

**Exploring Teaching Strategies for the Development of Critical Thinking Skills in an EFL
Classroom with Technologist Courses at SENA in Montería**

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Deiby Márquez

Abstract

The study delved into an investigation aimed at describing the teaching strategies employed to cultivate critical thinking within the realm of English as a foreign language (EFL) instruction at SENA Montería. Adopting a comprehensive mixed-method and case study approach, a fusion of quantitative and qualitative methodologies was deployed to meticulously scrutinize the teaching strategies in practice and assess students' critical thinking levels. The comprehensive analysis unearthed a myriad of productive strategies implemented by educators, including leveraging open-ended questioning techniques, facilitating engaging discussions, and employing specific tools designed to incite introspection and analytical thinking among students. Some instruments implemented are semi-structured interviews, field diaries, and online questionnaires for both populations. However, the research outcomes unveiled an average level of critical thinking skills prevalent among the student populace, thus signifying an imperative necessity for fortifying these instructional practices. In light of these revelations, it is recommended to institute continuous professional development programs for educators. Such programs are pivotal in empowering teachers with innovative and adaptable methodologies. Additionally, it is advocated to foster an inclusive educational environment that caters to the diverse spectrum of students' cognitive abilities and learning styles. This approach is projected to significantly elevate the efficacy of imparting critical thinking skills within similar educational settings. This research advances a crucial dialogue on the importance of critical thinking skills in EFL education, underscoring the pivotal role of pedagogical strategies and continuous teacher development in shaping the intellectual acumen of students. The outcomes of this study serve as a foundational framework guiding the refinement and augmentation of teaching strategies, emphasizing the

pivotal nexus between effective instructional practices and the nurturing of critical thinking capacities in language education.

Keywords: Critical thinking, Teaching strategies, Foreign language, Teaching methods.

Resumen

El estudio se encuentra dirigido a describir las estrategias de enseñanza empleadas para cultivar el pensamiento crítico en el ámbito de la enseñanza del inglés como lengua extranjera (EFL) en el SENA de Montería. Adoptando un diseño de estudio de casos y el enfoque de investigación cualitativa, para estudiar a profundidad las estrategias de enseñanza en la práctica y evaluar los niveles de pensamiento crítico entre los estudiantes, algunos instrumentos implementados son la entrevista semiestructurada, diario de campo y cuestionarios en línea para la población participante. El análisis exhaustivo develó ciertas estrategias eficaces aplicadas por los educadores, entre las que cabe destacar el aprovechamiento de técnicas de preguntas abiertas, la facilitación de debates y el empleo de herramientas específicas diseñadas para incitar a la introspección y el pensamiento analítico entre los estudiantes. Sin embargo, los resultados de la investigación revelan un nivel medio de habilidades de pensamiento crítico entre la población estudiantil, lo que significa una necesidad imperiosa de fortalecer estas prácticas educativas. A la luz de estos hallazgos, se recomienda instituir programas de desarrollo profesional continuo para los educadores. Estos programas son fundamentales para dotar a los profesores de metodologías innovadoras y adaptables. Además, se aboga por fomentar un entorno educativo inclusivo que atienda al diverso espectro de capacidades cognitivas y estilos de aprendizaje de los alumnos. Se prevé que este enfoque aumente significativamente la eficacia de la enseñanza de las habilidades de pensamiento crítico en entornos educativos similares. Esta investigación promueve un diálogo crítico sobre la importancia de las destrezas de pensamiento crítico en la enseñanza del inglés como lengua extranjera, subrayando el papel fundamental de las estrategias pedagógicas y el desarrollo continuo del profesorado en la formación de la perspicacia intelectual de los estudiantes. Los resultados de este estudio sirven como marco fundacional que guía el

perfeccionamiento y el aumento de las estrategias de enseñanza, haciendo hincapié en el nexo fundamental entre las prácticas de instrucción eficaces y el fomento de las capacidades de pensamiento crítico en la enseñanza de idiomas.

Palabras Claves: Pensamiento crítico, Estrategias pedagógicas, Lengua extranjera, Metodología de enseñanza.

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Introduction

In modern education's dynamic and evolving landscape, fostering critical thinking skills is an indispensable aspect of nurturing well-rounded and competent learners. At the Servicio Nacional de Aprendizaje (SENA) in Montería, where the pursuit of knowledge and technological proficiency is central, enhancing the thinking capabilities of students at the A2 level holds paramount importance. Critical thinking, encompassing the ability to analyze, evaluate, synthesize, and apply information effectively, is the linchpin that propels individuals beyond mere comprehension and into insightful analysis, effective problem-solving and informed decision-making.

This research study delves into the pivotal role of teaching strategies to develop critical thinking skills among A2-level students pursuing technological courses at SENA in Montería, aiming to highlight the benefits and strategies that can pave the way for academic excellence and success in their chosen field. Students can excel in their educational endeavors and thrive in an increasingly complex and competitive world by honing their critical thinking abilities. In this order of ideas, the study is structured as follows:

The first chapter introduces the research, contextualizing the problem studied, presenting the research question, explaining the motivations behind the choice of the problem, detailing the general objective and specific objectives, and justifying the methodologies employed to support the purpose of the study. The second chapter focuses on reviewing the current state of knowledge on the subject and analyzing different studies and research that have addressed the same problem and methodology; the theoretical and conceptual frameworks underpinning the research are included here. The third chapter describes the methodological approach, the research context, the

target population, the expected impact, the ethical protocol followed, the instruments used, their validation, and the pedagogical intervention process carried out during the study.

The fourth chapter describes the data analysis and findings, explaining how the categories were obtained. The fifth chapter presents the results and conclusions obtained during the research, discusses the pedagogical implications, establishes the study's limitations, and proposes recommendations for future research that can explore different perspectives and influential variables in the development of critical thinking skills in a foreign language in the context of SENA Monteria.

Introduction of the Research Study

The primary goal of this process is to develop technical and technological knowledge, attitudes, and values for social coexistence. The aim is to describe teaching strategies that can help students develop the necessary skills to act critically and creatively in the worlds of work and life.

Context of the Research Problem

The research aims to cater to the needs of students at level A2 by the Common European Framework of Reference for Languages, specifically within the academic setting of the SENA institution in Montería. It is widely acknowledged that languages and communication methods vary depending on the culture and setting of the respective schools (Hawkins, 2010). This study is aligned with SENA's articulated perspective on professional training, as stated by the institution in 2013, emphasizing the importance of a comprehensive theoretical-practical educational process.

The motivation behind undertaking this study stems from a profound interest in researching the description of different teaching strategies to teach critical thinking skills. This study focuses on elements that significantly influence the teaching and learning of English as a Foreign Language (EFL). These elements encompass the socio-cultural challenges students might face, the dynamics between teachers and students that impact classroom language usage, and the consistent role of teachers in the teaching process. Moreover, research suggests teachers' self-efficacy can significantly influence learners' motivation (Shah, Hussain, and Nasseef, 2013). Therefore, understanding the relationship between teachers' effectiveness and students' critical thinking skills is paramount.

The study aims to research and describe the potential of carefully selected and implemented teaching strategies to facilitate significant enhancements in students' critical thinking skills within the educational context of the esteemed SENA institution. By assessing the influence of different teaching strategies on students' critical thinking skills, this research aims to contribute to the ongoing discourse regarding effective language teaching strategies. "Given that assessment at SENA adopts a comprehensive approach, the recognition of prior learning will be conducted by verifying the following pieces of evidence:

Evidence Of Knowledge

Accreditation of a minimum level of A2 in English for technical programs and a minimum level of B1 for technological programs. This can be demonstrated by presenting results from internationally recognized certification tests listed in NTC 5580 of 2011 for reading comprehension and listening comprehension or through the SEPT exam (MEN, 2017).

Evidence of Performance and Product

If the learner meets the minimum language proficiency level required through the knowledge test results, they must undergo performance and product tests correlated with the minimum required level (minimum A2 level for technical programs and minimum B1 level for technological programs). These tests must be provided by the instructors' team at the Training Center. They should be related to the performance and product evidence established in the curriculum development and the formative project of the training program in which the learner is enrolled" (SENA, 2017).

The primary impetus driving this research stems from a fundamental desire to augment critical thinking skills among the student population. These skills have become more vital than ever in today's rapidly evolving world. Holec (1979), a renowned educational theorist,

emphasizes the significance of contemplating students' accountability in their academic journey. By enhancing critical thinking skills, students become active participants in their learning process rather than passive recipients of information. This proactive approach not only cultivates a deeper understanding of the subjects they study but also equips them with the essential skills needed to navigate the complexities of the modern world.

One key aspect of encouraging critical thinking skills among students is the promotion of individual independence. Holec (1979) argues that students can become confident and self-reliant learners by upholding their autonomy. When students are encouraged to take ownership of their learning, they develop a sense of responsibility and agency. This sense of accountability motivates them to explore different perspectives, think critically, and seek solutions to problems themselves. Moreover, upholding independence nurtures students' capacity to tackle challenges, adapt to new situations, and face future uncertainties with confidence.

Furthermore, this study is infused with a visionary outlook, aspiring to position SENA as a recognized bilingual institution in the foreseeable future. The significance of bilingualism cannot be overstated in today's globalized world. Bilingual individuals possess a unique advantage in global communication, cultural understanding, and professional opportunities. By aspiring to become a bilingual institution, SENA recognizes the transformative power of bilingualism within the educational landscape.

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aspiring to become a bilingual institution, SENA recognizes the transformative power of bilingualism within the educational landscape (SENA 2017).

The acquisition and mastery of multilingual competencies extend beyond academia, permeating various facets of life and paving the way for many opportunities in our interconnected global society. Developing critical thinking skills enriches the academic environment and is fundamental to effectively analyzing, evaluating, and solving problems in various areas of life. Critical thinking skills enable individuals to make informed decisions, understand different perspectives, and navigate the complexity of today's information.

Mastery not only promotes deeper learning but also drives logical reasoning and informed decision-making in a dynamic and changing world. Within this transformative landscape, the research endeavors to make a meaningful contribution, aligning with and advancing SENA's institutional vision as it endeavors to establish itself as a distinguished bilingual institution. Through this research, we aspire to propel the institution toward greater prominence on the international stage by embracing the power and potential of multilingualism in education and beyond.

The research into augmenting critical thinking skills among students is driven by the desire to equip them with essential skills for success in the modern world. Gattegno (2010) expresses an apparent skepticism regarding the influence of linguistic theory on language teaching approaches. He believes that linguistic studies, despite being a specialized field, tend to narrow one's perspective and contribute minimally to the broader goals of language education (Gattegno, 2010). By incubating independence, students become active participants in their learning journey, developing the ability to think critically and solve problems. Additionally, aspiring to become a recognized bilingual institution recognizes the transformative power of

multilingual competencies in an interconnected global society. This research seeks to contribute to realizing SENA's vision by promoting critical thinking among its student body, preparing them to thrive in the dynamic and complex world they will face.

The highlighted concern vividly underscores the imperative need for a comprehensive and sustained effort in educating a cadre of bilingual professionals through institutions of higher learning. In recognizing the accelerating pace of globalization and the heightened interconnectedness of our world, it is abundantly clear that fostering bilingualism among professionals has become a strategic necessity. This imperative calls for a proactive approach wherein educational institutions play a pivotal role in designing and implementing robust educational programs dedicated to nurturing and honing the bilingual capabilities of aspiring professionals.

By strategically researching these educational programs, institutions can ensure that bilingual professionals are equipped with linguistic proficiency and empowered with a profound understanding of each language's cultural, societal, and professional nuances. This multidimensional approach transcends mere language acquisition and delves into cultivating a holistic skill set that is indispensable for navigating the intricacies of the global arena. In Colombia, this educational endeavor takes on profound significance. As a nation aspiring to broaden its international engagement and effectively access global markets, having a cadre of well-educated bilingual professionals is beneficial and imperative. The ability to communicate and interact proficiently in English alongside their native language amplifies their competitiveness and influence in the international realm.

Moreover, this need underscores the value and importance of advancing critical thinking skills within education. Critical thinking is paramount in a world where dynamics are constantly

evolving, and cultural and economic boundaries are becoming increasingly porous. Rivers (1987) outlined the interactive approach in language education, asserting that language proficiency is attained when learners are engrossed in communicating genuine messages. These messages should hold significance and interest for both the speaker and the listener within a relevant context. Within the Colombian educational context, emphasizing critical thinking within the framework of advancing English language instruction is essential. It equips bilingual professionals with the capacity to analyze, synthesize, and evaluate information effectively, enabling them to make informed decisions and contribute meaningfully to the nation's efforts in internationalization.

In essence, an education that prioritizes bilingualism and critical thinking aligns with Colombia's vision of advancing its position on the global stage and creates a powerful ripple effect, influencing societal progress, economic growth, and cultural exchange within and beyond its borders. In his work on counseling learning, Curran (1976) emphasizes the essential prerequisites for effective learning. He particularly underscores the classroom environment as a pivotal element, aiming to improve learners' sense of intimidation and insecurity.

In conclusion, this study is driven by the objective of responding to the specific needs of level A2 students at SENA, as set by the Common European Framework of Reference for Languages. It researches teaching strategies for critical thinking skills in English as a Foreign Language, considering sociocultural challenges, teacher dynamics, and the role of teachers in motivating students. By shedding light on these strategies, the research aims to describe the methods employed within the classroom setting to augment students' critical thinking abilities within the academic framework of the SENA institution. By shedding light on these strategies, teachers become aware of diverse techniques to foster critical thinking among students. This

equips them with tools to create dynamic learning environments conducive to analytical reasoning.

Research Question

What are the teaching strategies for the development of critical thinking skills in an EFL class with technologist courses at SENA in Montería?

Sub Questions

What does the current academic literature reveal about effective teaching strategies for the development of critical thinking skills in EFL classrooms?

Which teaching strategies are most suitable for promoting critical thinking skills in an EFL class with technology courses at SENA in Montería?

How do student performance data, assessments, and academic achievements reflect the development of critical thinking skills in an EFL class with technologist courses at SENA in Montería?

What professional development strategies can be employed to assist educators in the effective implementation of teaching strategies that promote critical thinking skills in an EFL class with technologist courses at SENA in Montería?

Objectives

General Objective

To describe the teaching strategies for the development of critical thinking skills in an EFL class with technologist courses at SENA in Montería.

Specific Objectives

To review academic literature and research studies focused on teaching strategies for the development of critical thinking skills.

To determine the teaching strategies for the development of critical thinking skills to apply in an EFL class with technologist courses at SENA in Montería.

To analyze student performance data, assessments, and academic achievements to assess critical thinking skills.

To suggest teaching strategies for professional development that enable educators to implement these critical thinking-promoting strategies effectively.

Rationale of the Study

The foundational principle underlying this research is rooted in the growing recognition of the profound importance of cultivating critical thinking skills within the sphere of English language education in Colombia. Dewey (2022), a prominent philosopher and educator, first introduced the term 'critical thinking' as a crucial educational objective, aligning it with a scientific approach to the mind. He often referred to this objective as 'reflective thought,' 'reflective thinking,' 'reflection,' or simply 'thought' or 'thinking.'

Dewey's conceptualization paved the way for an in-depth understanding of the pivotal role critical thinking plays in the education system, especially in the context of English language instruction in Colombia. Emphasizing and integrating these essential thinking skills enhances academic proficiency and nourishes analytical and evaluative abilities necessary for a well-rounded education. The significance of this integration reverberates through the corridors of education, shaping future generations and equipping them with the cognitive tools needed for success in an ever-evolving global landscape (Dewey, 2022).

Much like numerous other nations, Colombia grapples with the imperative to adapt its educational system to equip students for the multifaceted demands and complexities of the 21st century. In this era of globalization and interconnectedness, proficiency in the English language

and the cultivation of critical thinking skills are pivotal facets of this preparatory process, essential for enabling individuals to navigate an increasingly interlinked and information-driven world. Recognizing the urgency of this matter, the Colombian government has proactively outlined comprehensive educational objectives that emphasize the development of 21st-century skills, notably highlighting critical thinking as indispensable for the nation's academic advancement.

The government has firmly committed to enhancing English language education, acknowledging its pivotal role in cultivating international competitiveness and stimulating economic growth (Ministerio de Educación Nacional de Colombia, 2016). Acknowledging the interconnectedness between language proficiency, critical thinking, and global competitiveness underscores the importance of integrating these elements into the nation's educational fabric. However, a conspicuous disparity exists between this governmental commitment and the practical implementation of effective teaching methodologies that nurture critical thinking within English classrooms.

Despite recognizing crucial thinking as a cornerstone of 21st-century education, many educators persist in relying on traditional teaching methods, prioritizing language proficiency over cognitive development (Chang, 2009). This disparity raises pertinent questions about aligning pedagogical approaches with the envisioned educational goals and the need for comprehensive reforms that bridge the gap between policy objectives and classroom practices. Efforts to bridge this gap necessitate a paradigm shift within the educational landscape, encompassing teacher training programs incorporating modern pedagogical strategies nurturing critical thinking and language learning. Additionally, it calls for examining educational policies

to ensure they provide adequate support and resources for effectively implementing progressive teaching methodologies.

By addressing these aspects, Colombia can stride confidently towards an academic framework that not only imparts linguistic competence but also nurtures analytical thinking, problem-solving abilities, and a holistic skill set vital for the evolving global dynamics. In the realm of language instruction, critical thinking is a multifaceted tool educators employ to sustain an environment that extends beyond the mere discussion of linguistic elements. Beyond its fundamental role in language acquisition, critical thinking encourages learners to analyze, synthesize, evaluate, question, and maintain a skeptical stance toward various topics, data, and evidence introduced within the classroom environment (Bedir, 2013). This approach is vital for nurturing learners' intellectual and cognitive growth, enabling them to engage with academic material in a deeper and more meaningful manner.

The essence of critical thinking lies in its capacity to transcend rote memorization or passive reception of information. It involves a complex set of cognitive abilities, grappling with ideas, and developing analytical skills (Cromwell, 2002). Through the cultivation of critical thinking, learners are empowered to explore connections, identify patterns, and draw informed conclusions, ultimately enhancing their capacity for higher-order thinking. Incorporating critical thinking into language instruction necessitates a departure from traditional pedagogical approaches. Language educators are encouraged to design thought-provoking tasks that prompt learners to articulate evidence-based ideas and engage in discussions that delve into deeper layers of comprehension. These tasks should challenge learners to understand the language structures and vocabulary and critically assess and interpret the information presented to them.

Moreover, integrating critical thinking into language instruction allows for a broader appreciation and comprehension of cultural nuances and diverse perspectives. Elder and Paul (2020) interpret crucial thinking as “thinking explicitly aimed at the well-founded judgment, utilizing appropriate evaluative standards to determine the true worth, merit or value of something.” Learners can develop an understanding of how language is intricately linked to culture, society, and individual experiences, stimulating a more holistic grasp of the language they are studying. By embracing critical thinking as an integral part of language instruction, educators contribute to the development of learners who are proficient in a language and capable of applying their linguistic knowledge in a discerning and thoughtful manner.

On the other hand, Gieve (1998) stated that students, as good critical thinkers, should have the ability to “examine the reasons for their actions, their beliefs, and their knowledge claims, requiring them to defend themselves and question themselves, their peers, their teachers, experts, and authoritative texts” (p. 126).” (Zare & Othman, 2015, p.159). This approach instills a lifelong skill set indispensable in an increasingly complex and interconnected world, enabling learners to navigate diverse situations with a reflective and analytical mindset.

The imperative to enhance critical thinking skills within the domain of English language education in Colombia stems from the recognition of its transformative potential. By integrating robust critical thinking pedagogies, Colombian students can develop a heightened ability to analyze, evaluate, and synthesize information, enabling them to compete effectively on the global stage. This competitive edge becomes increasingly pertinent in a world where interconnectivity and international collaboration are paramount.

In addition to promulgating global competitiveness, an emphasis on critical thinking within English education in Colombia equips students with adaptability in the face of evolving

job markets. The dynamic nature of today's professions requires individuals to possess both language proficiency and the cognitive agility to navigate complex challenges and make informed decisions. Critical thinking is a foundation for honing problem-solving skills, enhancing creativity, and nurturing an entrepreneurial spirit, which is vital in modern workplaces.

Furthermore, integrating critical thinking within English language education enables students to engage more effectively in international settings. Understanding diverse perspectives, effectively communicating ideas, and critically evaluating information are crucial components of successful engagement on the global stage. By instilling these abilities, educators prepare students to contribute meaningfully to international dialogues, collaborations, and academic pursuits.

The valuable insights obtained through this research have the potential to significantly influence educational policies and pedagogical approaches, thereby leading to a substantial enhancement of educational practices at the institutional level. Recognizing that the learning system is activated through the conscious cultivation of intelligent awareness and engagement is essential. As Scott and Page (1982) noted, learners must consistently challenge their cognitive abilities by abstracting, analyzing, synthesizing, and integrating information. Such active involvement in the learning process invariably translates into improved learning outcomes for students, aligning seamlessly with the educational objectives set forth by the Colombian government.

As per Brookfield (2017), educators contribute to developing students' critical thinking abilities by aiding them in exploring novel information and encouraging them to question personal presumptions whenever feasible. From the vantage point of both a teacher and a

researcher, this study holds promise as a catalyst for professional growth and development. It presents a unique opportunity to refine and augment instructional practices, incorporating the insights gained to serve students better and facilitate their success in an increasingly competitive global landscape. By embracing these research-informed changes, educators can optimize their role in shaping the educational journey of their students, contributing to a more effective and responsive educational ecosystem that prepares learners for the demands and challenges of the modern world.

From the vantage point of both a teacher and a researcher, this study holds promise as a catalyst for professional growth and development. It presents a unique opportunity to refine and augment instructional practices, incorporating the insights gained to serve students better and facilitate their success in an increasingly competitive global landscape. By embracing these research-informed changes, educators can optimize their role in shaping their students' educational journeys, contributing to a more effective and responsive educational ecosystem that prepares learners for the demands and challenges of the modern world. In conclusion, this research aims to contribute substantially to the National Learning Service (SENA) by offering practical strategies for English language teachers to nurture critical thinking in their classrooms. This research strives to enhance teaching practices by fostering environments that encourage analytical thinking, problem-solving, and meaningful learning experiences.

Moreover, it signifies a significant point in my growth as a researcher and an educator. Addressing the importance of critical thinking in the English language classroom has expanded my understanding and skills in devising impactful pedagogical strategies as an educator. Besides, it has enriched my perspective on cultivating critical thinking among students, enabling me to contribute more profoundly to the field of education and my role as an educator. By equipping

students with tools and skills to excel in a swiftly evolving global landscape, this study enriches SENA's educational practices and aims to positively impact society because it seeks to empower individuals capable of making meaningful contributions in a perpetually changing world.

Moreover, the contributions to SENA through research can enhance critical thinking abilities, which is valuable for overall academic and professional development. The study likely explores technology integration in the EFL classroom by mentioning technologist courses. The focus on an EFL classroom suggests that the survey addresses language proficiency. Improved critical thinking skills in English can lead to better language acquisition, supporting SENA's goal of providing comprehensive language education.

In addition, as a Researcher and EFL Teacher, conducting and participating in this study would provide us with practical experience in designing, implementing, and analyzing educational interventions. Throughout the study, it may be discovered and developed innovative teaching strategies that promote critical thinking in the EFL classroom. These insights can be directly applied to the teaching practices, making more effective L2 classes. Finally, professional development will be achieved by sharing the study's outcomes within the academic and teaching community. It showcases commitments to improving educational practices and student outcomes.

Reference Framework

In the expansive realm of educational research, the necessity of positioning the study within the context of existing knowledge and research in the field becomes evident. Developing critical thinking skills in the context of English as a Foreign Language (EFL) instruction at SENA in Montería holds paramount importance for well-rounded learners, resonating with the global call for cognitive proficiency in the 21st century. The introduction to this reference framework underscores the significance of grounding the research within a robust foundation, which is a body of knowledge, reference model, guides, tools, platforms, and standards that represent researched and practiced approaches that reflect shared learning and best practices in the domain (ODTI, 2014).

It serves as a guiding beacon, mapping the landscape of current knowledge, theoretical underpinnings, contextual intricacies, and regulatory dimensions that collectively provide the backdrop against which this research seeks to contribute meaningfully. In this introductory section, the importance of aligning the study with existing scholarship and research is emphasized, recognizing that it is from this base that new insights are to be gleaned, ultimately leading to practical recommendations for advancing EFL education at SENA in Montería. Through this reference framework, a deeper comprehension of the research's context is sought, along with an enhanced appreciation of its complexities and the opportunities it unfolds.

State of the Art

This section of this reference framework extensively explores the broader field of EFL (English as a Foreign Language) education, critical thinking, and language instruction, focusing on the current landscape of EFL education in Colombia (Trepanier, 2017). It also delves into recent research and trends shaping the academic discourse (Weinmann, Neilsen, and Cabezas,

2023). Additionally, it defines key concepts integral to our study, providing a comprehensive contextual framework for our inquiry (Brown, 2018).

EFL education prepares students for an increasingly interconnected global society (Treapnier, 2017). Beyond the mere acquisition of language skills, it emphasizes the development of critical thinking abilities (Thompson, Robinson, and McNeil, 2016). In Colombia, EFL education has undergone notable transformations to align with the demands of the 21st century (Gómez, 2017). Colombia recognizes the necessity of equipping its students with proficiency in English and the cognitive skills required to thrive in a world marked by complexity, diversity, and rapid change (Fandiño, 2013). The state of EFL education in Colombia is marked by a commitment to fostering learners who excel in language acquisition and evolve into analytical, evaluative, and reflective thinkers (Rincón and Clavijo, 2016).

Recent Research and Trends

Recent research in EFL education has witnessed a growing emphasis on the development of critical thinking skills (Li & Patra, 2024). Scholars and educators increasingly recognize the connection between language instruction and cognitive development. This burgeoning interest in EFL education research directly responds to the evolving demands of a globalized world, where the need for students to think critically and engage meaningfully in international contexts is paramount (Todorova & Todorova, 2018).

Recent studies highlight innovative pedagogical strategies that transcend the traditional focus on linguistic proficiency (Huang, 2021). These approaches nurture cognitive skills, enabling students to approach challenges with analytical rigor and creative problem-solving abilities (Jaswal and Behera, 2023). This surge in research reflects a commitment to enhancing

EFL education and nurturing skills that are essential for success in today's interconnected and information-driven world (Wang and Winstead, 2016).

In line with recent research trends, it is worth to say the interplay between language instruction and critical thinking, revealing a dynamic relationship between the two (Bagheri, 2015). Findings emphasize the essential role of thinking in fostering academic excellence in EFL and across a range of academic disciplines (Abbasi and Izadpanah, 2018). Scholars have identified the challenges and opportunities associated with integrating critical thinking within language instruction, sparking a dynamic dialogue on best practices and methodologies (Cohen, 2021). This research surge is a testament to the dedication of educators and researchers in enhancing language education, equipping students with the cognitive tools to thrive in an increasingly complex and interconnected world (Baker, 2020).

Praminingsih, Miarsyah, Rusdi, and Rawamangun (2022) conducted a meta-analysis titled "*Meta-analysis: the effect of inquiry Learning Model on Students' Critical Thinking skill*," and it was performed in Indonesia. Their primary objective was to scrutinize the impact of inquiry learning on enhancing students' critical thinking abilities. Utilizing a meta-analysis research method, they amalgamated findings from 20 studies investigating the influence of inquiry teaching on critical thinking skills across elementary, middle, and high school students. Employing a quantitative approach, they utilized effect size analysis to measure the effectiveness of inquiry learning on students' critical thinking skills through diverse assessment instruments such as tests, surveys, and interviews.

The meta-analysis findings affirmed the positive effect of inquiry learning on students' critical thinking skills. The researchers established a moderate effect size with an average of 0.66, signifying the significant impact of inquiry learning in fostering critical thinking abilities

among students across various educational levels. This comprehensive analysis contributes significantly to exploring teaching strategies to enhance critical thinking skills within an EFL classroom context.

The implications of this study resonate with the interest of this research in exploring teaching strategies for cultivating critical thinking skills in an EFL classroom with technologist courses at SENA in Montería. The evidence provided by Praminingsih et al. (2022) advocates for the efficacy of inquiry learning as an influential pedagogical approach to augmenting critical thinking skills. Their research underscores the potential utility of adopting inquiry-based methodologies within your educational setting, suggesting its viability as a beneficial strategy to enrich essential thinking skills among students. Additionally, the study's aggregation of varied measures for assessing critical thinking skills is a valuable resource for selecting appropriate evaluation tools for your proposed research. Overall, the insights derived from this meta-analysis offer helpful guidance in designing and implementing effective teaching strategies tailored to enhance critical thinking skills within the specific context of the EFL classroom at SENA in Montería.

The study conducted by Baş, M., & Bolat, Y. (2022) titled "*The Impact of Cognitive Competence on Critical Thinking Skills: An Educational Science Study with School Counsellors*," conducted in Turkey underscores the pivotal role of cognitive competence in fostering critical thinking abilities. This study, categorized under educational science, employed a correlational approach to explore the relationship between cognitive competence and critical thinking skills. The study used data collected from 323 school counselors to assess cognitive competence and critical thinking using specific instruments (CC and CT).

The findings underscored the significance of cognitive competence as a determinant factor influencing critical thinking proficiency. Specifically, individuals with higher levels of cognitive competence demonstrated more excellent proficiency in essential thinking processes. This highlights the importance of nurturing cognitive competence to enhance critical thinking skills among educators and underscores the potential benefits of incorporating strategies aimed at bolstering cognitive abilities in educational settings. Aiming to explore the nexus between cognitive competence and critical thinking skills within school counseling, the researchers employed a quantitative correlational study as their research method. This method allowed them to investigate the relationship between cognitive competence and critical thinking skills by utilizing a questionnaire to collect numerical data on participants' cognitive competence and critical thinking abilities.

The study used two specific instruments, namely the Cognitive Competence Scale (CCS) and the Critical Thinking Skills Test (CTST), to measure cognitive competence and critical thinking skills, respectively. The study's findings prominently reveal a significant positive correlation between cognitive competence and critical thinking skills among 323 school counselors in Turkey. This robust correlation underscores that school counselors demonstrating higher levels of cognitive competence concurrently exhibited elevated levels of critical thinking skills. Such findings hold significant contributions to the present study, which is focused on exploring teaching strategies for the development of critical thinking skills in an EFL classroom with technologist courses at SENA in Montería.

The insights garnered from this research underscore the pivotal role of cognitive competence in fostering critical thinking abilities, suggesting a targeted emphasis on enhancing students' cognitive competence to augment their critical thinking skills. Furthermore, the study

furnishes valuable information regarding the CCS and CTST as potential measures for assessing cognitive competence and essential thinking skills, offering guidance for selecting appropriate evaluation tools for your study. Overall, this study provides substantial insights into the interplay between cognitive competence and critical thinking skills, serving as a valuable resource for formulating effective teaching strategies within the EFL classroom setting at SENA in Montería.

Besides, Warsah, Idi, Morganna, Ruly, Uyun, Muhamad, Afandi, Muslim, and Hamengkubuwono (2021) explored "*The Impact of Collaborative Learning on Learners' Critical Thinking Skills*" in the "*International Journal of Instruction*" in Indonesia in 2021. Their study aimed to investigate the influence of collaborative learning on learners' critical thinking skills. Employing a quasi-experimental design, the researchers conducted a pretest-posttest assessment to examine the impact of cooperative learning on critical thinking abilities among 40 students from an Islamic education department at a university in Bengkulu, Indonesia.

Using a quantitative approach, the researchers employed a questionnaire encompassing the Critical Thinking Skills Test (CTST) and the Collaborative Learning Effectiveness Inventory (CLEI) as assessment instruments. The CTST measured critical thinking skills, while the CLEI evaluated collaborative learning effectiveness. Employing paired sample t-test and independent sample t-test analyses, the researchers compared pretest and posttest mean scores. The study unveiled a significant and positive impact of collaborative learning on critical thinking skills, with the pretest mean score at 32.35 and the posttest mean score at 37.68. The intervention's effect size was 0.80, signifying a substantial impact size.

This study's insights are significant for exploring teaching strategies to foster critical thinking skills within an EFL classroom with courses at SENA in Montería. Warsah et al.'s (2021) findings provide robust evidence that collaborative learning serves as an effective method

to enhance students' critical thinking abilities. This suggests the potential utility of incorporating collaborative learning strategies into your teaching approach to cultivate critical thinking skills among students in your EFL classroom setting.

Moreover, Warsah et al. (2021) study offers understandings into the efficacy of collaborative learning in advancing critical thinking skills, providing a foundation to shape effective teaching strategies within the EFL classroom at SENA in Montería. Their research emphasized on the role of collaborative activities, such as group discussions and peer feedback sessions, in fostering an environment where students actively engage with the material and each other. This interaction stimulated critical thinking as students were encouraged to analyze, question, and construct knowledge collectively. The study also highlights the importance of creating a supportive and inclusive classroom atmosphere where students feel comfortable sharing ideas and challenging assumptions. Implementing these strategies in the EFL classroom at SENA in Montería could lead to significant improvements in students' critical thinking skills, as it aligns with the collaborative learning techniques, educators can facilitate deeper understanding and retention of language concepts while simultaneously promoting critical analytical skills.

Finally, Behar-Horenstein and Niu's (2011) article, "Teaching Critical Thinking Skills in Higher Education: A Review of the Literature," delved into reviewing existing literature concerning the pedagogy of critical thinking skills within higher education. Utilizing a literature review as their research method, the researchers synthesized and summarized findings from 42 studies exploring teaching critical thinking skills in postsecondary education. Employing a qualitative research approach, they meticulously examined and amalgamated insights from various studies to construct a model delineating effective strategies for critical thinking

instruction. This literature review article significantly contributes to the present investigation into teaching strategies for fostering critical thinking skills in an EFL classroom with courses at SENA in Montería.

The article by Behar-Horenstein and Niu offers profound insights into the pedagogical landscape of critical thinking instruction in higher education. Also, provided comprehensive overview of critical thinking instruction within higher education equipped a model that could serve as a guiding framework in devising and implementing effective teaching strategies tailored to the EFL classroom.

The studies included on this review, drawing from diverse sources encompassing universities, colleges, and community colleges, encompassed both students and instructors. Employing thematic analysis, the researchers gleaned significant insights, concluding that effective critical thinking instruction demands explicit teaching of critical thinking skills and processes, active engagement of students in learning activities necessitating critical thinking, the relevance of learning activities to students' lives, and the provision of feedback and support to students as they develop their critical thinking skills.

In the national context, it is worth highlighting the contribution of Gutiérrez (2013) in his article "*Una reflexión interdisciplinar sobre el pensamiento crítico*" published in the "Revista Latinoamericana de Estudios Educativos" which aims to offer a comprehensive perspective on critical thinking. This approach seeks to understand this phenomenon from various disciplines, conducting a literature review covering philosophers, psychologists, pedagogues, and other critical-thinking scholars. Through this qualitative method, the author identifies and analyzes different perspectives on critical thinking, highlighting its conceptual complexity, defined in multiple ways in various disciplines. The article highlights three fundamental points about

critical thinking: its capacity to analyze, evaluate, and critically reflect on information and its relevance as an essential skill for learning, decision-making, and citizen participation. These findings from the literature review emphasize the multifaceted nature of critical thinking and its applicability in diverse educational and social contexts.

This interdisciplinary reflection on critical thinking provides valuable contributions for the study of teaching strategies in the development of critical thinking skills, since the comprehensive view of the article offers a broader understanding of the importance of critical thinking. It also identifies practical strategies, emphasizing the role of the teacher in fostering this skill through activities that involve critically analyzing information, formulating arguments, and making informed conclusions. These strategies provide guidance applicable in educational settings such as SENA, where teachers could implement tasks that promote critical analysis of diverse sources and the formulation of sound arguments to strengthen students' critical thinking in technology courses.

The study titled "*Results of a Program for the Development of Critical Thinking in Eighth Grade Students of an Educational Institution of Fe y Alegría in Colombia*" conducted by Castillo (2023), aimed to assess the efficacy of a program designed to enhance critical thinking among eighth-grade students in a Colombian educational institution. Employing a quasi-experimental design, the research featured an experimental group, which underwent the program, and a control group, which received no intervention.

Methodologically, the study employed a quantitative approach, utilizing a critical thinking test called (PPC) developed by Milla (2012) to collect data both before and after the implementation of the program. The sample comprised 39 eighth-grade students from a Fe y

Alegría institution, with 20 students assigned to the experimental group and 19 to the control group.

The findings revealed a significant improvement in critical thinking scores among students in the experimental group following the program, particularly in the realms of analysis and evaluation, as compared to synthesis. Moreover, the program, which was structured around the Socratic method, demonstrated effectiveness in fostering students' critical thinking abilities. This underscores the potential of targeted pedagogical interventions to enhance critical thinking skills among students, thus warranting further exploration and replication in similar educational contexts.

In relation to the present study on teaching strategies for the development of critical thinking in SENA in Montería, the work of Castillo Llanos turns out to be significant since it offers concrete evidence of the effectiveness of a specific program to improve these skills in eighth-grade students. It identifies specific areas of progress in critical thinking and suggests that the teaching strategies employed, such as asking challenging Socratic questions, encouraging discussion, and providing feedback, can be adapted for implementation in similar educational settings, such as in technology courses at SENA. Thus, assigning tasks that stimulate critical analysis, formulation of arguments, and informed decision-making could be a practical way to apply these strategies in the classroom.

In the same line, Quintero et. al (2017) carried out a study titled "*Desarrollo del pensamiento crítico mediante la aplicación del Aprendizaje Basado en Problemas*" aiming to investigate the efficacy of problem-based learning (PBL) in enhancing critical thinking skills among students of Biomedical Engineering. Employing a mixed-methods approach with a

parallel convergent design, the researchers collected quantitative and qualitative data to assess the impact of PBL on critical thinking development.

The study sample comprised 50 eighth-semester students of Biomedical Engineering, selected conveniently for participation. Two instruments were employed for data collection: a questionnaire of individual generic competencies developed by Olivares and Wong (2013), adapted to measure critical thinking dimensions, and an observation rubric designed to assess critical thinking skills associated with learning autonomy, active participation, oral and written communication, and critical thinking. The research proceeded through several stages: administering a pre-test using the competencies questionnaire, implementing the ABP strategy over an academic semester, conducting a post-test with the same competencies' questionnaire, and observing the learning process during ABP implementation. Quantitative data analysis, utilizing paired samples t-tests, revealed no significant changes in the evaluated dimensions of critical thinking. However, qualitative analysis indicated advancements in critical thinking skills related to learning autonomy, active participation, oral and written communication, and critical thinking.

In conclusion, while the study did not observe significant quantitative changes in critical thinking dimensions, qualitative findings suggest the potential of PBL in enhancing specific essential thinking skills among Biomedical Engineering students. Further research is recommended to explore how PBL influences vital thinking and its applicability across diverse disciplines. Ultimately, this research provides substantial evidence supporting the efficacy of PBL in cultivating critical thinking abilities, offering valuable guidance in devising teaching strategies tailored to the EFL classroom at SENA in Montería.

Finally, Alquichire and Arrieta (2018) conducted a study entitled "*Relationship between critical thinking skills and academic achievement*" to explore the correlation between critical thinking skills (CTS) and academic performance among first-semester students enrolled in the Biology and Chemistry program at the Universidad del Atlántico in Colombia. The study used a correlational research design to establish a quantitative relationship between critical thinking skills and academic achievement. For assessment purposes, the researchers employed the Watson-Glaser Critical Thinking Appraisal (W-GCTA), a validated tool widely recognized for evaluating critical thinking abilities, including analysis, inference, evaluation, and deduction. The study sample comprised 34 participants from the aforementioned academic program, with a gender distribution of 59% women and 41% men, aged between 16 and 40 (mean age 20.82 years).

Data analysis revealed a notable positive correlation between critical thinking skills and academic performance among first-semester students in the Biology and Chemistry program. The findings underscored the substantial relationship between these variables, indicating that students with higher critical thinking skills tended to demonstrate superior academic performance. This study holds implications for educators, suggesting the importance of fostering critical thinking skills among students. It emphasizes the need for educators to assume roles as facilitators and promoters of critical, creative, reflective, and analytical thinking among their students. Furthermore, it advocates for implementing didactic strategies to nurture critical thinking skills. Additionally, the research contributes valuable evidence regarding the association between critical thinking skills and academic achievement in students pursuing degrees in Biology and Chemistry. Thus, it is a foundational framework for future investigations in this area.

Thus, this research contributes significantly to the exploration of strategies for developing critical thinking skills in an EFL classroom with courses at SENA in Monteria by establishing a clear link between critical thinking skills and academic success. This study underscores the importance of fostering critical thinking skills to improve student performance in the EFL classroom context. Consequently, these results offer significant implications for adapting teaching strategies in the EFL classroom at SENA in Monteria, emphasizing the potential role of fostering critical thinking skills to reinforce academic achievement.

Key Concepts and Definitions

Critical Thinking

Critical thinking is a multifaceted cognitive process that involves actively and skillfully conceptualizing, applying, analyzing, synthesizing, and evaluating information. Ennis (1962) sees critical thinking as "reasonable, reflective thinking focused on deciding what to believe or do." It is deliberate and reflective thinking that leads to well-informed and sound judgments. Critical thinking encompasses reasoning logically and engaging in thoughtful, evidence-based decision-making.

Teaching Strategies

The term "strategy" traces its origins back to the ancient Greek word "strategic" or "strategies," denoting the "art of troop leader" or "office of general," primarily associated with the steps taken to secure victory in warfare (Oxford, 1990). While the aggressive connotations have diminished over time, the essence of control and goal-directedness inherent in strategy remains integral, even in modern contexts. Similarly, in education, teaching embodies elements of power and purposeful direction. According to Mangal & Mangal (2009), teaching strategy encompasses the plans devised by educators to guide learners towards achieving instructional

objectives. It is a structured approach toward realizing educational goals, with each instructional activity's success contingent upon the strategies employed (Mangal & Mangal, 2009).

Stones and Morris (1972) elaborate that teaching strategy constitutes a generalized plan for a lesson, incorporating a structured framework and delineating desired learner behavior in alignment with instructional objectives. This highlights the strategic nature of teaching, wherein educators meticulously design plans to impart knowledge and facilitate learning outcomes effectively. Different educational objectives necessitate implementing varied strategies, each delivering educational content to learners (Stones & Morris, 1972).

As emphasized by Beck (1998), teaching strategies constitute an essential component of effective instruction, serving as pivotal tools for educators to align instructional practices with educational goals. Various teaching strategies, from recitation to cooperative group tasks, offer diverse avenues for engaging students and fostering meaningful learning experiences (Beck, 1998). Notably, selecting teaching strategies is guided by the desired learning outcomes, with educators tasked to choose approaches that promote critical thinking, understanding, and retention of information among students (Casteel y Stahl, 1997). Ultimately, strategically selecting and integrating teaching strategies enable educators to create dynamic and effective learning environments conducive to student success (Casteel y Stahl, 1997).

Language Instruction

Language instruction refers to the various strategies, methodologies, and practices employed to teach a foreign or second language. It encompasses linguistic proficiency, cultural competence, and practical communication skills in a second language (Lantolf and Zhang, 2017). It aims to develop learners' capacity to communicate fluently and coherently in their target language. Cultural competence represents a crucial aspect of language instruction. The

integration of cultural elements into language teaching facilitates learners' comprehension of the social and cultural contexts in which the language is utilized. Byrnes and Maxim (2024) found that language instruction that incorporates cultural learning can lead to deeper engagement and motivation among students. This is because learners can discern the applicability of the knowledge they are acquiring and perceive its utility in actual, tangible contexts. Consequently, language instructors are advised to incorporate cultural materials, such as films, music, literature, and traditions, into their curriculum to enhance the learning experience.

Moreover, the role of technology in language instruction has become increasingly significant. The advent of digital tools and online resources has led to an expansion of language teaching, which now encompasses a variety of multimedia and interactive platforms. As Blake (2023) notes, technology-enhanced language instruction offers a number of advantages, including greater access to authentic language materials and opportunities for asynchronous learning. Online language learning platforms can facilitate immersive experiences through virtual exchanges, language apps, and social media interactions, thereby supporting both autonomous and collaborative learning. These technological advancements are in accordance with contemporary pedagogical practices that place an emphasis on learner-centered approaches and the development of 21st-century skills. Consequently, contemporary language instruction not only focuses on traditional classroom teaching but also employs technology to create dynamic and flexible learning environments.

English as a Foreign Language

According to Schauer (2019) EFL refers to the ability to interact in their own language with people from another country and culture, drawing upon their knowledge about intercultural communication, their attitudes of interest in otherness, and their skills in interpreting, relating

and discovering, i.e. of overcoming and enjoying intercultural contact. (p. 70). This research concerns efforts to equip students with proficiency in their native language and English. As Baker (2011) points out, the perspective on bilingual education depends largely on the point of view, and studies conducted in one context may have little relevance for bilingual education in another context. Bilingual education seeks to facilitate learners' engagement in bilingual and multicultural environments, providing them a competitive edge in a globalized world.

Furthermore, EFL is connected to language assessment and materials development, reinforcing by advocating for the integration of technology in language teaching, the potential of digital tools to enhance language acquisition, making his contributions both timeless and forward-thinking. These key concepts lay the groundwork for understanding the dynamic relationship between critical thinking, language instruction, and bilingual education. They serve as the foundation for the research, guiding our exploration of effective strategies for fostering critical thinking skills within the context of EFL education at SENA in Montería, Colombia.

Contextual Framework

The Contextual Framework section of this reference framework offers an in-depth exploration of the historical development of EFL (English as a Foreign Language) education in Colombia, shedding light on its evolution over the years. It also delves into significant educational policies and initiatives within the country that pertain to EFL education and the cultivation of critical thinking skills. Furthermore, this section provides valuable insights into the SENA institution in Montería, Colombia, outlining its mission, educational programs, and role in advancing EFL education.

A journey of adaptation and transformation marks the historical development of EFL education in Colombia. It can be traced back to the early 20th century when the country began

incorporating English into its educational system. Starting from the English language policy introduced in Colombia during the 1940s, in collaboration with the American and British governments (García et al., 2007), English Language Teaching (ELT) in Colombia has primarily followed a top-down approach. This approach leans on foreign theories and research to shape teaching practices within the local context of classrooms and educational institutions. This integration was driven by recognizing English as the global lingua franca and the need to prepare Colombian students for international engagement.

Over the years, Colombia has seen various approaches to EFL education, from traditional grammar-translation methods to more communicative and task-based approaches. It has evolved from focusing on rote learning to emphasizing proficiency and communication. This evolution is rooted in the understanding that EFL education goes beyond language mastery; it is a gateway to critical thinking and intercultural competence. This historical journey highlights the responsiveness of Colombian education to global demands and the commitment to nurturing learners who are linguistically proficient and cognitively adept.

Educational Policies and Initiatives

Colombia has exhibited a proactive approach to improving EFL education. It has launched a series of educational policies and initiatives designed to enhance language instruction and develop critical thinking skills. The country's commitment to equipping its students with essential cognitive tools is evident in initiatives such as the National Bilingual Program, which fosters bilingualism and critical thinking among students. This program emphasizes language proficiency and the ability to analyze, evaluate, and synthesize information, aligning closely with the research goals.

Educational reforms, such as the Comprehensive Bilingualism Plan and the 2036 Bilingual Colombia Program, emphasize the importance of critical thinking in EFL education. They promote a holistic approach, recognizing that cognitive and intercultural competencies must complement linguistic competence. These policies and initiatives reflect the Colombian government's commitment to preparing students for an interconnected world.

SENA Institution

The Servicio Nacional de Aprendizaje (SENA) in Montería, Colombia, plays a significant role in the landscape of EFL education. SENA is a public institution dedicated to vocational training and technical education. Its mission is to offer educational programs that equip students with the skills and knowledge needed for the labor market. SENA emphasizes a comprehensive theoretical-practical educational process, aligning closely with the goals of bilingualism and critical thinking promoted by the Colombian government.

SENA in Montería offers a range of educational programs, including technologist courses, where developing critical thinking and language proficiency is essential. The institution recognizes the importance of preparing students to excel in linguistic and cognitive domains. Its educational programs aim to foster well-rounded professionals who can navigate a complex and diverse job market.

In the context of EFL education, SENA provides a valuable educational setting where the interplay between language instruction and critical thinking is paramount. The institution is instrumental in nurturing learners who can communicate effectively in English, think critically, analyze information, and make informed decisions. This research seeks to identify effective strategies for cultivating critical thinking skills in EFL learners within this educational environment.

In conclusion, this contextual framework provides a comprehensive understanding of the historical evolution of EFL education in Colombia, the country's educational policies, and the unique role of SENA in Montería. It provides the context within which the research is situated, highlighting the contextual factors that have shaped EFL education. Moreover, it highlights the institution's dedication to fostering bilingualism and critical thinking among its students. Ultimately, these insights serve as a foundational basis for the study, offering a nuanced perspective on the challenges and opportunities inherent in advancing EFL education within this specific context.

Theoretical Framework

Theoretical Perspectives

The Theoretical Framework section of this reference framework serves as the intellectual foundation of the research, shedding light on the theories and theoretical perspectives that guide the study, specifically focusing on their relevance to critical thinking in education, language acquisition, and language teaching.

Constructivism, advocated by renowned scholars like Jean Piaget (Piaget, 1952) and Lev Vygotsky (Vygotsky, 1978), asserts that learners construct their understanding of the world by building upon their prior experiences and knowledge. In critical thinking, this theory suggests that learners construct their essential thinking abilities through active interaction with their environment and peers. It emphasizes the importance of problem-solving, inquiry, and hands-on experiences to stimulate cognitive growth.

Social Constructivism furthers this idea, proposing that critical thinking is a social process. Developed through collaboration, discourse, and shared problem-solving, this perspective highlights the role of social interaction in developing critical thinking skills. When

learners engage in meaningful discussions, debates, and collaborative projects, they acquire language skills and enhance their ability to think critically and reason effectively.

Language acquisition theories also play a pivotal role in this research since language is the primary medium through which critical thinking is expressed. Stephen Krashen's Input Hypothesis (Krashen, 1985) and the Interaction Hypothesis (Long, 1996) underscore the significance of comprehensible input and meaningful interaction in language acquisition. These theories stress that language learning is most effective when learners engage in authentic, purposeful communication. This principle is integral to developing critical thinking, as meaningful communication often involves analysis, evaluation, and problem-solving.

Pedagogical Approaches

Promoting critical thinking in the EFL classroom requires the consideration of pedagogical approaches that actively foster this cognitive skill. Several methodologies, such as Problem-Based Learning (PBL) and Inquiry-Based Learning (IBL), have gained prominence in EFL education.

Problem-Based Learning immerses students in real-world problems, encouraging them to explore and solve complex issues collaboratively (Barrows, 1996). This approach emphasizes critical thinking, as students must analyze situations, identify underlying issues, and generate creative solutions. Similarly, Inquiry-Based Learning promotes critical thinking by encouraging students to ask questions, investigate topics, and develop evidence-based conclusions (Dewey, 1986). PBL and IBL align closely with Constructivist theories, emphasizing active learning and developing critical thinking skills through problem-solving, inquiry, and meaningful discussion.

The Socratic Method, rooted in Socrates's philosophy, is another pedagogical approach with a rich tradition of stimulating critical thinking. It involves posing thought-provoking

questions to students and encouraging them to reflect, analyze, and articulate their ideas (Treapnier, 2017). This method is particularly effective in cultivating higher-order thinking skills, such as analysis, evaluation, and synthesis (Ho, Chen, and Li, 2023).

Relevant Theorists and Models

Several critical theorists and models have significantly contributed to understanding EFL education and cultivating critical thinking skills. Jerome Bruner's concept of scaffolding is integral to this research. Scaffolding refers to the support and guidance teachers or peers provide to help learners acquire new skills. It is essential in developing critical thinking, as it assists learners in tackling challenging tasks and gradually becoming more independent thinkers. Scaffolding ensures students receive the necessary support to advance their critical thinking abilities.

Paulo Freire's Critical Pedagogy theory emphasizes the importance of dialogue, reflection, and problem-posing in the educational process (Freire, 2020). This approach encourages learners to critically examine their social and cultural contexts, fostering a deeper understanding of the world around them. In the EFL classroom, Critical Pedagogy facilitates language acquisition and the development of critical consciousness, empowering students to engage meaningfully with societal issues.

Moreover, Bloom's Taxonomy of Cognitive Domains, a well-established classification of educational objectives, provides a framework for understanding the hierarchical nature of thinking skills (Bloom et al., 1956). It categorizes cognitive skills into six levels, from essential knowledge acquisition to high-level critical thinking and problem-solving. This taxonomy guides educators in designing instructional activities that foster critical thinking at various levels of

complexity, ensuring that learners progress in their ability to analyze, evaluate, and synthesize information.

Conceptual Framework

Conceptual Models

The conceptual framework guiding this research encompasses several models and theories that inform the study's approach to developing critical thinking in the English as a Foreign Language (EFL) classroom at SENA in Montería, Colombia.

Bloom's Taxonomy. This model, developed by Benjamin Bloom (1956), is a foundation for understanding cognitive processes. It categorizes thinking skills into six levels, from basic knowledge to higher-order thinking. The research employs this taxonomy to evaluate how instructional strategies impact students' ability to engage in critical thinking, moving beyond rote learning to higher cognitive processes.

Sociocultural Theory. The works of Lev Vygotsky (1978), an influential educational psychologist, provide insights into how social interaction and cultural context shape cognitive development. The research considers the sociocultural aspects of the EFL classroom and their role in fostering critical thinking skills.

Variables and Constructs

The research identifies critical variables and constructs integral to the study's focus on developing critical thinking skills within the EFL classroom at SENA in Montería:

Teaching Strategies

According to Killen and O'Toole (2023), teaching strategies are fundamental to teaching and learning, providing educators with a structured framework to guide their instructional practices. These strategies encompass various characteristics that contribute to their importance

in education. Firstly, they offer a systematic approach to teaching by establishing clear goals, defining actionable steps, and efficiently mobilizing resources to achieve desired learning outcomes. Aligned with educational objectives, they cater to diverse learning preferences and needs, ensuring inclusivity and effectiveness.

Moreover, teaching strategies are adaptable to different teaching-learning situations, allowing for flexibility and customization based on instructional goals, content complexity, and learner characteristics. Whether employing autocratic or democratic approaches, these strategies facilitate knowledge transfer from teacher to learner, fostering engagement and comprehension through a balanced mix of content delivery and interactive activities. They also consider learners' psychological aspects by incorporating activities that align with their interests, needs, and motivation levels, thus creating an optimal learning environment while adhering to teaching principles.

Killen and O'Toole (2023) highlight the numerous benefits of effective teaching strategies for educators and learners. These strategies stimulate critical thinking, collaboration, and creativity among students, resulting in positive learning outcomes that transcend the classroom. Promoting student engagement and responsibility for learning fosters positive teacher-student relationships and cultivates a sense of community within the school. Additionally, they instill values such as cooperation and shared decision-making while providing hands-on learning experiences that enhance understanding, retention, and application of knowledge.

In conclusion, teaching strategies are indispensable tools in the educational process, as emphasized by Killen and O'Toole (2023). They facilitate effective instruction and contribute to

learners' holistic development, preparing them for success in various domains of life beyond academia.

The educational landscape boasts a plethora of teaching strategies, ranging from recitation and discussion to role play, games, and simulation. Each plan offers unique benefits and opportunities for engaging learners, providing educators with a diverse toolkit to address students' varied needs and preferences. Acknowledging that no single teaching strategy reigns supreme across all circumstances is essential. Instead, selecting a plan should be approached carefully and rationally, considering factors such as instructional objectives, content complexity, contextual considerations, desired learning outcomes, and learner characteristics. Additionally, in the following sections it is discussed about the set of strategies implemented upon EFL classes.

Roleplaying. Role-playing underscores the social dimension of learning and its capacity to stimulate students intellectually and socially through cooperative behavior (Jarvis and Troiano, 2002). This teaching strategy offers numerous advantages for both educators and learners. Firstly, it enhances student interest in the subject matter, as research indicates that integrating experiential learning activities into the classroom can heighten interest and deepen understanding of course content (Poorman, 2002).

Moreover, role-playing fosters increased student engagement, shifting learners from passive recipients of knowledge to active participants in the learning process. Poorman (2002) asserts that genuine learning cannot occur when students are mere observers, highlighting the transformative effect of active involvement. Additionally, role-playing cultivates empathy and promotes an understanding of diverse perspectives among students (Jarvis and Troiano, 2002). By assuming the roles of different characters and immersing themselves in various scenarios, learners gain firsthand experience in seeing the world through others' eyes.

Games. Educational games, including simulation-based ones, promote active learning and collaboration among students, aligning with the preferences of today's learners accustomed to interactive and engaging materials, an innovative teaching strategy (Strauss, Howe & Markiewicz, 2006). By participating in simulation games, students engage in concurrent instruction, practice, and assessment, allowing for a more natural learning experience; these games enable students to self-reflect, identify areas for improvement, and apply their knowledge in realistic scenarios (Mawhirter y Garofalo, 2016).

Debates. Debate as a teaching strategy holds significant promise for language learning, offering an innovative, student-centered approach that engages learners through interactive, collaborative tasks. Extensive literature underscores the role of debate in language learning, emphasizing its potential to enhance learners' motivation, language proficiency, and soft skills such as critical thinking, cooperation, collaboration, and creativity. By encouraging students to engage in structured arguments and defend their viewpoints, debate improves language skills and fosters the development of valuable interpersonal and cognitive abilities (Cinganotto, 2019).

Simulations. The concept explored in Hamad and Alnuzaili's (2022) study revolves around using simulation as a teaching strategy to enhance English as a Foreign Language (EFL) speaking skills. The simulation strategy involves creating simulated real-life scenarios or environments in the classroom to provide learners with opportunities to practice and develop specific language skills. In this case, the researchers utilized a simulation strategy to simulate speaking situations, allowing students to engage in conversations and interactions as they would in real-life contexts.

By exercising their freedom of choice, educators can tailor their instructional approach to suit their students' specific needs and preferences. This flexibility allows for adaptability and

ensures that teaching strategies are aligned with the overarching goals of education while catering to students' diverse learning styles. Ultimately, the rational selection of teaching strategies empowers educators to create dynamic and engaging learning experiences that foster more profound understanding, critical thinking, and meaningful learning outcomes for all students.

On the other hand, in the realm of English as a Foreign Language (EFL) education, the pursuit of effective teaching methodologies is paramount to fostering student engagement, motivation, and critical thinking skills. Educators wield diverse instructional strategies tailored to support higher-level cognitive processes and scaffold students toward proficiency. As highlighted by Goldenberg (2008), “teachers use explicit instructional strategies, such as questioning techniques, to support higher-level thinking that involves predicting, summarizing, problem-solving, organizing, evaluating, and self-monitoring” (Goldenberg, 2008, p.3).

The instructional methods implemented in language education also incorporate scaffolding techniques meticulously designed to provide students with tailored support as they progress toward higher proficiency levels. Within this framework, students are granted sufficient time to practice these strategies, receiving guidance from peers and educators. Moreover, these methods aim to enhance understanding and instill in learners the confidence to navigate intricate linguistic obstacles autonomously.

Project-Based Learning

Project-based learning emerges as a dynamic pedagogical approach strategically embedded within the research to catalyze and harness motivation in the language learning process. Lam (2022) argues that project-based learning (PBL) is a practical pedagogical approach for promoting student engagement, motivation, and critical thinking skills in language

education and literature. The author supports this argument by citing research studies showing positive outcomes for PBL in language learning. He also provides examples of how PBL can be implemented in language classrooms. Considering the above, this strategy serves as a cornerstone of the research's methodological framework, with a particular emphasis on its influence on student engagement and the development of critical thinking. By interweaving this approach, the study delves into how teaching strategies invigorate the learning process and elevate students' motivation, ultimately shaping their critical thinking skills.

Critical Thinking Skills

According to Baş and Bolat (2022), critical thinking skills comprise the cognitive abilities of analysis, evaluation, synthesis, and problem-solving. Developing these skills are measured as the primary outcome of the research.

Scaffolding

Drawing from Vygotsky's sociocultural theory (1978), scaffolding represents the support and guidance provided to students during the learning process. Effective scaffolding is expected to facilitate the development of critical thinking skills. To understand the broader picture, it is essential to consider how students' inherent abilities, such as language proficiency, play a role in their learning process.

Language Proficiency

Rashid & Hashim (2008) suggested that language proficiency serves as a moderator, acknowledging that students' language abilities can influence the extent to which they can express and apply critical thinking skills. By integrating these elements—critical thinking, scaffolding, and language proficiency—it is worth saying that to enhance students' overall cognitive development the regulatory framework needs to be attended, as follows:

Regulatory Framework

Educational Regulations

EFL education in Colombia and Montería operates within a well-defined regulatory framework to ensure quality and consistency in language instruction. Key regulations and standards that impact EFL education include:

National Bilingualism Plan (PNB). This plan, implemented by the Colombian government, outlines the strategic goals for developing bilingualism among Colombian students. It emphasizes the importance of equipping learners with proficiency in a second language, mainly English and cultivating critical thinking skills (MEN, 2014). This initiative, part of the National Bilingualism Plan, provides a structured approach to EFL education. It focuses on critical thinking as a central component of bilingual education (MEN,2018).

This program sets a long-term vision for advancing bilingualism and developing critical thinking skills among students. It underlines the importance of an interdisciplinary and comprehensive approach to EFL education and represents a significant commitment from the Colombian government to advancing bilingualism and critical thinking skills among its students (MEN,2018). Colombia's language policy emphasizes the significance of multilingualism in the country. It recognizes that linguistic proficiency, including EFL education, is intertwined with cognitive development and the ability to think critically (James, 2018).

Quality Assurance and Assessment. As stated in the National Plan for Bilingualism (2014-2018) and the Framework for the Assessment of Foreign Language Proficiency (2022) of the Colombian Ministry of Education, Quality assurance and assessment are integral parts of the EFL educational landscape in Colombia. They ensure that students receive a high-quality education and that their critical thinking skills are effectively developed. Key aspects of the

regulatory framework related to assuring and assessing quality include. The Institute for the Evaluation of Education (ICFES, 2018, p. 12) notes that the Colombian government conducts standardized English proficiency examinations. These assessments gauge students' language skills and ability to think critically in English. Institutions, including SENA, must align their curricula with the expectations set by these examinations. On the other hand, the Basic Proficiency Standards in Foreign Language: English published by the MEN (2018) ensure that students' progress towards defined proficiency levels, including those expected by standardized English language proficiency tests.

Teacher Certification. According to the reference framework of competencies for teacher training and performance provided by the Ministry of National Education (2022), instructors responsible for EFL education at institutions like SENA are often required to attain certification to ensure the quality of teaching. This certification includes assessing their ability to employ instructional strategies that foster critical thinking. According to the Ministry of National Education (2018) and the National Accreditation Council (CNA, 2022) which details the requirements for curriculum design, instructional methodologies, teacher qualifications, assessment practices, and critical thinking development, ensure that EFL programs meet high standards of quality; EFL programs, including those offered by SENA, undergo accreditation processes to ensure they meet specific standards and objectives. This process evaluates pedagogical approaches promoting critical thinking skills (MEN, 2018).

Compliance and Accountability. According to the Ministry of National Education (2018), compliance with educational regulations and standards is closely monitored in the National Plan for Bilingualism, and mechanisms are in place to ensure accountability at various levels within the EFL education system. The National Plan of Bilingualism describes the MEN's

role in overseeing educational oversight, institutional self-assessment, and accountability frameworks, ensuring that EFL education meets the expected quality standards. In Colombia, educational authorities oversee institutions like SENA to ensure they adhere to national educational regulations, including those related to EFL education. These authorities conduct periodic evaluations and assessments to measure compliance (MEN,2018).

Educational institutions, including SENA, must self-assess their programs and curricula. This process involves evaluating their capacity to foster critical thinking skills and meet national bilingualism goals (MEN,2018). Accountability frameworks are established to hold institutions accountable for the quality of EFL education they provide. These frameworks often include specific indicators of language proficiency and critical thinking development (MEN,2018). The regulatory framework governing EFL education in Colombia and Montería is comprehensive and firmly rooted in promoting bilingualism and critical thinking. It emphasizes the need for alignment with national goals and standards, stringent quality assurance mechanisms, and accountability measures to ensure that students receive high-quality education and emerge as critical thinkers prepared for the challenges of the 21st century. As a key player in this landscape, the SENA institution is subject to these regulations and plays a pivotal role in fulfilling these objectives.

Methodology

Introduction to the Research Design

This chapter provides an intricate account of the methodology employed in this research, aimed at unraveling the complexity of teaching strategies in the context of language learning at SENA in Montería. This chapter guides the study, encompassing the methodological framework, type of study, data collection instruments, and ethical considerations. The meticulous design of this methodology is central to the study's mission of providing a comprehensive understanding of how teaching strategies collaboratively shape the development of critical thinking skills in the EFL classroom.

Methodological Design

At the core of this research, the methodological design embraces a qualitative approach, especially a case study collecting and analysis within the same phase of the research. This study advocates the use of a qualitative research design. Within the qualitative research tradition, case study research is employed to address the central question in this proposal. The research question asks for an in-depth exploration of teaching strategies to develop critical thinking strategies in a SENA English classroom.

Research Method

As stated earlier in this chapter, this study ascribes case study research to address the research question formulated and asks for the in-depth exploration of teaching strategies for developing critical thinking strategies in SENA English classrooms. As Yin (2014) notes, case studies are characterized by the following attributes: the ability to cope with the technically distinctive situation where there will be many more variables of interest than data points; the reliance on multiple sources of evidence, with data needing to converge in a triangular fashion;

and the benefit of prior development of theoretical propositions to guide data collection and analysis.

This method employs an analytical model based on cases, utilizing an intrinsic methodology to gain in-depth knowledge and understanding of the cases under analysis, which are considered complex and in constant operation (Stake, 1999). Consequently, this type of research is distinguished by a comprehensive and meticulous analysis of the case representing the study object. In this context, the research is particularistic, descriptive, heuristic, inductive, and cooperative regarding the relationship between the actors involved and the researcher. However, the primary focus, the conditions under which the case is to be studied, must also consider the ability to delineate its boundaries regarding its environment (Mertens, 2005). Additionally, as cited by Hernández et al. (2010), a case study is an investigation of an individual, group, organization, community, or society that is viewed and analyzed as an entity. The context in which the subject being studied develops must be considered.

By the postulates above, this work is considered an intrinsic case study (Stake, 2005), or what Yin (2014) refers to as the unique case design, given that it possesses distinctive characteristics, which render it of intrinsic value and aim to achieve a more profound comprehension of the specific case under study. This method allows researchers to gain a more comprehensive understanding of a research problem by triangulating findings from different data sources. This design gathers quantitative data to support the qualitative findings or see how they can be generalized (Creswell, 2005, p.201). As Villarreal and Landeta (2010) previously stated, its attributes make the case study a crucial tool for understanding intricate and multidimensional phenomena within specific contexts. As such, the research findings are insightful and contextually grounded, enabling a nuanced exploration of the factors at play.

A qualitative research approach offers an in-depth exploration of the subject matter. As Avalle (2022) claimed, it serves as a research methodology that delves into a particular case or collection of cases, offering an understanding of a phenomenon by examining its various dimensions and contexts. In this case, the focus is on SENA Montería, a well-known public institution in Colombia that provides vocational training and technical education, including EFL programs. By concentrating on this specific context, the research can uncover the nuances and subtleties that might be overlooked in more generalized research methods (Avalle, 2022).

Research Approach

This study advocates the use of a qualitative research approach. Within the qualitative research tradition, Creswell refers to the objective reality as not a fixed entity but a social construct (Creswell, 2005, p.201). The researcher's role is to understand the complexity of the experiences from the perspective of those who share them and to recognize the diversity of constructions that may arise. This involves establishing a bridge of communication and interactivity between the researcher and the participants, facilitating the construction of knowledge shaped by the cultural context.

In this context, Taylor and Bogdan (1986) posit that the objective of qualitative research is to analyze and elucidate specific social phenomena through the interpretation of empirical data derived from fieldwork about questions such as the "why," "how," and "when" of the subjects under study, rather than the mere accumulation of numerical data. Consequently, qualitative research seeks to understand the experience and the factors that affect specific topics, practices, or concepts. It is based on the understanding that reality is built by the individual in constant interaction with his social context. Accordingly, qualitative research is based on understanding the meanings that human beings construct based on their own experiences. These meanings are

related to the researcher's perceptions. Description is the main instrument used in qualitative research, and the collection and analysis of information are the main tasks.

To sum up, a qualitative approach and case study method are employed in this research to address the central question to be answered. In this way, the research methodology acknowledges the variation in the development of critical thinking skills and recognizes that the unique setting of SENA Montería influences these variations. The qualitative approach is well-aligned with a case study within the research's overarching objective: to provide a comprehensive understanding of how teaching strategies impact the development of critical thinking skills. It allows the study to unearth the complexities of this relationship within the real-world setting of the EFL classroom at SENA in Montería.

Context of the Research

SENA Montería was chosen as the research context because it is an educational institution that significantly impacts the lives of its students, and EFL programs are an integral part of its curriculum. By focusing on SENA Montería, the research explores the development of critical thinking skills among students at level A2 according to the Common European Framework of Reference for Languages (CEFR). This reference framework ensures that the findings are situated within an international context, enhancing their relevance and applicability.

Population and Sampling Procedures

According to Hanlon and Larget (2011), a population denotes all constituents of any clearly defined group of people, events, or objects that are the subject of an investigation. On this basis, the people studying in SENA educational institutions are located in the Córdoba department, which has socio-cultural features of inequality of low socioeconomic class and high vulnerability conditions. It is essential to mention that some of their economic activities are

associated with informal labor and agriculture. According to the previous information, SENA is an opportunity for these students to improve their incomes and socioeconomic aspects.

Regarding English language teaching, there is a population of nine teachers who assist 270 students from different municipalities and technical programs.

As a sampling procedure, a nonrandom sampling technique is often used when researchers need quick and convenient access to participants. Therefore, this research is drawn by convenience sampling, which involves selecting individuals who are most straightforward to reach or are readily available. However, it may lead to a biased sample since those who are most accessible may not be representative of the entire population. As a result, the researcher has included people who are available or volunteers or can be quickly recruited and willing to participate in the study (Hanlon and Larget, 2011). The researcher selects individuals who can be “conveniently selected.” Thus, the sample participants are 24 technical students in programs who learn English as a subject degree. Six (6) EFL teachers have voluntarily offered the data necessary to complete the research.

Ethical Protocol

The research addresses the critical need for integrating critical thinking skills into English language education in Colombia, recognizing its transformative potential in preparing students for the complexities of the 21st century (Dewey, 2022). By cultivating critical thinking alongside language proficiency, the study aims to bridge the gap between policy objectives and classroom practices, enhancing educational outcomes at both institutional and individual levels. This integration is essential for fostering global competitiveness and equipping students with the adaptability and problem-solving skills necessary for success in modern workplaces and international settings.

Furthermore, the research holds promise as a catalyst for professional growth and development, offering educators opportunities to refine instructional practices and contribute meaningfully to the educational journey of their students. By exploring innovative teaching strategies that promote critical thinking in the EFL classroom, the study seeks to enhance language acquisition and academic achievement, aligning with the overarching objectives of the National Learning Service (SENA) and enriching educational practices within Colombia. Ultimately, the research aims to empower individuals capable of making meaningful contributions in a perpetually changing world, thus making a valuable contribution to educational advancement and societal progress.

Conversely, recruiting participants involves a sample obtained through a simple random sampling technique from the SENA population of 24 students aged between 17 and 35, with a distribution of 14 women and 10 men. Additionally, six English teachers are participating in the research. Informed consent procedures include obtaining consent from parents or legal-age students, with the assurance of confidentiality by replacing participant names with nominal codes (Velázquez, 2017; López, 2004). Anonymity and confidentiality are maintained to ensure the relevance and social value of the research without any exclusions based on participants' characteristics. The data was stored encrypted and protected to safeguard the privacy and integrity of the entire study population.

Data collection involves a multifaceted strategy, combining surveys, academic performance analysis, and classroom observations to comprehensively explore the role of motivation and teaching strategies in shaping critical thinking skills in the EFL classroom at SENA in Montería. Surveys and questionnaires gather structured data on teacher knowledge and perspectives, employing open-ended and closed-ended questions (Muñoz, 2003; Fowler, 2013).

Academic performance analysis evaluates students' achievements, while classroom observations offer insights into student behavior and interactions (Lam, 2022; Martínez, 2007). Through meticulous implementation, the study thoroughly examines critical themes, enriching the depth and breadth of research findings while maintaining ethical standards and confidentiality measures.

Data Collection Techniques

This methodological chapter is not merely a roadmap for the study's progression but also a testament to the research's unwavering dedication to comprehensively investigating the role of motivation and teaching strategies in shaping critical thinking skills in the EFL classroom at SENA in Montería. It lays a robust foundation for the subsequent presentation of findings and analysis, providing the structural integrity for exploring these critical themes. Using various methods to present and summarize data can help understand the study. Also, it is helpful for researchers to reach conclusions and summarize the purposes or different strengths, which can affect the decision to use one over another.

This research employs a mixed data collection approach, incorporating techniques such as data coding, analytical matrices, and pattern matching. This process involves condensing words into abstract categories, with these categories or themes beginning to surface during initial analysis in the field. However, they can also be gathered through repeated and meticulous iterations, allowing for identifying abstract concepts that can be coded and displayed in various configurations. This gradual process enables the researcher to develop a deeper understanding of the social and behavioral implications of the findings.

Descriptions and Rationale of the Instruments

Researchers combine qualitative and quantitative instruments to gain a more holistic and nuanced understanding of critical thinking. This approach allows researchers to comprehensively examine critical thinking, capturing individual experiences and overarching trends within a given population. As follows:

Surveys and Questionnaires. Surveys and questionnaires constitute the primary means of data collection in this research. The questionnaire is a classic procedure in the social sciences for obtaining and recording data. The questionnaire consists of questions, usually of various types, systematically and carefully prepared on the facts and aspects of interest in a research or evaluation (Muñoz, 2003). This set of questions is precisely designed to elicit information relevant to the context of a particular investigation or assessment. Questions can vary in type, meaning they can be open-ended (where respondents can provide answers in their own words) or closed-ended (where respondents choose answers from a list provided).

These instruments are meticulously designed to gather structured data concerning teacher knowledge or their perspectives on the teaching strategies they use to promote critical thinking in their classrooms and their effective practice; it includes questions about specific activities, approaches, what strategies they use, how they apply them and the effectiveness of these strategies in their teaching process, and what observations they have made about how their students have responded to these strategies. According to Fowler (2013), “the survey is a systematic method for collecting information from, or about, a population” (p. 1); in this case, it incorporates a combination of open-ended and close-ended questions, enabling the collection of diverse perspectives and in-depth insights.

Furthermore, this method efficiently quantifies teachers' levels of affinity or familiarity with the multiple strategies and perspectives about the efficacy of different teaching strategies. By skillfully weaving both qualitative and quantitative survey questions, the study aims to gather a comprehensive dataset that encapsulates the breadth and depth of t experiences, ultimately enhancing the reliability and validity of research findings.

Academic Performance Analysis. A critical facet of data collection is analyzing academic performance in English at SENA in Montería. Lam (2022) states that "the analysis of academic performance is pivotal as it synergizes qualitative and quantitative data, enabling a nuanced and comprehensive exploration of the research topic" (p. 1248). According to him, it refers to gathering and analyzing data related to students' academic achievement in a particular subject, in this case, English at SENA in Montería. Besides, this analysis serves as the empirical touchstone of the research, facilitating the evaluation of how teaching strategies materialize into quantifiable academic achievements. The data collected through this analysis plays a pivotal role in assessing the practical impact of teaching strategies on students' language learning outcomes. The multi-dimensional approach to data collection is crucial as it synergizes qualitative and quantitative data, enabling a nuanced and comprehensive exploration of the research topic.

Classroom Observations. Classroom observations are the hidden eyes and ears of the research, offering a direct and immersive window into the EFL classroom environment at SENA in Montería. This method is vital for understanding student behavior, interactions, and the implications of different teaching strategies. According to Martínez (2007), in social research and any other type of research, observation and written documentation of what is observed are essential tools for generating detailed and precise descriptions. These records are elaborated by observing a specific reality that becomes the object of study. It is important to note that the

researcher's experience and purposes influence observation and documentation, as his or her questions guide this process in the field.

The observations are conducted over an extended period, capturing the dynamic evolution of the learning environment. They encompass assessing diverse instructional strategies, student engagement, and classroom interactions. Classroom observations allow the research to deeply understand how students respond to varied teaching methods and how critical thinking skills influence these responses. This methodological element offers a rich contextual exploration of the learning environment within the EFL classroom's real-world dynamics.

Validation Procedures

Instrument validation is a critical process intended to ensure the robustness, coherence, relevance, and clarity of each question proposed, aligning closely with the research objectives. Appendix E provides five formats for the expert evaluator to complete, guided by the previously outlined criteria.

A panel of highly qualified experts from universities was set up to validate the instruments used in this study. These experts thoroughly evaluated the teacher interviews, the online questionnaires for teachers and students, and the field diary where observations were recorded. Both evaluators reviewed the established evaluation criteria, which covered the instrument items' clarity, objectivity, consistency, coherence, relevance, and appropriateness.

The validation process reflected careful consideration of the study's specific needs and the characteristics of the educational context where the instruments were applied. The experts noted that the instruments provided a clear and logical structure for collecting data on students' progress and the effectiveness of teaching strategies. They also highlighted the importance of establishing precise mechanisms for evaluating the impact of these strategies on the development

of student's critical thinking, using qualitative and quantitative indicators to measure success and adjust as necessary.

This result strengthens confidence in the quality and relevance of the instruments for measuring the research objectives. In addition, observations made during the validation process underlined the importance of contextualizing the data analysis within the theoretical framework and specific objectives of the study. This ensures accurate interpretation of the results and identification of potential areas for improvement in the teaching and learning of critical thinking.

Data Analysis

Introduction to Data Analysis and Findings

This chapter is dedicated to deepening the analysis and presentation of the data obtained through various instruments carefully designed as part of this research effort to answer the following research question: What are the didactic strategies for the development of critical thinking skills in an EFL class with technologist courses at SENA in Monteria?

The instruments selected are derived from a mixed methods approach adopted in this study, encapsulating quantitative and qualitative data, such as surveys and questionnaires, academic performance analysis, and classroom observations, which were fundamental to capture a broad spectrum of quantitative and qualitative data relevant to the exploration of teaching strategies oriented to foster critical thinking skills in A2 level students enrolled in SENA courses in Monteria.

Data Management Procedures

The data analysis of this study is based on mixed information. The information was collected through two online questionnaires, one of which was made to 6 educators and the other to 24 students, observations in the face-to-face sessions of the different teachers, which were recorded in field notes, and, likewise, semi-structured interviews with teachers. Once the participants were selected and after their intervention, they answered the first instrument, a questionnaire, to evaluate students' critical thinking and logical argumentation skills. The results were analyzed.

The data were obtained through an online questionnaire that, in turn, organized and systematized the information. First, the information was reduced to analyze the relevant elements from the participants' perspectives on critical thinking and logical argumentation. Subsequently,

the data were organized into categories. Finally, the information gathered led to establishing some conclusions regarding which categories need more attention and improvement, thus applying the most accurate learning strategy to develop critical thinking skills in students.

The questionnaire's objective was to know, evaluate, or assess the student's critical thinking skills, argumentative skills, and open-mindedness in their different fields. The questionnaire provided criteria for evaluating critical thinking skills, classified into various sections according to varying levels of competence, from which students were asked to select one or more of the answers they felt most comfortable with through a self-assessment process. This enabled two categories to be established, namely strategies to promote critical thinking and levels of critical thinking of students, around which the analysis of the results of the other instruments implemented in the research project will revolve. This was followed by a questionnaire for the teachers or instructors, which consisted of 14 questions, including those relating to the characterization of the teachers. The data were obtained through an online questionnaire that organized and systematized the information.

First, the information was reduced to analyze the relevant elements from the participants' perspective on strategies to promote critical thinking in the classroom and the effectiveness of these strategies throughout the participants' professional journey. The data were then organized into graphs and, finally, the information gathered allowed for some conclusions regarding the evaluation of the effectiveness of different English teaching strategies that promote critical thinking and how these strategies help students understand, apply, analyze, synthesize, and solve problems in both English and technology contexts.

The analysis of the results collected in the second questionnaire was evaluative. The objective was to assess how teachers perceive and use teaching strategies in specific areas, such

as English as a foreign language (EFL) and technology courses, throughout their work trajectories, gathering teachers' perspectives and experience regarding the effectiveness of the strategies employed to teach these subjects and how they perceive student learning in these areas.

The collection and analysis of responses can help identify areas of strength and opportunities for improvement in teaching strategies, as well as allow for alignment between teaching methodologies and the perceived needs of students about language learning and understanding of technical concepts. Besides, by observing and recording or collecting information organized through field notes, a more detailed picture could be obtained regarding the application and effectiveness of pedagogical strategies to promote critical thinking skills. The purpose of implementing the field diary and observation was to record specific details of the classes observed, including activities, student participation, levels of understanding, group dynamics, challenges encountered, and conclusions.

Regarding the results collected, these observations provide a detailed and contextualized view of how critical thinking is implemented in the classroom in different educational programs. Furthermore, the data collected highlight the effectiveness of specific pedagogical strategies and, at the same time, identify challenges and areas for improvement in promoting critical thinking in particular learning environments. Finally, these findings are fundamental to understanding current practices, identifying barriers to implementing critical thinking, and proposing strategies to improve teaching critical thinking in the context of English language learning in diverse educational programs.

Furthermore, the semi-structured interview was conducted with teachers to gather information about the strategies for fostering critical thinking in the English classroom. These

interviews comprised 14 questions that sought to explore teachers' pedagogical practices and approaches to developing critical thinking in students.

The interview was conducted to understand how teachers integrate and promote critical thinking in their English lessons. In addition, it sought to explore how the educational institution supports the development of critical thinking and what strategies and inhibitors teachers identify in the classroom. The responses provided by the teachers offer a comprehensive view of how critical thinking is approached and understood in the English classroom. Moreover, they reveal the importance of integrating various strategies to effectively develop essential thinking skills and the challenges that may hinder this process in the educational environment.

The results of this study hold significant relevance for ongoing research focused on strategies to enhance critical thinking in English language education. By soliciting direct feedback from teachers with firsthand classroom experience, this research offers authentic insights into the practical integration of essential thinking skills within English language teaching. This approach identifies successful classroom strategies teachers employ to foster critical thinking, providing valuable guidance for refining existing practices or implementing new methods in educational settings.

Moreover, the findings shed light on the obstacles and challenges encountered by teachers in their efforts to promote critical thinking. This critical examination is essential for understanding both the practical and systemic barriers that may impede the effectiveness of such initiatives. By uncovering these challenges, educators and policymakers can develop targeted interventions to address them, enhancing the overall efficacy of critical thinking instruction in English language classrooms.

Furthermore, content analysis is presented as an appropriate method of data analysis for this study because of its ability to delve into the meaning of texts within a specific context. According to Delgado and Gutiérrez (1998), the content of a text is not limited to the text itself but transcends to an external plane where it acquires its true meaning. This methodology makes it possible to explore texts' hidden dimensions and latent meaning and infer meanings from the subjects' accounts. On the other hand, descriptive statistics complement content analysis by providing a quantitative understanding of the data. As Nick (2007) points out, descriptive statistics allow data to be summarized and analyzed systematically, using methods such as measures of location and dispersion for quantitative variables and graphical representations. This methodology helps identify patterns and trends in the quantitative data collected in the study, which contributes to a more complete understanding of the phenomena under investigation.

In summary, combining content analysis and descriptive statistics allows the study's data, including qualitative and quantitative aspects, to be addressed, providing a holistic and enriching perspective for the research.

Categories

After implementing the initial questionnaires, observation, notes field, interview, and analysis of the results, it was necessary to relate the categories and how they are related or would impact the implementation of the learning strategies to develop critical thinking skills. The categories that guided the development of critical thinking skills in Sena-Montería students were classified as follows: a) ***levels of critical thinking of students*** and b) ***strategies to promote critical thinking***. Most of the data was analyzed through the qualitative perspective by interpreting the narratives and participants' outcomes using the Google Forms spreadsheet and interviews to give accurate reports on the information gathered.

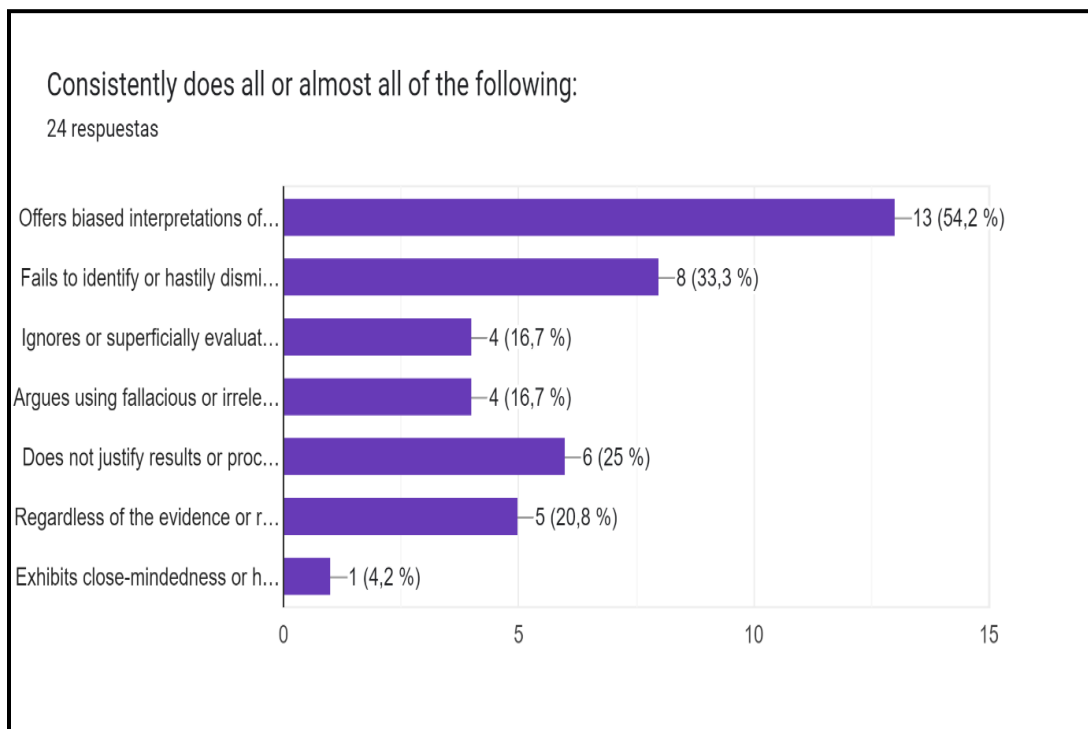
Results

Once the categories were set by the questionnaires, observation, field diary, and interviews, the categories presented are strategies to promote students' critical thinking and levels. Thus, this research study focused on developing those categories of critical thinking skills by implementing learning strategies.

Levels of Critical Thinking of Students

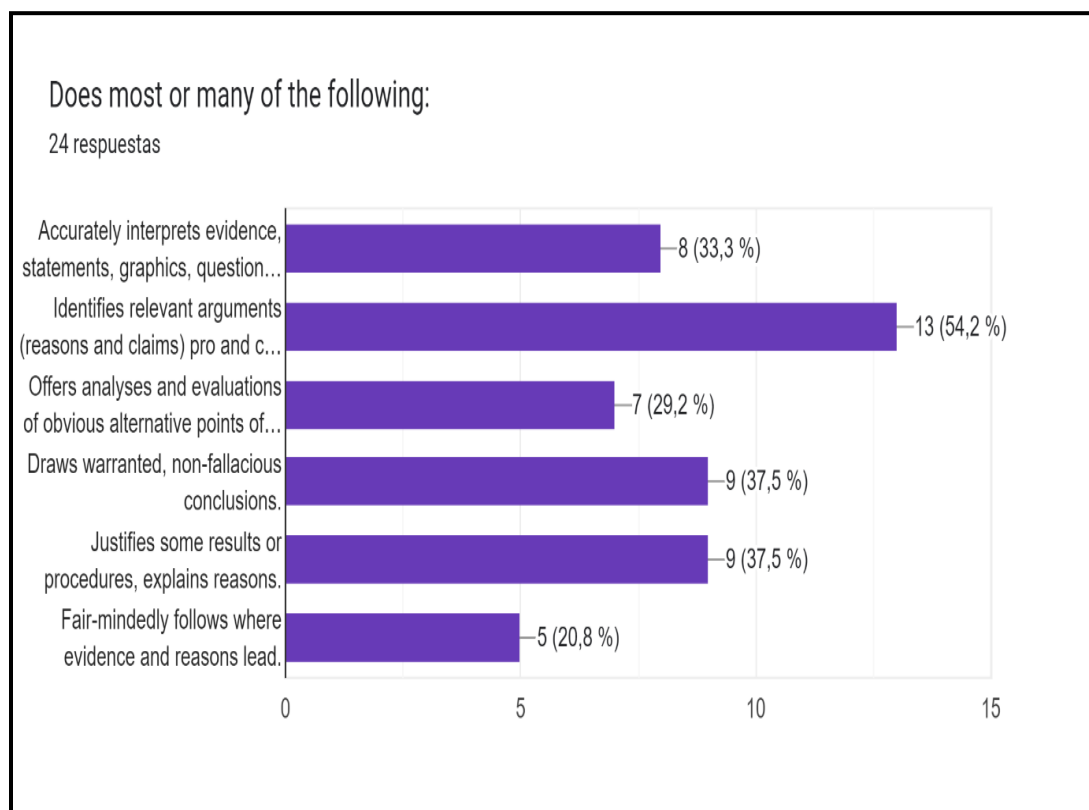
The target population to participate in this research comprises 24 participants between the ages of 17 and 35 years old from the SENA technological programs and six (6) EFL SENA teachers. Participants, teachers, and students answered the Google Form questionnaires and semi-structured interviews designed to collect more precise information about the implementation, advantages, and relevance of pedagogical strategies that promote critical thinking.

The students' questionnaire had criteria for assessing critical thinking skills, categorized into four sections based on varying proficiency levels. In the first section, 54,2 % of students stated that they offer biased interpretations of evidence, statements, graphics, questions, information, or the points of view of others. In comparison, 33,3% stated they fail to identify or hastily dismiss strong, relevant counterarguments. 25% does not justify results or procedures nor explain reasons. Meanwhile, the options that state students ignore or superficially evaluate obvious alternative points of view or argue using fallacious or irrelevant reasons and unwarranted claims represent 16,7% each. Furthermore, 20,8% of the participants stated that regardless of the evidence or reasons, they maintain or defend views based on self-interest or preconceptions—finally, just 4,2% state they exhibit close-mindedness or hostility to reason.

Figure 1*Participant First Outcomes*

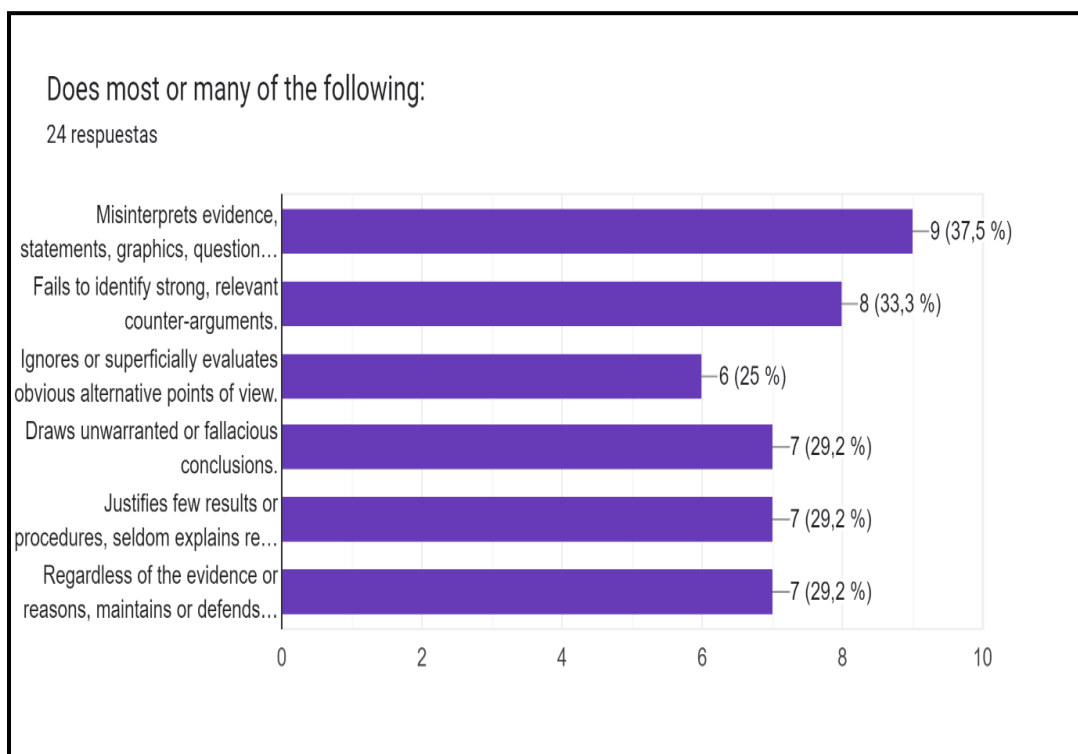
Note. Source. Own elaboration, (2024).

In the second section, 33,3% of the answers claim that students accurately interpret evidence, statements, graphics, questions, etc. Meanwhile, 54,2 % identifies relevant arguments (reasons and claims), pro and con. Besides, 29,2% offered analyses and evaluations of obvious alternative points of view. Nine students, representing 37,5%, stated to draw warranted, non-fallacious conclusions, and another 37,5% justified some results or procedures and explained reasons. Finally, 20,8% said that fair-mindedly follow where evidence and reasons lead.

Figure 2*Participant Second Outcomes*

Note. Source. Own elaboration, (2024).

Another section of the categories gave the following results: 37,5% of the answers stated that students misinterpret evidence, statements, graphics, questions, etc. 33,3% fail to identify strong, relevant counterarguments. 25% ignore or superficially evaluate obvious alternative points of view. The following three options presented the same percentage of responses, which is equivalent to 29.2% in each one.

Figure 3*Participant Third Outcomes*

Note. Source. Own elaboration, (2024).

On the other hand, in the teacher's questionnaire, all the questions aimed at getting information about the use of learning strategies to promote critical thinking and the essential level of thinking of the students. In the first one, "the teaching strategies used in the EFL class effectively encourage students to grasp and understand new concepts," 50% of the teachers answered "Sometimes," and 16,7% answered "Always." The same percentage for the other options, which are "Usually" and "Rarely," but no one answered "Never," which contributes to ruling out any possibility that the strategies to promote critical thinking skills, according to the teachers, are ineffective.

Strategies to Promote Critical Thinking

To analyze the category chosen, some note fields were taken during sessions of four groups; the purpose was to explore the implementation of critical thinking along with the teaching strategies employed to develop the different essential levels of thinking and skills. Based on the observations provided in the journal entries, the following teaching strategies and instructional techniques were identified:

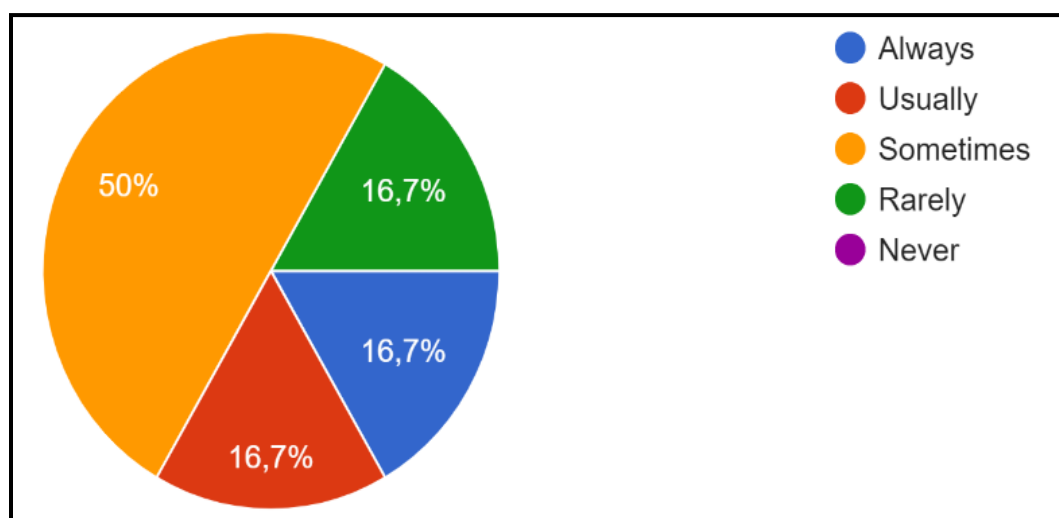
- Structured activities focused on developing critical thinking through persuasive writing.
- Scaffolded questioning techniques to guide students through the process of critical analysis.
- Incorporation of collaborative discussions to enhance comprehension and engagement.
- Use of visual aids to support understanding and illustrate concepts.
- Providing constructive feedback on language proficiency and the quality of reasoning.
- Interactive activities to engage students in discussion and interpretation of texts.
- Integration of multimodal approaches, including visual and auditory stimuli.
- Peer collaboration and feedback sessions to encourage deeper analysis and critique.
- Use of open-ended questions to promote deep thinking and analysis.
- Utilization of creative exercises to foster divergent thinking and imaginative exploration.

- Implementation of small group activities to encourage collaboration and discussion.
- Incorporation of debating exercises to explore ethical dilemmas and articulate viewpoints.
- Conclusion of lessons with written reflections to encourage metacognitive awareness.
- Assessment criteria that include evaluation of critical thinking alongside language proficiency.

These teaching strategies and methods are designed to embed critical thinking skills within the English as a Foreign Language (EFL) classroom setting. Their implementation in the classroom aims to foster heightened student engagement and analysis. Observations of their application were meticulously recorded in the journal instrument, which is available in the appendices.

Figure 4

Teacher's Outcomes About the Effectiveness of Teaching Strategies in the EFL Class.

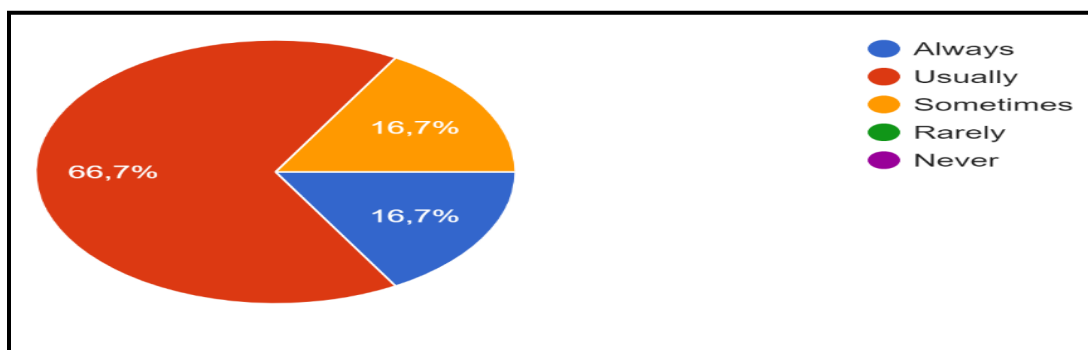


Note. Source. Own elaboration, (2024).

The teaching methods support students in applying theoretical knowledge to practical scenarios". In this statement, a percentage in favor of the strategies applied in the different practical scenarios can be observed, with "always" representing 66.7 % and the same 16.7 % for both "sometimes" and "always."

Figure 5

Teacher's Outcomes about Support of the Methods in Practical Scenarios.

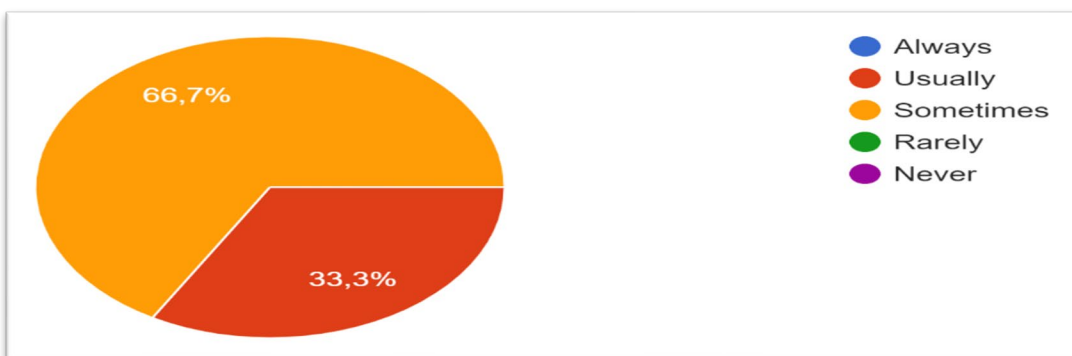


Note. Source. Own elaboration, (2024).

Furthermore, the statement "the teaching approaches foster a culture of questioning and evaluating ideas within the EFL and technologist courses" means another tremendous and positive contribution to the affirmation that the teaching strategies or approaches implemented in the EFL classrooms and technologist courses in these courses do allow the development and promotion of critical thinking, fostering a culture of questioning as 66.7% of the answers are "sometimes" and 33% "usually" although through the different questions and data where disparity is observed in the results, a large majority of responses reflect the effectiveness of the teaching strategies and the level of skills acquired by the students.

Figure 6

Teacher's Outcomes about Teaching Approaches Promoting Critical Thinking Skills.



Note. Source. Own elaboration, (2024).

Students were given prompts that required them to form and defend opinions on contemporary issues. Sample prompts included:

- "Should schools implement a dress code?"
- "Is social media a positive or negative influence on society?"
- "What are the advantages and disadvantages of online learning?"

The teacher employed scaffolded questioning techniques throughout the lesson to guide students through critical analysis. She started with more straightforward questions to activate prior knowledge and gradually progressed to more complex inquiries that prompted students to consider multiple perspectives and potential counterarguments. A significant portion of the class was dedicated to collaborative discussions, and to enhance comprehension and engagement, the teacher incorporated visual aids. The teacher provided constructive feedback during and after the activities, emphasizing language proficiency, the quality of reasoning, and the coherence of arguments.

During the second observation, the class began with a short reading comprehension task as a warm-up, followed by an exchange of interpretations among the students, which set a participatory tone. This was followed by a discussion of a short story, focusing on the themes and motivations of the characters, where open-ended questions were posed to encourage in-depth analysis. A short film adaptation was integrated to provide visual context, and visual aids were used to facilitate illustration and accommodate a variety of learning styles. Students actively engaged in dialogue, expressing and defending their interpretations.

In addition, there was a creative exercise exploring alternative endings to the story, promoting divergent thinking and imaginative exploration. Small group activities were conducted for collaborative analysis and peer feedback sessions for constructive criticism. Linguistic expression was integrated throughout critical thinking activities. Finally, a discussion was held on the ethical dilemmas present in the story, concluding with a written reflection on the story. The assessment criteria included both critical thinking and language proficiency.

On the other hand, during the third observation, several challenges were identified in the classroom dynamics. There were difficulties in capturing students' attention during the initial activity, reflected in minimal enthusiasm for sharing interpretations and limited participation. During the discussion of a simplified text, fundamental comprehension difficulties were evident, as many students needed help understanding the deeper themes and motivations of the characters. The transition to the Socratic seminar format met with resistance, with a general reluctance among students to actively participate in open discussions.

The creative exercise to explore alternative endings to the story generated confusion, as students needed help to move beyond literal interpretations. The small group activities lacked active collaboration, and some students seemed disconnected, which impacted the effectiveness

of the peer feedback sessions. During the ethical dilemma debate, significant gaps in language competence were revealed as students struggled to articulate their views coherently in English. Although the exercise concluded with a written reflection, many responses needed more depth, showing limited evidence of critical thinking skills in writing.

Additionally, when conducting a creative exercise exploring alternative endings to the story, students needed help moving beyond literal interpretations, negatively impacting the effectiveness of the training. Small group activities needed more dynamic collaboration; some students were disengaged or reluctant to contribute to collaborative discussions. During the debate on ethical dilemmas, challenges in language competence were revealed, as several students found it difficult to articulate their views in English. Written reflections needed depth, showing minimal evidence of critical thinking skills, with many responses being superficial and reflecting a lack of understanding of the ethical dilemmas.

In the last observation, a diversity of participation and responses was observed among the students. Some participated actively, showing a solid understanding of the topics discussed, while others needed help in fundamental analysis and expression of opinions. In particular, the creativity exercise to explore alternative endings to a story generated varied responses, showing a range of cognitive skills in the class. Collaboration in group activities also presented varied levels, with some students leading productive discussions and others remaining passive. During the debate on ethical dilemmas, a diversity in linguistic competence was evident, with some expressing opinions with confidence and others facing difficulties articulating their views. These observations highlight a diversity of outcomes in the development of critical thinking.

It revealed a mix of outcomes in critical thinking development because while some students actively engaged and demonstrated understanding, others exhibited challenges.

Addressing these disparities and incorporating differentiated strategies may enhance effectiveness in fostering critical thinking skills in this EFL setting. It is suggested that these disparities be addressed and differentiated strategies incorporated to improve overall effectiveness in promoting critical thinking skills in this English as a foreign language (EFL) teaching environment.

Regarding the results obtained after synthesis and analysis of the observations recorded in the field notes, it was found that groups 1 and 2 showed classes where critical thinking was effectively fostered. Structured activities were used that involved collaborative discussions, integration of different resources (visual and audiovisual), and constructive feedback that allowed students to express and defend arguments.

Figure 7

Classes Observations.



Note. Source. Own elaboration, (2024).

Observations 3 and 4 revealed difficulties in introducing critical thinking at a basic level. Lack of participation, resistance to interactive activities, comprehension problems, and challenges in developing critical thinking skills, particularly in expressing and analyzing ideas,

were noted. In observation number five, there was an apparent diversity of outcomes in developing critical thinking.

Likewise, the interviews sought insights into how teachers incorporate critical thinking into their English classes and how institutional support facilitates this educational approach. One teacher articulated their strategy: "In my lessons, I try to integrate critical thinking by integrating activities that require analysis of literature, interpretation of text, and the development of well-supported arguments in writing" (T1). Emphasizing institutional backing, another teacher noted, "Well, the institution supports critical thinking by promoting a curriculum that emphasizes analysis and problem solving rather than raw memorization" (T2).

Furthermore, the significance of reflection and metacognition in enhancing cognitive abilities and fostering adaptability was underscored by a teacher who remarked, "I like more reflection and metacognition because this approach not only enhances their cognitive abilities but also promotes adaptability and a life-long love for learning" (T3). Teachers emphasized the importance of promoting independent thinking, creativity, and problem-solving skills through critical thinking. A range of teaching strategies, such as class discussions, debates, collaborative learning, and role-plays, were highlighted to foster critical thinking (T4).

Identifying potential obstacles, another teacher elaborated, "Some of the factors that can hinder the development of critical thinking skills in the classroom can include the over-emphasis of memorization, assessment methods, fear of failure, lack of knowledge, distractions, and sometimes insufficient teacher training" (T5). A teacher said, "I like analytical thinking, logical reasoning, creative problem solving, reflection, and metacognition. Because by incorporating these strategies or critical thinking levels and skills, students are better equipped to navigate the challenges they will face academically and in their future careers" (T6).

These voices collectively portray the multifaceted approach to integrating critical thinking into the English classroom while shedding light on the challenges that may impede this process within the educational context.

Table 1

Teachers' Voices

Participant	Outcomes from the Interview
T1	“In my lessons, I try to integrate critical thinking by integrating activities that require analysis of literature, interpretation of text, and the development of well-supported arguments in writing”
T2	“Well, the institution supports critical thinking by promoting a curriculum that emphasizes analysis and problem solving rather than raw memorization”
T3	“I like more reflection and metacognition because this approach not only enhances their cognitive abilities but also promotes adaptability and a life-long love for learning”
T4	“Promoting critical thinking in the classroom is crucial for several reasons, it fosters independent thought, encourages creativity, and helps students to develop problem-solving skills.
T5	“Some of the factors that can hinder the development of critical thinking skills in the classroom can include the over-emphasis of memorization, assessment methods, fear of failure, lack of knowledge, distractions, and sometimes insufficient teacher training”

T6 “I like analytical thinking, logical reasoning, creative problem solving, reflection, and metacognition. Because by incorporating these strategies or critical thinking levels and skills, students are better equipped to navigate the challenges they will face both academically and in their future careers”

Note. This table contains the summary of the questions asked during the interviews with the instructors

These findings provide a comprehensive overview of how critical thinking is addressed in the English classroom, highlighting the need to integrate a wide range of strategies and skills to promote critical thinking effectively. Furthermore, the challenges that might hinder this process in the educational context were also revealed.

Discussions and Conclusions

The next chapter addresses elements related to the significance of the results presented in the previous chapter, the pedagogical and research implications, limitations, and recommendations for further research studies.

Discussions

The present study identified various effective strategies implemented by teachers at SENA-Montería to foster critical thinking in English as a Foreign Language (EFL) classes. Among these strategies, the use of open-ended questions and creating spaces for debates and round-table discussions were highlighted. Teachers' initiative in presenting complex challenges and using critical thinking tools like mind maps and cause-effect diagrams were also noted. However, despite these efforts, the study revealed an average level of critical thinking among students.

Contrasting these findings with existing literature reveals notable insights. Recent research emphasizes the growing importance of critical thinking in EFL education (Herrera and Portilla, 2021). Scholars like Mohammadi and Golandouz (2017) stress the need for EFL education to focus on critical thinking, aligning with Colombia's commitment to preparing students for a complex, globalized world (Todorova, N and Todorova, 2018). Despite this, the present study suggests room for improvement in critical thinking skills among SENA-Montería students.

Studies such as Praminingsih et al. (2022) and Warsah et al. (2021) demonstrate the efficacy of inquiry-based and collaborative learning in enhancing critical thinking skills. Additionally, research by Baş & Bolat (2022) highlights the correlation between cognitive competence and critical thinking skills. These findings underscore the potential of innovative

teaching strategies to nurture critical thinking, aligning with the present study's focus on tailored approaches for the EFL classroom at SENA in Montería.

Furthermore, Behar-Horenstein and Niu's (2011) literature review offers insights into effective pedagogical strategies for teaching critical thinking in higher education. Similarly, Alquichire and Arrieta's (2018) study suggests a positive correlation between critical thinking skills and academic achievement, reinforcing the importance of fostering such skills.

In summary, while the present study at SENA-Montería highlights practical strategies for promoting critical thinking, there is scope for further enhancement. By drawing on insights from diverse research, educators can refine teaching methodologies to cultivate essential thinking skills, ultimately preparing students more effectively for academic and professional challenges.

Research Implications for the Field Study

The findings of this study underline the importance of providing continuous teacher training that strategically addresses the challenges identified, such as strengthening language skills and creating inclusive and participatory classroom environments. In addition, they highlight the need to balance a variety of pedagogical strategies with an adaptation to the needs of individual learners, which is essential for the effective promotion of critical thinking in EFL settings.

Successful integration of critical thinking in EFL learning environments requires a holistic approach considering the diversity of learners' abilities and levels. This involves not only the application of a variety of pedagogical strategies, such as open-ended questions, discussions, and critical thinking tools but also adapting these strategies to the individual needs and learning styles of learners. Furthermore, it highlights the importance of continuous teacher training to

address the identified challenges and improve the effectiveness of teaching critical thinking in similar contexts.

It is necessary to acknowledge the inherent limitations of this study, such as the limited representativeness of the participants and the reliance on a single educational context in Sena-Montería. Given that the findings are based on a specific sample and a particular educational setting, there is a possibility that they may not be generalizable to other similar institutions or academic settings. It is crucial to keep this limitation in mind when considering the applicability of the results to different contexts. However, despite these limitations, the recommendations drawn from this study may provide a valuable basis for developing more effective and adaptive strategies for teaching critical thinking in similar educational settings. These recommendations can contribute significantly to improving the quality of education and the holistic development of students by promoting fundamental skills for reflective analysis and problem-solving.

This study provides an enlightening insight into strategies for promoting critical thinking in the English as a foreign language (EFL) environment in Sena-Montería. However, future research addressing specific areas is suggested to enrich this field of study further. Firstly, the comprehensive comparison of various pedagogical strategies could offer a deeper understanding of their relative effectiveness and impact on learning outcomes, thus providing a more informed approach to method selection. In addition, exploring different educational and cultural contexts could shed light on the adaptability and efficacy of these strategies in diverse settings, allowing for a broader understanding of their applicability.

Furthermore, it highlights the need to balance a variety of pedagogical strategies with adaptation to the needs of individual learners, which is fundamental to the effective promotion of critical thinking in EFL settings. Successful integration of critical thinking in these settings

requires a holistic approach that considers the diversity of learners' abilities and levels. This involves applying various pedagogical strategies, such as open-ended questions, discussions, and critical thinking tools, and adapting these strategies to students' individual needs and learning styles.

Moreover, it highlights the importance of continuous teacher training in dealing with the challenges identified and improving the effectiveness of teaching critical thinking in similar contexts. This involves providing regular professional development opportunities focused on specific strategies to foster critical thinking and strengthen the pedagogical skills of educators in EFL settings. Taking all of the above into account, some of the main implications are detailed below:

1. We need to delve deeper into the variability of critical thinking: The study's results reveal variability in the level of critical thinking among students at SENA-Montería. Further research is crucial to explore the reasons behind this variability. This could involve examining socio-economic, cultural, cognitive, and pedagogical factors. By understanding the causes of this variability, more effective strategies can be developed to support all students' critical thinking development.

2. Adapting teaching strategies: Research suggests that teaching strategies should be adapted to meet students' diverse needs and learning styles. This involves implementing differentiated teaching strategies that consider individual students' language proficiency levels, learning styles, and cognitive needs. Adapting teaching creates a more inclusive environment and promotes the development of critical thinking for all students.

3. Strengthening teacher training: The research underlines the need to strengthen teacher education in the area of critical thinking. Teacher education courses should equip teachers with

the knowledge, skills, and strategies necessary to foster the development of critical thinking in their students. This includes teaching specific strategies, creating a learning environment that promotes critical thinking, and assessing students' critical thinking development.

4. Collaboration between researchers and teachers: Research suggests that collaboration between researchers and teachers is critical to improving the teaching of critical thinking. Researchers can provide teachers with information and tools to improve their practice, while teachers can provide researchers with information about the challenges and opportunities they face in the classroom. By working together, researchers and teachers can develop more effective teaching strategies and improve student learning.

To recap, the research findings offer valuable implications for the field of EFL education, particularly in SENA-Montería and similar educational settings. Emphasizing a comprehensive and adaptable approach, this study underscores the importance of empowering educators with appropriate tools and strategies to enhance critical thinking skills among students. By acknowledging and catering to individual learner needs, effective and meaningful teaching practices can significantly elevate the teaching and learning of critical thinking in these contexts.

Research Limitations on the Present Study

It is necessary to acknowledge the inherent limitations of this study, such as the limited representativeness of the participants and the reliance on a single educational context in Sena-Montería. Given that the findings are based on a specific sample and a particular educational setting, there is a possibility that they may not be generalizable to other similar institutions or educational settings, so the study might benefit from the inclusion of diverse educational contexts or institutions to ensure a more robust generalization of findings.

Additionally, the research duration might affect the longitudinal view of skill development; a longer study period might capture more comprehensive changes in critical thinking abilities. Lastly, the absence of a control group limits comparative insights into the effectiveness of interventions. It is crucial to keep this limitation in mind when considering the applicability of the results to other contexts, recognizing, and addressing these limitations fosters a clearer understanding of the study's scope and applicability in broader educational settings.

Recommendations for Further Research

This study provides an enlightening insight into strategies for promoting critical thinking in the English as a foreign language (EFL) environment in Sena-Montería.

Despite the limitations mentioned above, the recommendations drawn from this study may provide a valuable basis for the development of more effective and adaptive strategies for teaching critical thinking in similar educational settings. These recommendations can contribute significantly to improving the quality of education and the holistic development of students by promoting fundamental skills for reflective analysis and problem solving.

To further enrich this field of study, future research addressing specific areas is suggested. Firstly, the comprehensive comparison of various pedagogical strategies could offer a deeper understanding of their relative effectiveness and impact on learning outcomes, thus providing a more informed approach to method selection. In addition, exploration of different educational and cultural contexts could shed light on the adaptability and efficacy of these strategies in diverse settings, allowing for a broader understanding of their applicability.

Furthermore, longitudinal and follow-up research could provide a holistic and long-term view of the development of critical thinking among students, identifying patterns of growth and areas for improvement. In addition, focusing on specific interventions, such as overcoming

language barriers or engaging students with varying levels of participation, could offer more focused strategies to address particular challenges in promoting critical thinking. Finally, studying the correlation between the development of critical thinking and academic performance in different disciplines and assessing the impact of innovative educational strategies.

Conclusions

In conclusion, this study has effectively addressed the research question by thoroughly exploring and describing teaching strategies for the development of critical thinking skills in an EFL environment with technologist courses at SENA in Montería. By achieving the proposed objectives, a robust foundation has been established based on previous research, identifying, and evaluating effective strategies applicable to our specific educational context.

Identifying concrete strategies, such as open-ended questions, debates, role-plays, critical thinking tools, and complex challenges, has been pivotal in stimulating critical and creative reflection among students. However, despite the effectiveness of these strategies, the analysis of academic performance data revealed an average level of critical thinking skills among SENA-Montería students.

This research has provided insights into the promotion of critical thinking and formulated specific recommendations for educators' professional development. These suggestions aim to strengthen teachers' capacities in effectively implementing critical thinking-promoting strategies in EFL educational contexts. Additionally, it is important to adapt these strategies to the individual needs of learners and diverse educational contexts to ensure more effective and meaningful teaching.

While acknowledging inherent limitations such as limited participant representativeness and the focus on a specific educational context, this study underscores the need for further work

on implementing and developing teaching strategies that promote critical thinking. By adopting an adaptive approach, enhancing teaching skills, and understanding individual student needs, significant progress can be made in improving critical thinking skills among EFL students in SENA-Montería and similar educational settings.

In summary, this study contributes to the field by offering insights into effective teaching strategies for fostering critical thinking skills in EFL contexts, thereby addressing the research question, and meeting the proposed objectives. Through continued research and application of these strategies, we can further enhance the quality of education and student outcomes in similar educational environments.

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Appendix

Appendix A

Resumen Analítico de Estudio RAE

1. General Information	
Type of Document	Thesis
Access to Document	A research report submitted to Escuela de Ciencias de la Educación - ECEDU in partial fulfillment of the requirements for the degree of Magister en Mediación Pedagógica en el Aprendizaje del Inglés
Title of the Document	Exploring teaching strategies for the development of critical thinking skills in an EFL classroom with technologist courses at SENA in Montería
Author (s)	Deiby Estid Márquez Gómez
Publication	2024
Key Words	Critical thinking skills, Pedagogical strategies, Education, Learning

2. Description

In this study, the aim was to describe the teaching strategies for the development of critical thinking skills in an English as a foreign language (EFL) environment in technological courses at SENA, Monteria. To achieve this objective, a mixed methodological approach was adopted that integrated both quantitative and qualitative data. The target population comprised students from four groups of technology courses, selected through simple random sampling. Specific questionnaires were used to assess students' critical thinking skills, classified into different

proficiency levels. The main results, both quantitative and qualitative, were presented in detail, highlighting the different categories of critical thinking skills observed in the students, along with a comprehensive analysis of the pedagogical strategies employed during the classroom observations.

The findings of this study revealed a diversity of results in terms of the development of critical thinking skills among students. It was observed that some groups demonstrated effective promotion of critical thinking through structured activities and collaborative classroom discussions. However, other groups showed difficulties in introducing critical thinking at more basic levels. In addition, interviews with teachers highlighted the importance of promoting independent and creative thinking, while noting obstacles such as pressure to memorize and assessment methods that may limit the effective development of critical thinking. These findings reflect the complexity of integrating strategies for the promotion of critical thinking into the educational environment, highlighting the need to address disparities and apply differentiated strategies to improve the overall effectiveness of critical thinking skills development in the EFL classroom.

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4. Contents

This report consists of five chapters. The first chapter introduces the research by contextualizing the problem of exploring teaching strategies for the development of critical

thinking skills in an English as a Foreign Language (EFL) classroom with technologist courses at SENA in Montería. It presents the research question, explains the motivations behind choosing this problem, details the general and specific objectives, and justifies the methodologies employed to support the study's purpose. The second chapter focuses on reviewing the current state of knowledge on teaching strategies for developing critical thinking skills in EFL classrooms. It analyzes different studies and research that have addressed similar problems and methodologies to include both the theoretical and conceptual frameworks underpinning this research. The third chapter describes the methodological approach of the study, detailing the research context, the target population of technologist students at SENA in Montería, the expected impact, the ethical protocols followed, and the instruments used for data collection. It also covers the validation of these instruments and the pedagogical intervention process carried out during the study. The fourth chapter provides a detailed analysis of the collected data and findings, explaining how the categories of teaching strategies were identified and the impact they had on developing critical thinking skills among students. The fifth and final chapter presents the results and conclusions obtained from the research. It discusses the pedagogical implications of the findings, establishes the limitations of the study, and proposes recommendations for future research. These recommendations aim to explore different perspectives and influential variables in the development of critical thinking skills in a foreign language within the context of technologist courses at SENA Montería. Additionally, it suggests strategies for professional development to help educators effectively implement critical thinking-promoting strategies in their teaching practices.

5. Methodology

The methodological process of this research was divided into five interrelated moments. Initially, the research problem was identified, understanding the situation through direct interaction with the target population. In the second moment, specific instruments were designed, such as two questionnaires, one to characterize the students and the levels of critical thinking and the other one to teachers to compile the different pedagogical strategies for promoting and learning critical thinking skills, shedding light on the problems identified. The third moment focused on data collection, including observation, and taking field notes and interviews with teachers. Then, in the fourth step, the data collected were meticulously analyzed, identifying significant patterns and relationships. Finally, in the fifth step, the findings were synthesized, and relevant conclusions were formulated, allowing the research question to be addressed and implications for future research to be drawn.

This methodological approach allowed for a progressive and systematic approach to the problem, from initial identification to the formulation of substantiated conclusions. Each step played a crucial role, from the initial understanding of the problem through to the production of results and subsequent interpretation, thus providing a solid structure for the research.

6. Results

The research focused on identifying strategies for fostering critical thinking and assessing levels of critical thinking among students in the framework of SENA technology courses. Data were collected from 24 students and 6 educators through questionnaires and observations. The results show that while a considerable percentage of students demonstrated skills in identifying relevant arguments and exhibiting critical thinking, a significant proportion also presented difficulties in justifying reasoning or identifying alternative points of view. Teachers, on the other hand, highlighted the effectiveness of certain strategies to foster critical thinking,

however, they identified obstacles such as overemphasis on memorization and assessment methods, as well as lack of teacher training. Classroom observations revealed a diversity of outcomes in the development of critical thinking, ranging from classes where critical thinking was actively encouraged to those with difficulties in integrating critical thinking skills. The importance of integrating a wide range of strategies and skills to effectively promote critical thinking in the EFL classroom in the specific context of SENA is highlighted.

The findings of the present research relate directly to the definition of critical thinking skills proposed in the literature reviewed as Ennis (1962) describes critical thinking as a reflective and reasoned process focused on informed decision making. This study focused on describing critical thinking, spotlighting essential cognitive skills such as analysis, evaluation, synthesis, and problem-solving, as outlined by Baş and Bolat (2022) as key components of critical thinking. The results can validate the importance of these skills on informed decision-making and logical reasoning ability, thus supporting the relationship between theory and practical application of critical thinking skills.

7. Conclusions

The study identified a diverse range of effective strategies implemented by teachers in SENA-Montería to foster critical thinking in the English as a foreign language (EFL) classroom.

These strategies included the use of open-ended questions to stimulate reflective thinking, the organization of debates and discussions that foster a collaborative environment, and the presentation of complex challenges to promote critical reflection and creativity among students. The use of specific tools, such as mind maps and cause-effect diagrams, was also highlighted as contributing to the organization of ideas and the stimulation of critical thinking. Despite these effective strategies, the results reflected an average level of critical thinking

among students, pointing to the need to strengthen the development of critical thinking across the student population.

The research underlined the importance of adapting teaching strategies to the diverse needs and ability levels of students, as well as the need for flexibility in curriculum design and teaching methodologies. It also highlighted the importance of an inclusive and differentiated approach that encourages the active participation of all students. The study concluded that ongoing teacher training is essential to address the challenges identified and to improve the effectiveness of teaching critical thinking in settings similar to SENA-Montería.

Furthermore, successful development of critical thinking in EFL learning environments requires a holistic approach that considers the diversity of learners' abilities and levels, along with the application of varied pedagogical strategies tailored to individual needs and learning styles. Ultimately, the findings highlighted the importance of ongoing teacher training to address the challenges identified and to improve the effectiveness of teaching critical thinking in similar educational settings.

Elaborado por: Deiby Estid Márquez Gómez

Fecha de Elaboración del Resumen: 22/07/2024

Appendix B

Teacher's Interview

Interview to determine the teaching strategies for the development of critical thinking skills to apply in an EFL class with technologist courses at SENA in Montería	
Date	
Place	
Interviewer	
Participant	(full name, age, gender, role):
Introduction	By conducting this interview, it will be explored in-depth insights into your teaching strategies for the development of critical thinking skills
Ethical Considerations	Confidence

Questions

1. Why do you think it is important to provoke critical thinking in the classroom?
2. How does the institution support the development of critical thinking?
3. How do you integrate critical thinking in your English lessons?
4. What critical thinking levels or skills do your favor in the classroom? Why?
5. Which of the critical thinking skills you mentioned previously do you emphasize more? Why?
6. What instructional strategies do you employ to develop critical thinking?
7. From your own perspective, what factors hinder the development of critical thinking skills in the classroom? Think of your students learning experience.

Appendix C

Journal observations

JOURNAL	
Observation N°:	1
Researcher	Deiby Estid Márquez Gómez
Teacher observed	Clara Inés Saenz Causil
Objective	To explore the implementation of critical thinking along with the instructional strategies employ to develop the different critical thinking levels and skills.
Date	30/11/2023
Place of Observation	SENA Campus Montería – Room
Resources	Laptop, Cellphone
Participants	Document management program
Field notes about the phenomenon of interest	Analytic considerations
<p>The core of the observation focused on a series of structured activities aimed at developing critical thinking through persuasive writing. Students were provided with prompts that required them to form and defend opinions on contemporary issues. Sample prompts included:</p> <p style="padding-left: 40px;">"Should schools implement a dress code?"</p> <p style="padding-left: 40px;">"Is social media a positive or negative influence on society?"</p> <p style="padding-left: 40px;">"What are the advantages and disadvantages of online learning?"</p> <p>Throughout the lesson, the teacher employed scaffolded questioning techniques to guide students through the process of critical analysis. she started</p>	<p>This observation underscored the effective integration of critical thinking development within an EFL classroom. Mr. Rodriguez's approach not only targeted language proficiency but also fostered the ability of students to think critically in a second language. The structured activities, collaborative discussions, and emphasis on real-world issues contributed to creating an engaging and intellectually stimulating environment for language learners.</p>

<p>with simpler questions to activate prior knowledge and gradually progressed to more complex inquiries that prompted students to consider multiple perspectives and potential counterarguments.</p> <p>A significant portion of the class was dedicated to collaborative discussions and to enhance comprehension and engagement, the teacher incorporated visual aids.</p> <p>The teacher provided constructive feedback during and after the activities, emphasizing not only language proficiency but also the quality of reasoning and the coherence of arguments.</p>	
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JOURNAL	
Observation N°:	2
Researcher	Deiby Estid Márquez Gómez
Teacher observed	Jully Buelvas Berrio
Objective	To explore the implementation of critical thinking along with the instructional strategies employ to develop the different critical thinking levels and skills.
Date	30/11/2023
Place of Observation	SENA Campus Montería – Room
Resources	Laptop, Cellphone
Participants	Administrative management program
Field notes about the phenomenon of interest	Analytic considerations
<p>Brief reading comprehension task as a warm-up.</p> <p>Students shared interpretations, setting a participative tone.</p>	<p>Class demonstrated effective integration of critical thinking in an EFL setting.</p>

<p>Discussion on a short story emphasizing themes and character motivations.</p> <p>Open-ended questions encouraged students to analyze deeply.</p> <p>Integration of a short film adaptation for visual context.</p> <p>Visual aids used for illustration and diverse learning styles.</p> <p>Students actively engaged in dialogue, expressing and defending interpretations.</p> <p>Creative exercise exploring alternative story endings.</p> <p>Encouraged divergent thinking and imaginative exploration.</p> <p>Small group activities for collaborative analysis.</p> <p>Peer feedback sessions for constructive critiques.</p> <p>Language expression integrated with critical thinking.</p> <p>Debating exercise on story's ethical dilemmas.</p> <p>Concluded with a written reflection on the story.</p> <p>Assessment criteria included critical thinking and language proficiency.</p>	<p>Interactive activities engaged students, showcasing improved critical thinking skills.</p> <p>Multimodal approach and peer collaboration contributed to an intellectually stimulating environment.</p>
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JOURNAL	
Observation N°:	3
Researcher	Deiby Estid Márquez Gómez
Teacher observed	Keila Maria Barreto Arteaga

Objective	To explore the implementation of critical thinking along with the instructional strategies employ to develop the different critical thinking levels and skills.	
Date	01/12/2023	
Place of Observation	SENA Campus Montería – Room	
Resources	Laptop, Cellphone	
Participants	Business Consulting Program	
Field notes about the phenomenon of interest	Analytic considerations	
<p>Challenges in capturing students' attention during the warm-up.</p> <p>Minimal enthusiasm in sharing interpretations, hindering participative engagement.</p> <p>Basic comprehension difficulties evident during discussion on a simplified text.</p> <p>Many students struggled to grasp deeper themes and character motivations.</p> <p>Transition to Socratic seminar format faced resistance.</p> <p>Reluctance among students to actively participate in open-ended discussions.</p> <p>Creative exercise exploring alternative story endings met with confusion.</p> <p>Students struggled to think beyond literal interpretations.</p> <p>Small group activities lacked active collaboration.</p> <p>Some students appeared disengaged, impacting the effectiveness of peer feedback sessions.</p> <p>Debating exercise on ethical dilemmas revealed significant language proficiency gaps.</p>	<p>The class highlighted challenges in introducing critical thinking at a basic EFL level.</p> <p>Engagement issues, comprehension struggles, and resistance to interactive activities impacted the effectiveness of the lesson.</p> <p>Addressing language proficiency gaps and fostering a more supportive learning environment are crucial for improved critical thinking development.</p>	

<p>Students struggled to articulate viewpoints coherently in English.</p> <p>Concluded with a written reflection, but many responses lacked depth.</p> <p>Limited evidence of critical thinking skills in written reflections.</p>	
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JOURNAL	
Observation N°:	4
Researcher	Deiby Estid Márquez Gómez
Teacher observed	Martha Cecilia Durango Ortiz
Objective	To explore the implementation of critical thinking along with the instructional strategies employ to develop the different critical thinking levels and skills.
Date	01/12/2023
Place of Observation	SENA Campus Montería – Room
Resources	Laptop, Cellphone
Participants	Accounting for Business Operations
Field notes about the phenomenon of interest	Analytic considerations
<p>Majority of students showed disinterest during the initial reading comprehension task.</p> <p>Few students actively participated, while others seemed passive.</p> <p>Basic reading comprehension difficulties observed in the discussion of a straightforward short story.</p> <p>Students had challenges identifying key themes and motivations.</p> <p>Attempted a Socratic discussion format, but encountered resistance.</p>	<p>The observation underscored challenges in introducing critical thinking at a basic EFL level.</p> <p>A considerable number of students displayed disinterest, and comprehension struggles hindered engagement.</p> <p>Addressing resistance to interactive formats and focusing on foundational language skills are essential for cultivating a more</p>

<p>Reluctance to express opinions freely hindered the depth of the conversation.</p> <p>Creativity exercise exploring alternative story endings faced hurdles.</p> <p>Students had difficulty moving beyond literal interpretations, impacting the exercise's effectiveness.</p> <p>Small group activities lacked vibrant collaboration.</p> <p>Some students appeared disengaged or hesitant to contribute to collaborative discussions.</p> <p>Debating exercise on ethical dilemmas revealed language proficiency challenges.</p> <p>Articulation of viewpoints in English proved challenging for several students.</p> <p>Written reflections lacked depth, with minimal evidence of critical thinking skills.</p> <p>Many responses were perfunctory, reflecting surface-level understanding.</p>	<p>positive environment for critical thinking development.</p>
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JOURNAL	
Observation N°:	5
Researcher	Deiby Estid Márquez Gómez
Teacher observed	Maria Lucia Villadiego Lopez
Objective	To explore the implementation of critical thinking along with the instructional strategies employ to develop the different critical thinking levels and skills.
Date	01/12/2023
Place of Observation	SENA Campus Montería – Room
Resources	Laptop, Cellphone
Participants	accounting management program

Field notes about the phenomenon of interest	Analytic considerations
<p>Some students actively participated, while others exhibited passive involvement.</p> <p>Moderate success in discussing a straightforward short story.</p> <p>Some students demonstrated an understanding of key themes, while others struggled with basic analysis.</p> <p>Some students actively engaged, expressing opinions, while others remained reserved.</p> <p>Creativity exercise exploring alternative story endings yielded mixed responses.</p> <p>A portion of the class demonstrated imaginative thinking, while others struggled with the concept.</p> <p>Small group activities showed varied levels of collaboration.</p> <p>Some students actively participated, fostering a productive discussion, while others remained passive.</p> <p>Debating exercise on ethical dilemmas showcased a range of language proficiency.</p> <p>Some students confidently expressed opinions, while others faced challenges in articulating viewpoints.</p> <p>Some students demonstrated thoughtful analysis, while others provided more superficial responses.</p>	<p>The observation revealed a mix of outcomes in critical thinking development.</p> <p>While some students actively engaged and demonstrated understanding, others exhibited challenges.</p> <p>Addressing these disparities and incorporating differentiated strategies may enhance overall effectiveness in fostering critical thinking skills in this EFL setting.</p>

Appendix D

Teacher's Questionnaire

Section I - Conceptualizing

Critical thinking skills comprise the cognitive abilities associated with analysis, evaluation, synthesis, and problem-solving. The development of these skills is measured as the primary outcome of the research.

The teaching strategies used in the EFL class effectively encourage students to grasp and understand new concepts. *

Always

Usually

Sometimes

Rarely

Never

Students can clearly articulate their understanding of theoretical concepts in the technologist courses. *

Always

Usually

Sometimes

Rarely

Never

Nota. Link: <https://forms.gle/GeqaeGceXcbVydPZ6>

Appendix E

Student's Questionnaire

Section I

Weak. Consistently does all or almost all of the following:

Consistently does all or almost all of the following: *

- Offers biased interpretations of evidence, statements, graphics, questions, information, or the points of view of others.
- Fails to identify or hastily dismisses strong, relevant counter-arguments.
- Ignores or superficially evaluates obvious alternative points of view.
- Argues using fallacious or irrelevant reasons, and unwarranted claims.
- Does not justify results or procedures, nor explain reasons.
- Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions.
- Exhibits close-mindedness or hostility to reason.

Section II

Unacceptable. Does

Nota. Link: <https://forms.gle/SjRDmt47QG6PT3s49>

Appendix F

Expert Validation Instrument

General Information

- **Expert full name:** Alex Mauricio Díaz Buelvas
- **Education Level:** PhD in Educational Sciences

- **Profession:** English Teacher
- **Institution:** Universidad de Córdoba
- **Position held:** Full-time professor at English Program
- **Instrument:** Teacher's Interview
- **Author:** Deiby Estid Márquez Gómez
- **Program:** Maestría en Mediación Pedagógica en el Aprendizaje del Inglés

Validation

Instrument Evaluation Indicators	Criteria Instrument Items	Poor	Marginally Acceptable	Acceptable	Good	Very Good
		1	2	3	4	5
Clarity	They are formulated with appropriate language that facilitates understanding.				X	
Objectivity	They are expressed in a measurable form.					X
Consistency	There is a logical organization in the questions.					X
Coherence	The contents are related to					X

	the problem question.					
Relevance	The information requested is appropriate in relation to the research question.					X
Adequacy	The quantity and quality of the items presented in the instrument are sufficient.				X	
Partial Summatory					08	20
Total Summatory		28				

General Information

- **Expert full name:** Juan Carlos Pastrana Muñoz
- **Education Level:** PhD in Educational Sciences
- **Profession:** University Professor
- **Institution:** Universidad de Córdoba
- **Position held:** Full-time professor at English Program
- **Instrument:** Teacher's Interview
- **Author:** Deiby Márquez Gómez
- **Program:** Maestría en Mediación Pedagógica en el Aprendizaje del Inglés

Validation

Instrument Evaluation Indicators	Criteria Instrument Items	Poor	Marginally Acceptable	Acceptable	Good	Very Good
		1	2	3	4	5
1.Clarity	They are formulated with appropriate language that facilitates understanding.				X	
2.Objectivity	They are expressed in a measurable form.				X	
3.Consistency	There is a logical organization in the questions.				X	
4.Coherence	The contents are related to the problem question.					X
5.Relevance	The information requested is appropriate in relation to the research question.					X
6.Adequacy	The quantity and quality of the items presented in the instrument are sufficient.					X
Partial Summatory					12	15
Total Summatory		27				

Journal - Observations

The instruments aim to determine the specific needs and characteristics of the students, as well as the educational context in which they operate. It is important to emphasize that continuous monitoring of student progress and effective feedback are essential elements in this process. Precise mechanisms should be established to evaluate the impact of the teaching strategies implemented in developing students' critical thinking skills, using qualitative and quantitative indicators to measure success and adjust as needed. In addition, it is critical to identify and use specific measures to assess students' critical thinking skills directly.

It is essential to remember that data analysis should be contextualized within the study's theoretical framework and specific objectives. This will allow for a more accurate interpretation of the results and help identify possible areas for improvement in the teaching and learning critical thinking skills.

Validation Results

Total Quantitative Assessment: 55/60

Opinion:

A. Favorable ()

B. Must Improve ()

C. Not Favorable ()

Observations:

Apendix G

Informed Consent

Consentimiento Informado – Líder de Bilingüismo

SENA – Regional Córdoba – Centro de Comercio Industria y Turismo

Atendiendo a la normatividad vigente sobre consentimientos informados (Ley 1581 de 2012 y Decreto 1377 de 2012), y en mi calidad de Líder de Bilingüismo de la Regional SENA – Montería avalo el desarrollo del proyecto investigativo denominado “*Exploring teaching strategies for the development of critical thinking skills in an EFL classroom with technologist courses at SENA in Montería*”, implementado por el maestrante, Deiby Márquez Gómez de Montería. De manera atenta informo que, conozco el perfil del trabajo de investigación que se desarrolla en nuestra institución y que este se encuentra articulado con nuestro horizonte institucional y modelo pedagógico.

Por lo mencionado como constancia de mi autorización anexo mi firma en el documento:

<p style="text-align: center;">Nombre y apellido del Líder de Bilingüismo</p> <p>Jorge David Gómez Bedoya</p>	<p style="text-align: center;">Firma</p> <p style="text-align: center;"><i>Jorge Gómez</i></p>
<p>Montería, Córdoba 01 de diciembre de 2023</p>	

Nota. La participación del estudiante no conlleva riesgos para su salud física ni mental, ni se prevén efectos secundarios en el futuro. Durante todo el proceso, desde el primer contacto con el participante durante la entrevista hasta la publicación de los resultados, se garantizará la confidencialidad absoluta para preservar su privacidad. Por tal razón, los nombres serán reemplazados por códigos nominales.