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MASTER'S DEGREE IN ENGLISH LANGUAGE PEDAGOGY AS A FOREIGN LANGUAGE

DEGREE WORK PRIOR TO OBTAINING THE MASTER'S DEGREE IN PEDAGOGY OF ENGLISH AS A FOREIGN LANGUAGE

TOPIC:

ENHANCING CRITICAL THINKING SKILLS IN A1.2 LANGUAGE LEARNERS THROUGH SOCRATIC METHOD IMPLEMENTATION

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We hope our work will inspire further exploration and innovation in the field of education, ultimately benefiting students and educators alike.

DEDICATION

This research proposal is dedicated to all those who have been our guiding lights and faithful supporters throughout this academic journey. To our beloved families, who have been the bedrock upon which we have built our aspirations. To our mentors and teachers, whose wisdom and guidance have shaped us into the educators and researchers we are today.

This work is dedicated to all future educators and researchers who strive to make a difference. May this proposal inspire and pave the way for new discoveries and innovative practices in education.

ABSTRACT

Enhancing Critical Thinking Skills in A1.2 Language Learners through Socratic Method Implementation

Authors: Brito Sugeidy, Navarrete Sharon.

The proposed study aims to investigate whether the Socratic Method can address this deficiency and foster critical thinking among these learners. Research authors identified a pressing need within a private high school at the South of Guayaquil, Ecuador where 9th-grade students struggle to articulate critical thoughts effectively in both native and foreign languages despite being exposed to bilingual education.

The research design employs qualitative methods, including comprehensive interviews, observation checklists and pre and post tests to gain insights into students' experiences and perceptions. By evaluating the effectiveness of the Socratic Method in fostering critical thinking skills, the study aims to contribute to pedagogical approaches in language education. It aims to bridge the gap between theory and practice, offering valuable perceptions about language acquisition and critical thinking development.

Moreover, the proposed research has significant practical implications, benefiting the 17 students who belong to 9th grade group A by enhancing their critical thinking abilities and language proficiency. Overall, this research proposal provides a comprehensive framework for investigating the impact of the Socratic Method on critical thinking skills among A1.2 English language learners, emphasizing its importance from professional, methodological, technological, and social perspectives.

Keywords: Critical thinking, Socratic Method, English language learners, language acquisition.

RESUMEN

Título: Mejora de las habilidades de pensamiento crítico en estudiantes de idiomas A1.2 a través de la implementación del Método Socrático

Autores: Brito Sugeidy, Navarrete Sharon.

El estudio propuesto tiene como objetivo investigar si el Método Socrático puede abordar esta deficiencia y fomentar el pensamiento crítico entre estos estudiantes. Los autores de la investigación identificaron una necesidad apremiante dentro de una escuela secundaria privada en el sur de Guayaquil, Ecuador, donde los estudiantes de noveno grado tienen dificultades para articular pensamientos críticos de manera efectiva tanto en idiomas nativos como extranjeros a pesar de estar expuestos a una educación bilingüe.

El diseño de la investigación emplea métodos cualitativos, incluyendo entrevistas exhaustivas, listas de cotejo, y pruebas previas y posteriores para obtener información sobre las experiencias y percepciones de los estudiantes. Al evaluar la efectividad del Método Socrático en fomentar las habilidades de pensamiento crítico, el estudio tiene como objetivo contribuir a enfoques pedagógicos en la educación lingüística. Busca cerrar la brecha entre la teoría y la práctica, ofreciendo percepciones valiosas sobre la adquisición de idiomas y el desarrollo del pensamiento crítico.

Además, la investigación propuesta tiene implicaciones prácticas significativas, beneficiando a los 17 estudiantes que pertenecen al grupo de noveno grado A al mejorar sus habilidades de pensamiento crítico y su competencia lingüística. En general, esta propuesta de investigación proporciona un marco integral para investigar el impacto del Método Socrático en las habilidades de pensamiento crítico entre los estudiantes A1.2 de lengua inglesa, enfatizando su importancia desde perspectivas profesionales, metodológicas, tecnológicas y sociales.

Palabras clave: Pensamiento crítico, Método Socrático, estudiantes de lengua inglesa, adquisición de lengua.

TABLE OF CONTENT

TABLE OF INDEX

INDEX OF FIGURES

INDEX OF ANNEXES

INTRODUCTION

In the context of secondary education, teachers' dedication as well as their efforts on behalf of students' development of critical thinking skills are significant. By the research time, the authors of this research work at a private institution which is located in the city of Guayaquil, in Ecuador. One of the groups they both work with is 9th grade, which is composed of 17 students taking into account group A, and since it is a bilingual high school, students receive not only Language Arts as a subject at this level, thus having ten weekly-hours allowing students to be constantly exposed to the English language and improve their communicative skills as well as their cognitive development.

All the details previously mentioned provide authors with enough time to observe the behavior of students when learning. Especially, during the periods in which each of the authors has classes with the groups. That way, it has been feasible to identify the strengths and weaknesses of the students. And one of the issues that has caught the attention is the poor critical thinking that peers handle. Since students are frequently required to participate actively in bilingual subjects where they can express their thoughts about different topics, it has been noticed that students find it difficult yet to be able to transmit in their own words their opinions in both native and foreign language. Moreover, this situation has been evidenced with the application of inferable, comparative, and hypothetical questions. All of the above mentioned gives way to the importance given by the authors of this research to conduct an immediate and effective solution to address the upcoming trouble in order to get short-term results. Thus, having a possible improvement in the students' critical thinking.

Could the implementation of the Socratic Method improve Critical Thinking Skills of 9th grade students?

Based on the research lines of Universidad Bolivariana del Ecuador, the present proposal research responds to the Pedagogy, Didactics and Management of Education as it seeks to improve the teaching exercise in Ecuadorian classrooms with the implementation of the Socratic method to foster critical thinking skills in A1.2 learners. Therefore, this work aims to research, evaluate, and apply educational models that lead to varying learning processes and achieve substantial results.

The writers must pay special attention to understanding the complexities of the critical thinking component and its potential applications within educational settings in order to promote the effective advancement of this research. The authors can find creative strategies to encourage critical thinking in the classroom by exploring deeply into the varying traits of this cognitive process. For students to be empowered to participate actively and effectively in a wide range of circumstances, this stimulation is crucial. By doing this, learners can learn how to critically analyze information as well as how to skillfully come to conclusions, deduce important information, and solve challenging problems. Thus, methods, strategies, and educational practices have been looked for in order to best nurture the full potential of critical thinking among students, thereby enhancing their overall cognitive capabilities and readiness for a changing and demanding world.

As the research aim of this investigation, the Implementation of the Socratic Method will raise critical thinking skills, will prevent the acquisition of misconceptions and encourage reasoning among students.

Specific research objectives

1. Diagnose and evaluate students' ability to respond to open-ended questions related to the Sciences and Social Studies subjects in the English language through the observation instruments.
2. Analyze relevant theoretical concepts to identify the causes of the issue and provide based-recommendations for optimizing the application of the Socratic Method.
3. Assess students' ability to infer, synthetize, and draw conclusions following the systematic application of the Socratic method by the teacher to measure and evaluate its results.

The Socratic Method, which acts as the independent variable, is one of the main conceptual categories in this research work. It is a teaching and learning strategy that emphasizes open-ended inquiries, critical discourse, and the investigation of underlying assumptions. It motivates learners to actively participate, solve problems, and reflect deeply. The Socratic method is the teaching strategy used in this study to help A1.2 language learners improve their critical thinking abilities "if a student has had a higher amount of Socratic classes, he/she will perform better on a syllogistic reasoning task." (Grondin, 2018)

On the other hand, the dependent variable, critical thinking, defines a collection of cognitive abilities and personality traits that allow people to successfully assess, synthesize, and apply knowledge “Attitudes of inquiry that involve an ability to recognize the existence of problems and an acceptance of the general need for evidence in support of what is asserted to be true“ (Ford, 2008 quoted Batemate, 1997). It involves the capacity for critical thought, logical decision-making, and problem-solving. The desired outcome or change that researchers hope to see and evaluate in A1.2 language learners as a result of their exposure to the Socratic method is critical thinking in this study. It includes a variety of critical thinking skills like logic, analysis, interpretation, and the capacity for drawing rational inferences.

It is necessary to define and measure particular variables and indicators in order to convert these conceptual categories into practical terms for research purposes. In order to operationalize the independent variable "Socratic Method," it may be necessary to list the elements of Socratic training, such as the frequency and length of Socratic sessions, the kinds of questions asked, and the degree of student participation. Researchers might evaluate how faithfully the Socratic approach is used in classrooms.

The operationalization of the dependent variable, "Critical Thinking," on the other hand, can entail the use of standardized assessment instruments designed to evaluate multiple aspects of critical thinking, such tests, rubrics, or performance assignments. Researchers may examine students' skills in text analysis, argument evaluation, assumption identification, and logical inference as indicators of increased critical thinking. To collect qualitative information about students' assessments of their critical thinking skills and the effects of Socratic instruction on their thought processes, self-report questionnaires or interviews will also be used.

Comprehensive interviews are the main qualitative research methodology that will be used. For these interviews, participants from the experimental group who have experienced instruction based on the Socratic Method will be chosen. The research seeks to reveal firmly and detailed insights regarding their learning experiences, the impact of the Socratic Method on their critical thinking skills, and any problems or benefits they perceive through open-ended questions and guided discussions. These interviews will be done in a structured approach to provide participants freedom to openly express their opinions. Thematic analysis will be used to discover recurrent themes, patterns, and qualitative results about the development of critical thinking abilities

In order to apply the research techniques previously mentioned, the researchers will create a set of observation checklists, which have been recognized as invaluable tools in educational assessment and evaluation (Stigging, 2015), to first assess and diagnose students' ability to respond to open-ended questions. These results will be also compared with a final performance after the application of the Socratic method as a way to draw conclusions on the effectiveness of this method.

The main beneficiaries of this proposal are the group of students who participate in Socratic-based activities. This involves the teacher in a way that he/she is the person in charge of questioning students constantly. It does not play the role of a villain who contradicts and opposes everything that students propose, but as a mentor who formulates questions to stimulate well-founded answers and reasoning. As Faith (2018) stated "Socratic Learning Method enhances students' learning as it reduces the impact of misconception, aids students in organizing knowledge". In other words, students receive several benefits when implementing the Socratic method in class because it works as a shaper for the construction of their own knowledge. So, students will internalize the fact that not all statements should be taken for granted, but rather questioned. Avoiding memorization of misconceptions gives students the opportunity to come up with reasons on their own. This would lead to either correcting their wrong thoughts or strengthening their ideals. Thus, beneficiaries are the students who gain the habit of working on their critical thinking, but it's the teacher who needs to provide the perfect guidance to achieve success.

The present research which sets out to enhance critical thinking skills of A1.2 students with the application of an effective method that is the Socratic, will not only allow students to develop their reasoning, but also will allow them to be able to produce the target language more fluently and give well-informed answers. The theoretical value of this proposal lies to boost a gap in knowledge. Currently, this method has been underestimated in the teaching exercise, thus the importance of reintegrating and rectifying this method where the individuals can generate their own points of view and different ideas which are discussed as a means to increase their social interaction and intellectual capacities.

Additionally, it addresses the introduction of an approach to language acquisition, exploring the correlation between the Socratic method and linguistic fluency. Lastly, this work provides relevant insights into how to more effectively study a population of language learners,

especially those at the A1.2 level, by emphasizing the development of critical thinking skills alongside language proficiency. Thus, the significance of its theoretical and methodological contributions to the fields of education and language acquisition, is valuable.

CHAPTER I: THE RESEARCH PROBLEM

1.1 Critical Thinking Skills

In a time of speedy technological advancement and an endless flood of information, developing and using strong critical thinking skills becomes essential to both personal achievement and the advancement of society. This research attempts to break down the components of critical thinking and explore how it can support both intellectual autonomy and well-informed decision-making. To define what is in general critical thinking skills, it refers to "ability of individuals to take charge of their own thinking and develop appropriate criteria and standards for analyzing their own thinking" (Shirkhani and Fahim, 2011 quoted Elder and Paul, 1994). Similarly, Masduqi (2011) states that it is the process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information obtained or generated by observation, experience, reflection, reasoning, or communication as a guide to belief and action, being a self-controlled process.

Nevertheless, according to Lailiyah and Wediyantoro (2021) some researchers entail that the main aim of education is to boost students to think critically, while others believe that these skills are naturally developed by the individuals. Both considerations lead to the importance of giving learners the opportunities to autonomously find the strategies to give answers or solutions inside and outside the classroom using their own resources. With these kinds of experiences, apart from being wrong or correct, learners will make well-informed decisions following all the critical thinking processes.

Likewise, within the field of English Foreign Language education, beyond grammar and vocabulary, the implementation of critical thinking is necessary in terms of language acquisition. These abilities are what enable students to not only acquire the language resources required for achieving effective and meaningful communication but also the ability to negotiate the complexities of cross-cultural contexts.

In arrange to investigate the universe of basic considering aptitudes, it is vital to characterize the components that create this cognitive prepare. In the work of Shirkhani & Fahim (2011) "language learners who have created basic considering abilities are competent of doing exercises of which other understudies may not be capable". This is where the issue tackling component takes place. When students are exposed to problems in which they are independently

able to find a possible way, they are not only exercising or reflecting from experiences with a similar situation, but also they engineer the most accurate idea to provide an answer or solution.

Problem solving entails recognizing an issue, assessing it, then creating and putting into practice suitable solutions. However, this process is not an application installed in the software of human beings by default. Instead, the individual has the responsibility to develop it to the point of being able to think more critically about the decisions he or she takes. Similarly, Rezaei, Derakhshan, Bagherkazemi (2011) quoted "critical thinkers do not have ―Critical Thinker tattooed on their foreheads, nor do they put on t-shirts labeled with ―I'm a critical thinker" (Buskist and Irons, 2008), on the contrary, it is demonstrated in the behavior of learners when a situation requires an optimal result. Thus, for the purpose of exercising this in the language classroom, teachers introduce to their teaching methods the Problem-Based Learning (PBL), which is an approach that focuses on the continuous development of critical thinking skills through collaborative work by encouraging students to innovate, create and construct well-informed resolutions to case problems. In the work of Narmaditya (2017) she stated that the results obtained from a study revealed that the implementation of this method helped students to enhance critical thinking skills (quoted by Lailiyah, & Wediyantoro, 2021).

Traditional teaching methods are still applied and assessments do not evaluate reasoning in language learning at all. In fact, remembering dates, names, places or even grammar structures are fundamental and necessary for one's cultural knowledge, however what is more relevant is the way how the individual uses that information for questioning about real-world problems "Now, at the beginning of the 21st century, rote learning and memorization are no longer appropriate for those who want new, meaningful knowledge and understanding." (Živkovié, 2016), thus fostering a classroom environment that promotes interaction, straightforward communication, and tolerance for a range of perspectives and views is indispensable as well.

In the same way, not all the approaches and teaching methods allow the development and reinforcement of these important skills integrally. For example, even though the communicative language teaching is useful for allowing classroom being able to express themselves through productive skills, it does not help improve learners fluency and proficiency at all as Shirkhani & Fahim (2011) referred in their work in which they affirmed that some researchers claim that even communicative language teaching, that stresses a strong emphasis on using language as a tool for communication, is ineffective at enabling students strengthen their proficiency (quoted

Kabilan, 2000). That is why "He suggests that for learners to be proficient in a language, they need to be able to think creatively and critically when using the target language" (Shirkhani & Fahim, 2011).

For instance, other learning approaches can be implemented by educators in order to provide opportunities where students think creatively and critically in language classrooms. The content-based approach, which "refers to the subject matter that people learn or transmit using language" (Bula, 2014 quoted Richards &Rodgers, 2001) is a method that encourages learners to engage language in context, linking skills to meaningful information to process and acquire in the target language. Thus, Yan (2021) considers that the content-based approach applied in language lessons promotes learners' critical thinking skills "It should be noted that in a content-based approach, attention is focused on the content and what can be perceived through it." (Yan, 2021)

According to Narmadiya's research (2017), studies have also shown that incorporating Problem-Based learning is an efficient way to assist students to develop critical thinking skills. It is conceptualized as "the learning that results from the process of working towards the understanding or resolution of a problem." (Nazir, 2010 quoted Barrows and Tamblyn,1980). In the same work, Nazir (2010) states that students can apply their understanding of the subject to real-world challenges and learn from each other when they actively discuss and analyze difficulties. These findings not only support the fostering critical thinking skills, but also encourage learners to debate and analyze real-world situations that are aligned to the learning goals of the subject.

When it comes to the historical development of critical thinking, it is known that it is traced from ancient philosophical traditions through the Renaissance and Enlightenment periods to modern educational methodologies which shows evidence of its continuing importance and evolution with the latest findings. According to Masduqi (2011) critical thinking first emerged by Greek philosophers and it has been employed ever since the fall of the Greek Empire in the Before Christ era, gaining considerable and influential relevance. The author also included that "Many historians believe that the roots of critical thinking can be traced from Socrates' teaching practice and vision 2,500 years ago. He brilliantly revealed a probing questioning method that individuals could not logically justify their assertive claims to knowledge." (Masduqi, 2011),

thus it is essential the recognition of the enduring relevance of Socratic questioning which emphasizes its timeless contribution to promote intellectual inquiry and judgment.

Also from the historical view, in the same way Paul, Elder and Bartell (2018) stated that Socrates used a technique of intense questioning to find out that people were unable to defend their self-assured claims to wisdom. Causes that conceptualized the evolution of critical thinking in ancient times have come from the misunderstanding of meanings, inadequate and insufficient evidence, or self-contradictory mindset and beliefs. Hence the authors also concluded that Socrates "established the importance of asking deep questions that probe profoundly into thinking before we accept ideas as worthy of belief." (Paul, Elder and Bartell, 1997, p 1).

Through the time, the heritage of methodical critical thinking was exemplified in writings and beliefs of Middle Age writers such as Thomas Aquinas that highlighted the human ability of creativity, imagination and reasoning. He also illustrated that "those who think critically do not always reject established beliefs, only those beliefs that lack reasonable foundations." (Paul, Elder and Bartell, 2018). Some periods later (15th and 16th centuries) the term critical thinking gained more popularity as European scholars began to take relevance through their system of making judgements about religion, sociocultural aspects, laws, and freedom, such as Colet, Erasmus, and Moore in England (Paul, Elder and Bartell, 2018).

In terms of language learning, schooling in the twenty-first century has experimented with a great majority of learning approaches and methodologies that have been developed and reformed from different parts of the world. Researchers have been arguing which of these approaches is the most appropriate to allow teachers to demonstrate significant results that can be seen in learners' exit profiles. Rezaei, Derakhshan, and Bagherkazemi (2011) reach a similar conclusion when they say that, even if they are still applicable, a student's academic success or failure cannot be determined by a standardized test of fundamental abilities performance alone. As they emphasized, traditional indicators of academic success cannot only be based on test scores; rather, it must also take into consideration the complex nature of educational accomplishments and the development of an in-depth awareness of students' progress within this dynamic educational framework.

However, there is still on debate the most effective method to accurately measure learners' way of thinking critically. For this, experts have created different systems of measurement for open-ended answers that provide specific results regarding the characteristics of the thinker. One of them is a questionnaire assessment developed by Peter and Noreen Facione called The California Critical Thinking Dispositions Inventory (CCTDI) which "is a survey instrument designed to measure whether a person habitually exhibits the mindset of an ideal critical thinker." (Nelson, 2005, p. 2). Nevertheless, this program is only available to evaluate postsecondary students ,(undergraduate, graduate, and professional) outside scholar settings.

On the other hand, a test that is found to measure high school learners is the Cornell Critical Thinking Test (CCTT) developed by Ennis, Millman, & Tomko in 1985. This study aims to fill the knowledge gap on the construct validity of the CCTT by analyzing the responses of elementary school-aged children. By doing this, researchers contribute empirical evidence to help address the lack of construct validity evidence for obtained scores that is currently available to inform score-based judgments (Immekus, Leach, French, Hand, 2020).

While evaluating critical thinking abilities is the primary goal of both resources, their approaches and priorities differ. With its emphasis on the dispositional components of critical thinking, the CCTDI explores students' mental habits, such as curiosity and open-mindedness, and offers insights into their general preparedness for critical thinking like Nelson established one of the uses of the CCTDI is "As a one-time test to gain understanding of how students view themselves as critical thinkers. Students' strengths toward critical thinking is noted and areas for improvement identified" (2005, p. 1).

On the other hand, the CCTT provides a more task-oriented assessment, measuring students' capacity to effectively analyze and evaluate material. It emphasizes the application of critical thinking abilities within particular domains due to the lack of empirical evidence "Implications associated with this lack of clarity on distinguishable dimensions pertain to both the measurement and conceptual understanding of critical thinking within educational settings" (Immekus, Leach, French, Hand, 2020). Thus, combining the development of critical thinking dispositions with the refinement of practical skills, and integrating both evaluations in language learning environments can produce a comprehensive framework that promotes a more all-encompassing growth of learners' cognitive abilities.

In the setting of secondary school, critical thinking skills should be used for language acquisition, as language learning is an important aspect in increasing deeper comprehension and learning engagement. As Norris and Ennis (2012) stated, "Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and evaluating information" (quoted Scriven and Paul, 2003, p.1). Thus, its application in language learning enables students to skip rote learning, encouraging them to be more analytic, question assumptions, and be able to interpret texts easily.

In the same way, Facione (2020) highlighted the significance of critical thinking research related to fostering creativity in language lessons, asserting that "critical thinking is crucial for self-directed learning and creative problem-solving." The knowledge of the essential part that critical thinking plays is in accordance with the overall objectives of education, especially when it comes to solving challenges that students currently face. The contemporary educational landscape grapples with the pressing issue of students providing answers without clear justification, indicative of a deficiency in critical thinking skills. Traditional educational approaches often fall short in cultivating these skills, hindering students from developing the capacity for reasoned analysis and innovative problem-solving.

Facione's emphasis on the importance of critical thinking becomes even more pertinent in this context, as it highlights the urgent need to reshape educational paradigms. Beyond merely enhancing academic performance, integrating critical thinking into education becomes a means of equipping students with the essential tools to navigate the complexities of an increasingly intricate world. Teachers who stimulate critical thinking abilities help students not only achieve success in school but also build a mindset that welcomes creativity, thrives in ambiguity, and makes a significant contribution to society.

Last but not least, incorporating critical thinking within language instruction not only enhances academic achievement but also aligns seamlessly with the primary objectives of education—global engagement and lifelong learning. These cognitive abilities extend beyond the classroom, providing opportunities to students to actively participate in a globalized society where adaptability, cultural literacy, and the capacity for informed decision-making are required. Studies conducted in this field highlight the crucial role that critical thinking plays in enhancing language learning outcomes because it gives learners the tools they require to

navigate a range of linguistic and cultural contexts in addition to generating an increased understanding of linguistic variations.

Early critical thinking instruction helps EFL students develop into skilled communicators and analytical thinkers, which benefits both their academic and personal development. Furthermore, the endeavor's broader societal worth cannot be emphasized, since people with strengthened critical thinking abilities actively participate in the global conversation, advocating collaboration as well as understanding across cultural boundaries. In essence, promoting critical thinking in language education transcends the immediate academic context, preparing students for a lifetime of meaningful engagement in a dynamic and globalized society.

1.2 Socratic Method

It is suitable to start by defining the independent variable which is the Socratic Method. Even though its features have been settled numerous years ago, it is such a valuable theory which is worth analyzing as a factor that can contribute to the improvement of critical thinking skill; at least, that's what most of literature expresses about this method.

According to Saint Leo University (2022), "the Socratic method of teaching is a thought-provoking dialogue between an instructor and their students." And then, Bouhlal (2023) described it very well when he said that "it involves a series of questions designed to clarify and refine one's thinking, with the goal of arriving at a deeper understanding of a concept or idea." So, this method has been connected frequently with the improvement of critical thinking because of its focus on promoting reasoning to challenge prior knowledge or assumptions in order to avoid any type of misconceptions.

It is vital to hint at the fact that the Socratic Method does not only appear in writings related to the education framework, but other areas have implemented it. This is the case of a scientific article titled Journal of the Royal Society of Medicina, whose author was Mark Harper (2003). He dedicates a section to talking about a variety of philosophical authors and methodologies that have been present in the field of medicine and one of these is the Socratic method. Harper defines this method "not as a competitive process but a cooperative search for both truth and understanding". Four main steps are mentioned to follow to carry out this process, and the steps are repeated until a good analysis of the topic is achieved. And he proceeds to point out an example in which doctors make use of these cases with real clinical cases.

Now that the concept of this method has been well-defined in different areas, it is appropriate to mention the history behind the Socratic Method. It is well-known that the method comes from the time of the great Greek philosopher, Socrates and this is what gives the name to the method. However, the beauty of the method relies on the practice that was developed since that time in which the main beneficiaries were the apprentices. As Scholle (2020) described "…in order to delve into his students' view, he (Socrates) would ask them questions until any contradictions were exposed. Socrates also used this method of questioning to encourage people to question the things they were told and to look beyond the obvious."

When researching about the essence of the Socratic Method, it is pretty common to find articles in which the method is linked mainly with the field of philosophy. Nevertheless, it is pertinent to expose that the concept goes beyond pigeonholing the method into a single science, but rather it is about the notion that it brings. Nelson (1980) couldn't state it better when he said that "The Socratic method, then, is the art of teaching not philosophy, but philosophizing; the art of not teaching about philosophers but of making philosophers of the students".

The Socratic Method is usually described with elements or stages that allows a good performance of this teaching practice. For example, Overholser (1994) says that "the Socratic Method includes three main elements: systematic questioning, inductive reasoning, and universal definitions". He outlines systematic questioning as a way to guide participants in their process of looking for their own answers. This is the part of the interview process in which questions play an important role. Then, Overholser mentions briefly that inductive reasoning refers to helping learners to emit conclusions according to their experiences. And the last element, universal definitions, is the result of the knowledge constructed.

Within his article, he concluded that the Socratic method makes learners "to question their assumptions and evaluate their beliefs in a critical manner". He also meant to state that cognitive skills are developed by using this method and those abilities might be significant when facing situations with troubles. Lastly, this article emphasizes again on the role of the questioning process and how it benefits both instructor and participant to better understand the learner's assumptions. And the elements of the method promote self-exploration and avoid specific content since it can be underlying and change. Nevertheless, the author of that article suggests that the Socratic Method cannot be applied easily or fits with any participants. since it requires

a good part of cognitive development too. That is, those who are part of the method must make an effort to expand their knowledge and what they used to believe.

When it comes to the benefits that the Socratic Method provides to students, all the advantages are related to the management of knowledge, as well as promoting a deeper reasoning. According to Lam (2018), "Socratic Learning Method enhances students' learning as it reduces the impact of misconception, aids students in organizing knowledge, cultivates higher order thinking skills, and helps students to monitor their own learning". In other words, the advantages are closely related to critical thinking, which is one of the areas that educators want to cultivate and develop a lot in students.

Additionally, the Socratic Method can not only contribute to the main development of critical thinking skills in students but induce other aspects such as curiosity, and teaching students how to handle challenges. As Scholle (2020) wrote on his blog, "The Socratic method is also used to help arouse curiosity in students. By making them think in different ways about various subjects, it encourages them to wonder how things could be different." And that's what the teaching process should be about. It is not only about the continuous transmission of knowledge, but also working on promoting natural instinctive behaviors such as curiosity which has often been shown to bring positive and contributing outcomes.

Besides, another benefit of the Socratic method is the development of the power of judgment among students. As Acim (2018) said, "Socratic method is not only its tendency to question but also its strong capacity to help students differentiate reasonable arguments from unreasonable or ill-formed ones." It means that learners also hone skills in recognizing rational arguments worth defending from the not-so-good ideas. Students usually struggle to organize their ideas which leads them to confusion when raising their voice and defending their thoughts. So, if the Socratic Method is developed properly, participants will get used to distinguish decent explanations which ensures them good performance during the questioning time.

It is important to consider that there are some factors that put at risk the good performance of the Socratic method of which has been previously mentioned. Especially situations that disrupt the long-awaited fluid interaction between teacher-students that would allow the reasoning of those who participate. According to Dalim, Ishak & Hamzah (2022), "the lack of questioning skills among teachers becomes the major hindrance towards practicing the Socratic method

in classrooms." Teachers are the ones who take the first step in this method when establishing open questions that promote a discussion. However, if the instructor does not have that ability to ask questions, the expected reasoning among students will not occur. The answers would probably be short and the discussion would last less than expected.

Furthermore, a challenge that can end up being a benefit for students is the fact of an unequal level of theoretical knowledge among students regarding a particular topic. It is true that there are subjects of which certain students know and handle more than others. At first glance, this would lead to an unfair development among students when arguing their answers due to lack of knowledge, but this is not always the case. According to a study carried out by Sorvatzioti (2012), "students met the need to use the critical way of thinking and their social experience more in comparison to their supposed theoretical knowledge on the subject." In simple words, the different level of conceptual knowledge can not represent a barrier in order to stop applying the Socratic Method. Hence, students will learn something new from others and everyone can defend their positions using personal experiences and basic reasoning. Paradoxically, this "challenge" of ignorance of certain topics can turn into a benefit. The same professor Sorvatzioti (2012) verified that "those (students) with nonspecific knowledge felt it was easier to participate in the exchange of their opinions because they were not "limited" by doctrines."

Once the general background of the Socratic Method has been analyzed, it is necessary now to focus on the actual nature of the method. It means that it is time to mention the Socratic questioning process which takes place during the application of the method. "I know you won't believe me, but the highest form of human excellence is to question oneself and others." Socrates

According to Jarvis (2002), Socrates' questioning was part of his method of teaching and it consisted of "attempting to formulate a definition of something and then trying to test its accuracy by a careful analysis of its meaning." He maintains that this method has a non-autocratic approach in which students should reach a better definition when questioning something and connect it with prior and familiar concepts. The process of questioning starts with a topic which promotes discussion, and it is proposed by the teacher. It must give rise to many perspectives and opinions in order to promote a variety of participation among students. Then, Jarvis (2002) states that the teacher adopted a "facilitator style". And as a facilitator, the teacher listens carefully and brings out students' opinions rather than displaying the teacher's

own knowledge. So, the teacher initiates the questioning but the students' attempted responses are what lead to self-reflection and subsequently an innate questioning in the students.

As Hayulina (2018) stated, “Socratic questioning is a systematic process for examining the ideas, questions, and answers that form the basis of human belief.” For this, individuals who are involved are stimulated to think in order to obtain concrete responses. An educational research carried out by Hayulina is called “Developing Students’ Critical Thinking on Speaking Through Socratic Questioning Method” and took place in Indonesia. The results obtained came from a group of 35 students who were exposed to Socrates' method of questioning. The author of that research, Yayuk Hayulina (2018), displays the six most common types of questions of the Socratic method in a chart and these are:

a) Questions for clarification

b) Questions that probe assumptions

c) Questions that probe reasons and evidence

d) Questions about viewpoints and perspective

e) Questions that probe implications and consequences

f) Questions about question

The conclusion of the research revealed that the Socratic method was such a great method to apply in order to improve students’ critical thinking and the questioning step was fundamental. Students need to identify pretty well the questions which are divided into types since some of them are easier to answer, but all of them definitely make students think critically.

It is essential to highlight that the use of the Socratic method is still present to this day despite its ancient origin. It is evident to find a variety of texts, articles and research in which this method is used in different areas of study such as law, psychology and education. The application and the way it is developed may have changed a little, however the essence remains the same. This only attributes to the adaptability that historical methods can have and its great impact has not let the Socratic method remain in the past.

It is illustrated by Sutton (2020) in which one of his articles explores how the Socratic Method is defined and applied in the classroom. He describes it as a “technique that produces insightful

perspectives and helps identify positive actions" and this is achieved after a series of questions. Coincidentally, Sutton also mentions how significant it can be to possess the skill of questioning. To some extent contemporary ideas about the Socratic method coincide with what was born at the time with its author, Socrates. Sutton can't interpret it better when he wrote that a series of open questions facilitates unraveling beliefs and assumptions that the mind does not let go easily. So, when the article refers to the framework of education, the author states that the use of the Socratic Method differs from a traditional way of teaching. Thus, there will be no precise alignment to the lesson plan of that day, but rather the course of the class would depend on the topic that arises during that dialogue and discussion. Regarding the application of the Socratic method in class according to Sutton, it is required that students not only have their position clear but also defend their ideals. That way, Socratic questioning will be applied effectively and as a result students' answers will not be based purely on facts that anyone can memorize but will reach conclusions on their own with their participation in the class discussion.

CHAPTER II: METHODOLOGY FOR THE DEVELOPMENT OF THE RESEARCH AND DIAGNOSTIC STUDY

2.1 The paradigm of the project

The current research was carried out under a mixed approach because it included both qualitative and quantitative approaches. Qualitative makes reference to the orientation taking into account the sciences of education, while qualitative refers to the collection and management of numerical data that are duly tabulated and later analyzed.

According to Onwuegbuzie and Leech (2006) "Conducting mixed methods research involves collecting, analyzing, and interpreting quantitative and qualitative data in a single study or in a series of studies that investigate the same underlying phenomenon." The incorporation of a holistic approach not only facilitates a more thorough comprehension of intricate phenomena but also empowers researchers to cross-check their findings across multiple sources, consequently increasing the study's validity and reliability. Diverse collection methods, including surveys, interviews, observations, and tests, were integrated by researchers to gather a wider range of perspectives and insights, enhancing the scope and depth of their studies. Furthermore, by mixing quantitative and qualitative analyses continuously, research problems may be explored more deeply and subtle connections and patterns that might be missed by employing a single scientific technique are revealed. In the end, using mixed methods research enables researchers to generate more robust and nuanced findings, advancing knowledge within their particular fields.

To advance with this research about the improvement of critical thinking in 9th grade students, it is suitable to conceptualize and operationalize the main categories that had been identified throughout the procedure. These correspond to the Socratic Method as the independent variable which was implemented through activities in order to be measured with the research instruments and Critical Thinking as the dependent one.

Once both variables were well-identified, concepts could not stay behind. As Rao & Reddy (2013) said "Concepts are the basic instruments that a researcher employs to describe observable phenomena and they are the foundations on which the researcher builds propositions and theories." Conceptualization provides not only a timely description of the variables to be analyzed but also credibility and support when considering the variables as relevant to the research.

In addition to the concepts, there is another pertinent procedure called operationalization. According to Andrade (2021), "variables need to be operationalized; that is, stated in a way that explains how they will be measured." This operation provides a better understanding of the subjects of study since variables are presented in an organized way and next to some other fitting details. Thus, the observation of concepts and their measurement is a fact and will lead to a good analysis once the data is collected. Additionally, this gives the research a quantitative and qualitative analysis of information. All of the above gave way to the variable operationalization table which was created in detail in order to cover all possible directions. That is, conceptual definitions, dimensions as well as their indicators, and optimal scales. And these are presented in the matrix.

2.2 Conceptualization and Operationalization of Main Categories

The main categories for this study include:

2.2.1 Definition and Explanation of Main Categories

Socratic Method

In the context of this research work, it was important to determine the independent variable which is the implementation of the Socratic method to enhance Critical Thinking Skills which is the dependent variable. After defining these variables, researchers established a clear framework for their study that allowed for a thorough examination of the effects of this particular teaching strategy on the growth of critical thinking skills.

Firstly, the Socratic method is a stimulating conversation between a teacher and her students. It is based on the method employed by the philosopher Socrates, who was renowned for drawing young minds into discussions aimed at defining general concepts (Saint Leo University, 2022). In the same way the mentioned article stated that "Instead of giving information and facts, an instructor using the Socratic method of teaching asks students a series of open-ended questions (with more than a yes or no answer) about a specific topic or issue" (Saint Leo University, 2022).

This method not only encourages active participation but also fosters critical thinking and analytical skills among students. By posing thought-provoking questions and challenging assumptions, the Socratic method cultivates a deeper understanding of complex ideas and encourages students to examine their own beliefs and values. Furthermore, it promotes a

collaborative learning environment where students engage in respectful dialogue, exchange diverse perspectives, and collectively explore the nuances of various topics. In essence, the Socratic method serves as a powerful tool for intellectual growth, encouraging students to become independent thinkers capable of navigating ambiguity and complexity with confidence and clarity.

Critical Thinking

On the other hand, it is defined critical thinking skills as" the ability of individuals to take charge of their own thinking and develop appropriate criteria and standards for analyzing their own thinking." (Shirkhani & Fahim, 2011 quoted Elder and Paul, 1994). In the same way Masduqi (2011) asserted that it is the process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information obtained or generated by observation, experience, reflection, reasoning, or communication as a guide to belief and action, being a self-controlled process. Based on this description, it is clear that developing critical thinking abilities is important in a variety of settings, including the classroom and daily life. Building these abilities in the classroom allows students to investigate topics more thoroughly, challenge assumptions, and create arguments with strong evidence. Beyond the classroom, critical thinking abilities play an important role in professional settings as they help people solve complicated issues, adjust to changing conditions, and come to well-informed conclusions.

Furthermore, in a time when people are constantly exposed to information from a variety of sources, having good critical thinking skills gives people the ability to sort through information, identify reliable sources, and differentiate between truth and opinion. Thus, developing critical thinking abilities results in the development of intellectual autonomy, improved cognitive flexibility, and a more discriminating manner in which to interact with the globalized world.

2.2.2 Description of the research context

The authors of this research, who had a relationship to the private school in Guayaquil, Ecuador, considered that the growth of critical thinking skills is very relevant in the framework of secondary education. This group of students consists of 17 ninth-graders. Considering that one of the main subjects in the curriculum is Language Arts, for a total of ten instructional hours, students' exposure to the languages (L1-L2) not only improves their English language skills but

also encourages their cognitive development and communication skills. Such committed work on the part of educators is essential to giving learners the resources that they need to effectively and competently get around the complex world of today. Basically, the context just presented has the type of information that contributes to analyzing the collection of data in a better way.

2.3 Research Questions

a) How does the current level of critical thinking skills among 9th grade students at a private school in Guayaquil manifest in their responses to open-ended questions related to different topics through General English Learning?

b) What are the underlying causes contributing to the observed difficulties in students' expression of opinions and critical thinking in both their native language and English, particularly concerning inferable, comparative, and hypothetical questions?

c) How effective is the systematic application of the Socratic Method by teachers in fostering critical thinking skills among 9th grade students, particularly in the context of a high school environment?

d) What are the potential improvements in students' ability to infer, synthesize, and draw conclusions after the implementation of the Socratic Method, specifically in the context of addressing their challenges with expressing opinions and critical thinking in both native and foreign languages?

2.4 Research proposal justification

The present work emerged clear throughout the diagnostic stage that students struggle with expressing or discussing their ideas through speaking or writing when the checklist was used to apply the observation. When they interacted with one another, they could communicate using the language, but they were unable to construct coherent or complete sentences. There were five periods of one class-hour of instruction in a week, which ran from April 27th to May 24th.

The information required was substantial to determine that students needed to develop their critical thinking abilities by giving them tasks or activities with regard to the Socratic method's guidelines that were collected from the stage's results. These factors were taken into account in order to enhance speaking and writing fluency while applying the task-based, content-based and the communicative instruction approach.

The research's quantitative component used a pre-test/post-test control group design to initiate the study. This approach made it possible to compare two groups: a control group that got

regular language teaching, and an exposed group that participated in discussion activities designed to improve their speaking skills. The students' critical thinking abilities were evaluated at baseline by the pre-test, and their advancement following the intervention was measured by the post-test. The comparison of how well the Socratic method activities developed production skills was made feasible by the control group. Furthermore, the qualitative element employed a debate lesson assessed with a checklist in order to keep track of the acquisition of understanding of different viewpoints of ninth-grade students about critical thinking skills.This approach allowed for a detailed examination of individual students' speaking proficiency development, their attitudes toward group of discussion with open-ended questions, and other the challenges they encountered during the intervention.

2.5 Delimitation of population, sample, and sampling.

The population at a private school located in Guayaquil, consisted of 17 students in 9th grade, and it included both group A and group B. However, the sample which was selected for this study consisted of 17 students who belong to Group A. According to Hanlon, B., & Larget, B. (2011), a sample is “a subset of the individuals in a population; there is typically data available for individuals in samples.” In other words, the sample was taken from a population and it should represent the main characteristics of it since its elements must have some similarities. Thus, the delimitation allows a more focused study to show whether or not there was an improvement in critical thinking skills once the Socratic method was implemented.

Then, the sampling procedure applied to this research was purposive sampling. As Rozalia, G. (2007) said “These methods are focused on assuring the sample representativeness in relation to the reference population structure using a series of key features.” And it usually gives the researcher the option to select the appropriate sample according to the criteria of the study. The considerations within the non-probabilistic sampling framework were: 1) All students attend classes at the same institution. 2) The group handles an A1.2 English level according to CEFR. 3) All the students have the same scholar schedule. 4) Age range between 12 and 13 years old. 5) All the students attend Language Arts as a subject.

Table #1 - Sample Population

Participants	Sample Population	Percentage
Women	6	35,30%
Men	11	64,70%
Total	17	100%

Elaborated by: Brito, Sugeidy and Navarrete, Sharon (2024)

2.6 Research Context

The current project was conducted at a private school located in Guayaquil. It is located in the urban area of the city, thus students who belong to this school come from the middle social class. The contributors of this research belong to the 9th-grade. They range in age from 13 to 14. Because students were receiving required instruction for the scholar year, the engagement with them took place in a face-to-face classroom setting.

2.7 Research stages

The investigation was divided into six periods: delimitation of the problem, theoretical revision, elaboration of the instruments, application of the instruments, data collection and its analysis, and finally conclusions and recommendations. The first stage was crucial to identify the difficulty that 9th grade students had when communicating and discussing appropriately with their classmates and teachers. That is to say, the first stage corresponds to the diagnostic stage in which the problem was evident thanks to an observation checklist. These details in the first section allowed us to determine the study problem and in turn think about the most appropriate methodology to provide a solution. Next, the second stage gives way to the collection of all available information such as articles, studies, or research, which have been based on the same study topics as the present study. This provides a theoretical background to count on the necessary knowledge to continue with the following stages.

Afterwards, the third stage was all about the instruments which were meticulously designed to be applied with the group of students selected. The instruments were a pre-test quiz, observation checklist, behavioral observation checklist, interview, and a post-test quiz. In the fourth stage, the authors of this research applied the mentioned instruments for data collection and analysis of the results. In the fifth stage, once the data was collected it was time to actually analyze

results in order to draw conclusions about the improvement of the students once the method was executed. Regarding last stages, the results were presented and all of the above made it possible to draw up the appropriate conclusions of the research and attach some recommendations for a future study.

Table #2 - Stages of the research project

Stage	Description	Activities	Performers
Delimitation of the Problem	Define the object of the study and the methodology.	Review of previous information and researchers.	Researchers Tutor
Literature Review	Outline the theoretical foundation guiding the study.	Explore and analyze bibliographic references.	Researchers
Elaboration of Instruments	Set the required criteria to obtain data for the study.	Design of a pretest and post-test, debate groups, and an interview.	Researchers Experts in the field to validate the instruments
Application of Instruments	Employ the designed instruments for data collection.	Apply the pre-test, post-test, debate groups, and interview.	Researchers
Data Analysis	Compile a report detailing the findings to assess the students' circumstances.	Application of the statistical analysis from the data obtained to draw conclusions.	Researchers
Final report of data conclusions	Collect and analyze the research outcomes.	Elaborate a final report with the results and draw conclusions and provide recommendations.	Researchers

Elaborated by: Brito, Sugeidy and Navarrete, Sharon (2024)

2.8 Instruments derived from the selected methodology

According to the operationalization of variables, five instruments were carefully designed to apply them in this research in order to collect data from the group selected.

2.8.1 Pre-test quiz

This instrument was elaborated for 9th-grade students, group A and it is such an effective instrument to evaluate critical thinking skills prior to the implementation of the Socratic Method. Pre-tests can be used at the beginning of a course to establish a subject knowledge baseline and then related to an end of the course exam to look at knowledge added (Berry, 2008). This pre-test quiz includes five questions or scenarios which cover a variety of contexts such as interpretation of a story, analysis of a video, problem-solving, comprehension of an article and even the assessment of a debate. So, students will be engaged in diverse contexts which evoke analytical thinking processes.

The application of this pre-test quiz within the 9th-grade group A will be developed in class and will be administered by the authors of this research. Its main purpose is to identify individual strengths as well as areas that require improvement in critical thinking abilities. Berry (2008) reinforced that when he said that a pre-test "tests the students just prior to the material being covered in the course".

2.8.2 Observation Checklist

Prior to the implementation of the Socratic Method Intervention, an observation checklist will be used in the diagnostic stage of the research to capture initial and significant data on both independent (Socratic Method) and dependent variables (Critical Thinking) within the classroom environment of the group selected for the study. It was divided into 10 aspects, each one addressing to measure the variables such as the students participation in discussions or the presence of providing questions that encourage deeper thinking which are related to the Socratic Method, and /or asking clarifying questions, providing justifications for answers, and engaging in respectful debate (Facione & Facione, 2006) according to the Critical Thinking variable. To implement the current checklist, each item will be rated on a three-point scale (Yes, Sometimes, and No) in order to track the frequency of observed behaviors. This method makes it feasible to gather pre-intervention baseline data on student critical thinking skills (the dependent variable) and the possible impact of the Socratic Method (the independent variable). This baseline data creates a critical frame of reference for assessing the success of the intervention.

2.8.3 Behavioral Observation Checklist

This instrument is designed to track student behaviors indicative of critical thinking in discussions adapted to the principles of the Socratic method. This will address both student progress while learning English language and the teacher's implementations of the Socratic Method capturing evidence of critical thinking progress. The checklist will be informed by existing instruments like the "Critical Thinking Observation Checklist" by Facione & Facione (2006) but adapted to the specific context of A1.2 English language learners, focusing on behaviors such as asking clarifying questions, providing justifications for answers, and engaging in respectful debate.

2.8.4 Interview to the Teacher

The interview was conscientiously designed to understand the teacher's perspective regarding the critical thinking skills of his students within the context of English language learning and the integration of the Socratic Method as a teaching strategy. According to Spencer et al. (2020) , "Interview questions, either structured or semi-structured, are related to the research question or research activities to gauge the participants' thoughts, feelings, motivations, and reflections." It encompasses a set of questions which aims to acknowledge how teachers usually observe, improve, and evaluate critical thinking skills in classroom discussion or any everyday scenario. This instrument will not only help with a general perspective of what instructional practices are being applied, but it would also examine how teachers employ the Socratic Method. Thus, it serves as a valuable tool for acquiring a notion of how the teaching process works and then look for instructional practices that give results of improvement in critical thinking skills.

The interview will be conducted in person with the Language Arts teacher of the 9th grade group A. During the interview, ten questions were asked to bring out his perceptions, strategies and experiences related to fostering critical thinking skills in students. The researchers recorded the responses for a better data analysis of this instrument.

2.8.5 Post-test quiz

It was a specially designed test which incorporates both open-ended and multiple-choice questions, to assess the level of critical thinking skills developed by the population in study after the immersion to the Socratic method learning experience. The questions will be based on established critical thinking frameworks like Ennis-Weir Critical Thinking Disposition Scale (1985) but adapted to the A1.2 level and content covered during the intervention (Facione,

2016). The post-test quiz will be administered to learners at the conclusion stage of instrument application. Thus, analyzing students' performance on the quiz will provide qualitative data on their critical thinking development after experiencing Socratic discussions.

2.9 Initial Diagnosis

To have the prior insights of what was going to be analyzed, researchers employed the Observation Checklist with the population of matter, in order to identify the main difficulties or weaknesses related to the development of Critical Thinking in English Language lessons. The indicator of the checklist not only focuses on the role of the teacher on implementing Critical thinking within his activities, but also analyzes the active performance of learners to discuss different topics of relevance and developing the target language measuring if there was presence or absence of the Socratic method. Through employing an integrated approach, the researchers were able to fully appreciate the particular challenges that teachers and students face, which allowed them to identify possible areas for improvement in the development of skills in critical thinking within the framework of English language learning.

Moreover, the application included in the Observation Checklist offered a useful framework for evaluating how well methods of instruction encourage students to think critically. Through an examination of teachers' pedagogical strategies and students' matching participation, the checklist provided an expanded perspective of the relationship between pedagogy and student participation. Consequently, this made it easier to assess how much critical thinking was being promoted in English language lessons in a broader way. The conclusions drawn from this initial study offered a strong foundation for developing focused procedures and improving instructional strategies to more effectively support the growth of critical thinking skills in language learning environments.

2.9.1 Analysis and interpretation of the data derived from the Observation Checklist

In the preliminary classroom observation of the study, a comprehensive analysis was conducted to understand the current state of teaching practices and student engagement. There were 17 ninth-graders in the class, and their English proficiency level was A1.2. Important information about the efficiency of the instructional strategies and the teacher's application of the Socratic Method was obtained from the observation checklist.

During a few occasions, it was noticed that the teacher encouraged the students to go deeper into issues and ask questions. Even though an effort was made to involve students in inquiry-based learning, the majority of the inquiries were YES/NO questions rather than ones that required in-depth answers. This restricted the possibility of encouraging a deeper examination of topics.

There were also only a few class discussions where students participated in debate to question presumptions and consider opposing viewpoints. There was an evident absence of application of activities meant to elicit such critical involvement, suggesting a serious deficiency in promoting higher-order thinking.

Only a portion of the teacher's use of questioning strategies to encourage critical thinking and active engagement was fruitful. Students' frequent reliance on textbook solutions revealed a lack of self-assurance or an inability to articulate their own opinions when the text did not explicitly back them. Rather than encouraging autonomous thought, this emphasizes a reliance on predetermined responses.

Additionally, it was notable that students were reluctant to participate in genuine discussions, primarily because they were insecure about their language abilities. Their unwillingness to examine opposing views or participate in critical information analysis was limiting. It was not easy for kids to question concepts and have polite debates in a school setting that encouraged a culture of inquiry. The necessity for an encouraging and supportive atmosphere for learning was further reinforced by the shyness that students were seen to exhibit when asked open-ended questions.

In the same way, students hardly contributed to the examination of difficult subjects or offered insightful commentary during class discussions. Students' sharing of ideas, which was essential for collaborative learning and the development of critical thinking, was not embraced in the classroom. Furthermore, because the open-ended nature of these questions proved difficult for those in this group, thus the Socratic Method was not used to guide problem-solving activities. Instead of employing the Socratic Method to analyze texts or case studies collectively, the majority of classroom activities focused on solving general language exercises.

In summary, the initial observation of this A1.2 English Language lesson revealed substantial challenges in applying the Socratic Method successfully. Students' insecurity and over-reliance

on prepared textbook responses undermined the teacher's efforts. In the future, specific methods to create a safe space and progressively incorporate open-ended questioning strategies could improve students' critical thinking abilities and Socratic Method participation in English Classroom settings.

2.9.2 Analysis and interpretation of the data derived from the Pre-test.

A pre-test quiz was addressed to the 17 students from 9th grade in order to gather information about their current status of their critical thinking skills. The quiz was constituted by five multiple choice questions which involved different real-life scenarios and only one of the options was a reflection of a critical answer. Students were not only requested to use their regular English skills to understand each of the scenarios, but they were challenged to identify the question or solution that would lead to a deeper understanding of the presented situation. Such essential data related to the use of critical thinking skills among A1.2 English learners was collected from the pre-test quiz.

Question 1: You are reading a story about a character who finds a lost wallet on the street. What is a critical thinking question you might ask about this story?

The results for question 1 indicated that only 41,18% of the 9th grade students correctly identified the critical thinking question. In other words, only 7 students out of 17 could recognize the answer that best reflected a critical interrogatory. It suggests that many students may struggle with distinguishing between superficial details and deeper analytical questions. The low percentage of correct responses points to the need for enhancement in critical thinking abilities among students.

Question 2: You watch a video about different animals in the jungle. Afterward, your teacher asks, "What do you think is the most important thing animals need to survive in the jungle?" Which response demonstrates critical thinking?

The results for question 2 revealed that 76,47% of the students from 9th grade identified correctly the response which demonstrates critical thinking. It shows a strong understanding among the majority of the students (13 out of 17) about what a thoughtful answer refers to. The high percentage of correct responses advocates that many students are capable of recognizing the necessary elements for animal survival in the jungle. It could be due to the fact that students might be more familiar with this context, or they count on a prior knowledge about animal survival that aligns with their critical thoughts and leads to a significant percentage of correct answers.

Question 3: You are given a problem-solving puzzle to complete. Which of the following actions demonstrates critical thinking?

The outcomes of question 3 indicated that 9 out of 17 students identified the action that demonstrates critical thinking. This manifests that slightly more than half of the students understand the importance of using different strategies to solve a problem, while the rest of the students may need further instruction on problem-solving techniques. Those students who answered correctly might have previous experience or knowledge in problem-solving techniques, enabling them to apply critical thinking skills effectively. Overall, the results of this question highlight both strengths but also areas for potential improvement in critical thinking education.

Question 4: You read an article that claims drinking water is essential for good health. Which question demonstrates critical thinking about the article?

The results for question 4 of the pre-test quiz showed that 10 out of 17 students answered correctly; it was 58.82% of students. This is considered as a moderate percentage, and it just indicates a reasonable understanding among A1.2 students of what constitutes critical thinking in the context of evaluating claims related to health. Some possible reasons behind these results could include students' prior exposure to discussion about health and wellness, the clarity of the question, or even the relevance of the topic of drinking water to the daily experiences of the students. However, the fact that nearly 41.18% did not choose the correct response also suggests room for improvement in fostering deeper critical analysis skills among students. Educators may need to focus on providing more opportunities for students to challenge their critical thinking abilities in different scenarios.

Question 5: You are watching a debate about the importance of recycling. One side argues that recycling helps protect the environment, while the other side disagrees. What would be a critical thinking question to ask about this debate?

The results of question 5 in the pre-test quiz showed that 47.06& of students, specifically 8 out of 17, accurately identified the critical thinking questions relevant to a recycling debate. It represents a moderate level of understanding among A1.2 students to what corresponds to a thoughtful inquiry of debate context. On the other hand, a notable 52.94% did not select the correct response. It suggests that a significant portion of students still need further development in formulating relevant questions that lead to good debates. Good responses might be a

reflection of a critical thought about the different perspectives in the debate, or a great evaluation of the evidence and arguments of both sides. And incorrect answers may stem from factors such as misunderstanding the depth of critical questioning needed or lack of familiarity with effective debate strategies.

Table #3 - Results of the pre-test quiz

Question number	Question area	Number of correct responses	Percentage of correct responses
1	Moral Decision	7	41,18%
2	Survival Essentials	13	76,47%
3	Strategic Approach	9	52,94%
4	Health Validity	10	58,82%
5	Debate Question	8	47,06%

Elaborated by: Brito, Sugeidy and Navarrete, Sharon (2024).

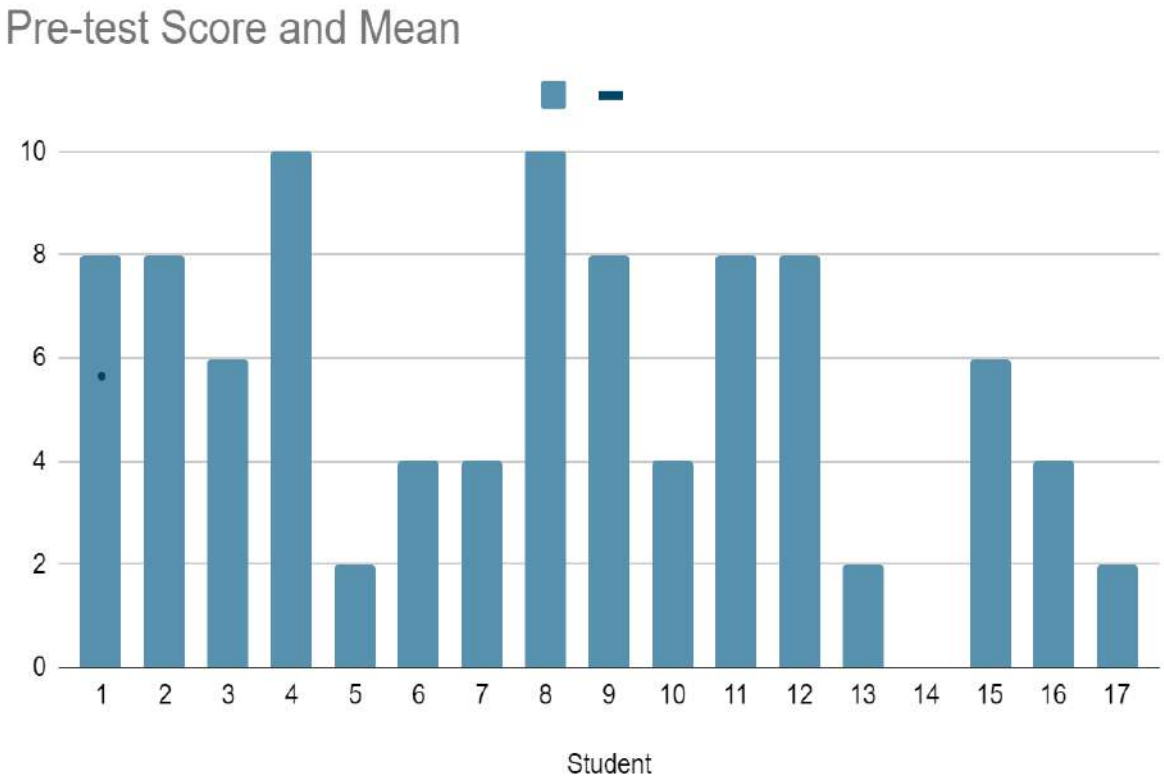
Table #4 - Student Pre-Test Scores with Statistical Overview

Student	Score	Mean	Maximum Score	Minimum Score
1	8			
2	8			
3	6			
4	10			
5	2			
6	4			
7	4			
8	10			

9	8	5,65	10	0
10	4			
11	8			
12	8			
13	2			
14	0			
15	6			
16	4			
17	2			
Total	96			

Elaborated by: Brito, Sugeidy and Navarrete, Sharon (2024).

Figure 1: Pre-Test Score and Mean



Elaborated by: Brito, Sugeidy and Navarrete, Sharon (2024).

CHAPTER III: PRESENTATION AND VALIDATION OF THE PROPOSAL

This part of the proposal includes all the information needed to understand the structure and originality of the systematic analysis of activities as well as its foundations, characteristics, structure, and components.

3.1 Foundations of the system of activities to develop Critical Thinking through the implementation of the Socratic Method.

The theoretical bases as analyzed in this research and discussed in Chapter I, considering that the Socratic Method serves as an appropriate starting point to motivate students to answer challenging questions since it allows students more autonomy to analyze and express themselves while learning English. This method is being used actively for engaging in the teaching-learning process by posing thought-provoking questions that encourage the growth of English production skills (speaking and writing). As a result of its absence or lack of usage, many students experience discomfort, nervousness, or anxiety when speaking or writing since they haven't had enough opportunities in English classes to have their ideas validated and to develop new concepts based on them.

The Socratic Method, a powerful tool in education, can be applied to the PBL approach, a teaching methodology aimed at solving real-world challenges through task completion. By embracing the Socratic Method, students engage in a dynamic process of questioning and critical thinking, enhancing their language production skills, particularly speaking. Through cooperative learning, students actively participate by generating innovative ideas to support each project. The final presentation becomes an opportunity for students to demonstrate their understanding, applying the Socratic Method to reflect, analyze, and present their solutions. This approach fosters a deep understanding of the subject matter and encourages students to think independently, fostering a lifelong love of learning.

Similarly, the Socratic Method presents itself as a teaching approach that may be used alongside a set of exercises to address issues that occur within the real world. This method's suggested tasks (system of questioning) are focused on promoting critical thinking and active engagement in an ongoing search for knowledge. Students are encouraged to express their ideas and opinions through argumentative interactions, which promote language creation and improve communication skills.

The proposal aligns to the guidelines set by Ecuador's National English curriculum in accordance with the CEFR and has its basis in philosophical principles. In which learning can be enhanced by completing particular tasks or activities, and which was designed to allow students to continue having discussions regarding contemporary global issues through collaborative tasks. Additionally, it has been determined that ninth-grade students must achieve an A2 level of English proficiency in accordance with the mentioned Guidelines "Interact and participate in brief informal discussions, in a simple way by asking and answering simple questions about the learners' personal, educational and social background" (Ministerio de Educación, 2023, pages 11-14). This is supported by the research's application and development under the curriculum's quality standards, which emphasize the critical thinking skills of ninth-graders as part of their exit profile.

In terms of linguistics, this proposal seeks to improve the students' speaking and writing skills through highlighting the reduction of pronunciation inaccuracies, the improvement of vocabulary and grammar application, and the promotion of productive peer-to-peer communication. Similarly, the proposal acknowledges the importance of accurately applying grammar and vocabulary. Students can build a strong foundation in language structure and increase the range of their vocabulary by having opportunities to strengthen their speaking and writing skills. This not only helps students communicate more effectively but also allows them to express themselves in a way that is more complex and sophisticated.

Through implementing this, the methodical suggestion gives teachers the chance to connect with students and enhance the effectiveness of English language instruction. Thereby offering the students opportunities to interact with their peers in the target language throughout class, teachers can acquire an increased understanding of how their students are performing.

This proposal provides a framework of relevant activities that actively include students in learning through methods that take into account questioning, group discussions, problem-solving exercises, and interviews in order to obtain such contact with the students in the teaching process. The system of activities, when viewed from a methodical perspective, enables a relevant environment in which both teachers and students participate since it was divided into phases that assist the systematic presentation of language to develop critical thinking.

Given that the Socratic method of teaching sets a strong emphasis on the needs of student-centeredness, it allows them to take their time exploring and researching to find solutions to problems that arise in real-world scenarios. This method stimulates students' interest while giving the material they are studying a practical meaning.

The activities in the system aim to encourage critical thinking in both teachers and students by allowing them to ask meaningful questions that genuinely enhance their learning. Additionally, as the students become familiar with the system, it is expected that at the conclusion of each phase, they would be able to demonstrate their progress by writing or speaking in English.

● Collaborative: Being able to think critically is essential in today's globalized world, so being able to communicate in the language competently is frequently regarded as an added benefit. Students aim to acquire strong English critical thinking skills. While there are many ways to improve critical thinking skills, one of the best strategies is collaborative learning. In this instance, the set of exercises incorporates the Socratic Method to support a group-based strategy for enhancing English language critical thinking skills.

● Communicative: By highlighting the value of language use in interpersonal interaction, idea exchange, and meaning transmission, this proposal involves a communication-based approach. When it comes to improving critical thinking skills through interactive methods, the communicative approach is essential. Students actively interact with the language, which promotes a deeper comprehension of its complexities. By engaging in class discussions, debates, interviews, dialogues, and oral presentations, students develop their critical thinking and analytical abilities while improving their overall proficiency.

● Systematic: The strategy for developing the Socratic Method aims to gradually arrange and structure the learning process in order to improve English language proficiency effectively and without making students feel overwhelmed. This means selecting appropriate settings or scenarios, offering direction, and developing assessment standards in order to promote meaningful language development. Active involvement, constant feedback, and the development of critical thinking skills are all greatly benefited by the systematic application of the Socratic Method, all of which are objectives associated with language learning.

The methodological criteria stated below constitute essential requirements to developing the activities:

● Take into account the Common Framework of Reference for Languages (CEFR)-aligned English as a Foreign Language Curriculum guidelines. This method, which emphasizes language acquisition as a means for involvement and debate rather than just a piece of knowledge to be learned, is similar to the communicative language method. Considering that 9th-year students are expected to achieve an A2 level in language proficiency and oral skills, this is highly important.

● Approximately four weeks should be given consideration for putting the idea into practice within the learning process. During this time, different stages of the project's development will be demonstrated through a range of activities. The Socratic Method should be the main focus of these exercises, which will motivate students to use critical thinking skills through discussions, debates, presentations, and dialogues.

● Lesson plans need to include the phases that are included in the sequence of activities. The four scheduled themes have distinct goals and correspond with the four stages of the system. Important components such as technique, resources, evaluation, and recommendations for applying the Socratic Method to improve critical thinking skills are also considered in the preparation.

● The plan should be implemented under the best circumstances possible, as the educational community should collaborate and its development. It should be mentioned that students benefit much from the application of resources like literature, technology, and other materials when they are making their presenting results of any of the activities. These factors are taken into consideration during the teaching-learning process which produces the Socratic Method, creating a realistic experience for students to continuously improve their performance.

3.1.1 Description of the system of activities to develop Critical Thinking

Being able to communicate competently in English is recognized as a key for relating in a world that is increasingly globalized. In the field of education, the linguistic ability becomes an essential way of gaining access to new experiences. Promoting the development of students' beneficial skills, including speaking and writing, is of great importance to the teaching-learning process.

As a result, innovative methods and approaches in education encourage the use of the Socratic Method and other communicative and collaborative activities since it gives students a set of exercises to improve English language-production skills.

The Socratic Method uses a variety of questions that originally were meant to improve and magnify the ability of learners to construct ideas or concepts, articulate themselves in an argumentative format, and promote communicative engagement. Furthermore, it suggests strengthening listening and understanding skills in order to assess themselves and provide feedback on the language that students have acquired and produced.

The primary challenge in applying the proposed activities, for example debates, conversations, and dialogues into practice is adapting them to the educational objectives and the outcomes that are intended to be obtained both during and after this study as a means of encouraging learning along with the language's application and proficiency at the A2 level that has been previously specified in the curriculum.

Consequently, it aims to maintain a proactive attitude in students by implementing the Socratic Method targeted toward a communicative system of activities. By engaging in each activity, they will be able to strengthen not only their critical thinking abilities but also their ability to interact in English skills.

As a result, students will have the chance to enhance their language proficiency while acquiring knowledge in order to interact with the world outside of them. The essence of what this idea provides, that individuals interact with more people in various circumstances and solve real-life problems by engaging in these activities.

The fact that students actively participate in tasks or activities from the real world is the primary objective of the learning method. This student-centered method promotes teamwork, critical thinking, problem-solving, and applying knowledge and abilities to solve issues in the real world.

Below is an overview of the stages involved in the implementation of the Socratic Method in each phase of the system of activities:

Establishing learning objectives and outcomes that students should achieve as a result of applying the system of activities begins with the arrangement of open-ended questions

concerning current real-life issues at the beginning of the lessons. These learning objectives should be aligned with the curriculum standards, success indicators, and institutional objectives.

STAGE 1. Pre-test and Observation Checklist Application

This phase is focused on gathering baseline data and to observe the learners' initial critical thinking skills and behaviors. The application of these instruments will serve as a diagnostic tool to assess the students' current critical thinking skills, while the observation checklist will provide a systematic method for recording and analyzing the students' behaviors and interactions during Socratic Method Discussions.

Capturing specific behaviors and interactions were measured through observable indicators such as the students' ability to ask probing questions, provide evidence for their opinions, and engage in constructive dialogue. Thus, the systematic document of students' critical thinking behaviors are assessed consistently and objectively.

During the application of the pre-test, it was key to ensure that the assessment is conducted in a low-stakes environment to minimize anxiety and allow the students to perform to the best of their abilities. Additionally, the observation checklist should be used discreetly to avoid influencing the students' behaviors during the Socratic Method discussions. This approach will ensure that the data collected accurately reflects the students' natural critical thinking skills and behaviors in the language learning context.

Following the administration of the pre-test and the use of the observation checklist, the data collected will provide significant insight into the A1.2 language learners' baseline critical thinking skills and their initial behaviors during Socratic Method discussions. This information will serve as a foundation for the subsequent stages of the research, allowing for a comparison of the students' progress in critical thinking skills after the implementation of the Socratic Method. Thus, effectively applying the pre-test and observation checklist in the first stage of the research, the study will be equipped to evaluate the impact of the Socratic Method on enhancing the critical thinking skills of A1.2 language learners.

STAGE 2. Implementation of the Socratic Method

In this phase, the application of the Socratic Method was integral to promote critical thinking skills among language learners. It plays an important role to understand the practical application

of the method in order to guide students through thoughtful and analytical discussions. The Socratic Method emphasizes open-ended questioning, critical thinking, and collaborative dialogue, creating a dynamic and intellectually stimulating learning environment.

It is key in this phase that teachers begin by carefully selecting thought-provoking questions that encourage students to think deeply about the topic at hand. These questions should prompt students to analyze, evaluate, and synthesize information, promoting a deeper understanding of the subject matter. Encouraging active participation from all students, regardless of their proficiency level, was essential for cultivating a vibrant and collaborative learning environment. In terms of significant application of the method, the facilitation of discussions play a crucial role while allowing students the freedom to explore their ideas and engage in meaningful exchanges with their peers. Additionally, by employing the Socratic Method checklist, teachers can track the progression of students' critical thinking skills and identify any patterns or changes in their behaviors over the course of the Socratic Method implementation. This data will provide valuable insights into the impact of this methodology, serving as a foundation for subsequent analysis and evaluation in the research study.

STAGE 3. Assessment of the Socratic Activities

The main goal of the research methodology's third stage will be to evaluate how well Socratic activities used by the teacher to improve A1.2 language learners' abilities to think critically. The Socratic method will be implemented through a range of interactive exercises. It is well-known for encouraging in-depth inquiry and reflective thinking. To be more precise, the teacher may include debates, pair discussions, and dialogues in the English as a Foreign Language (EFL) lessons. The activities mentioned previously are intended to promote critical thinking, straightforward communication of ideas, and meaningful peer interactions (Paul & Elder, 2006; Brookfield, 2012).

The Socratic tasks will be carefully inserted both at the beginning and at the end of every class in order to ensure a thorough evaluation. This method will give students lots of chances to practice critical thinking as a way to both introduce new content and reinforce previously taught concepts. Students will have the opportunity to enhance and sharpen their critical thinking abilities in a consistent and systematic manner by using these exercises to start and end classes. It takes

repetition to strengthen their capacity for information analysis, evaluation, and synthesis (Facione, 2011).

On the closing lesson of this phase, a post-test measuring the growth of the students' critical thinking abilities will complete the evaluation procedure. This post-test will include both multiple-choice and metacognitive questions that will force students to consider the techniques and ways they thought during the exercises. While the metacognitive questions examine the candidates' knowledge of their own cognitive processes and capacity for thought regulation, the multiple-choice questions will evaluate their application of critical thinking in a variety of settings (Vygotsky, 1978). The goal of this simultaneous approach is to give the community a comprehensive picture of the students' growth as critical thinkers.

All things considered; the evaluation of the Socratic exercises will offer insightful information about how these techniques affect the critical thinking skills of A1.2 language learners positively. In order to demonstrate the potential advantages of the Socratic approach in promoting critical thinking in EFL environments, the research incorporates dialogues, pair talks, and debates into the classes and assesses the results using a structured post-test. The results of this phase will advance knowledge of how interactive and reflective exercises might improve students' language acquisition and cognitive growth in the ninth grade.

3.2 Validation of the methodological proposal

The researchers' particular instruments, designed especially for the study, were used to demonstrate the validity of the investigation. The ideas that these instruments were meant to represent were faithfully delivered. With an emphasis on dimensions and indicators, the researcher developed a survey based on the operationalization of variables. Additionally, they performed a pre- and post-test to identify issues and assess advancements made during the implementation of the strategy. The study's instruments were valid and dependable, with well-researched measures that underwent tutor validation prior to use. This confirmed that the acquired data appropriately represented the investigation's constructions of interest.

Likewise, as stated by Wood and Haber (2013), a retest dependability is guaranteed by the stability and consistency of instruments that have been used in the past and have reliably generated results. It has been proven that the many questionnaires assessing the same construct produce comparable and trustworthy findings in terms of internal consistency.

However, during the research methodological design phase, a few possible risks were found. For example, the process of assigning samples contained a bias in selection. In order to solve this, a non-random sample that was adapted to the 9th year of EGB was applied; this increased the sample's representativeness of the target population. Additionally, measurement bias was used to reduce the possibility of data gathering problems. This was made possible by the tutor and pre-application.

Following a systematic approach is one area that requires focus. This is because research instruments, like the checklists and the interview when using the Socratic Method to promote critical thinking skills, are developed on this basis. The variables were operationalized in order to produce a reliable and accurate study for teachers and students.

In summary, it is imperative to ensure the validity and trustworthiness of research in order to derive precise findings and contribute significantly to the collection of scientific knowledge. Identifying prevalent obstacles to validity and implementing relevant instruments that increase the credibility of the research are essential as well.

Similar to this, strengthening the confidence in research findings involves combining several techniques of reliability assessment and taking important factors into account during the study design and data gathering procedure. In the end, a careful analysis of validity and dependability helps to preserve the validity and trustworthiness of scientific research.

The intention to use the Socratic method to improve Critical Thinking skills in EGB 9th grade students meets with the requirements set stated by the Common European Framework of Reference for Languages (CEFR) and the Ministry of Education. The emphasis of these standards is on learners achieving A2 level language competence.

On top of that, the proposal aims to support educators who want to use the Socratic method as a part of their teaching exercise that permits and facilitates proactive engagement, communicative skills development, and classroom interaction for meaningful learning for both students and teachers.

It was able to maintain focus on its final objective, which is to assess students' ability to infer, synthesize, and draw conclusions following the systematic application of the Socratic method by the teacher to measure and evaluate its results.

3.2.1 Analysis and interpretation of the data derived from the Interview to the Teacher

Statement 1: How do you observe students' critical thinking skills manifesting in their written assignments and classroom discussions?

Students' critical thinking abilities are demonstrated in written assignments by being able to evaluate and analyze data, formulate solid arguments, and provide evidence to back up their assertions. Students may also show that they can actively listen, consider alternative points of view, and create well-supported arguments whether working alone or in groups through book-based activities and authentic resources.

Analysis: In written assignments and debates, the teacher's answer emphasizes the importance of assessing and analyzing data, developing arguments, and offering supporting information as essential components of critical thinking. This is consistent with Bloom's taxonomy, which states that analysis, synthesis, and assessment are components of higher-order thinking skills (Krathwohl, 2002). Such skills are demonstrated in the A1.2 context by planned exercises that encourage students to interact critically and actively with the content.

Statement 2: Can you share an example of a lesson or activity that effectively challenged students to think critically and analyze texts deeply?

In fact, I can provide one example of a lesson that effectively challenged students to think critically and analyze texts deeply which is a close reading activity. In this activity, students are given a short text and are asked to read it multiple times, focusing on different aspects each time. For example, in the first reading, students may focus on understanding the main ideas and supporting details. In the second reading, they may analyze the author's tone and use of language. In the third reading, they may examine the text's underlying assumptions and evaluate its credibility. Through this activity, students are encouraged to engage in careful analysis, interpretation, and evaluation of the text, fostering their critical thinking skills.

Analysis: The example of the close reading exercise highlights recurrent reading, with a different analytical focus each time. This approach, which encourages students to read the content more closely, is beneficial in developing critical thinking skills because it is backed by Fisher and Frey's (2014) close reading research. This scaffolding strategy breaks down difficult work into simple steps, allowing A1.2 learners to gradually strengthen their analytical skills.

Statement 3: How do you encourage students to question and evaluate information they encounter in English texts, media, or everyday life?

I strongly believe that it is essential to have a classroom culture that promotes inquiry and critical thinking in order to motivate students to challenge and analyze the information they come across. As educators, we can educate students the skills and methods necessary to examine information, such as how to spot prejudiced material, assess the strength of the evidence, and find trustworthy sources. Students must also carry out research and critically assess material for the assignments given, which may include fact-checking activities or examining media messages for bias.

Analysis: Constructivist learning, which promotes questioning and discovery as a way of knowledge construction, is in accordance with the teacher's emphasis on developing an inquiry-friendly classroom culture (Vygotsky, 1978). Teaching A1.2 students to recognize prejudiced material and assess the evidence helps them become more observant information consumers, which is essential for strengthening their critical thinking abilities in a foreign language.

Statement 4: In what ways do you support students in developing their ability to make connections between different texts, themes, or ideas?

To help students develop their skills in critical thinking, it is essential to guide them in drawing connections between various texts, subjects, or concepts. Personally, I use it when providing students specific instructions on how to find and evaluate relationships. For example, I can motivate them to search for recurring themes in texts, contrast and compare various texts, or identify patterns and trends. In order to help students, understand how various ideas relate to one another, it is also important to organize debates that allow them to develop conclusions and create connections based on evidence from research.

Analysis: The response addresses techniques that are essential to the development of critical thinking, like identifying themes, comparing texts, and identifying patterns. Research on fundamental literacy and reading comprehension validates these strategies (McLaughlin & DeVoogd, 2004). Guiding A1.2 students in creating these connections fosters stronger cognitive engagement with the content and bridges their comprehension.

Statement 5: How do you address any challenges or obstacles students may face in developing their critical thinking skills, particularly those with varying levels of English proficiency?

Differentiation and scaffolding are necessary to address the obstacles and barriers that students might face when developing their critical thinking abilities. It has been helpful for me to offer extra assistance to students with different levels of difficulty in the target language through the use of simplified texts, vocabulary training, and language support resources. To assist students in organizing their ideas and drawing connections, I make use of graphic organizers, visuals, and other instructional tools. It's indispensable to give students opportunity for practice and feedback, as well as establish an inclusive, encouraging climate in the classroom where they feel free to express themselves and take initiatives. An environment where students feel comfortable taking risks and expressing their ideas.

Analysis: Best practices in language education are shown in the teacher's use of differentiation and scaffolding to assist students at varied levels of proficiency (Tomlinson, 2001). Simplified texts and visual aids reduce the cognitive strain for A1.2 learners, allowing them to concentrate on working on their critical thinking skills.

Statement 6: How do you integrate the Socratic Method into your English lessons, and what specific strategies do you use to facilitate Socratic discussions?

I integrate the Socratic Method into my English lessons by creating a classroom environment that encourages dialogue and critical thinking. I use thought-provoking questions to stimulate discussion and engage students in active learning. To facilitate Socratic discussions, I ask open-ended questions that encourage students to think deeply and critically. I also encourage students to ask questions of their own and promote active listening and respectful dialogue. Additionally, I use techniques such as paraphrasing, summarizing, and asking for clarification to deepen understanding and encourage students to think more deeply about the topic at hand.

Analysis: A key aspect of the Socratic Method is the teacher's strategy of encouraging a dialogue-rich setting with thought-provoking questions (Paul & Elder, 2006). Open-ended questions and strategies like summarizing and paraphrasing help scaffold language skills and foster critical thinking in A1.2 learners, which is particularly important in this situation as learners are starting to create complex concepts in a foreign language.

Statement 7: Can you describe a recent Socratic discussion in your class and how it contributed to students' understanding of the text or topic?

We recently discussed the novel's identity issue in a Socratic session in my class. I invited students to consider the motivations and actions of the characters by presenting open-ended questions at the beginning of the debate. Students' comprehension of the text developed as the conversation carried on and they were able to address the issue of identity in a relevant and personal way by drawing parallels between the experiences of the characters and their own lives. Students had the chance to express their opinions, critically evaluate the book, and acquire knowledge from one another during the Socratic dialogue.

Analysis: The following instance shows how the Socratic Method allows students to make personal connections to the material in order to assist deeper comprehension (Lipman, 2003). Discussing the intentions and deeds of characters using open-ended questions can help A1.2 learners better understand the book and make the learning process more relevant and powerful.

Statement 8: How do you ensure that all students actively participate in Socratic discussions and feel comfortable expressing their thoughts and opinions?

To ensure that all students actively participate in Socratic discussions and feel comfortable expressing their thoughts and opinions, I create a supportive and inclusive classroom environment. I point out precisely what is expected of participants and offer guidelines for polite and respectful conversation. Additionally, I adopt techniques like think-pair-share and small-group conversations to allow students to gather their ideas before presenting them to the class. It is of great importance to create an atmosphere of confidence where all viewpoints are accepted and valued by carefully listening to the students and validating their contributions.

Analysis: Developing a positive and inclusive atmosphere is necessary for motivating every student to take part in Socratic dialogues (Brookfield & Preskill, 2012). Think-pair-share and small-group conversations are effective strategies for helping A1.2 learners structure their ideas and gain confidence. This also helps to make sure that all students in the classroom feel appreciated and heard.

Statement 9: What feedback have you received from students about the effectiveness of the Socratic Method in enhancing their critical thinking skills and understanding of English texts?

Students have expressed satisfaction with the Socratic Method's effectiveness to improve their comprehension of English texts and their ability for thinking critically. They have said that the Socratic Method has improved their abilities for in-depth thought, significant analysis, and

meaningful conversation. As a result of the Socratic Method's promotion of active engagement with the text through questioning and making connections, students have also reported improvements in their comprehension of English texts. They value the chance to voice their ideas and opinions and get insight from the viewpoints of their peers.

Analysis: Positive feedback from students' highlight how well the Socratic Method works to improve comprehension and critical thinking (Perkins, 1999). The approach's emphasis on peer learning and active participation helps A1.2 students achieve a deeper comprehension of English literature and strengthens their analytical abilities by challenging them to express and assess various points of view.

Statement 10: How do you assess the impact of the Socratic Method on students' learning outcomes and adjust your teaching approach accordingly?

To assess the impact of the Socratic Method on students' learning outcomes, I make use of a range of techniques. I use formative evaluations, which include written reflections, class discussions, and observation, to find out how engaged and informed my students are with the topic. Summative tests, like quizzes and projects, are another tool I use to determine how well students can apply their critical thinking abilities to unusual situations. I evaluate the way I teach in light of the evaluation outcomes, make any necessary changes, and offer specific support to students who might need additional guidance.

Analysis: A solid understanding of student learning can be rendered possible when using both formative and summative assessments to evaluate the effectiveness of the Socratic Method (Black & Wiliam, 1998). Continuous evaluations such as written reflections and class discussions offer valuable insights into the engagement and comprehension of A1.2 learners. Additionally, projects and quizzes test their application of skills in critical thinking, assisting educators make the required modifications to the curriculum.

3.2.2 Analysis and interpretation of the data derived from the Behavioral Observation Checklist.

The integration of the Socratic Method in an A1.2 English language classroom aims to enhance critical thinking skills through structured dialogue and inquiry. The analysis of a behavioral classroom checklist (see annex xx) provides information about how well this method works in

a classroom of 17 ninth graders. This article assesses the checklist's observations and responses to determine how the Socratic Method affects students' critical thinking and involvement.

The students' willingness to express their opinions demonstrates how actively they participate in Socratic discussions, contributing to the conversation and sharing insights. Since it enables students to express their ideas and take part in insightful discussions, this active participation is essential for the development of critical thinking (Brookfield & Preskill, 2012). It's clear from the first portion of the class that the teacher successfully applies the Socratic Method by encouraging critical inquiry and enabling debates among the students.

However, during Socratic conversation, students can find it difficult to ask insightful questions that go further into difficult subjects or ideas. This challenge indicates that more experience and assistance are needed to formulate thought-provoking questions in the target language. Developing proficiency in this area is essential for encouraging a higher degree of inquiry and deeper critical involvement (Vygotsky, 1978). In spite of this, the success of the Socratic conduct depends on the classroom environment encouraging open dialogue and respectful disagreement during Socratic debates. Students feel more comfortable expressing different opinions and participating in critical discourse in an atmosphere that promotes open communication (Lipman, 2003).

Although they can combine several points of view to create a solid understanding of complex issues, learners still need more practice in this area. Improving their text summary skills can help them become more skilled at synthesis and critical thinking. Students use suitable language and supporting details to convey their thoughts clearly. They might, however, find it difficult to use new terminology, which emphasizes the necessity of constant vocabulary development to help their argumentative skills.

In summary, the Socratic Method exhibits potential for improving A1.2 students' critical thinking skills, but there was still opportunity for development, especially in the areas of creating questions, active listening, and text summarizing. The Socratic Method's propensity to promote critical thinking will be further enhanced through ongoing practice and support in these areas. The encouraging environment in the classroom and the teacher's effective instruction provide solid bases for advancing the development of these crucial abilities.

3.2.3 Post-tests results, analysis and interpretation

In order to assess the efficacy of a specific teaching strategy or intervention, post-test administration was an essential stage in educational research and assessment. A post-test is used in the context of language acquisition, particularly for A1.2 English language learners, to evaluate the growth of skills in critical thinking after the use of instructional methods such as the Socratic one. This method, which places a strong emphasis on conversation and questioning, aims to improve critical thinking by motivating students to examine and present their ideas in an organized way (Paul & Elder, 2007). A post-test of this kind was intended to show a discernible increase in students' capacity for information analysis, evaluation, and synthesis—a sign of a more profound engagement with the subject matter.

Critical thinking skills are especially well-promoted by the Socratic Method's emphasis on open-ended questions and conversation (Lam, 2011). Through the active participation of students in discussions centered around contentious themes and the encouragement of considering other viewpoints, this approach promotes the development of critical and in-depth thinking skills in learners. It was anticipated that the post-test results will demonstrate students' increased comprehension of the material as well as their increased ability to apply critical thinking techniques to unusual and varied contexts, indicating a significant advancement in their cognitive capacities.

A post-test was given to a group of 17 A1.2 English language learners in order to assess how much the Socratic Method had improved their critical thinking skills. Every activity evaluated a distinct facet of critical thinking across a range of situations. The analysis for every task is as follows.

3.**2.3.1 Analysis and Interpretations of the Results**

The findings of the post-test showed that the ability of learners to take into account other points of view had significantly improved. 12 students particularly have shown a 70% improvement in their ability to reflect on divergent opinions. These students' opinions on challenging themes were more informed and in-depth than those on their pre-test, which suggests a considerable improvement in their critical thinking skills.

Furthermore, 11 students showed a 65% improvement in their ability to evaluate arguments and supporting data during the courses. Their post-test responses demonstrated a deeper

understanding and critical assessment of the given facts, indicating a notable improvement in their analytical abilities over the intervention.

The observed improvement was 80% when it comes to the 14 students who properly identified the objective of such dialogues as developing a variety of ideas and critical thinking. The conversations were held on highly contentious issues. This outcome indicates that the students have absorbed the value of inclusive and open discussion and show an increased awareness of the significance of these qualities.

Additionally, the findings of the post-test showed that students' capacity to challenge historical assumptions had improved by 75%. By questioning preconceptions and interpretations of historical events, 13 students demonstrated a greater understanding and a more critical approach to historical analysis. This indicates a significant improvement in their ability to think critically in historical circumstances.

Similarly, there was a 70% increase in the students' ability to analyze the primary information. In this matter, 12 students showed increased proficiency, which significantly enhanced their critical thinking skills. They had a stronger ability to evaluate and comprehend primary materials, highlighting the influence of the educational intervention on their general cognitive growth.

Specifically, within the historical analysis context, 13 students correctly (95% of responses correct) acknowledged the significance of critical thinking in evaluating historical texts and challenging assumptions and interpretations. This indicates a significant 75% improvement, showing that students' understanding of historical critical analysis has deepened.

Moreover, 10 students demonstrated a 60% improvement in literary analysis, demonstrating a stronger capacity to use critical thinking by recognizing themes and symbolism in poetry. This improvement demonstrates their capacity to interact more deeply with literary works, indicating that the teaching strategies employed have been successful in developing their critical thinking skills.

Likewise, there was a 70% development on the capacity to read and reinterpret literature. It was evident that 12 learners were quicker at refuting their first interpretations, which promoted the growth of critical thinking. Their capacity to transform poetry demonstrates how comfortable and skilled they are becoming at deciphering intricate literary works.

A significant improvement of 75% was seen when students examined various interpretations of literary texts, and 90% of them correctly identified the objective of this type of analysis as being to develop critical analysis and comprehension. 13 students correctly identified this goal, demonstrating their improved critical thinking skills and increased comprehension of the significance of a variety of viewpoints in literary studies.

To conclude, an 80% improvement was noted when different perspectives on current events were examined. 14 students demonstrated increased critical thinking abilities and an understanding of current affairs as a consequence of their development in balancing opposing viewpoints during class discussions. This suggests that students are more prepared to participate in thoughtful and informed conversations about current events.

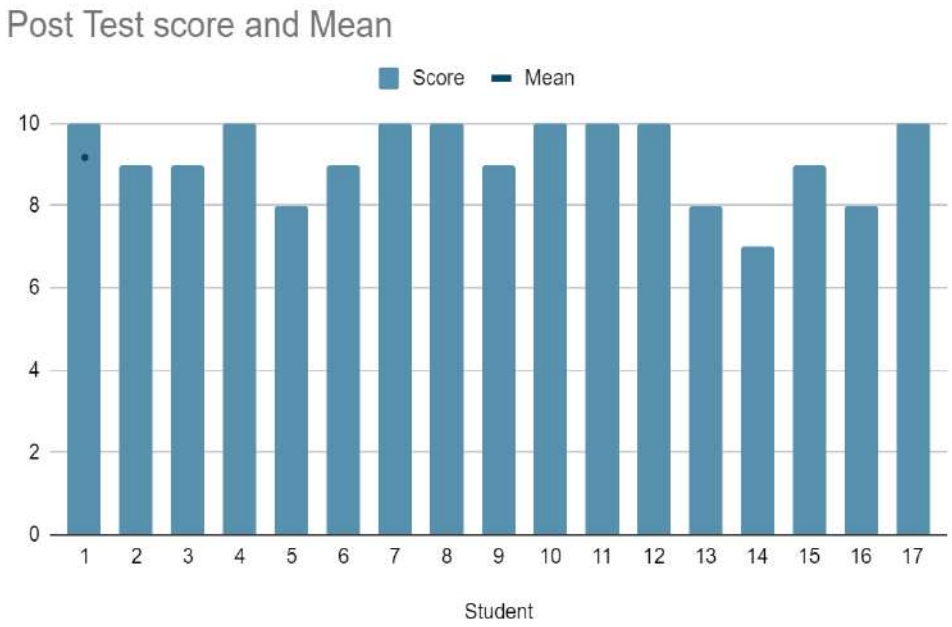
The results of the post-test indicate that students' ability to analyze different points of perspective and interact critically with a range of issues has significantly improved. Their English language proficiency has significantly improved as a result of these advancements, encouraging more in-depth critical thinking and efficient communication. Through questioning presumptions, assessing arguments, and engaging in thought-provoking conversations, students have developed the self-assurance and competencies required for advanced literary analysis and knowledgeable discourse on contemporary issues. This helps them become more proficient in English while also preparing them to interact more intelligently and persuasively in both academic and professional settings.

Table #5 - Chart of Results of the Post-Test

Question Number	Question Area	Improvement Noted	Correct Responses
1	Author Bias	70%	-
2	Evidence Evaluation	65%	-
3	Debate Question	80%	100%
4	Historial Insight	75%	-
5	Source Analysis	70%	-
6	Critical Role	75%	95%
7	Moral Decisions	60%	-
8	Interpretation Shift	70%	-
9	Strategic Approach	75%	90%
10	Perspective Broadening	80%	-

Elaborated by: Brito, Sugeidy and Navarrete, Sharon (2024)

Figure 2: Post Test Score and Mean



Elaborated by: Brito, Sugeidy and Navarrete, Sharon (2024).

After the application of the Socratic Method, the post-test results showed that the students critical thinking skills had significantly improved. The method's success was clear with an improvement percentage of 62.50% and a mean score of 8.23. Students struggled most with "Moral Decisions," scoring 60%, while they did best with "Debate Question" and "Perspective Broadening," scoring 80% in each. With scores of 65% and 70%, respectively, "Evidence Evaluation" and "Source Analysis" presented additional difficulties. On the other hand, the method's efficacy was reinforced by the impressive performance in "Critical Role" and "Strategic Approach," both receiving a score of 75%. These findings showed that the Socratic Method significantly improved critical thinking abilities, but they also pointed out areas that needed more teaching, like moral decision-making.

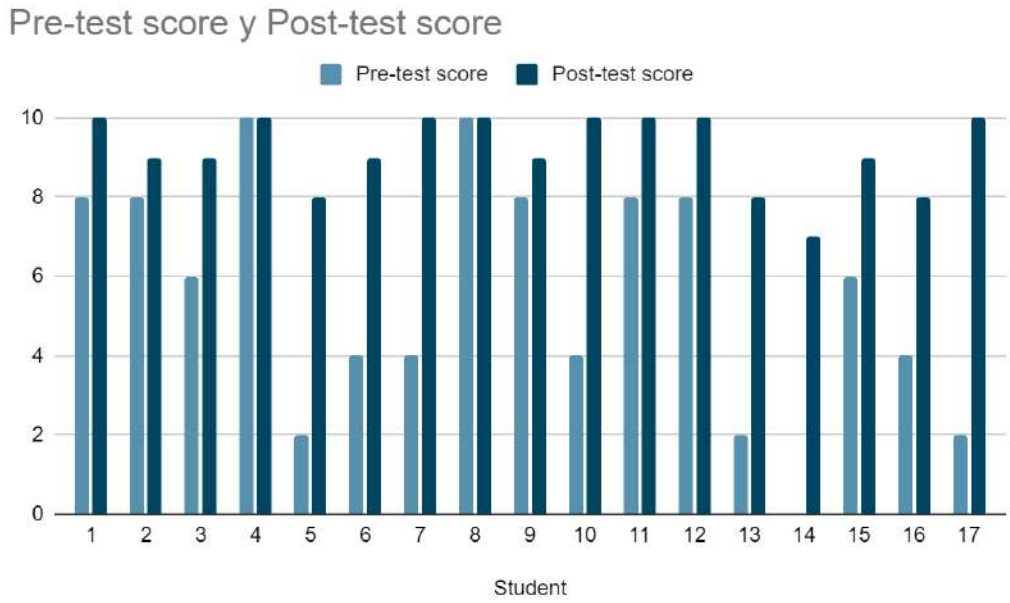
Table #6 -Comparative Chart of Pre and Post-test Results.

Student	Pre-test score	Post-test score	Post-Test Mean	Improvement Percentage
1	8	10		
2	8	9		

3	6	9		
4	10	10		
5	2	8		
6	4	9		
7	4	10		
8	10	10		
9	8	9	8,23	62,50%
10	4	10		
11	8	10		
12	8	10		
13	2	8		
14	0	7		
15	6	9		
16	4	8		
17	2	10		
Total	96	156		

Elaborated by: Brito, Sugeidy and Navarrete, Sharon (2024).

Figure 3: Pre-Test Score and Post-Test Score Comparative Graphic.



Elaborated by: Brito, Sugeidy and Navarrete, Sharon (2024).

Considerable progress was identified in critical thinking and communicative abilities between the pre- and post-tests in the population in study, whose language proficiency level is A1.2 following the use of the Socratic Method. Students' scores improved significantly, on average, from 5.65 in the pre-test to 8.23 in the post-test. Despite their early difficulties with open-ended questions, students' performance on the post-test improved as their scores increased due to their deeper familiarity with the Socratic method from previous lessons. Questions related to moral decision-making and evidence evaluation remained to present difficulties, indicating areas that require further attention. On the other hand, questions about debating and broadening one's perspective were less difficult to answer and significantly improved according to the statistics. All things considered; the findings demonstrate how well the Socratic Method develops critical thinking in addition to proficiency in language.

CONCLUSIONS

There is no doubt that the application of the Socratic Method has improved the critical thinking abilities of 9th grade students. According to the results of the behavioral observation checklist, students actively participated in Socratic debates, which facilitated deeper involvement and the exchange of ideas. However, difficulties were found, especially in coming up with perceptive questions and efficiently summarizing texts, pointing to areas where critical thinking skills still need to be developed. And, the students' post-test results showed strong evidence of improvement in a variety of critical thinking domains. These areas include considering different points of view, evaluating arguments critically, analyzing primary sources and literary texts more effectively. These gains brought out how well the Socratic Method worked to develop the students' analytical skills and deeper cognitive engagement.

One of the specific research objectives was successfully achieved through detailed observation instruments. Students' initial capabilities were assessed and areas of difficulty were identified. Observations revealed that they did struggle with articulating their thoughts clearly and providing well-reasoned answers. Then, the second objective was accomplished when analyzing relevant theoretical concepts which allowed to provide a solid framework for understanding the observed deficiencies. Afterwards, the results obtained in post-test confirmed the efficacy of the pedagogical approach of implementing the Socratic Method. It is directly related to the third research objective in which conclusions were drawn through the systematic application of the method previously mentioned.

Furthermore, despite initial difficulties in certain areas such as moral decision-making and evidence evaluation, the overall improvement in critical thinking skills was notable. The fact that the learners' average post-test score increased further supports the effectiveness of the method in promoting both critical thinking and language proficiency among the learners. This enhancement highlights the method's capacity to support more in-depth cognitive processing and improved concept expression. Methods like these play a transformative role and open the door to more thorough cognitive growth.

In conclusion, while the Socratic Method has shown considerable promise in enhancing critical thinking skills among A1.2 English learners, ongoing practice and support are necessary to further develop students' abilities. They can certainly improve their skills like questioning, summarizing and engaging critically with complex ideas. The existence of a positive classroom environment

and effective instructional strategies are crucial foundations for the continuing development of these vital abilities in both academic and professional settings. Integrating the Socratic Method into the regular curriculum could create a culture of inquiry and reflective thinking, equipping students with the cognitive tools needed for continuous education. It can prepare them to explore and contribute to a world that is becoming more complex and ever-changing.

RECOMMENDATIONS

To build on the success of this research and address the areas of improvement identified, several recommendations are proposed. Firstly, it is essential to implement regular and systematic Socratic Method sessions to maintain and enhance the critical thinking skills of students. This approach will help in reinforcing the gains made and in addressing the difficulties observed in formulating perceptive questions and summarizing texts. Additionally, providing support for students struggling with specific aspects of critical thinking, such as moral decision-making and evidence evaluation, is essential. This could include additional workshops, personalized feedback sessions, and supplementary materials to aid their understanding and skills.

Moreover, teacher training and development are key to the successful implementation of the Socratic Method. Providing professional development opportunities for teachers to become more adept at facilitating Socratic discussions is imperative. This training should focus on strategies for encouraging deeper inquiry, managing classroom discussions, and providing constructive feedback to students. Encouraging teachers to collaborate and share best practices for implementing the Socratic Method can also be beneficial. This could be achieved through regular meetings, workshops, and the creation of a resource-sharing platform.

Looking ahead, future research directions should include conducting longitudinal studies to track the long-term impact of the Socratic Method on students' critical thinking abilities and overall academic performance. This will provide valuable data on the sustainability of the observed improvements and the potential need for ongoing interventions. And investigating the application of the Socratic Method in different educational settings and with diverse student populations is also recommended to determine its effectiveness across various contexts. This will help in understanding the broader applicability and scalability of the method. Furthermore, addressing unresolved issues identified in the current research, such as difficulties in moral decision-making and evidence evaluation, is vital. Future studies should explore interventions and support mechanisms to help students overcome these challenges, ensuring a comprehensive approach to developing critical thinking skills.

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ANEXXES

ANNEX 1: OPERATIONALIZATION MATRIX

OPERATIONALIZATION MATRIX					
INDEPENDENT VARIABLES	CONCEPTUAL DEFINITION	OPERATIONAL DEFINITION	DIMENSIONS	INDICATORS	SCALES
Socratic Method	According to Saint Leo University (2022), "the Socratic method of teaching is a thought-provoking dialogue between an instructor and their students."	Implementation of structured questioning techniques designed to prompt critical thinking and foster dialogue among language learners.	Pedagogical	Frequency and types of questions used during instructional sessions	Observation checklist or coding scheme (e.g. presence/absence of specific types of questions, level of student participation coded on a scale).
				Level of student engagement in dialogue and depth of student responses	
			Cognitive development	Improvement in critical thinking skills	
				Ability to analyze complex problems	
				Depth of understanding of the subject matter.	
			Metacognitive awareness	Ability to reflect on their thinking	
				Monitor their comprehension and regulate their participation in the dialogue.	

			Emotional engagement	Levels of interest, motivation, and enthusiasm displayed during the dialogue	
				Creation of a supportive and inclusive learning environment	
			Interpersonal	Rapport between participants	
				Respect for diverse perspectives, and the ability to actively listen and respond to others' viewpoints.	

OPERATIONALIZATION MATRIX					
INDEPENDENT VARIABLES	CONCEPTUAL DEFINITION	OPERATIONAL DEFINITION	DIMENSIONS	INDICATORS	SCALES
Critical thinking	It is the process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information obtained or generated by observation, experience, reflection, reasoning, or communication as a guide to belief and action, being a self-controlled process. (Masduqi, 2011)	Pre- and post-assessment tests measuring students' abilities to analyze, evaluate, and synthesize information, as well as their ability to make reasoned judgments or decisions.	Cognitive process	Ability to analyze information critically.	Observation checklist or coding scheme (e.g. presence/absence of specific types of questions, level of student participation coded on a scale).
				Capacity to synthesize diverse perspectives.	
				Skill in problem-solving.	
			Communication	Effective expression of ideas.	
				Active use and development of receptive skills.	
				Receive or provide constructive feedback.	
			Self-controlled process.	Ability to reflect on their thinking	
				Monitor their comprehension and regulate their participation in the dialogue.	
				Levels of interest, motivation, and enthusiasm displayed during the dialogue	