other hand, five participants, representing 16% of the data, had trouble expressing ideas clearly and providing enough detail during their impromptu speeches. Finally, four learners, accounting for 12% of the data, struggled to develop ideas clearly. These findings suggest that a majority of the students can develop ideas clearly; however, students need additional support in expressing their ideas with detail.
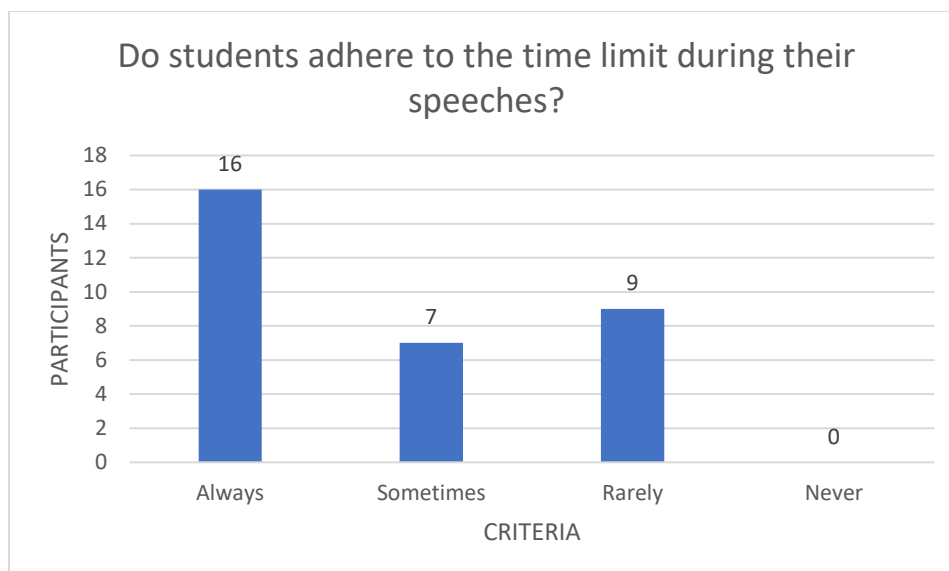
Figure 8. Do students stay on topic and address the prompt/question effectively?

Source: Data taken from the pre-test applied to 32 students at CEIC during October 2023.

Figure 8 illustrates the effectiveness of the participants of the study in adhering to the assigned topic and accurately addressing the prompt during the first impromptu speech. The collected data reveals that 12 students, accounting for 38% of the data, stayed focused on the topic during the speech. Similarly, 10 learners, representing 31% of the data, developed ideas accurately but went off-topic sometimes. On the other hand, nine participants, representing 28% of the data, found it challenging to stay on topic during their impromptu speeches. Finally, one learner, accounting for 3% of the data, failed to address the prompt correctly. These findings suggest that students may benefit from additional support in this matter.

Figure 9. Do students adhere to the time limit during their speeches?

Source: Data taken from the pre-test applied to 32 students at CEIC during October 2023.

Figure 9 illustrates the effectiveness of the participants of the study in adhering to the assigned time limit during the first impromptu speech. The collected data reveals that 16 students, accounting for 50% of the data, adhered precisely to the time limit during the speech. On the other hand, 7 learners, representing 22% of the data, were close to completing the time assigned. Similarly, nine participants, representing 28% of the data, found it challenging to complete their impromptu speeches within the allowed time. These findings suggest that half of the students might need to improve their language skills to effectively manage their speech duration.

4.2. Post-test Checklist

After implementing ChatGPT-3.5 as a pedagogical tool in the classroom for four weeks, a post-test was applied to establish the effectiveness of using this chat as a pedagogical tool to improve EFL students' fluency and accuracy during impromptu speeches. This checklist consisted of nine different items that helped the investigator determine if there were any improvements in learners' performances during the impromptu speeches after using ChatGPT-

3.5. The items on the list considered aspects such as grammar, vocabulary, pronunciation, hesitation, pace, coherence, usage of the second language, and speech duration. The instrument was applied in the classroom by the teacher of each level on December 2nd, 2023.

Students got randomly assigned one topic related to the contents of their current level. Students at level 2 had topics related to places around town, movies, being sick, daily life, and parts of the house while learners at level 5 talked about department stores, nature, food, moving in, eating out, and technology. On the other hand, students at level 13 were assigned topics related to short stories, fairy tales, legends, supernatural events, cultures around the world, natural wonders of the world, consumerism, globalization, and environmental issues. During the impromptu speech, participants at level 2 had 30 seconds for preparation, where they could brainstorm ideas and write down key words to guide themselves during the speech, and 2 minutes to present their impromptu speeches. Students at level 5 had the same preparation time but had 3 minutes to present their impromptu speeches. Finally, students at level 13 had 30 seconds for preparation and 4 minutes to present their impromptu speeches. It is important to mention that the distribution of the time was carefully selected considering participants' level.

Table 4 shows the topics for the impromptu speeches for each level and the time assigned to each one.

Table 4. Topics for the impromptu speech and speech duration

Level	Impromptu Speech Topics	Preparation Time	Speech duration
2	Places around town Movies Being sick Daily life Parts of the house	30 seconds	2 minutes
5	Department stores Nature Food	30 seconds	3 minutes

	Moving in		
	Eating out		
	Technology		
13	Short stories	30 seconds	5 minutes
	Fairy tale		
	Legends, Supernatural		
	events Cultures around the		
	world		
	Natural wonders of the world		
	Consumerism		
	Globalization		
	Environmental issues		

Note: The topics for each level are based on the contents from the curriculum taught at CEIC regular courses.

The results obtained from the checklist used to assess participants' performance after the implementation of ChatGPT-3.5 are shown in Figures 10 through 19. Results are compared to those obtained from the first Impromptu.

Figure 10. Do students use correct grammar structures? – Impromptu Speech II
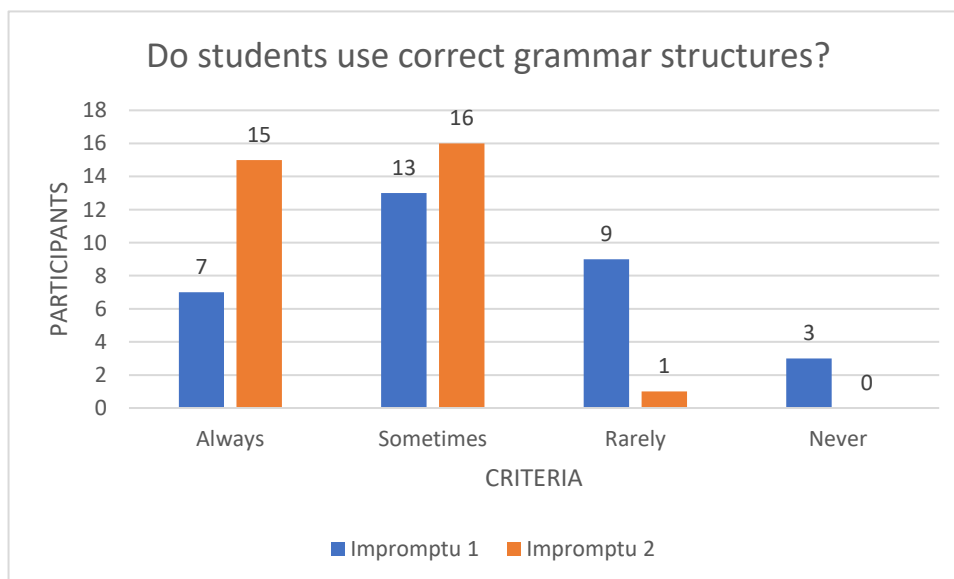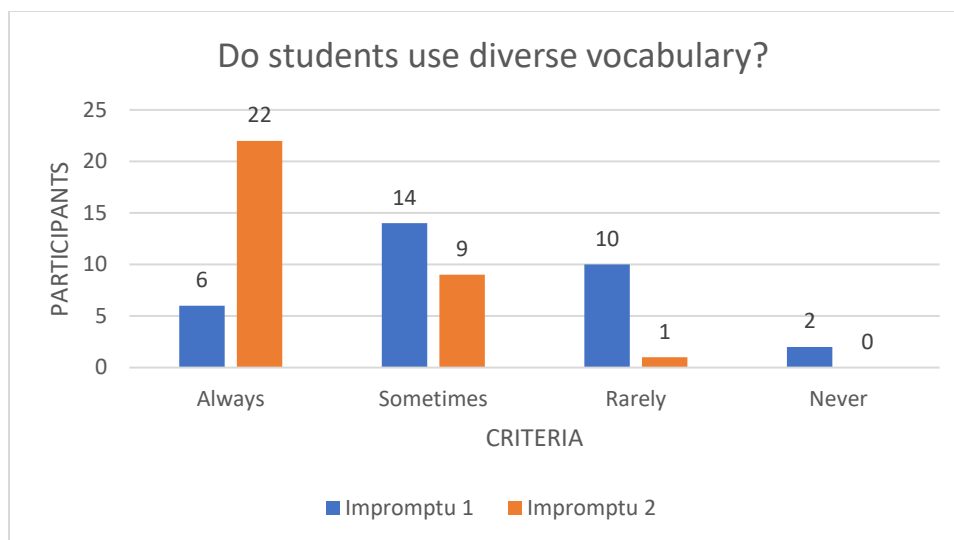
Source: Data taken from the pre-test and post-test applied to 32 students at CEIC during October 2023 and December 2023

As illustrated in Figure 10, blue represents the results from the first impromptu speech applied to participants in October 2023 before the implementation of ChatGPT-3.5, while orange represents the results from the second impromptu speech applied to participants in December 2023 after the implementation of ChatGPT-3.5. The analysis of the results obtained in the first impromptu speech showing the frequency of correct grammar structure usage among participants is shown in Figure 1.

Regarding the data collected in the second impromptu speech, the results reveal that 15 students, accounting for 47% of the data, consistently used correct grammar structures during the whole speech, whereas 16 students, representing 50% of the data, made certain grammatical mistakes. On the other hand, one student, 3% of the data, had difficulties to accurately employing grammar structures. These findings suggest that there is a clear improvement in the correct usage of grammar structures among the participants from the first to the second impromptu speech. The percentage of students consistently using correct grammar increased significantly, from 22% to 47%, indicating progress. Additionally, there was a decrease in the percentage of students facing difficulties with grammar usage, dropping from 19% to 3%. However, the percentage of students making certain grammatical mistakes remained unchanged at 50%. Overall, while there is room for improvement, the results suggest a positive trend towards better grammar skills among the participants of the study after the implementation of ChatGPT-3.5 as a pedagogical tool in the classroom.

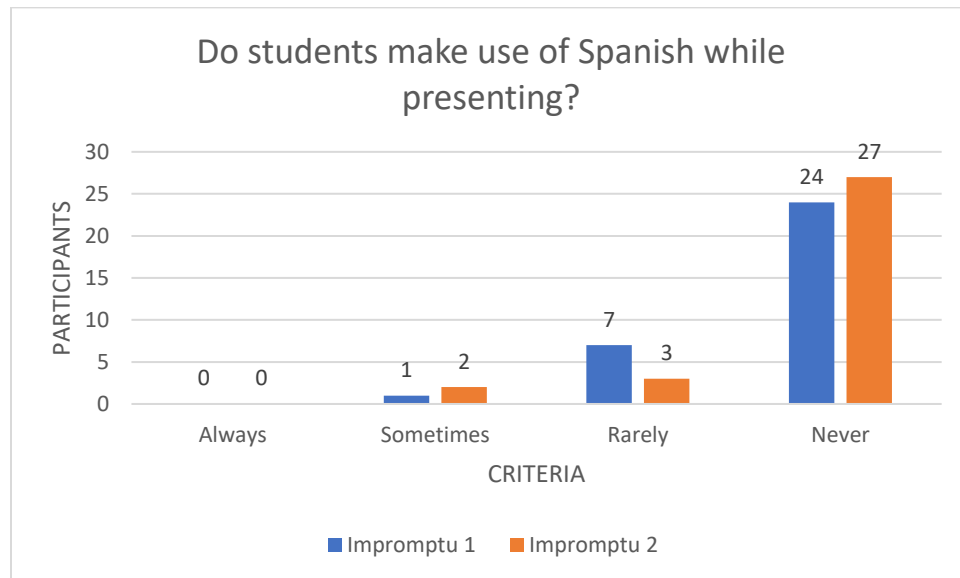**Figure 11.** Do students use diverse vocabulary? – Impromptu Speech II

Source: Data taken from the pre-test and post-test applied to 32 students at CEIC during October 2023 and December 2023

As illustrated in Figure 11, blue represents the results from the first impromptu speech applied to participants in October 2023 before the implementation of ChatGPT-3.5, while orange represents the results from the second impromptu speech applied to participants in December 2023 after the implementation of ChatGPT-3.5. The analysis of the results obtained in the first impromptu speech showing the diversity of vocabulary used by participants of the study during the first impromptu speech is shown in Figure 2.

Regarding the data collected in the second impromptu speech, the results reveal that 22 students, accounting for 52% of the data, consistently used different vocabulary throughout the speech while 9 students, representing 28% of the data, used different words but not consistently. In contrast, 1 student, representing 3% of the data, used only a limited range of words related to the class content.

These findings suggest a noticeable difference in the vocabulary used among participants from the first to the second impromptu speech. The percentage of students consistently using diverse vocabulary increased significantly, from 19% to 52%. Moreover, fewer students used different words inconsistently. There was also a decrease in the percentage of students using limited vocabulary related to the topics of the class, dropping from 31% to 3%. In the second spontaneous speech, any number of students did not use any vocabulary related to class topics. Overall, these findings suggest that there was an improvement in vocabulary skills among the participants from the first to the second impromptu speech.

Figure 12. Do students make use of Spanish while presenting? - Impromptu Speech II
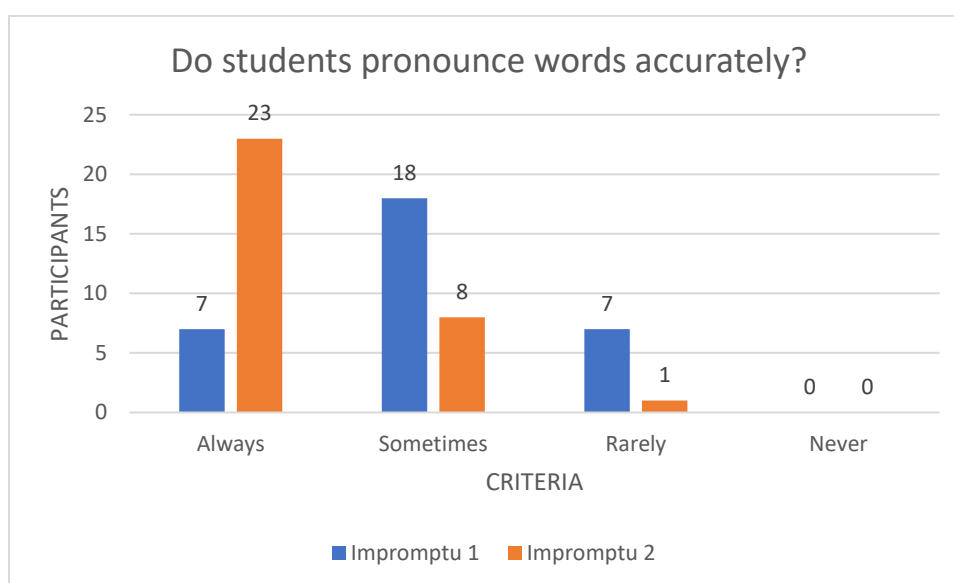

Source: Data taken from the pre-test and post-test applied to 32 students at CEIC during October 2023 and December 2023

As illustrated in figure 12, blue represents the results from the first impromptu speech applied to participants in October 2023 before the implementation of ChatGPT-3.5, while orange represents the results from the second impromptu speech applied to participants in December 2023 after the implementation of ChatGPT-3.5. The analysis of the results obtained in the first impromptu speech showing how often participants of the study relied on Spanish during the first impromptu speech are shown in figure 3.

Regarding the data collected in the second impromptu speech, the results reveal that two students, accounting for 6% of the data, sporadically relied on Spanish in some parts of the speech, whereas three students, representing 10% of the data, rarely used Spanish. Additionally, a significant majority of 24 students, representing 84% of the data, did not feel the necessity to incorporate Spanish during their impromptu speeches. These findings suggest that the majority of students do not feel the need to rely on Spanish during a spontaneous speech. In

both cases, most participants did not feel the need to rely on Spanish during their spontaneous speeches, with a consistent 75% to 84% of students not incorporating Spanish. Additionally, the percentage of students who sporadically or rarely used Spanish remained relatively low and did not show a substantial change between the two speeches. Therefore, it can be concluded that there was no notable improvement or difference in the reliance on Spanish between the first and second impromptu speeches.

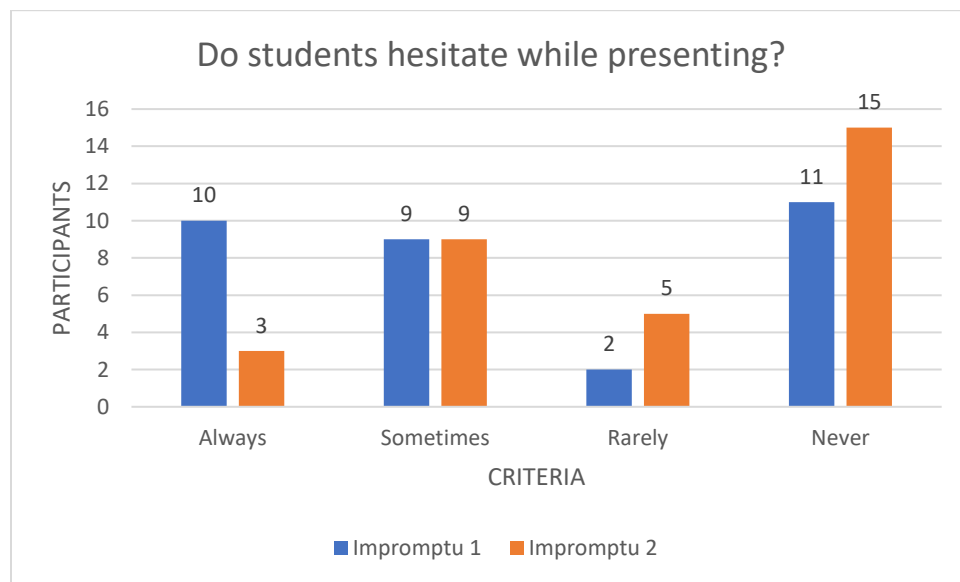**Figure 13.** Do students pronounce words accurately? - Impromptu Speech II

Source: Data taken from the pre-test and post-test applied to 32 students at CEIC during October 2023 and December 2023

As illustrated in Figure 13, blue represents the results from the first impromptu speech applied to participants in October 2023 before the implementation of ChatGPT-3.5, while orange represents the results from the second impromptu speech applied to participants in December 2023 after the implementation of ChatGPT-3.5. The analysis of the results obtained in the first impromptu speech showing how often participants pronounce words accurately during the first impromptu speech are shown in figure 4.

Regarding the data collected in the second impromptu speech, the results reveal that 23 students, accounting for 72% of the data, consistently pronounced words accurately during the whole speech, whereas 8 students, representing 25% of the data, mispronounced certain words. On the other hand, one student, accounting for 3% of the data, encountered difficulties in pronouncing words. These findings suggest that there was a significant improvement in pronunciation among participants from the first to the second impromptu speech. The percentage of students consistently pronouncing words accurately increased notably, from 22% to 72%. Additionally, there was a decrease in the percentage of students mispronouncing words, from 56% to 25%, and in the percentage of students encountering difficulties in pronunciation, from 22% to 3%. Overall, these findings suggest that there was a remarkable improvement in pronunciation among the participants from the first to the second impromptu speech.

Figure 14. Do students hesitate while presenting? - Impromptu Speech II
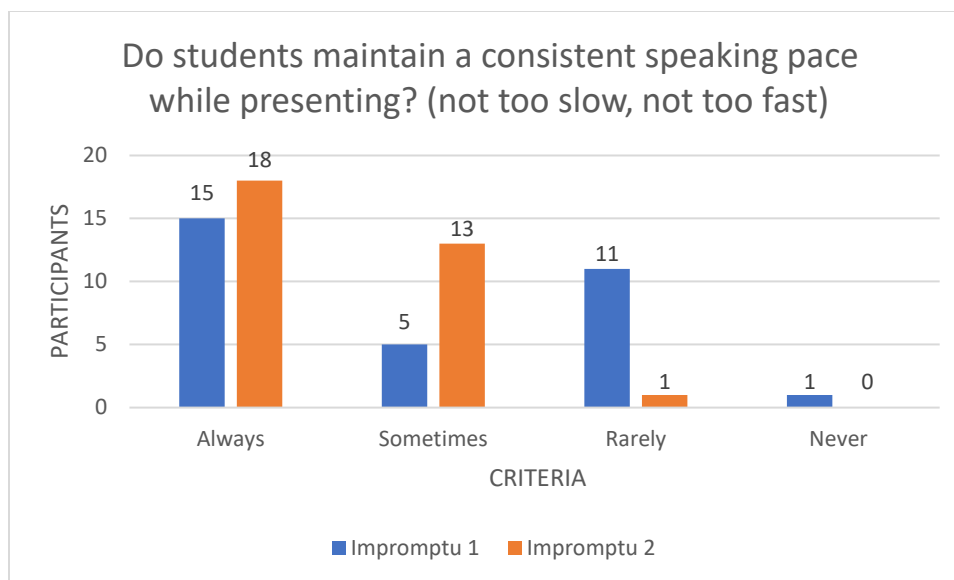

Source: Data taken from the pre-test and post-test applied to 32 students at CEIC during October 2023 and December 2023

As illustrated in figure 14, blue represents the results from the first impromptu speech applied to participants in October 2023 before the implementation of ChatGPT-3.5, while orange represents the results from the second impromptu speech applied to participants in December 2023 after the implementation of ChatGPT-3.5. The analysis of the results obtained in the first impromptu speech showing how often participants of the study hesitate during the first impromptu speech are shown in figure 5.

Regarding the data collected in the second impromptu speech, the results reveal that three students, accounting for 9% of the data, consistently hesitated during the speech. Similarly, nine students, representing 28% of the data, hesitated on some occasions. On the other hand, five students, representing 16% of the data, rarely hesitate during their impromptu speeches. Finally, 15 learners, accounting for 47% of the data, did not hesitate while presenting. These findings suggest that there was an improvement in hesitation among participants from the first to the second impromptu speech. The percentage of students who consistently hesitated decreased significantly from 31% to 9%, while the percentage of students who did not hesitate increased from 35% to 47%. Additionally, there was an increase in the percentage of students who rarely hesitated, from 6% to 16%. However, the percentage of students who hesitated on some occasions remained the same at 28%. Overall, while there is room for improvement, these findings suggest an improvement in hesitation among the participants from the first to the second impromptu speech, particularly in terms of reducing consistent hesitation and increasing the number of students who did not hesitate while presenting.

Figure 15. Do students maintain a consistent speaking pace while presenting? (not too slow, not too fast) – Impromptu Speech II

Do students maintain a consistent speaking pace while presenting? (not too slow, not too fast)
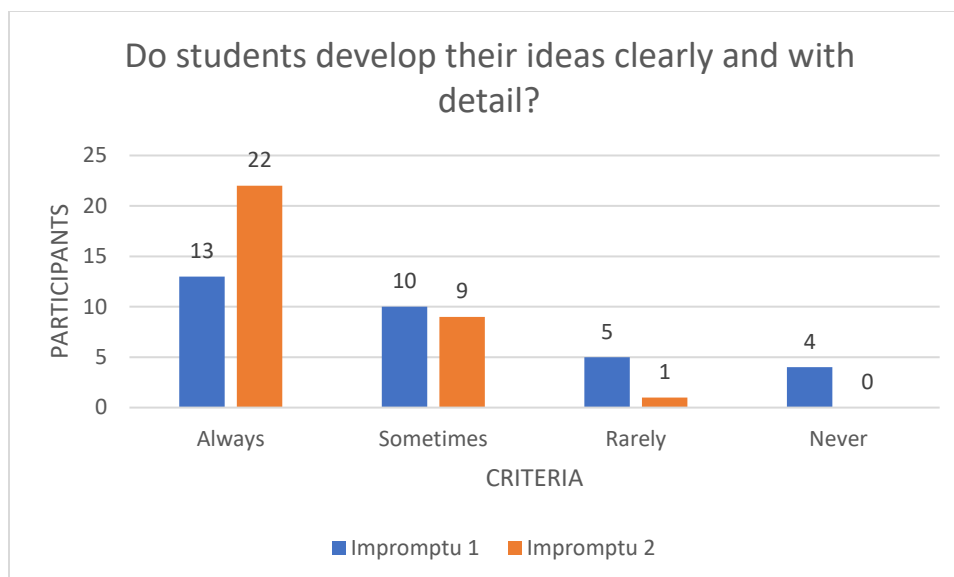
Source: Data taken from the pre-test and post-test applied to 32 students at CEIC during October 2023 and December 2023

As illustrated in Figure 15, blue represents the results from the first impromptu speech applied to participants in October 2023 before the implementation of ChatGPT-3.5, while orange represents the results from the second impromptu speech applied to participants in December 2023 after the implementation of ChatGPT-3.5. The analysis of the results obtained in the first impromptu speech showing how often participants of the study maintain a consistent speaking pace during the first impromptu speech is shown in Figure 6.

Regarding the data collected in the second impromptu speech, the results reveal that 15 students, accounting for 47% of the data, consistently maintain the fluency of their speech. during the speech. Similarly, 13 students, representing 41% of the data, reduced the consistency of their speech on some occasions. On the other hand, 1 student, representing 3% of the data, changed the consistency of their speech on several occasions. Overall, while there is room for improvement, these findings suggest an improvement in fluency, particularly in terms of reducing the inconsistencies in speech.

Figure 16. Do students develop their ideas clearly and with detail? – Impromptu Speech II
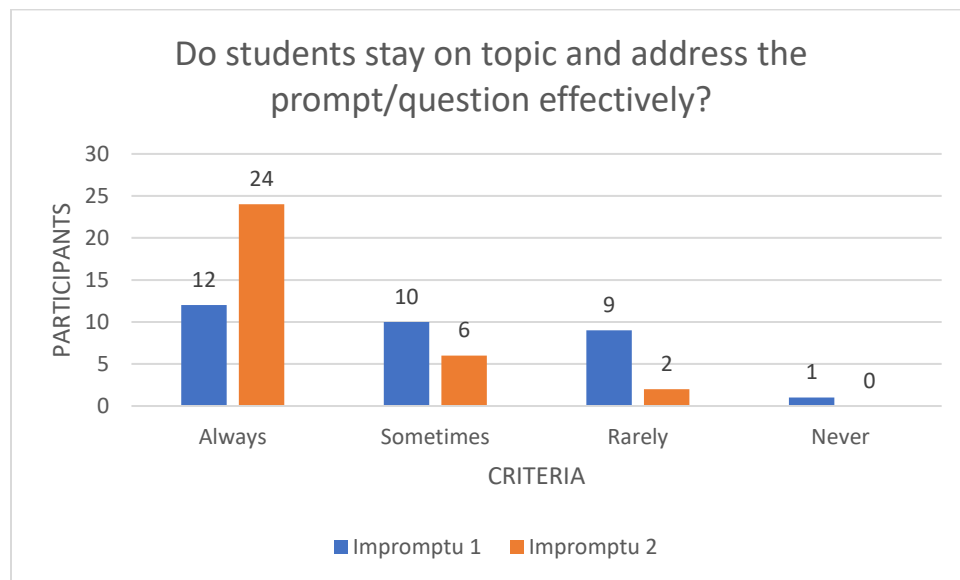
Source: Data taken from the pre-test and post-test applied to 32 students at CEIC during October 2023 and December 2023

As illustrated in figure 16, blue represents the results from the first impromptu speech applied to participants in October 2023 before the implementation of ChatGPT-3.5, while orange represents the results from the second impromptu speech applied to participants in December 2023 after the implementation of ChatGPT-3.5. The analysis of the results obtained in the first impromptu speech showing the clearness with which participants of the study develop the first impromptu speech are shown in figure 7.

Regarding the data collected in the second impromptu speech, the results reveal that 22 students, accounting for 69% of the data, consistently articulated ideas clearly and with detail during the speech. Similarly, nine learners, representing 29% of the data, developed ideas clearly but lacked detail in their explanations. On the other hand, one participant, representing 3% of the data, had trouble expressing ideas clearly and providing enough detail during their impromptu speeches. These findings suggest that there was a significant improvement in the development of ideas among participants from the first to the second impromptu speech. The percentage of students who consistently articulated ideas clearly and with detail increased from

41% to 69%. Additionally, there was a decrease in the percentage of students who had trouble expressing ideas clearly and providing enough detail, from 16% to 3%. Although the percentage of students who developed ideas clearly but lacked detail remained similar, the overall result suggests an improvement in the development of ideas and details.

Figure 17. Do students stay on topic and address the prompt/question effectively? – Impromptu Speech II

Source: Data taken from the pre-test and post-test applied to 32 students at CEIC during October 2023 and December 2023

As illustrated in Figure 17, blue represents the results from the first impromptu speech applied to participants in October 2023 before the implementation of ChatGPT-3.5, while orange represents the results from the second impromptu speech applied to participants in December 2023 after the implementation of ChatGPT-3.5. The analysis of the results obtained in the first impromptu speech showing the effectiveness of participants of the study to adhere to the assigned topic and to accurately address the prompt during the first impromptu speech are shown in figure 8.

Regarding the data collected in the second impromptu speech, the results reveal that 24 students, accounting for 75% of the data, stayed focused on the topic during the speech. Similarly, 6 learners, representing 19% of the data, developed ideas accurately but went off topic sometimes. On the other hand, two participants, representing 6% of the data, found it challenging to stay on topic during their impromptu speeches.

These findings suggest that there was a significant improvement in the effectiveness of participants from the first to the second impromptu speech to adhere to the assigned topic and to address it properly. The percentage of students who stayed focused on the topic increased notably from 38% to 75%, indicating a substantial improvement. Additionally, there was a decrease in the percentage of students who went off-topic or found it challenging to stay on topic. Overall, these findings suggest that there was an improvement in the effectiveness of students to adhere to the assigned topic and accurately address the prompt from the first to the second impromptu speech.

Figure 18. Do students adhere to the time limit during their speeches? – Impromptu Speech II
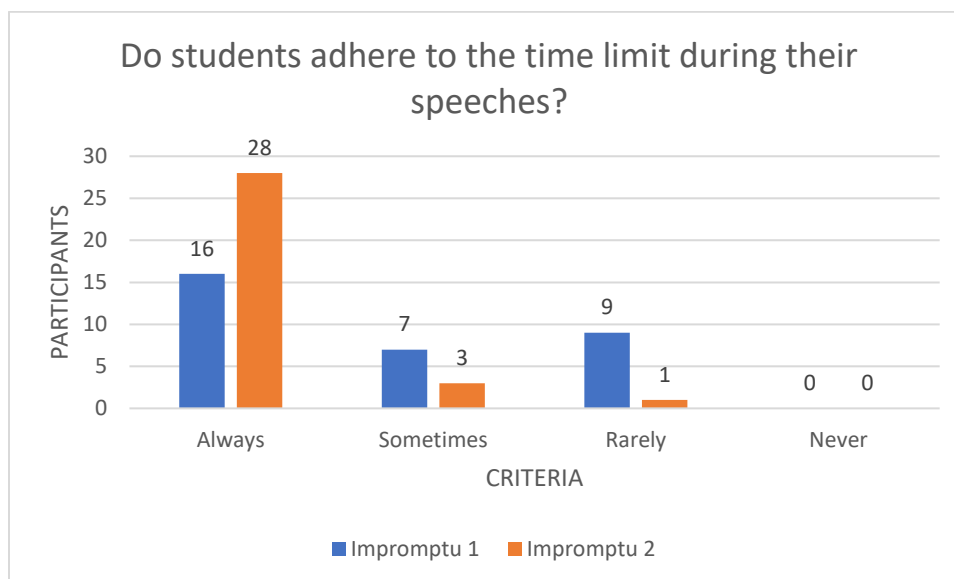

Source: Data taken from the pre-test and post-test applied to 32 students at CEIC during October 2023 and December 2023

As illustrated in Figure 18, blue represents the results from the first impromptu speech applied to participants in October 2023 before the implementation of ChatGPT-3.5, while orange represents the results from the second impromptu speech applied to participants in December 2023 after the implementation of ChatGPT-3.5. The analysis of the results obtained in the first impromptu speech showing the effectiveness of participants of the study to adhere to the assigned time limit during the first impromptu speech are shown in figure 9.

Regarding the data collected in the second impromptu speech, the results reveal that 28 students, accounting for 88% of the data, adhered precisely to the time limit during the speech. On the other hand, three learners, representing 9% of the data, were close to completing the time assigned. Similarly, one participant, representing 3% of the data, found challenging to complete their impromptu speeches within the allowed time. These findings suggest that there was a significant improvement in the time management among participants from the first to the second impromptu speech. The percentage of students who adhered precisely to the time limit increased notably from 50% to 88%. Additionally, there was a decrease in the percentage of students who were close to completing the time assigned or found it challenging to complete their speeches within the allowed time.

4.3. Questionnaire

To explore the acceptance range of CEIC students regarding the use of a four-week plan with ChatGPT-3.5 to improve their fluency and accuracy during impromptu speeches, a questionnaire was applied. It contained nine close-ended questions and one open-ended question. The questionnaire was done in class. Questions were related to the experience of using ChatGPT-3.5 for four. The results from this instrument are shown in figures from 20 to 31.

Figure 19. How often did you use ChatGPT-3.5 during the four-week plan to engage in conversations based on the topics studied in class?

How often did you use ChatGPT-3.5 during the four-week plan to engage in conversations based on the topics studied in class?
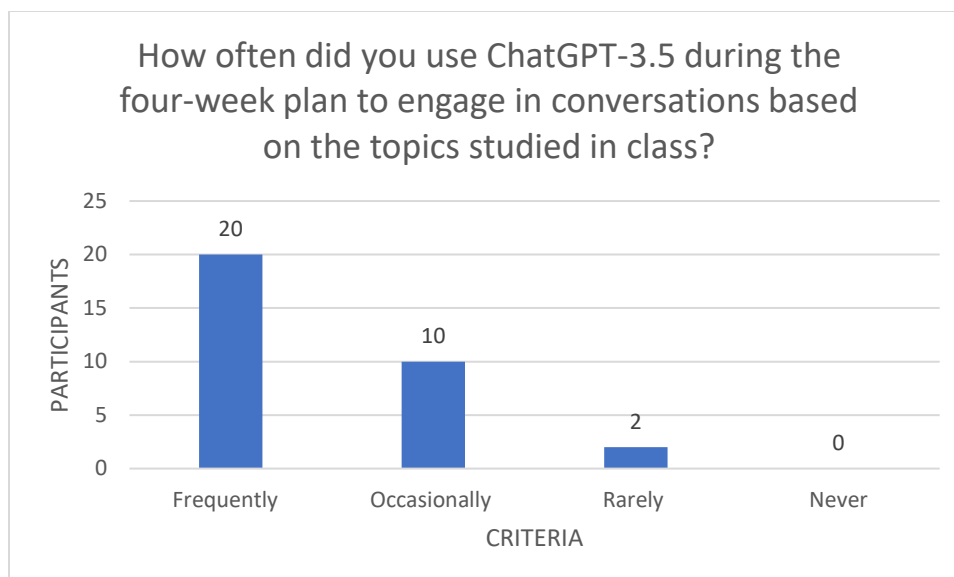
Source: Data taken from the Questionnaire applied to 32 students at CEIC during December 2023.

Figure 19 illustrates the frequency with which participants of the study used ChatGPT-3.5 during the four-week plan. The collected data reveals distinct patterns in participants' engagement with the chat. Sixty-three percent of the participants, corresponding to 20 students, frequently engaged in conversations with ChatGPT-3.5, using it consistently three or more times a week. A group of 10 students, accounting for 31% of the data, used the chat a little bit less frequently. These participants demonstrated a moderate level of involvement with ChatGPT-3.5, indicating a consistent usage of the chat twice a week, which is slightly less frequent compared to the first group. Finally, 2 students demonstrated a minimal engagement with the chat, using it only once a week, this corresponds to 6% of the data collected.

Figure 20. How often did you use ChatGPT-3.5 during the four-week plan to engage in conversations based on the topics studied in class?

How helpful was ChatGPT-3.5 in providing feedback and suggestions during your conversations?
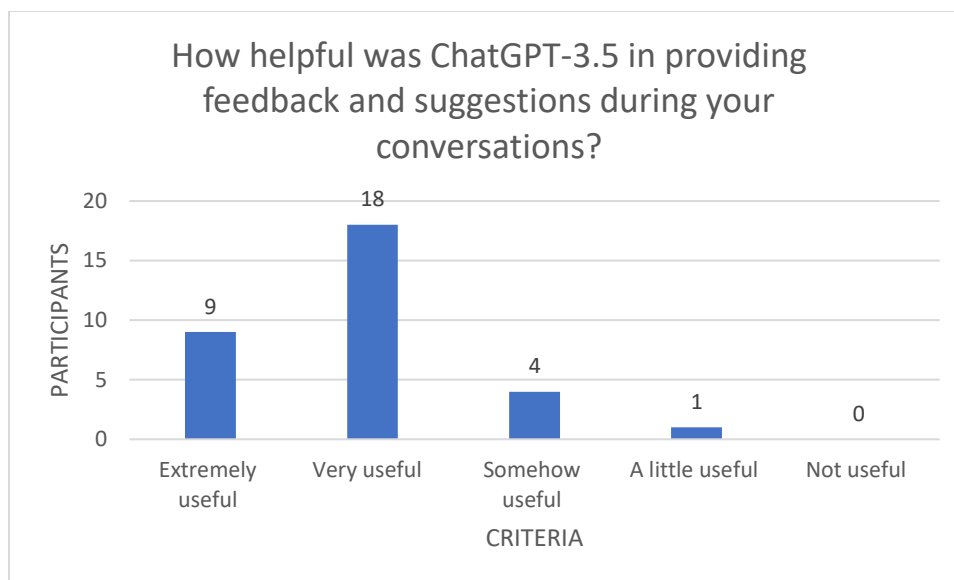
Source: Data taken from the Questionnaire applied to 32 students at CEIC during December 2023.

Figure 20 shows the general perception of participants of the study regarding the usefulness of ChatGPT-3.5 in offering feedback and suggestions during the four-week plan. The collected data reveals that most participants find ChatGPT-3.5 to be a valuable tool for providing feedback and suggestions during conversations, with a total of 27 participants perceiving the chat extremely useful or very useful in this regard. This represents 84% of the data collected. Similarly, 4 participants, accounting for 13% of the data, perceive the chat somewhat useful, acknowledging its contribution to feedback and suggestions, but with some reservations. One person, representing 3% of the data, expressed disagreement with the rest of participants, finding the chat just a little useful to give feedback and suggestions during conversations. No participant found ChatGPT-3.5 useless to offer feedback or suggestions.

Figure 21. Did using ChatGPT-3.5 to practice conversations based on the topics studied in class make you feel more confident and prepared for the final impromptu speech?
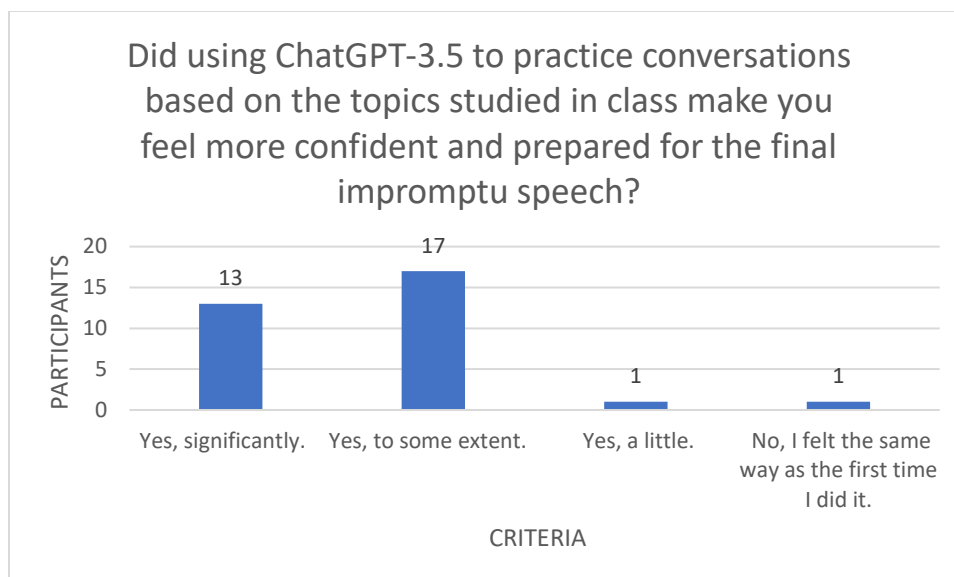
Source: Data taken from the Questionnaire applied to 32 students at CEIC during December 2023.

Figure 21 provides a general perception of participant's view regarding the confidence given by ChatGPT-3.5 in the final impromptu speech. The collected data reveals that the majority of participants perceived a significant improvement in confidence in the last impromptu speech, with 13 participants finding a significant improvement in their confidence level and 17 students finding an improvement to a certain extent. This shows a favorable inclination towards the efficacy of ChatGPT-3.5 in boosting confidence in students, with 94 % of responses supporting this view. Contrary to them, 1 participant, accounting for 3% of the data, felt only a little more confident compared to the first impromptu, and 1 other participant felt exactly the same way.

Figure 22. How confident do you feel about your fluency and grammar skills after using ChatGPT-3.5?
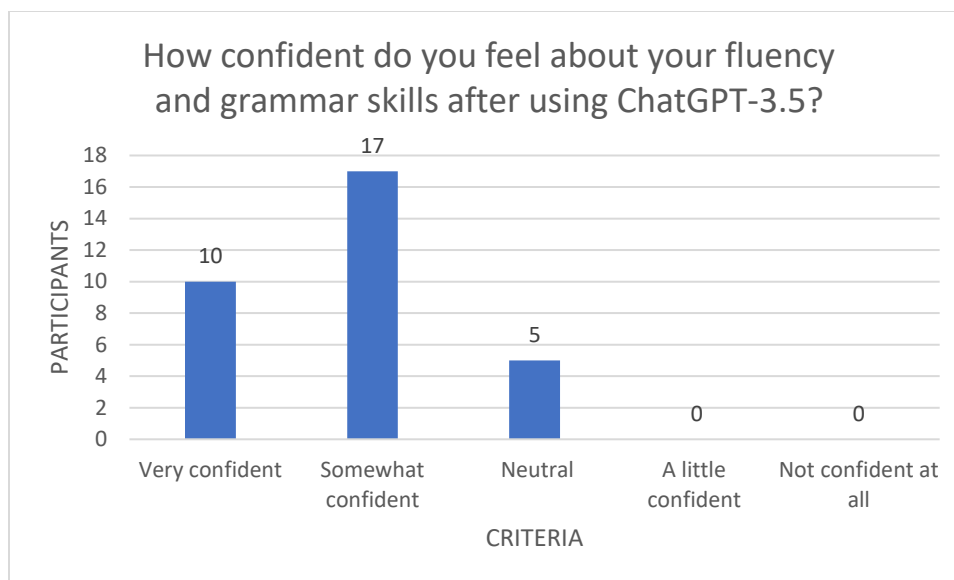
How confident do you feel about your fluency and grammar skills after using ChatGPT-3.5?

Source: Data taken from the Questionnaire applied to 32 students at CEIC during December 2023.

Figure 22 illustrates an overview of participants' views regarding the improvement of their fluency and accuracy after using ChatGPT-3.5. The collected data shows that the majority of participants reported feeling confident about their fluency and grammar skills after engaging with the chat, with 27 participants feeling very confident or somewhat confident. This indicates a strong inclination towards the effectiveness of ChatGPT-3.5 in enhancing students' skills, with 84% of responses supporting this view. Additionally, 5 participants remained neutral, accounting for 16% of the data. None of the participants of the study expressed a negative viewpoint on this matter.

Figure 23. Did using ChatGPT-3.5 help you increase your vocabulary related to the topics studied in class?

Did using ChatGPT-3.5 help you increase your vocabulary related to the topics studied in class?
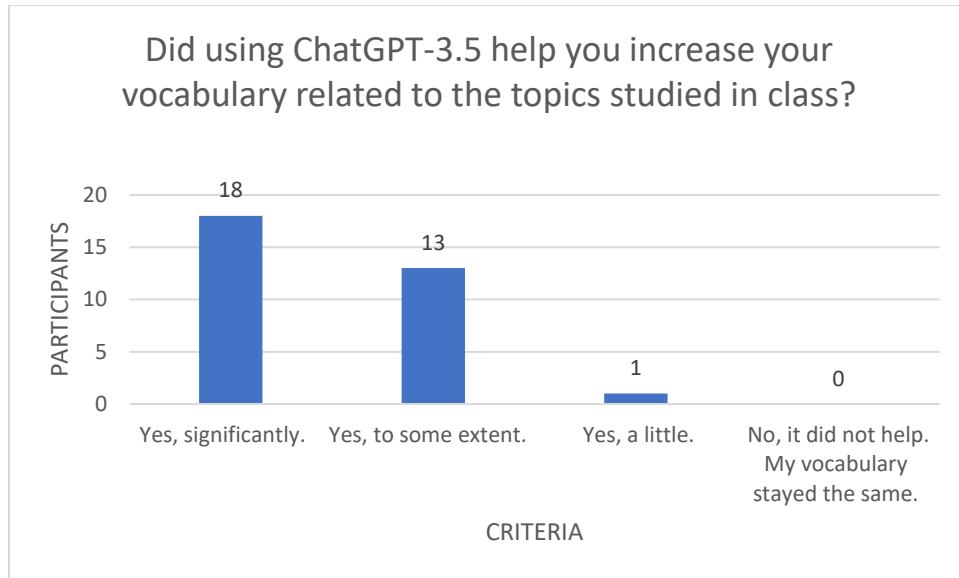
Source: Data taken from the Questionnaire applied to 32 students at CEIC during December 2023.

Figure 23 illustrates an overview of participants' views regarding the improvement of their vocabulary related to topics studied in class after using ChatGPT-3.5. The collected data shows that nearly all participants perceived some level of improvement in their vocabulary after engaging with the chat, with 31 participants expressing a significant or moderate improvement. This suggests a positive inclination towards the efficacy of ChatGPT-3.5 in enriching students' vocabulary, with 97% of responses supporting this view. Only 1 participant expressed minimal improvement in their vocabulary, accounting for 3% of the data. None of the participants of the study expressed a negative viewpoint on this matter.
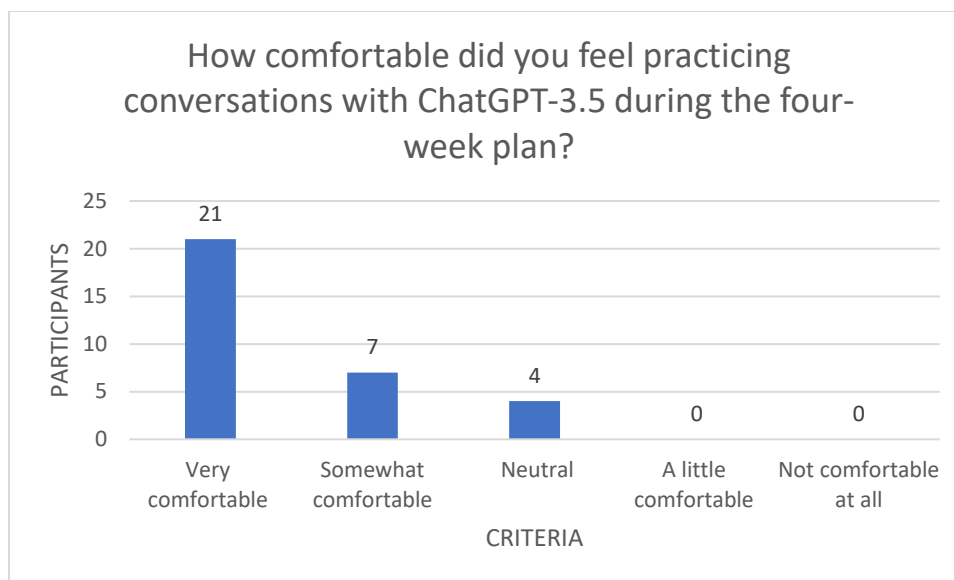
Figure 24. How comfortable did you feel practicing conversations with ChatGPT-3.5 during the four-week plan?

How comfortable did you feel practicing conversations with ChatGPT-3.5 during the four-week plan?

Source: Data taken from the Questionnaire applied to 32 students at CEIC during December 2023.

Figure 24 illustrates how comfortable participants felt during their interactions with ChatGPT-3.5 during the four-week plan. The collected data reveals that the majority of participants felt either very comfortable or somewhat comfortable engaging with the chat, with 28 participants expressing a positive view, representing 88% of the data collected. In addition, 4 participants remained neutral, accounting for the remaining 12% of the data. None of the participants of the study expressed a negative discomfort during their interactions with ChatGPT-3.5.

Figure 25. Do you think ChatGPT-3.5 was beneficial for improving your fluency and accuracy during the final impromptu speech?

Do you think ChatGPT-3.5 was beneficial for improving your fluency and accuracy during the final impromptu speech?
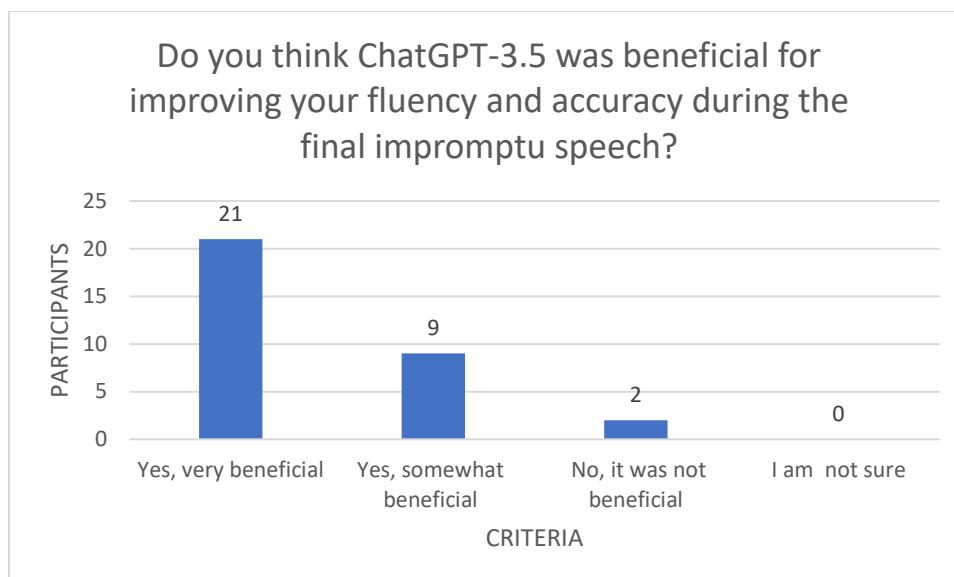
Source: Data taken from the Questionnaire applied to 32 students at CEIC during December 2023.

Figure 25 provides an overview of participants' perspectives on the benefits of ChatGPT-3.5 in improving fluency and accuracy. The collected data shows that 30 participants found the chat to be beneficial in improving students' language skills. This suggests a positive perception of the effectiveness of ChatGPT-3.5, with 94% of responses supporting this view. On the contrary, 2 participants held a negative perspective on the benefits of the chat, accounting for 6% of the collected data.

Figure 26. Would you recommend using ChatGPT-3.5 as a pedagogical tool to other EFL students to improve their oral expression skills?

Would you recommend using ChatGPT-3.5 as a pedagogical tool to other EFL students to improve their oral expression skills?
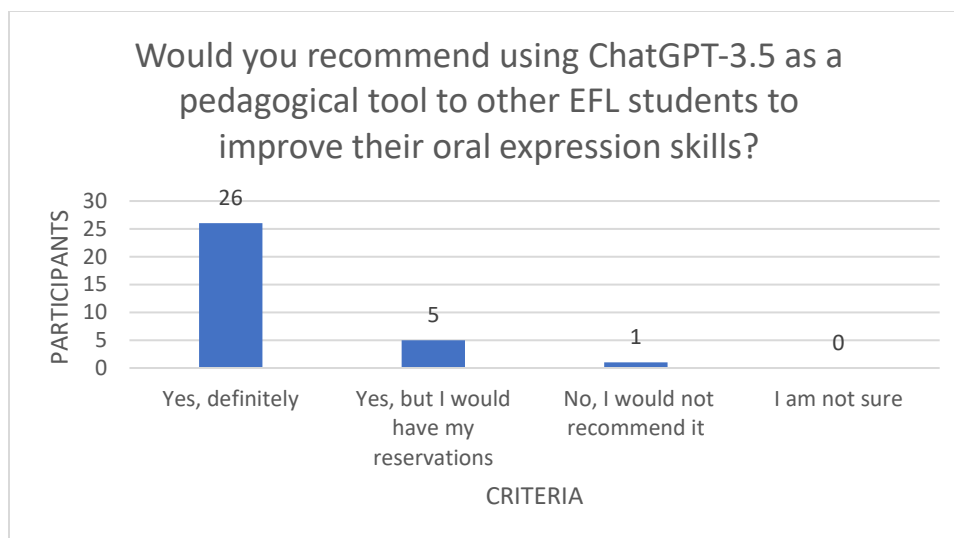
Source: Data taken from the Questionnaire applied to 32 students at CEIC during December 2023.

Figure 26 illustrates the willingness of participants to recommend the usage of ChatGPT-3.5 to other English as a Foreign Learners to improve their oral skills. The collected data shows that nearly all participants would recommend using this tool as a pedagogical tool, with 26 participants being sure to recommend the chat and 5 participants recommending it with minor reservations. This suggests a positive perception of the effectiveness of ChatGPT-3.5 as a pedagogical tool in the EFL classroom, with 97% of participants supporting this view. Only 1 participant differed from the rest of the answers expressing that they would not recommend using the chat, accounting for 3% of the data collected.

Figure 27. How likely are you to continue using ChatGPT-3.5 to keep working on your fluency and accuracy?
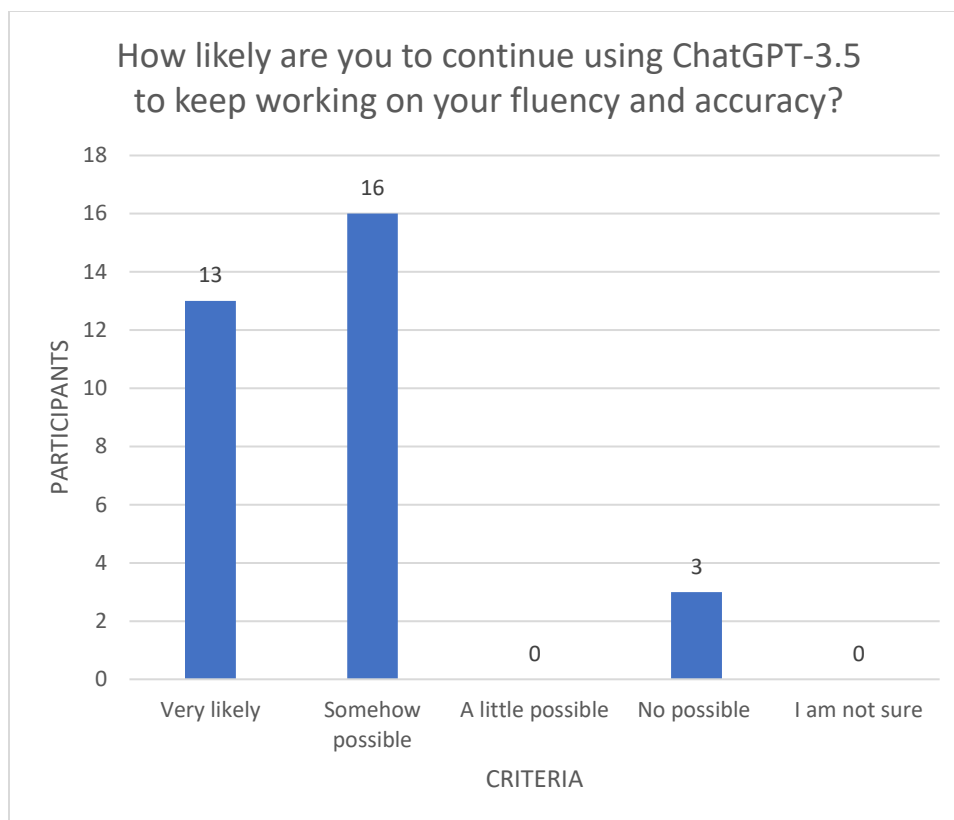
Source: Data taken from the Questionnaire applied to 32 students at CEIC during December 2023.

Figure 27 illustrates the participants' inclination to continue using ChatGPT-3.5 to improve their fluency and accuracy. The collected data shows a prevailing willingness among participants to keep using this tool as a pedagogical tool, with 29 participants expressing a strong desire to continue its usage while 16 considered it a possible option. This suggests a positive recognition of ChatGPT-3.5's efficacy in the EFL classroom, with 91% of participants seeing its value. Contrary to them, 3 participants did not perceive the continuation of using ChatGPT-3.5 as a viable option.

Table 5. What aspects of the four-week plan with ChatGPT-3.5 do you think could be improved to increase its effectiveness?
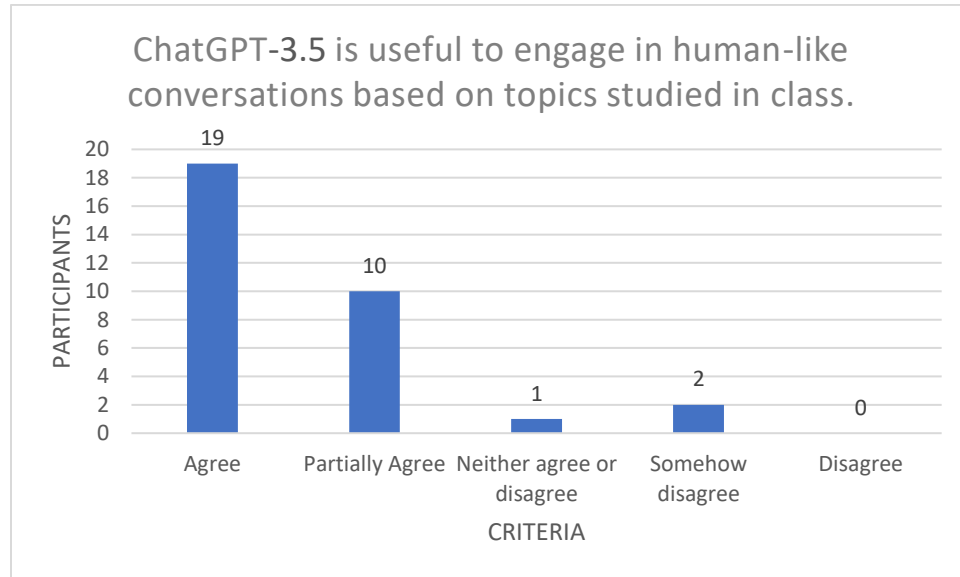
	Number of Participants
More and different topics of conversation are needed	13
No changes are needed	13
Changing the prompt	3
Different	3

Participants' responses in question 9 can be categorized into four different groups as shown in Table 5. As observed there, thirteen participants expressed their desire to have more topics available to discuss with ChatGPT-3.5 other than the ones related to topics studied in class. In addition, an equal number of participants found the dynamic of using ChatGPT-3.5 over a four-week period, three times a week, was practical and beneficial for them; therefore, they were satisfied with the current frequency and duration of the interactions. On the other hand, three participants suggested modifying the initial prompt given to them at the beginning of the four weeks to enhance the precision of ChatGPT-3.5 in terms of error corrections. Finally, another group of three participants proposed different ideas from the rest of the answers, suggesting daily usage of the chat, integration of chat sessions into the classroom activities rather than extracurricular use, and a statistics summary of the progress at the end of the four-week period.

4.4. Likert Scale

To complement the results of the study and to explore the acceptance range of using ChatGPT-3.5 as a pedagogical tool, a Likert scale was used. Learners had to rate statements among "agree" "partially agree" "neither agree nor disagree" "somehow disagree" and "disagree" based on their experiences using ChatGPT-3.5 for four weeks. The results from the 8 items of the Likert Scale are shown in figures from 29 to 38.

Figure 28. ChatGPT-3.5 is useful to engage in human-like conversations based on topics studied in class.

Source: Data taken from the Likert Scale applied to 32 students at CEIC during December 2023.

Figure 28 illustrates the general perception of participants of the study regarding the utility of ChatGPT-3.5 in engaging in human-like conversations based on topics covered in class. The collected data reveals a prevailing inclination towards the positive acceptance of ChatGPT-3.5's capabilities to facilitate conversations similar to the ones they could have with another person, with the majority of participants expressing agreement with the statement proposed in the instrument. A total of 29 participants either fully agree or partially agree with the notion, suggesting a widespread acknowledgment of ChatGPT-3.5's potential in simulating human-like conversations. Only 1 participant did not have a definitive stance, while 2 individuals expressed some level of disagreement with the statement, showing an opposite opinion to the other participants.

Figure 29. ChatGPT-3.5 is helpful to practice before an impromptu speech.
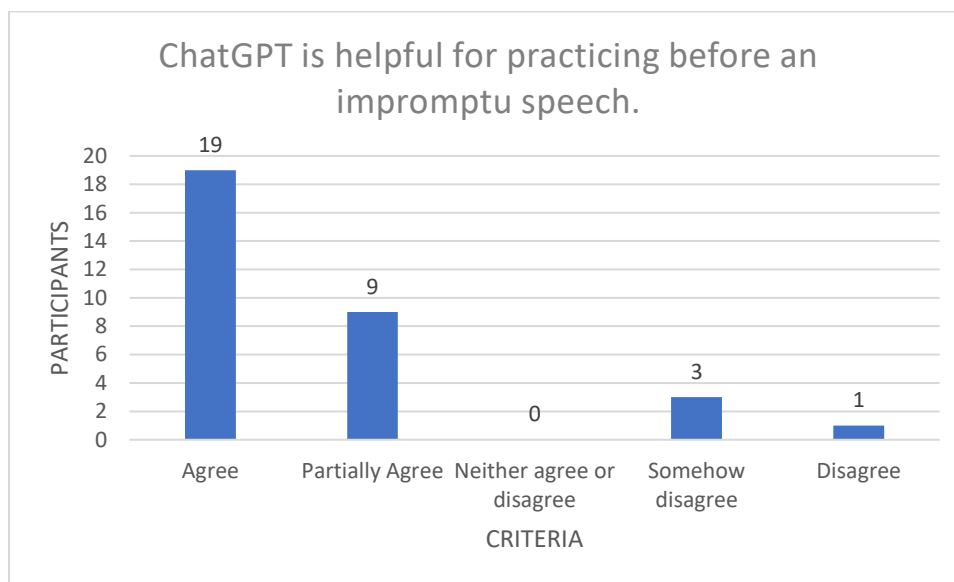
ChatGPT is helpful for practicing before an impromptu speech.

Source: Data taken from the Likert Scale applied to 32 students at CEIC during December 2023.

Moving to Figure 29, the general perception of participants of the study regarding the usefulness of ChatGPT-3.5 as a preparatory tool before an impromptu speech is shown. The data shows that a majority of participants indicate their acceptance of ChatGPT-3.5 as a valuable tool for practicing before an impromptu speech with a total of 28 participants who fully agree or partially agree with the statement provided in the Likert Scale. However, it is also possible to observe that 3 participants have their reservations towards the utility of ChatGPT-3.5 for the purpose of preparing before a spontaneous speech, and 1 person suggests that the chat is not useful for this matter.

Figure 30. Previously practicing with ChatGPT-3.5 makes me feel more confident before presenting an impromptu speech.

Previously practicing with ChatGPT makes me feel more confident before presenting an impromptu speech.
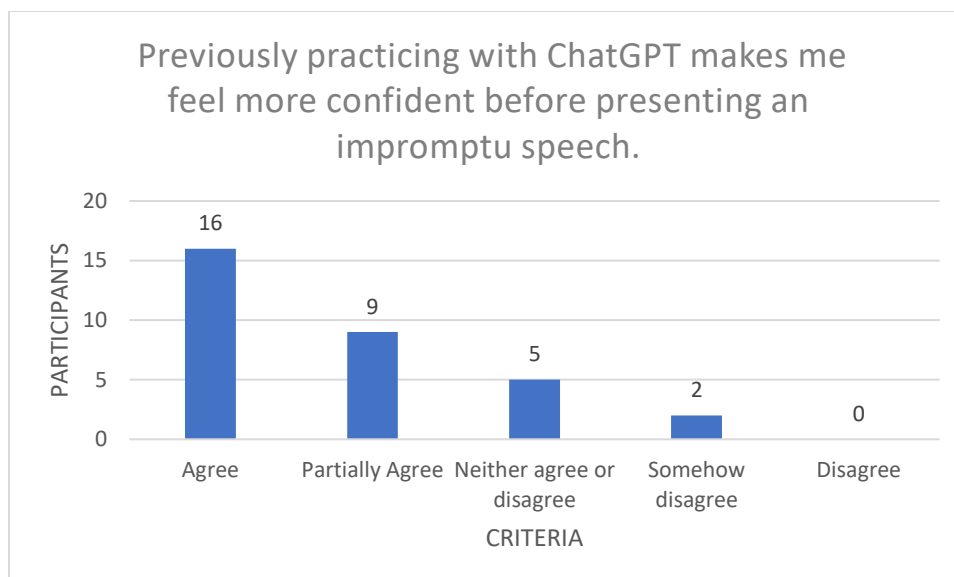
Source: Data taken from the Likert Scale applied to 32 students at CEIC during December 2023.

Figure 30 provides a general perception of the participant's view regarding the confidence given by ChatGPT-3.5 through prior interactions before an impromptu speech. The collected data reveals that 25 participants perceive an increase in confidence after engaging with ChatGPT-3.5 before a spontaneous speech, with 16 participants fully agreeing with the statement and 9 participants partially agreeing with it. This shows a favorable inclination towards the efficacy of ChatGPT-3.5 in boosting confidence in students, with 78% of responses supporting this view. On the other hand, 5 participants, accounting for 16% of the data, do not have a definitive stance regarding the statement, and 2 individuals, constituting 6% of the data collected, express reservations regarding its efficacy.

Figure 31. ChatGPT-3.5 has helped me improve my fluency during impromptu speeches.
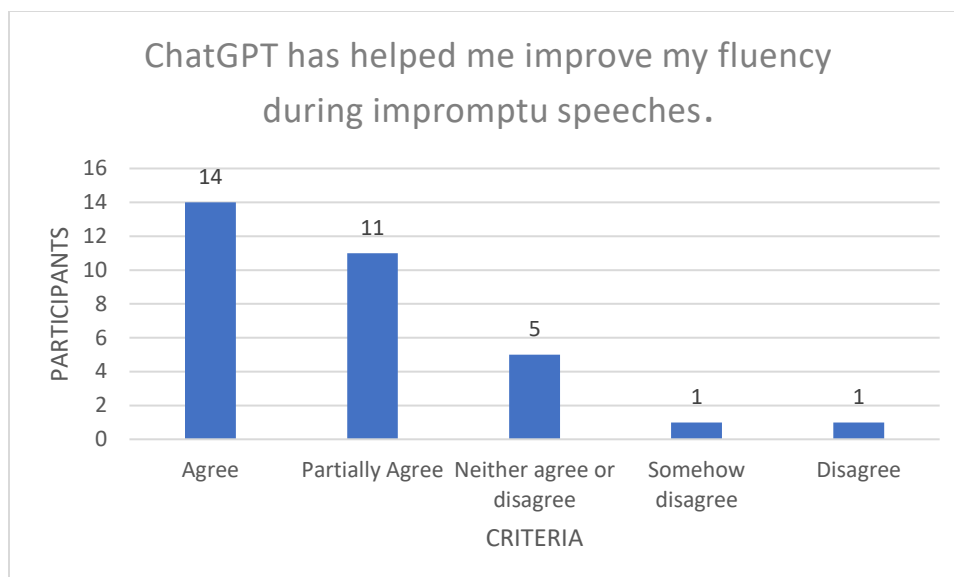
Source: Data taken from the Likert Scale applied to 32 students at CEIC during December 2023.

Figure 31 illustrates the general perception of participants of the study regarding the usefulness of ChatGPT-3.5 in helping students improve their fluency during impromptu speeches. The collected data reveals that 25 participants fully agree or partially agree with ChatGPT-3.5 's capabilities to help learners improve fluency during impromptu speeches. The collected data reveals that 25 participants perceive an improvement in their fluency after engaging with ChatGPT-3.5 before a spontaneous speech, with 14 participants fully agreeing with the statement and 11 participants partially agreeing with it. This shows a favorable inclination towards the efficacy of ChatGPT-3.5 in boosting fluency in students, with 78% of responses supporting this view. On the other hand, 5 participants, accounting for 16% of the data, do not have a definitive stance regarding the statement, and 2 individuals, constituting 6% of the data collected, express reservations regarding its efficacy.
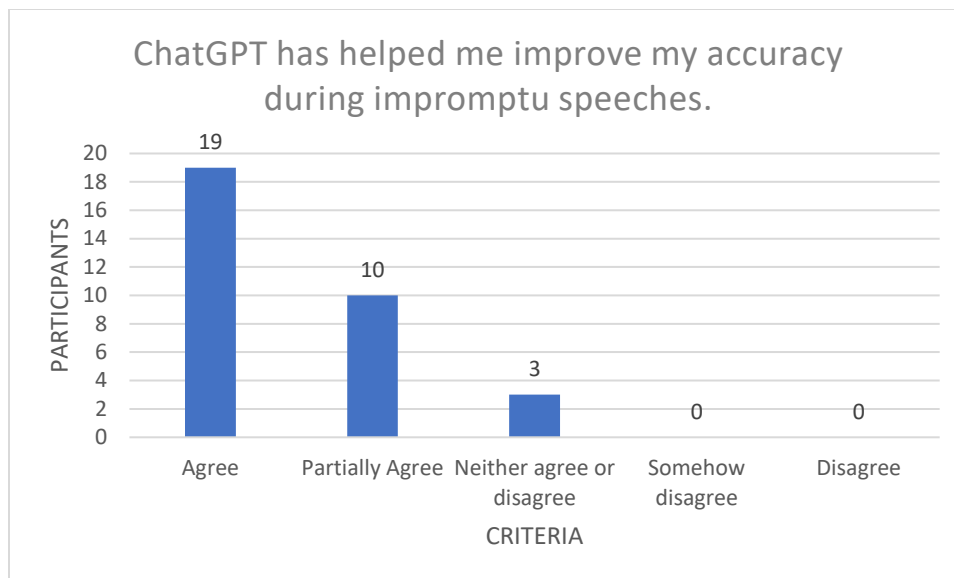
Figure 32. ChatGPT-3.5 has helped me improve my accuracy during impromptu speeches.

Source: Data taken from the Likert Scale applied to 32 students at CEIC during December 2023.

Figure 32 shows the general perception of participants of the study regarding the usefulness of ChatGPT-3.5 in helping students improve their accuracy during impromptu speeches. The collected data reveals that 29 participants fully agree or partially agree with ChatGPT-3.5's capabilities to help learners improve accuracy during impromptu speeches, with 19 participants fully agreeing with the statement and 10 participants partially agreeing with it. This shows a favorable inclination towards the efficacy of ChatGPT-3.5 in boosting accuracy in students, with 81% of responses supporting this view. Opposite to this, 3 participants, accounting for 9% of the data, do not have a definitive stance regarding the statement. Any student disagrees with the statement.

Figure 33. I find ChatGPT-3.5 to be useful for impromptu speech practice.

I find ChatGPT to be useful for impromptu speech practice.

Source: Data taken from the Likert Scale applied to 32 students at CEIC during December 2023.

Figure 34 illustrates the general perception of participants of the study regarding the usefulness of ChatGPT-3.5 in helping students prepare before impromptu speeches. The collected data reveals that 28 participants fully agree or partially agree with ChatGPT-3.5's capabilities to help learners practice before a spontaneous speech, with 20 participants fully agreeing with the statement and 8 participants partially agreeing with it. This shows a favorable inclination towards the efficacy of ChatGPT-3.5 in helping students practice before an impromptu, with 88% of responses supporting this view. On the contrary, 2 participants, accounting for 6% of the data, do not have a definitive stance regarding the statement, and 2 individuals, constituting 6% of the data collected, express reservations regarding its efficacy.
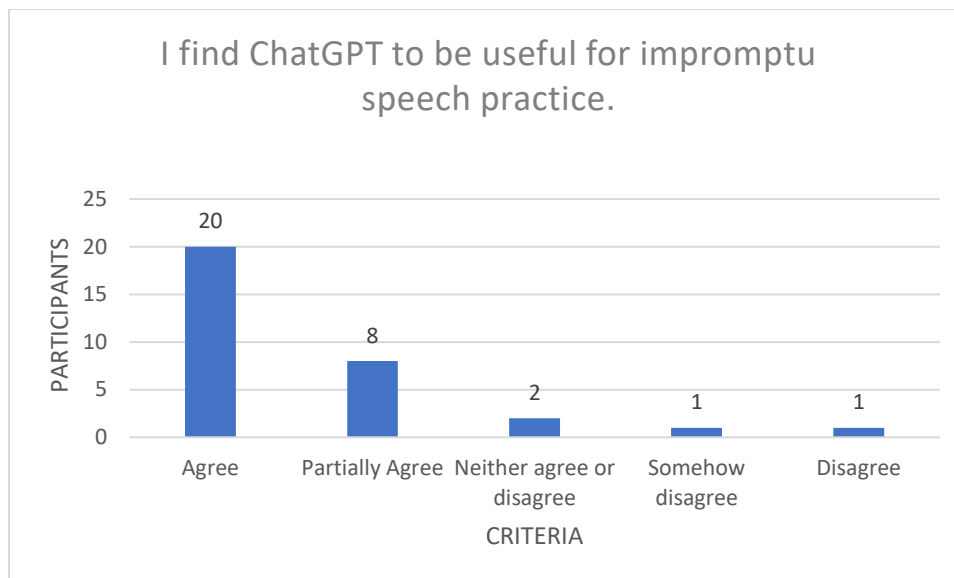
Figure 35. I consider ChatGPT-3.5 a great conversational partner.
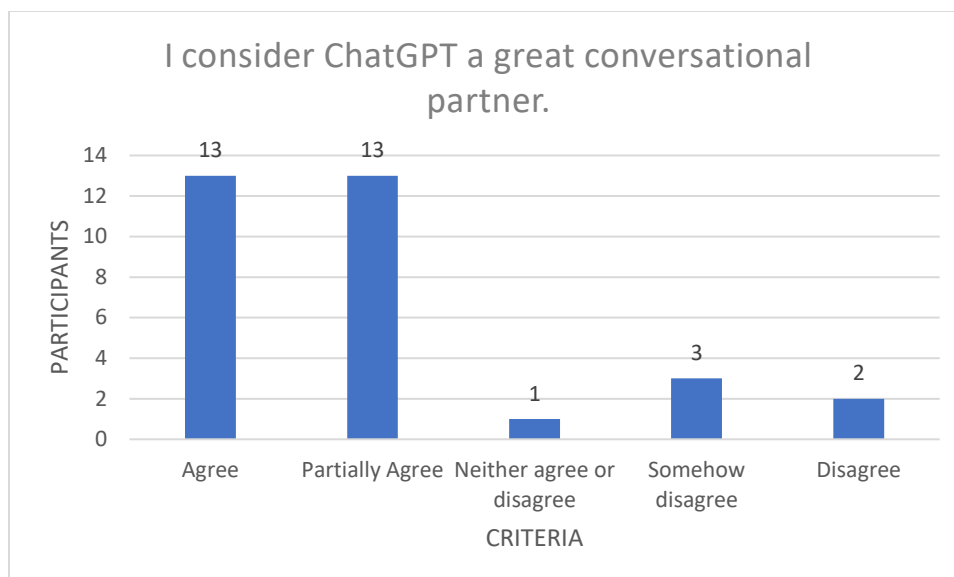
Source: Data taken from the Likert Scale applied to 32 students at CEIC during December 2023.

Figure 35 illustrates the general perception of participants of the study regarding the usefulness of ChatGPT-3.5 in being a conversation partner. The collected data reveals that 26 participants fully agree or partially agree with ChatGPT-3.5's capabilities to be a great conversation partner before a spontaneous speech, with 13 participants fully agreeing with the statement and 13 participants partially agreeing with it. This shows a favorable inclination towards the efficacy of ChatGPT-3.5 in helping students practice before an impromptu, with 82% of responses supporting this view. On the other hand, 1 participant, accounting for 3% of the data, does not have a definitive stance regarding the statement, and 5 individuals, constituting a 15% of the data collected, express reservations regarding its efficacy, with 3 participants somehow disagreeing with the statement and 2 disagreeing.

Figure 36. I would recommend the use of ChatGPT-3.5 for impromptu speech practice to other EFL students.

I would recommend the use of ChatGPT for impromptu speech practice to other EFL students.
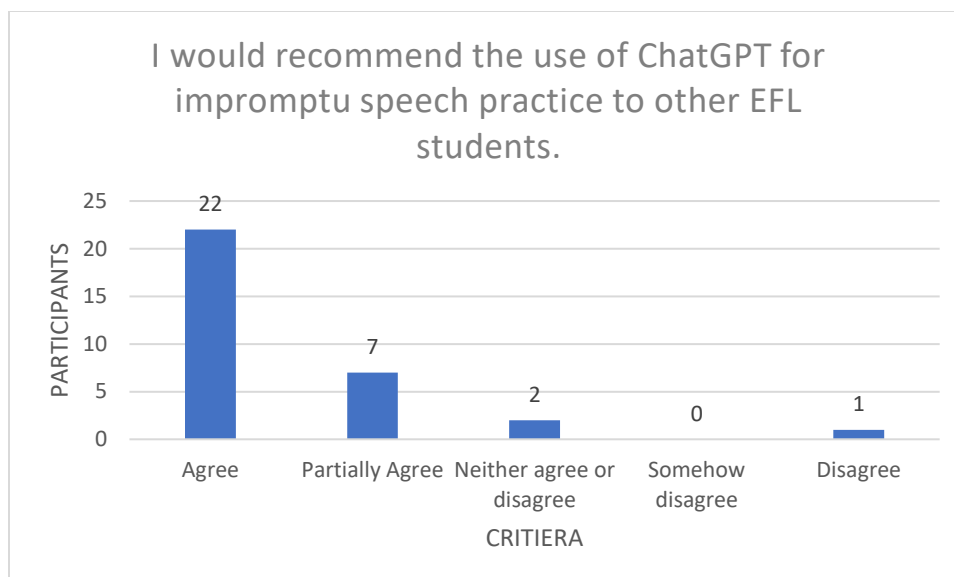
Source: Data taken from the Likert Scale applied to 32 students at CEIC during December 2023.

Figure 36 shows the general perception of participants of the study in recommending ChatGPT-3.5 for impromptu speech practice to other EFL students. The collected data reveals that 29 participants fully agree or partially agree with ChatGPT-3.5's capabilities to practice before an spontaneous speech, with 22 participants fully agreeing with the statement and 7 participants partially agreeing with it. This shows a favorable inclination towards the efficacy of ChatGPT-3.5 in helping students practice before an impromptu, with 91% of responses supporting this view. On the other hand, 2 participants, accounting for 6% of the data, do not have a definitive stance regarding the statement, and 1 individual, constituting 3% of the data collected, expresses reservations regarding its efficacy.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions

This chapter presents the key findings from the investigation based on the four specific objectives proposed in Chapter I and the analysis and interpretation of the data gathered in Chapter IV. These conclusions offer valuable insights into the effectiveness of implementing ChatGPT-3.5 as a pedagogical tool to improve the fluency and accuracy of EFL students. The researcher also includes recommendations for future investigations related to this field.

Providing students with regular exposure to the target language, authentic interactions, and opportunities to use the language in real-life contexts is fundamental to acquiring proficiency in a foreign language. Without these types of interactions, EFL students often struggle to develop fluency and accuracy. As authors like Kim (2017) and Hosni 2014 point out, EFL learners have difficulties in building competence in speaking due to the limited exposure and opportunities they have to practice the language. (225, 23). However, recent technological advancements, particularly in artificial intelligence, have revolutionized language learning possibilities. Now, students have tools that help them boost their speaking skills and gain confidence in using the target language; for instance, chatbots. These chatbots "can mimic human conversation using natural and ordinary language" (Hea-Suk, 2021, p. 225)., which allows EFL learners to engage in authentic conversations and interact with the target language. On the other hand, activities such as impromptu speeches have proven to be useful in helping students spontaneously use the language they are learning.

This study aimed to determine the effectiveness of using ChatGPT-3.5 to improve the fluency and accuracy of 32 EFL students at CEIC through a pre-test checklist, a post-test checklist, a questionnaire, and a Likert Scale. Overall, the results were positive, demonstrating that students' speaking abilities were enhanced in the second impromptu speech after interacting with ChatGPT-3.5 for four weeks.

Raba 2017, as cited in Hea-Suk (2021), explains that mastering speaking in a foreign language requires the integration of grammar, vocabulary, pronunciation, and fluency during the learning process. (p. 713). However, the results obtained from the data collected from the first impromptu speech showed that grammar, vocabulary, and pronunciation were the skills in which learners demonstrated weaker performance, suggesting a need among CEIC students to improve these aspects. Regarding fluency, it was observed that half of the students demonstrated a need to polish their speaking pace to some extent. Tavakoli (2018) relates fluency to students' proficiency levels, emphasizing its role in facilitating effective communication, without fluency, communication may suffer impediments. In addition, half of the students struggled to complete the assigned time limit for their speeches, suggesting how deficiencies in other skills could interfere with students' ability to complete the speech time.

On the other hand, although a majority of students articulated ideas clearly, some faced difficulties in providing sufficient detail. This might be related to the fact that a majority of students in the group did not have sufficient vocabulary or grammatical structures to express their ideas. Some students also found it challenging to stay focused on the assigned topic, indicating the necessity for improvement. Surprisingly, contrary to teacher expectations, few students felt the necessity to incorporate Spanish into their impromptu speeches.

However, the results from the subsequent speech showed that there was a noticeable difference in the vocabulary and pronunciation among participants from the first to the second impromptu speech. The percentage of students consistently using diverse vocabulary increased significantly, from 19% to 69%. Thanks to the opportunity that chatbots bring to practice a variety of vocabulary (Kim, 2017, p. 231), ChatGPT-3.5 proves to be very practical in the improvement of this skill. There was also a decrease in the percentage of students using limited vocabulary related to class topics, dropping from 31% to 3% in the second spontaneous speech. Considering that the topics for the conversations with ChatGPT-3.5 were based on the contents from the curriculum taught at CEIC regular courses, it can be concluded that constant

engagement with the vocabulary learned in class facilitates its integration into spontaneous speech among students. Regarding pronunciation, students consistently pronouncing words accurately increased notably, from 22% to 72%. Hea-Suk (2021) explains that practicing pronunciation while chatting with a chatbot can help students improve their linguistic skills (p. 716). In regards to grammar, students consistently using correct grammatical structures increased from 22% to 47%, indicating progress. However, the percentage of students making certain grammatical mistakes remained unchanged at 50%. Overall, while there is room for improvement, the results suggest a positive trend toward better grammar skills after the implementation of ChatGPT-3.5. These results coincide with Božić (2023) explanation about the effectiveness of using ChatGPT-3.5 to improve learners' grammar, pronunciation, and vocabulary. (p. 3).

Another significant improvement was the effectiveness of participants in adhering to the assigned topic and addressing it properly. The percentage of students who stayed focused on the topic increased notably from 38% to 75%, indicating a substantial improvement. Students also developed ideas better in the second speech. Based on the overall results, it is possible to conclude that the improvement in vocabulary, grammar, and pronunciation also helped in the development of ideas, which resulted in 28 out of the 32 students finishing the assigned time speech during the post-test.

On the other hand, there was a consistent level of fluency and hesitation among participants between the pre-test and post-test. This suggests that while ChatGPT-3.5 may offer benefits in other aspects of language learning, its impact on speech fluency and hesitation, as assessed through impromptu speeches, may not be immediately noticeable based on the current data. Considering that students from level 2 and level 5 were part of the participants of this study, it is significant to reference the findings found by Hea-Suk (2021) who did not find any considerable improvement in fluency in low-level students after practicing with AI while they

noticed improvement in intermediate students. (p. 731). Thus, a division of participants per level could be considered for future research.

In addition, to determine students' perceptions toward ChatGPT-3.5 efficacy, the researcher implemented a questionnaire with eight close-ended questions and one open-ended question. Based on the participants' responses, it was found that ChatGPT-3.5 helped students boost their vocabulary, grammar, and fluency and helped them feel more confident and prepared before the presentation of the second impromptu speech. The collected data showed that 97% of the participants perceived some level of improvement in their vocabulary after engaging with the chat. This was evident during the second impromptu speech performance, suggesting a positive inclination towards the efficacy of ChatGPT-3.5 in enriching students' vocabulary. In addition, 94% of the participants perceived an improvement in their confidence levels after engaging in conversations with ChatGPT-3.5. They expressed feeling more prepared to present an impromptu speech after their interactions with the chat. This can be reflected in students finishing the time assigned to them for the second speech. Augustini (2023) attributes this boost in confidence to the fact that "through interactions with ChatGPT, students can practice their language skills in a safe and non-judgmental environment. This can help students build confidence in their language abilities and develop the willingness to take risks in their learning." p.930. In the same way, 88% of the participants felt either very comfortable or somewhat comfortable engaging with the chat. None of the participants of the study expressed a negative discomfort during their interactions with ChatGPT-3.5. This positive outcome can be attributed to the personalized interactions with the chat.

Furthermore, the collected data revealed that most participants found ChatGPT-3.5 to be a valuable tool for providing feedback and suggestions during their conversation; therefore, nearly all participants would recommend using ChatGPT-3.5 as a pedagogical tool and would

continue using it. This suggests a positive perception of the effectiveness of ChatGPT-3.5 as a pedagogical tool in the EFL classroom.

Even though some participants expressed a desire to have more topics available to discuss with ChatGPT-3.5 other than the ones related to topics studied in class, it is worth noting that the constant interaction with the vocabulary and grammatical structures from the class topics is believed to be the key in student's improvement.

Finally, most participants acknowledged the potential of ChatGPT-3.5 as a pedagogical tool in EFL classrooms. Participants highlighted its usefulness in keeping conversations similar to the ones they might encounter in real-life scenarios and its ability to act as a conversation partner, which aligns with the principles of the Communicative Language Approach. They also pointed out how the chat can be used as a preparatory tool before impromptu speeches, and how it helped them to improve their fluency and accuracy. Therefore, most students would recommend using the chat to other EFL students.

In this study, the efficacy of integrating ChatGPT-3.5, a conversational AI, into EFL learning to improve EFL accuracy and fluency during impromptu speeches was evaluated considering the principles of the Communicative Language Approach. The results demonstrate a substantial improvement in students' accuracy and overall speaking language skills after using ChatGPT-3.5 for four weeks. Vocabulary, grammar, and pronunciation were the skills that improved the most from the first to the second impromptu speech. This denotes ChatGPT-3.5's efficacy in enhancing core language skills. Moreover, the chat's ability to engage in human-like conversations, act as a conversational partner, and help students boost their confidence while presenting impromptu speeches was particularly appreciated. However, there was not a significant improvement in student's fluency.

ChatGPT-3.5 strongly aligns with the principles of the Communicative Language Approach, serving as a conversation partner for students in and outside of the classroom and giving learners the opportunity to engage in authentic conversations, practice grammatical topics studied in class, and receive immediate and personalized feedback. In conclusion, the findings of this study demonstrate that ChatGPT-3.5 has a significant and positive impact on student's improvement of speaking skills and can be a promising tool in the field of language education. "Future advancements and refinements in AI technology are expected to further enhance ChatGPT-3.5's capabilities, making it an indispensable asset in language learning, ultimately fostering proficient language learners." (Kostka and Toncelli, p. 7, 2023).

5.2. Recommendations

"The emergence of ChatGPT and AI tools will undeniably continue to impact change in education in ways we cannot yet foresee. (p. Kostka and Toncelli, p. 14, 2023). While this study demonstrates positive outcomes towards the implementation of ChatGPT-3.5 in the EFL classroom, three recommendations can be made. First, the current study was carried out for a period of 4 weeks, in which students had to interact with ChatGPT-3.5 three times a week for a minimum of 10 minutes. Exploring the long-term impact and more constant interactions with ChatGPT-3.5 can provide valuable insights into the effectiveness and benefits of the chat over time. However, it is necessary to take into account other factors like the individual dynamics of the participants of the study since not all learners might be willing to interact with the chat for more than four weeks or three times a week due to time constraints or personal preferences. Therefore, flexibility in scheduling and allowing for optional additional interactions with ChatGPT-3.5 could accommodate diverse learner needs and preferences while still providing opportunities for enhanced language practice. Second, the small sample size used in the study may limit the generalizability of the findings. Conducting a similar study with a larger sample size could enhance the statistical significance and enable more vigorous conclusions to be

drawn. Additionally, a larger sample size would facilitate subgroup analyses, allowing

researchers to identify potential variations in different proficiency levels, which can provide a

more comprehensive understanding of the chat's utility and the factors influencing its outcomes.

Finally, improvements and future advances in the field of AI technology are expected to happen

in the future, which might boost ChatGPT-3.5's capabilities to act as a conversation partner. It is

essential for future educators and institutions interested in the utilization of this technology to

constantly update themselves on the latest developments and advancements in the field to

effectively take advantage of ChatGPT-3.5 and integrate it seamlessly into educational settings.

CHAPTER VI

PROPOSAL

6.1. Name of the proposal

The proposal of "Integrating Artificial Intelligence into the EFL Classroom" emerges from the objectives and results found during the research: "Implementing ChatGPT-3.5 as a Pedagogical Tool to Improve EFL Students' Fluency and Accuracy During Impromptu Speeches at Centro de Estudios de Idiomas Conversacionales (CEIC) during the Third Quarter 2023."

6.2. Description

This proposal describes a mini project involving students from level 2, level 5, and level 13 at CEIC. Its main purpose is to integrate artificial intelligence into the process of developing proficiency in the English language. The length of this project is four weeks, during which students have the opportunity to engage in conversations with ChatGPT-3.5 three times a week. In the first week, students deliver an impromptu speech to see their current level of English. After the four weeks, they deliver an impromptu speech to demonstrate their learning over the time of the mini project. This proposal is an extra-curricular activity that enhances the work teachers and students are doing during regular class time.

Teachers from each level are in charge of their respective groups in order to follow the process closely and collect the conversations from students. Pupils are assigned topics based on the CEIC curriculum for their current level. Students at level 2 have topics related to places around town, movies, being sick, daily life, and parts of the house while learners at level 5 talk about department stores, nature, food, moving in, eating out, and technology. On the other hand, students at level 13 have topics related to short stories, fairy tales, legends, supernatural events, cultures around the world, natural wonders of the world, consumerism, globalization, and environmental issues.

During the impromptu speech, participants at level 2 have 30 seconds for preparation, where they can brainstorm ideas and write down keywords to guide themselves during the speech, and 2 minutes to present their impromptu speeches. Students at level 5 have the same

preparation time but minutes to present their impromptu speeches. Finally, students at level 13

have 30 seconds for preparation and 4 minutes to present their impromptu speeches.

For a better understanding of the topics to be developed in each group and the time for each

impromptu speech, the following table is presented:

Table 6. Topics for the impromptu speech and speech duration

Level	Impromptu Speech Topics	Preparation Time	Speech duration
2	Places around town Movies Being sick Daily life Parts of the house	30 seconds	2 minutes
5	Department stores Nature Food Moving in Eating out Technology	30 seconds	3 minutes
13	Short stories Fairy tales Legends Supernatural events Cultures around the world Natural wonders of the world Consumerism	30 seconds	5 minutes

	Globalization		
	Environmental issues		

The topics for each level are based on the contents from the curriculum taught at CEIC regular courses, and the distribution of the time is selected considering the participants' level.

6.3. Place to be Developed

This proposal is developed at Centro de Idiomas Conversacionales (CEIC) in Heredia, an institution born to give the opportunity of learning English to members of the community of Heredia. Their vision is to successfully position users in the national and international educational and professional spheres. Their mission is to benefit children, teenagers, young adults, and adults with high-quality language learning and economically accessible alternatives. All teachers aim to guide learners towards language acquisition through the Communicative Language Teaching (CLT) approach. Thirty-two students from this institution are the population for this project.

6.4. Organization

The researcher is part of the staff at Centro de Idiomas Conversacionales (CEIC), which makes it possible to do this project with the respective permissions from the institution.

6.5. Involved Population

The population considered for this project is 32 students from levels 2, 5, and 13 at CEIC. Students and teachers from these groups voluntarily agree to be part of this project, which will be carried out during the third quarter of 2023. This project will help students to boost their fluency and grammar through an innovative technological tool.

6.6. General and Specific Objectives

6.6.1. Proposal General Objective

- To enhance English language proficiency among students at Centro de Estudios de Idiomas Conversacionales (CEIC) by incorporating artificial intelligence, specifically ChatGPT-3.5, into their learning process.

6.6.2 Proposal Specific Objectives

- To provide students at CEIC with the opportunity to engage in conversational interactions with ChatGPT-3 to boost their proficiency levels.

- To determine the effectiveness of integrating artificial intelligence into the EFL classroom by evaluating students' performance in an impromptu speech at the end of the four-week project.

- To offer an extra-curricular activity that complements the regular English language curriculum and enhances the overall learning experience for both teachers and students at CEIC.

6.7. Chronogram of Activities

Figure 37. Chronogram of the activities to be carried out in the proposed project.

PROPOSAL CHRONOGRAM OCTOBER – DECEMBER 2023			
Week 1	Date	Activity	Time
Week 1	October 28th – November 4th	Impromptu speech Conversation #1 with ChatGPT-3.5 Conversation #2 with ChatGPT-3.5	Around 35 minutes per person

		Conversation #3 with ChatGPT-3.5	
Week 2	November 5th – November 14th	Conversation #3 with ChatGPT-3.5 Conversation #4 with ChatGPT-3.5 Conversation #5 with ChatGPT-3.5	Around 30 minutes
Week 3	November 12th November 18th	Conversation #6 with ChatGPT-3.5 Conversation #7 with ChatGPT-3.5 Conversation #8 with ChatGPT-3.5	Around 30 minutes
Week 4	November 19th November 25th	Conversation #9 with ChatGPT-3.5 Conversation #10 with ChatGPT-3.5 Conversation #11 with ChatGPT-3.5	Around 30 minutes
Week 5	December 2nd	Impromptu speech	Around 5 minutes per person

Through the previous figure, the researcher presents to the teachers in charge of the groups and to the institution the plan for the proposal to develop.

6.8. Necessary Budget for its implementation

To facilitate the development of this project, access to a cell phone or computer, along with internet connectivity, is indispensable. Fortunately, as all students possess one of these devices and an internet connection, no further financial investment is necessary. Additionally, active participation from both teachers and students during their free time is essential for the project's progression.

6.9. Suggested Bibliography

Hea-Suk, K., Cha, Y., & Na-Young, K. (2021). Effects of AI Chatbots on EFL Students'
    Communication Skills. Korean Journal of English Language and Linguistics, 21, 712-
    734. https://doi. 10.15738/kjell.21..202108.712

Kostka, I., & Toncelli, R. (2023). Exploring Applications of ChatGPT to English Language
    Teaching: Opportunities, Challenges, and Recommendations. *TESL-EJ, 27(3).*
    https://doi.org/10.55593/ej.27107int

REFERENCES

Al Hosni, S. (2014). Speaking Difficulties Encountered by Young EFL Learners. International

Journal on Studies in English Language and Literature (IJSELL). 2(6), 22-30. https:

//www.arcjournals.org/as a Second Language Learning Tool. Journal of Multimedia

Information System, 10(1), 79-88. https://doi.org/10.33851/JMIS.2023.10.1.79

Babulkar, H. (2020). Oriental University . https://What is impromptu speech. – Oriental

University (oulms.in)/

Ben Williamson, Felicitas Macgilchrist & John Potter (2023) Re-examining AI, automation and

datafication in education. Learning, Media and Technology, 48:1, 1-5, DOI:

10.1080/17439884.2023.2167830

Božić, V., (2013). Chat GPT and Education. https://doi. 10.13140/RG.2.2.18837.40168

Chen, X., Zou, D., Xie, H., & Cheng, G. (2021). Twenty Years of Personalized Language

Learning: Topic Modeling and Knowledge Mapping. Educational Technology & Society,

24 (1), 205-222. 205 ISSN 1436-4522 (online) and 1176-3647 (print).

Chinedu W., & Abejide A. (2021). Chatbots Applications in Education: A Systematic Review.

Computers and Education: Artificial Intelligence. https:

//www.sciencedirect.com/journal/computers-and-education-artificial-intelligence

Farrokhnia, M., Banihashem, S. K., Noroozi, O., & Wals, A. E. J. (2023): A SWOT Analysis of

ChatGPT: Implications for educational practice and research. Innovations in Education

and Teaching International, 1 – 15. https://doi.10.1080/14703297.2023.2195846

Grewal, D.S. (2014). A Critical Conceptual Analysis of Definitions of Artificial Intelligence as

Applicable to Computer Engineering. IOSR Journal of Computer Engineering, 16, 09-13.

Haristiani, N., & Danuwijaya, A. R. I. A. (2019). Gengobot: A Chatbot-based grammar

application on mobile instant messaging as language learning medium. Journal of

Engineering Science and Technology, 14(6), 3158–3173

Hea-Suk, K., Cha, Y., & Na-Young, K. (2021). Effects of AI Chatbots on EFL Students'

Communication Skills. Korean Journal of English Language and Linguistics, 21, 712-

734. https://doi. 10.15738/kjell.21..202108.712

Kim, N.K. (2017). Effects of Different Types of Chatbots on EFL Learners' Speaking

Competence and Learner Perception. Comparative Cultural Studie, 48, 223 – 252. https:

//www.kci.go.kr/

Koponen, M., & Riggenbach, H. (2000). Overview: Varying perspectives on fluency. In H.

Riggenbach (Ed.), Perspectives on fluency (pp. 5-24). Michigan: The University of

Michigan Press.

Kostka, I., & Toncelli, R. (2023). Exploring Applications of ChatGPT to English Language

Teaching: Opportunities, Challenges, and Recommendations. *TESL-EJ*, *27*(3).

https://doi.org/10.55593/ej.27107int

Nimit, W. (2012). Traditional Teaching Methods VS. CLT: A Study. Frontiers of Language and

Teaching. 3, 125-131. https: // (PDF) Traditional Teaching Methods vs. CLT: A Study |

IOLC Conference - Academia.edu

Pham, X., Pham, T., Nguyen, Q.M., Nguyen, T., & Cao, T.T. (2018). Chatbot as an Intelligent

Personal Assistant for Mobile Language Learning. Proceedings of the 2018 2nd

International Conference on Education and E-Learning.

Rebolledo, R. and F. González (2022). Exploring the Benefits and Challenges of AI-Language

Learning Tools. International Journal of Social Sciences and Humanities Invention 10

(01): 7569-7576, 2023 DOI: 10.18535/ijsshi/v10i01.02 ISSN: 2349-2031

Roos, S. (2018). Chatbots in Education: A Passing Trend or a Valuable Pedagogical Tool?

Department of Informatics and Media.

http://www.divaportal.org/smash/record.jsf?pid=diva2:1223692/

Sunyoung, K., Shim, J., & Shim J. (2023). A Study on the Utilization of OpenAI ChatGPT

Travaglioni, M. Antonella, P. Fabio, D.F., Raffaela, C. Giuseppina, P. (2019). Artificial Intelligence and Machine Learning Applications in Smart Production: Progress, Trends and Directions. doi:10.20944/preprints201912.0016.v1

Tuomi, I. (2018). The Impact of Artificial Intelligence on Learning, Teaching, and Education: Policies for the Future. Publications Office of the European Union. doi:10.2760/12297

Yuan, F., & Ellis, R. (2003). The effects of pre-task planning and on-line planning on fluency, complexity and accuracy in L2 monologic oral production. Applied Linguistics, 24(1), 1-27.

Álvarez, A. A. (2022, November 4). *Centro de estudios UNA enseña idiomas conversacionales a población.* https://www.unacomunica.una.ac.cr/index.php/noviembre-2022/4293-centro-de-estudios-una-capacita-poblacion-en-idiomas-conversacionales

Varela, J. T. (n.d.). Visión y Misión. https://www.literatura.una.ac.cr/index.php/vision-y-mision

ANNEXES

Appendix 1

EFL Students' Perception of the Implementation of ChatGPT-3.5 as a Pedagogical Tool to Improve Fluency and Accuracy During Impromptu Speeches

This research is carried out by Jazmín Campos, an English Teaching student from the Department of Education at Universidad Hispanoamericana, as part of her thesis. The study aims to explore the effectiveness of using ChatGPT-3.5, an innovative tool that uses Artificial Intelligence (AI) to simulate human-like conversations, to improve English as a Foreign Language (EFL) students' fluency and accuracy during impromptu speeches during the third quarter of 2023.

As part of the study, EFL students at Centro de Estudios de Idiomas Conversacionales (CEIC) will be requested to participate in the research. Their participation is fundamental to collecting valuable data that will later be analyzed to gain more insights into the effectiveness of implementing ChatGPT-3.5 as a pedagogical tool and identifying the benefits and limitations of this chat in education. In addition, their responses will help the study understand better the challenges faced by EFL students while achieving fluency and accuracy during impromptu speeches.

In order to participate in the study, participants have to complete four instruments, which include a pre-test and a post-test checklist, a questionnaire, and a Likert scale. The pre-test will assess the learner's current fluency and accuracy during impromptu speeches while the post-test will measure any improvements after the implementation of ChatGPT-3.5 as a pedagogical tool. The questionnaire and the Likert scale, on the other hand, will serve to determine students' levels of satisfaction and their perspectives on using ChatGPT-3.5 as a pedagogical tool. The questionnaire contains eight close-ended questions and one open-ended question. Students' honesty and thoughtful participation will be highly appreciated before the end of Decemberer 2023. All instruments will be completed during class lessons.

Participation in this study is completely voluntary, and all information provided will be treated with strict confidentiality. All responses will be anonymous, ensuring that the student's identity will remain confidential and that their individual responses cannot be linked to them in any way.

The researcher appreciates learners' contributions at CEIC and looks forward to a future where technology will be included in EFL classrooms to improve students' learning processes.

Sincerely,

Jazmín Campos

Universidad Hispanoamerica, Department of Education, Licenciatura in English Teaching

PART I – PRE-TEST

Objective: To assess EFL students' fluency and accuracy while developing oral tasks in an English lesson at CEIC.

Student's Name: _____ Date: _____

This pre-test was designed to be used before implementing ChatGPT with students. Every student gets one topic related to the class assigned randomly. They have 30 seconds for preparation and four minutes to present their impromptu speeches.

Item	Always	Sometimes	Rarely	Never
Do students use correct grammar structures?				
Do students use diverse vocabulary?				
Do students make use of Spanish while presenting?				
Do students pronounce words accurately?				
Do students hesitate while presenting?				
Do students maintain a consistent speaking pace while presenting? (not too slow, not too fast)				
Do students develop their ideas clearly and with details?				

Do students stay on topic and address the prompt/question effectively?				
Do students complete the time of the speech?				

PART II - QUESTIONNAIRE

Objective: To explore the acceptance range of EFL students regarding the use of a four-week plan with ChatGPT to improve their fluency and accuracy during impromptu speeches.

Student's Name: _____ Date: _____

This questionnaire was designed to explore the acceptance range of EFL students at CEIC regarding the use of a four-week plan using ChatGPT three times a week as a pedagogical tool to improve their fluency and accuracy during impromptu speeches. It contains nine close-ended questions and one open-ended question to be answered honestly. Participation in this questionnaire is very valuable and the data collected through it will be useful to evaluate the effectiveness of implementing ChatGPT as a pedagogical tool in EFL classrooms.

1. How frequently did you use ChatGPT-3.5 during the four-week plan to engage in conversations based on the topics studied in class?

   ☐ Very frequently (3 times a week or more)

   ☐ Frequently (2 times a week)

   ☐ Occasionally (1 time a week)

   ☐ Never (I did not use ChatGPT)

2. How helpful was ChatGPT-3.5 in providing feedback and suggestions during your conversations?

   ☐ Extremely helpful

   ☐ Very helpful

   ☐ Somehow helpful

☐ Slightly helpful

☐ Not helpful at all

3. Did using ChatGPT-3.5 to engage in previous conversations based on the topics studied in class make you feel more confident and prepared for the impromptu speeches?

☐ Yes, significantly.

☐ Yes, to some extent.

☐ Yes, a little.

☐ No, I felt the same way as before.

4. How confident do you feel in your fluency and accuracy during impromptu speeches after using ChatGPT-3.5?

☐ Very confident.

☐ Somewhat confident.

☐ Neutral.

☐ Not very confident.

☐ Not confident at all.

Did using ChatGPT-3.5 help you increase your vocabulary related to topics studied in class?

☐ Yes, significantly.

☐ Yes, to some extent.

☐ Yes, a little.

☐ No, it did not help. My vocabulary remained the same.

5. How comfortable did you feel engaging in conversations with ChatGPT-3.5 during the four-week plan?

☐ Very comfortable

☐ Somewhat comfortable

☐ Neutral

☐ Not very comfortable

☐ Not comfortable at all

6. Overall, do you believe that ChatGPT-3.5 was beneficial in improving your fluency and accuracy during impromptu speeches?

☐ Yes, it was highly beneficial.

☐ Yes, it was somewhat beneficial.

☐ No, it was not beneficial.

☐ I am unsure.

7. Would you recommend using ChatGPT-3.5 as a pedagogical tool to other EFL students for improving speaking skills?

☐ Yes, definitely.

☐ Yes, with reservations.

☐ No, I would not recommend it.

☐ I am unsure

8. How likely is it for you to continue using ChatGPT-3.5 to keep working on your fluency and accuracy?

☐ Very likely.

☐   Likely to certain extent

☐   Little likely

☐   Not likely at all.

☐   I am unsure.

9. Is there anything specific about the four-week plan using ChatGPT-3.5 as a pedagogical tool that you think could be improved to enhance its effectiveness for impromptu speeches?

_____

_____

_____

_____

_____

PART III – POST-TEST

Objectives:

1. To establish the potential benefits and/or limitations of using ChatGPT-3.5 as a pedagogical tool to improve EFL students' fluency and accuracy during impromptu speeches.

   Name: _____ Date: _____

This post-test was designed to be applied after implementing ChatGPT for four weeks, three times a week. Every student gets one topic related to the class assigned randomly. They have one minute for preparation and four minutes to present their impromptu speeches. The results of this post-test will be compared to the results of the pre-test to determine any improvement in students' fluency and accuracy.

Item	Always	Sometimes	Rarely	Never
Do students use correct grammar structures?				
Do students use diverse vocabulary?				
Do students make use of Spanish while presenting?				
Do students pronounce words accurately?				
Do students hesitate while presenting?				
Do students maintain a consistent speaking pace while presenting? (not too slow, not too fast)				
Do students develop their ideas clearly and with details?				
Do students stay on topic and address the prompt/question effectively?				
Do students complete the time of the speech?				

PART IV – LIKERT SCALE

Objective: To explore the acceptance range of EFL students regarding the use of a four-week plan with ChatGPT-3.5 to improve their fluency and accuracy during impromptu speeches.

Student's Name: _____ Date: _____

This Likert scale was designed to explore the acceptance range of EFL students at CEIC after using ChatGPT-3.5 three times a week as a pedagogical tool to improve their fluency and accuracy during impromptu speeches. Learners have to rate the following statements based on their experience using ChatGPT during a four-week plan.

1. ChatGPT-3.5 is useful to engage in human-like conversations based on topics studied in class.

   ☐ Agree.

   ☐ Partially agree.

   ☐ Neither agree nor disagree.

☐ Somehow disagree.

☐ Disagree.

2. ChatGPT-3.5 is helpful for practicing before an impromptu speech.

☐ Agree.

☐ Partially agree.

☐ Neither agree nor disagree.

☐ Somehow disagree.

☐ Disagree.

3. Previously practicing with ChatGPT-3.5 makes me feel more confident before presenting an impromptu speech.

☐ Agree.

☐ Partially agree.

☐ Neither agree nor disagree.

☐ Somehow disagree.

☐ Disagree.

4. ChatGPT-3.5 has helped me improve my fluency during impromptu speeches.

☐ Agree.

☐ Partially agree.

☐ Neither agree nor disagree.

☐ Somehow disagree.

☐ Disagree.

5. ChatGPT-3.5 has helped me improve my accuracy during impromptu speeches.

☐ Agree.

☐ Partially agree.

☐ Neither agree nor disagree.

☐ Somehow disagree.

☐ Disagree

6. I find ChatGPT-3.5 to be useful for impromptu speech practice.

☐ Agree.

☐ Partially agree.

☐ Neither agree nor disagree.

☐ Somehow disagree.

☐ Disagree.

7. I consider ChatGPT-3.5 a great conversational partner.

☐ Agree.

☐ Partially agree.

☐ Neither agree nor disagree.

☐ Somehow disagree.

☐ Disagree.

8. I would recommend the use of ChatGPT-3.5 for impromptu speech practice to other EFL students.

☐ Agree.

☐ Partially agree.

☐ Neither agree nor disagree.

☐ Somehow disagree.

☐ Disagree.