

Impact of the Montessori and CLIL Methods on Learning English

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Abstract

The impact of the Montessori and CLIL methods were investigated considering the English learning process of fourth grade students. These methods were explored through the qualitative methodological approach, using observation, the relation of the results of the pedagogical strategy, the journals and the opinion of the students. The students' participation, their progress in learning English and their perception of the methods used were evaluated. In addition, through the interview, the proposed work was developed, which was adapted to each approach.

Considering that the Montessori Method is focused on the student and the CLIL method integrates the teaching of curricular contents through a second language. The Liceo Psicopedagógico Montessori School located in Chocontá-Cundinamarca stipulated the Montessori Method as a pedagogical approach and introduced the CLIL method as a support for bilingualism. In general, the results showed that the two methods, Montessori and CLIL have had positive impacts on the learning of English in fourth grade students. The self-directed approach of the Montessori Method promoted motivation and self-confidence, encouraging active participation in the learning process. On the other hand, the CLIL method proved effective in combining the acquisition of English with curricular contents, allowing students to contextualize language in practical situations.

Keyword. Learning English, bilingualism, Montessori Method, CLIL Method (Integrated Content and Language Learning).

1 Contextualization

This research highlights the need to incorporate bilingualism, particularly English, not only as a curriculum component but also as an integral part of achieving Colombia's bilingualism objectives, as outlined by the Ministry of National Education-MEN (2006): “To achieve citizens capable of communicating in English, in such a way that they can represent the country into the processes of universal communication, in the global economy and in cultural situations, with internationally comparable standards” (p. 6), This research identifies the profound impact of implementing Content and Language Integrated Learning (CLIL), where English serves as the foundation for education across the learning disciplines. It also aims to compare this approach with established methods such as the Montessori Method.

For many years, the Liceo Psicopedagógico Montessori School located in Chocontá-Cundinamarca, has been using the Montessori Method in its teaching process of English. When it was decided that it should become a bilingual school, it decided to implement various changes in its teaching strategies. These included the addition of more hours of English classes per week and the use of other methods such as the CLIL method. These changes were carried out little by little to achieve its goal of being a bilingual institution.

The Liceo Psicopedagógico Montessori School, the sole private school in the town, provides education to boys and girls starting from the age of two, spanning from preschool to eleventh grade. The school has a total of 200 students of which the majority are children of farmers or municipal employees. The primary economic activities in the region include flower cultivation, livestock farming, and trade. The Lyceum stands out for its eclectic pedagogical approach, as outlined in its Institutional Educational Project (PEI). According to the PEI, "Our pedagogical approach is not confined to a single theoretical framework; rather, it draws from

various theories to offer a more comprehensive understanding of reality" (Liceo Psicopedagógico Montessori school located in Chocontá, 2011).

The foregoing demonstrates that incorporating the CLIL method into English language learning to achieve bilingualism in the school was not a complex task. This is primarily due to the Montessori approach employed by the Liceo, which aligns seamlessly with this method. Additionally, it is essential to clarify that the Lyceum has never had any intention of forsaking the Montessori Method as its primary pedagogical model for teaching other subjects. Instead, the CLIL method has been introduced as a strategic tool within the school environment to improve the development of second language linguistic competencies.

The study population includes thirteen fourth-grade students from Liceo Psicopedagógico Montessori School located in Chocontá, Cundinamarca. These students range in age from 9 to 11 years old. There are eight girls and five boys. Specifically, those students have been selected whose academic performance in the field of foreign languages aligns with the levels of education required for this research and who have been exposed to the Montessori Method.

The students are in a fourth-grade stage; therefore, in this context, they are provided with the opportunity to actively participate in a comparative research process in which they are exposed to two pedagogical methods: the Montessori and the CLIL (Content and Language Integrated Learning). The research also emphasizes the essential role of the participants throughout each phase, from problem identification to final feedback.

For this research, the fourth grade was involved. As previously mentioned, the subjects of Art, Science, Technology, and Mathematics were already integrated into the CLIL method. These subjects were taught in the fourth grade using this method, and it was evident that the students benefited from it. Bilingual education expanded their horizons, diversified their performance levels, and opened up a multitude of linguistic opportunities.

As the only private school in Chocontá, Liceo Psicopedagógico Montessori is committed to elevating its educational standards by pursuing accreditation as a bilingual institution. Achieving this accreditation will offer a broader range of educational opportunities for its students and the community.

Finally, the research in the LLEI is considered from the research macro project 2 (The study of English language and its contexts) (Understanding and characterizing EFL in LLEI: Experiences and phenomena in the educational contexts of teachers) and research subproject 3 (Understanding the contexts of teaching and learning English in EFL education).

2 Research Statement

2.1 Description of the Research Interest

The Liceo Psicopedagógico Montessori School and other educational institutions incorporate into their Institutional Educational Project (PEI) a method that adapts to the characteristics of the population and captures the attention of the educational community. This is in line with the views expressed by Vygotsky (1976) through his concept of the Zone of Proximal Development (ZPD) and Bruner (1978) with his Scaffolding Theory. For these authors, it was crucial that when developing a learning method, the community actively participates, and that the students' abilities and needs are taken into consideration.

Taking into consideration the aspiration for bilingualism, this research was based on the need for the Liceo Psicopedagógico Montessori School. The school aims to become a bilingual institution; hence, it has decided to incorporate the CLIL (Content and Language Integrated Learning) method as a strategic element to attain this objective. Concurrently, it continues to use the Montessori Method, particularly in the development of other subjects, notably at the preschool level.

One of the key principles guiding this pursuit of bilingualism is the acknowledgment that education is subject to continuous assessment. It is not solely based on the requirements outlined by the Ministry of National Education (MEN) but also considers the input from parents, the students' needs, the cultural context, and the educational environment.

To justify the decision to become a bilingual school and improve students' skills, it's important to consider the insights of policy consultant Ricardo Romero, as he responded to an interview with the newspaper *Altablero* of MinEducación (2005) When asked, "What does bilingualism contribute to the development of Colombian students' competencies?" he provided the following response: "Bilingualism contributes to the development of students' competencies

in three primary areas: the establishment of robust thought structures, the cultivation of civic and scientific skills, and the encouragement of an investigative spirit” (p. 2)

Furthermore, the need to transform into a bilingual school is enshrined in the same law 1651 of 2013, known as the Bilingualism Law. In Article 2° of this legislation, it stipulates: “To develop the communicative skills of reading, comprehension, writing, listening, speaking, and accurate expression in a foreign language” (Congreso de la República, 2013, p. 1). To fulfill this mandate, the Lyceum is compelled to incorporate a methodology that aligns with the overarching goal of bilingualism, not limited solely to English but extending to other subjects, initially encompassing art, technology, science, and mathematics. Within the research context, this expansion of bilingualism is associated with the enhancement of educational quality and overall quality of life.

However, when confronted with the challenge of achieving bilingualism, the chosen approach was CLIL (Content and Language Integrated Learning). As explained by several authors, including Mehisto et al. (2008, as cited in Martinez, 2013), CLIL represents an innovative method that seamlessly integrates curricular content with a different language, in this case, English, alongside the students' native language, Spanish. Mehisto et al. state: “In CLIL, language serves to acquire knowledge, and this, in turn, serves as a resource for language acquisition. Students can immediately apply what they are learning, which serves as a powerful motivator” (p. 10).

Nevertheless, while implementing the Montessori Method as the primary pedagogical approach, it becomes essential to assess the impact on English language acquisition through both the Montessori and CLIL methods, thereby addressing the research question and objectives effectively.

2.2 Research Question

What is the impact of the Montessori and CLIL methods on the English language acquisition of fourth-grade students at Liceo Psicopedagógico Montessori School located in Chocontá, Cundinamarca?

2.3 Objectives

2.3.1 General Objective

To establish the impact of the Montessori and the CLIL methods on the English language acquisition of fourth-grade students at Liceo Psicopedagógico Montessori School located in Chocontá, Cundinamarca.

2.3.2 Specific Objectives

To identify the impact of the Montessori and the CLIL methods on English language acquisition before their full implementation in the educational sequence, focusing on the key elements of each method.

To develop a didactic sequence aimed at enhancing English language acquisition in fourth-grade students using the Montessori and the CLIL methods, with the objective of evaluating their impact on learning.

To implement the designed didactic sequence to evaluate learning outcomes using both the Montessori and CLIL methods.

To analyze the results of the implementation of the didactic sequence in both the Montessori and the CLIL methods on English language acquisition.

3 Literature Review

In this chapter, a comprehensive compilation of research has been organized. It not only addresses the main topic and components of this study but also provides a significant and noteworthy perspective on the research work. This summary has been divided into two parts. The first part comprises previous research, which is substantiated by research articles authored by experts who extensively explore the topic. The second part encompasses the theoretical framework within which the categories that emerged during the research have been developed and the research context has been conceptualized. These categories include the Montessori Method, CLIL method, and Bilingualism, with the understanding that the methods are considered pedagogical strategies.

3.1 Prior Research

A primary research study that exemplifies the topic is *The Montessori Method in the Development of Oral English Expression*, Sánchez (2020) conducted by Sánchez (2020). The study aimed to assess the Montessori method's influence on English oral expression. It was conducted in an educational institution situated in the province of Pichincha, Quito canton. The study employed a mixed-method design but primarily focused on presenting data collected through surveys and checklists administered to both teachers and students.

One of the most noteworthy findings was that the semi-controlled recreational activities permitted by this method promote children's independence in their oral expression of the English language. This research provided initial insights into the impact of the Montessori method on English language learning, highlighting its provision of structured and authentic learning environments that contribute to second language development. The elements employed and the pre-intervention observations reflect a high level of student commitment to the learning process.

To further explore this topic, we came across the study titled *The Montessori Method in English Language Teaching*, this work was conducted within a context of well-organized bibliographic documentation. According to authors Alvear and Padilla (2023), who employed a qualitative and descriptive bibliographic approach, they successfully outlined significant and notable characteristics of the Montessori Method in terms of its impact on the English teaching process. Much like the previous research, these authors emphasize the significance of the prepared environment and Montessori teaching resources, which greatly influence children in recognizing English as another language that they can identify with.

Moreover, it's essential to highlight the importance of considering age and educational needs throughout the process. This aspect proved to be crucial for shaping the proposed activities, connecting them to real-world contexts, and aligning them with the population's specific characteristics that were being addressed.

In contrast, within the CLIL (Content and Language Integrated Learning) method, two research papers were examined. The first one, titled *CLIL: A Successful Methodological Proposal to Promote Bilingualism* by Saura (2018), presents an analytical study on the evolution of bilingualism through the implementation of the CLIL methodology, particularly in Spain. The author provides a contextualized overview of the theoretical and documentary contributions to this method and conducted observations within a student population spanning from 1st to 4th grades. In these grades, teachers had been delivering lessons using the CLIL approach.

Saura's personal reflection highlights the CLIL method as one of the most significant innovations in the field of education, particularly in English language instruction. It not only fosters motivation but also cultivates a positive attitude towards English proficiency across various knowledge domains, offering a wide range of benefits. A notable point made by the author is that "studying a second language allows students to engage with a second reality, a

reality that is not only linguistic but also social" (2018, p. 528). This insight suggests a promising avenue for further investigation into the achievements and contributions of this method in English language learning.

The second document is titled *CLIL Method for Enhancing Oral Expression in English among Students at Educational Institution No. 88388, Nuevo Chimbote 2021, Peru*, authored by Alegre (2022). Alegre aimed to illustrate the impact of the CLIL method on English oral expression using a quantitative and evaluative approach that involved both a control group and an experimental group. During the development of the assessment tools, it became evident that there was a significant improvement in English oral expression. The CLIL method proved to be effective and motivating, enhancing not only linguistic aspects but also fluency, vocabulary, and grammar.

These documents clearly underscore the pressing need for recognizing the CLIL method as a methodological strategy in English language education. It should be seen not only as a subject area but as a comprehensive approach integrated across all academic disciplines. This approach serves the dual purpose of fostering bilingualism and promoting students' personal and intellectual development.

Now, let's delve into another crucial aspect of this research: the research paper titled *Bilingualism: Analysis and Reflections for Educators and Students* by Nina et al. (2021) authored by Nina et al. (2021). This research aimed primarily at conducting an in-depth analysis to underscore the significance of bilingualism. Employing a literature review methodology centered on analytical reflection, the authors explored not only the concept of bilingualism but also delved into its underlying factors, various types, modes of acquisition, levels, and overall importance. This comprehensive approach provided them with a broader perspective on the profound significance of bilingualism. In their concluding remarks, they assert that bilingualism

significantly expands one's worldview, “enhancing capacities such as creativity, understanding, tolerance, and overall cognitive abilities” (p. 51).

To further complement our understanding of bilingualism and its practical implications, let's turn our attention to the research titled *Proposal for an Educational Plan to Foster a Bilingual Culture within an Educational Institution Located in the Municipality of Agustín Codazzi, Colombia*, conducted by Contreras (2022). The overarching objective of this study was to formulate an educational plan aimed at enhancing the teaching and learning of English. Employing a qualitative approach and utilizing semi-structured interviews, this research shed light on various challenges hindering the promotion of a bilingual culture. Notably, the study revealed deficiencies in pedagogical strategies and a lack of English proficiency among teachers.

In a broader context, these last two pieces of research expand our comprehension of bilingualism. They go beyond conceptual understanding and delve into the practical aspects of its implementation within the educational sphere. The motivation derived from bilingualism, as well as the challenges associated with it, played pivotal roles in the conception and execution of these research endeavors.

3.2 Theoretical Framework

This section focused on a sample of what some authors, theoretical referents opined or conceptualized about the Montessori Method, the CLIL method and bilingualism.

3.2.1 Montessori Method

The Montessori Method, developed by Maria Montessori, a renowned doctor and pedagogue, stands out for its emphasis on nurturing a child's character, moral strength, and personality. Montessori's pedagogy was influenced by notable predecessors, including Rousseau (1712-1778), Pestalozzi (1746-1827), and Froebel (1782-1827). Among these influences, she drew upon their most significant ideas, which laid the foundation for her beliefs in individuality,

intuition, and pedagogical value. She formulated her method towards the end of the nineteenth century and into the early twentieth century. It can be summarized as "focusing on a child's learning through a profound respect for their natural developmental journey. To nurture their abilities, the environment must align with their age and developmental stage" (Montessori Village, 2020, p. 2).

The Montessori Method emphasizes four fundamental principles: "1. respecting the child's natural and unique rhythm of development; 2. granting them freedom of choice and movement; 3. Encouraging self-correction and learning through hands-on experience; and 4. Fostering physical and mental independence and autonomy" (Montessori Foundation, 2023, p. 1). These principles are brought to life through essential features, which include a carefully prepared and authentic environment, tangible learning materials, attentive adult guidance, and an integrated curriculum that spans from birth to 18 years of age.

It is important to note that the Montessori Method, initially designed to assist children with learning disabilities, had a primary goal, as outlined in her book "Method of Scientific Pedagogy." As emphasized by Alba (2023), this goal primarily revolves around principles such as "respect, freedom, and responsibility within limits, valuing the child, instilling confidence, and fostering empathy" (p. 2). For this research the qualities of the Montessori Method are to put into practice, especially in the learning of English, where it is necessary to develop in the student confidence and empathy with a second language.

The emergence of this method provided an innovative context and promoted autonomy in the way each child learns. That is why this research has never wanted to exclude or minimize it, because it is the pedagogical basis of the institution and because its foundation was vital for education to be prepared for the changes that would come after its appearance, technology,

virtual learning environments, among others, and it is basic to take into account its main feature of providing a real and prepared environment.

3.2.2 CLIL

This method was created in 1994 by David Marsh, who sought to “describe the current of applied linguistics that ensures that in learning a foreign language greater success is achieved through common subjects“ (Luján, 2016, p. 1), in order to better understand this concept ”CLIL is a dual educational approach focused on which an additional language is used for teaching and learning content and language" (Attard et al., 2015, p. 6); subject to these concepts are innovative benefits, such as multiculturalism in the context of achieving interaction with other cultures thanks to the knowledge of other languages.

According to Loannou and Pavlou (2011, cited in Attard et al. 2015), there are three main characteristics of the CLIL method:

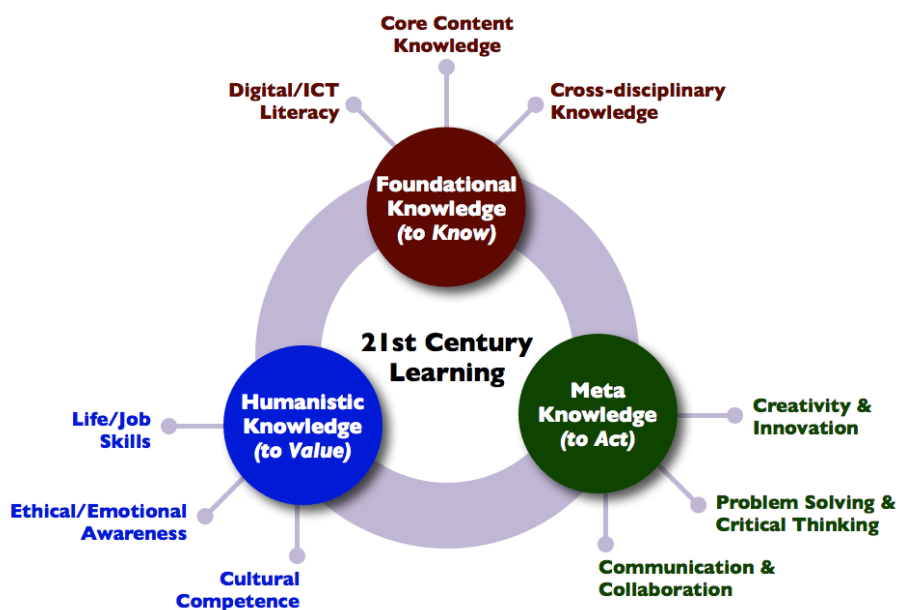
a) Learning an additional language is integrated with the content topics, such as science, history or geography. Students learn a language and through this the content is provided to them. b) The CLIL has its origin in different socio-linguistic and political contexts and is related to any language, age and level of studies from early childhood education, primary, secondary education, and vocational training. In this sense, the CLIL responds to the proposal of the permanent training program for all citizens, where multilingualism and multiculturalism are believed to promote integration, understanding and mobility among Europeans. c) CLIL is an approach that involves the development of social, cultural, cognitive, linguistic, academic, and other learning skills that will facilitate achievements in both content and language. (p. 7)

Figure 1 presents a diagram on which the CLIL method is based to make it part of what 21st century education should offer students, there are three (3) domains of knowledge: 1.

Fundamental Knowledge (Know): Digital Literacy/ICT, Basic Content Knowledge, Interdisciplinary Knowledge. 2. Humanistic Knowledge (valuing): Life/work Skills, Ethical/emotional Awareness, Cultural Competence. 3. Meta Knowledge (To Act): Creativity and Innovation, Problem Solving and Critical Thinking, Communication and Collaboration.

Figure 1

Knowledge domains for the 21st century student



Heick, T. (2018). 3 Knowledge Domains for the 21st Century Student. Retrieved from <https://www.teachthought.com/the-future-of-learning/knowledge-domains-for-the-21st-century-student/>

The CLIL method is a recent contribution, no more than 30 years old, unlike the Montessori method that already has a century of creation; CLIL introduces a development of knowledge for learning English, that development of knowledge in this method is presented in the three knowledge: Knowing, Valuing and Acting, which are necessary for students to learn English to its full extent, that is, with the four skills Listening, Speaking, Reading and Writing. In this research the CLIL method is the basis for incorporating this knowledge and for interpreting the impact of this new dynamic called CLIL on the learning of English in students, in addition to its influence on other areas of knowledge.

3.2.3 Bilingualism

The following table contains the definitions of bilingualism, historically proposed by different authors, which offer a broad perspective of the importance and the approach to which the mastery of a second language leads. All these definitions have made, in turn, that several types of bilingualism were defined, Bilingualism can be mentioned according to the type of domain of which Chin and Wigglesworth (2007) speak, it would be a native bilingualism and the acquired; other authors speak of bilingualism according to the linguistic level of each language (complete, incomplete, additive, subtractive), according to the use of both languages (social and individual), according to the moment of learning (simultaneous, successive, receptive). This is very important, since it is possible to identify and recognize different characteristics of bilingualism through the learning process that was generated in the school.

Table 1

Conceptualization of Bilingualism

Autor	Definition
--------------	-------------------

Bloomfield (1933)	Bilingualism implies "a mastery of two languages just like a native". In other words, it is the ability to speak two languages as native speakers do producing well-formed statements, carriers of meaning
Haugen (1953)	A bilingual person can use full and meaningful expressions in different languages.
Weinreich (1953)	He states that the practice of using two languages alternatively is called bilingualism and the people involved bilingual
Weiss (1959)	He argues that bilingualism is the direct, active and passive use of two languages by the same speaking subject; meaning active when spoken, and passive when received or understood
Macnamara (1967)	He defines bilingualism as the ability to develop some level of competence (speaking, reading, understanding, and writing) in a second language.
Para Mackey (1976)	bilingualism is the quality of a person or a population that makes common use of two languages without an aptitude marked by one language more than by the other
Titone (1976)	He explains that bilingualism is the ability of an individual to express himself in a second language respecting the concepts and structures of the same.
Blanco (1981)	He states that the bilingual is that person who can encode and decode to any degree linguistic signals from two different languages.
Cerdá Massó (1986)	Bilingualism is the ability of the speaker to use two languages interchangeably. By extension, describe the sociolinguistic condition whereby a community uses two different languages to cover the same collective and private communication tasks
Harding y Riley (1998)	They argue that individuals who can communicate in two or more codes do so in differentiated contexts that require using either language system. Therefore, their vocabulary and ability to speak, write, listen or read have different levels according to the uses they make in each language.
Romaine (1999)	Bilingual is a person who learns a set of meanings with two different linguistic representations
Lam (2001)	He defines bilingualism as the phenomenon of competence and communication in two languages

Bermudez, J., & Fandiño, Y. (2012). The Bilingual Phenomenon: Perspectives and Trends in

Bilingualism. In *Revista de la Universidad de la Salle*, 59, pp. 101-102. Retrieved from

https://www.researchgate.net/publication/262687125_El_fenomeno_bilingue_perspectivas_y_tendencias_en_bilinguismo

For this research it is important to recognize bilingualism as an objective part of the identification and subsequent interpretation of the impact on learning English through the Montessori and the CLIL method. Consequently, the adaptability of this theoretical part in the

research is subject to the impact that are managed to identify, because this can give context to the type of bilingualism that could be adapted in the institution or simply cover the subject from real results. Taking into account the opinion of the authors, it is necessary to consider these types of bilingualism. According to the domain: a native and acquired bilingualism. According to the linguistic level of each language (complete, incomplete, additive, subtractive). According to the use of both languages (social and individual) and according to the time of learning (simultaneous, successive, receptive). receptive).

4 Research Design

The present research was carried out with the purpose of establishing the impact on the learning of English through the Montessori method and the CLIL method, making use of various strategies to improve the rates of bilingualism, focusing education on the recognition of innovative techniques (CLIL) that allow meeting the objectives set, as well as evaluating and framing the impact of this, versus the traditional Montessori method that is handled in the school.

4.1 Description of the research tradition and type of study

Within the defined parameters and with a focus on the overall research project's objectives, a qualitative approach was adopted. This approach encompasses various methodological, theoretical, and epistemological aspects of interest. Qualitative research is rooted in the collection of descriptive data, which individuals contribute through their behaviors, words, experiences, and habits. As Salgado (2007) points out, it is "an endeavor to gain a profound understanding of the meanings and interpretations of situations as provided by

individuals, rather than an attempt to produce a quantitative measure of their characteristics or behaviors" (p. 72).

Considering qualitative research as a process with the aim of perceiving and studying the lives of individuals within a focus group, the objective is to collect data that each person can contribute through their behaviors, words, experiences, and habits. In essence, qualitative methodology broadly refers to research that seeks to obtain and produce descriptive data based on spoken or written words, as well as the attitudes and observable behaviors of individuals.

From this standpoint, Pérez (1994) defines qualitative research as "an active, systematic, and rigorous process of directed inquiry in which decisions are made about what is investigable while in the field of study" (p. 26). It is essential to emphasize that the focus of attention for qualitative researchers lies in creating detailed descriptions of situations, events, individuals, and observable behaviors, while incorporating the voices of participants. This approach considers their experiences, attitudes, beliefs, thoughts, and reflections as expressed by the participants themselves.

In this context, qualitative research emerges as a practical and authentic methodological choice within the field of educational sciences to address socio-educational issues. Colmenares and Piñero (2008) have already highlighted that "The contributions of qualitative research in education encompass a wide diversity and complexity of modalities, traditions, typologies, or methodologies used, ranging from interpretative studies to socio-critical or socio-constructivist studies, such as the Action Research method" (p. 99).

Regarding the research design employed in this study, considering the chosen methodological approach (qualitative), educational action research was selected. This design aligns seamlessly with the specific objectives and each phase of the research project. It is regarded as a valuable tool for studying and understanding educational reality while aiming for

its transformation. It is important to note that this design is rooted in a socio-critical and constructivist perspective of reality, which seeks to create spaces for dialogue, reflection, and collaborative knowledge-building. It emphasizes addressing the challenges that need to be addressed both inside and outside the classroom.

Action research originates from the need for teachers to investigate issues within the school environment. It involves perceiving and addressing these problems based on the perspectives of various stakeholders, such as students or other teachers, and relies on qualitative data as evidence. The primary goal is to implement actions that can resolve or enhance crucial aspects relevant to the institution or the specific area of interest. This research approach encompasses a wide range of strategies that draw from an understanding of the school's context. It aims to address and transform various elements, attitudes, and challenges observed within the educational setting.

According to Latorre (2005), action research "describes a range of activities undertaken by teachers within their own classrooms... these activities share the common element of identifying action strategies that are implemented, observed, reflected upon, and modified" (p. 23). Each of these educational practices is viewed as a tool for instigating social change and generating educational insights about social and educational reality. They empower those who engage in them by providing autonomy and influence.

In alignment with the, both the qualitative approach and action research provided a significant framework for the current study. This consideration arises from the fact that the research aims to highlight the impact created within the school environment through the introduction of an innovative strategy, CLIL, in contrast to the traditional Montessori methodology. While the Montessori Method continues to be employed in other areas, it does not encompass all the elements required for the establishment of a bilingual school. Simultaneously,

it does not facilitate the complete consolidation of bilingualism, thus hindering the utilization of suitable tools or the comprehensive development of students' knowledge.

4.2 Type of data to be collected and role of the researcher.

When selecting the research design, considerations encompassed not only the qualitative approach but also the validation of instruments for data collection. These instruments were crucial in guiding the project towards addressing the research question and achieving the defined objectives. Among the factors influencing the choice of action research was not only the desire to effect change and observe its consequential impact but also the active participation of essential stakeholders in the project, including teachers and students.

In the context of implementing the CLIL methodology, planning the utilization of these instruments involved addressing questions related to timing, students' communication skills, and the competencies they aimed to acquire and practice through these tools. Given these considerations, the following qualitative instruments were devised and employed, with the researcher actively involved in their planning and implementation. These instruments played a pivotal role in collecting relevant information that ultimately yielded favorable results and shed light on the impacts of the CLIL educational methodology in enhancing and advancing bilingualism. This was related to the traditional Montessori Method, which has long been in use within the school. It's important to emphasize that the research did not seek an absolute methodological overhaul but rather the integration of a new approach within three specific areas of interest.

The instruments used in this study are categorized based on the forthcoming conceptualized cycles, each aligning with the specific objectives outlined for the research.

4.2.1 Participant Observation.

In any qualitative research, observation should constitute the initial step and primary data-gathering tool due to its pivotal role in extracting insights related to various investigated parameters. As per Campos and Lule (2012), observation is described as "the most systematic and logical approach for visually and verifiably documenting the intended knowledge; it is the objective capture of real-world occurrences, whether for description, analysis, or explanation" (p. 49).

Two distinct types of observation exist: participant and non-participant. For the purposes of this research, participant observation, as defined by Santana (2010) (as cited in Sánchez et al., 2021), will be employed. "This approach involves the researcher immersing themselves in the research context and engaging with the subjects under study, making the observer an active participant in the observed situation" (p. 116). Consequently, the data analysis occurs concurrently with data collection, necessitating the researcher to specify what they should observe and how they will record these facts selectively. In this research, a participant observation table (Annex A) serves as a recording tool, enabling the systematic incorporation of individual findings. This facilitates a detailed examination of gathered data, with the goal of understanding the group's reality and sharing the experiences of the observed individuals.

The criterion of credibility was considered, as described by Palacios et al. (2013), "emphasizing its orientation towards the truth value of the research and its role in mitigating the researcher's biases and concerns by cross-referencing data from diverse sources" (p. 583). This criterion served as the internal validation for the participant observation instrument, establishing the criteria for observation in the current study. It primarily defined the subject matter of observation and the intended data to be recorded.

In this case, the categories considered for data collection included students' participation, communication, understanding, and interaction concerning the Montessori Method versus CLIL. The aim was to determine whether participants actively engaged in the provided activities, demonstrated interest in the content and language used, comprehended different concepts, connected them to their prior knowledge, and exhibited enthusiasm, curiosity, and motivation toward learning content in another language.

The input test, also known as the pre-test, served as a data collection tool (see Annex B) to assess students' prior knowledge of English within the context of the Montessori Method and the CLIL method. According to Avolio and Lacolutti (2006), diagnostic evaluation aims to gather information about the initial capabilities and knowledge of subjects, which are deemed essential for successfully initiating new learning processes (p. 137). The study group designed activities to gauge the level of knowledge students possessed before receiving specific instructions for the research. The results of this pre-test informed the development of a more effective strategy to achieve the research objective.

4.2.2 Qualitative survey

To understand the meaning of a survey, Sampieri et al. (2003) explain that "Opinion surveys are considered by various authors as a design or method. They typically employ questionnaires administered in various contexts" (p. 159). Additionally, Visauta (1989) highlights a key characteristic of surveys: they pose identical questions to all participants in the same sequence and within a similar social setting. A survey aims to "systematically and methodically gather information on research variables from a population. This information pertains to various aspects such as what individuals are, do, think, feel, expect, desire, or dislike, as well as the rationale behind their actions, opinions, and attitudes" (p. 259).

To achieve the first objective, a qualitative semi-structured survey was conducted (see Annex C). This approach facilitated the collection of detailed insights into the knowledge, reasoning, and motivations of fourth-grade students at the school concerning the implementation and transformation of the learning method used. It allowed for an exploration of the conceptualization of CLIL in enhancing a second language, emphasizing the significance of this approach in achieving individual bilingualism objectives. This survey gathered information for subsequent analysis, focusing on description rather than prediction, unlike quantitative surveys. Its purpose was to create a baseline of student knowledge, which would inform the pedagogical strategy, aligning with the third objective.

Within the qualitative research methodology, the semi-structured survey serves as a resource for delving into the subjectivity of participants. It engages with individuals to gain comprehensive insights into their experiences, thoughts, and the phenomena they are associated with. In qualitative research, surveys are regarded as effective tools for uncovering the meanings constructed by study participants through their narratives, stories, and experiences.

In the structure of these instruments, a review of the Guide to Basic Quality Criteria in Qualitative Research is carried out, whose authors, Blesa et al. (2014) define the basic criteria for the implementation and evaluation of all instruments that are part of qualitative research, such as:

An attempt to translate something that lies deeply in a way of approaching social processes and phenomena by researchers, that connects their positions with methodical tools and that responds to a vision of maintaining an awareness of the complexity of the social and research as ways of relating to that. (p. 17)

In addition, these authors also state that the criteria to be considered for the survey and other instruments used in a qualitative approach will always be "reflexivity, transparency, authenticity/credibility, holistic perspective, methodological systematics, coherence and complexity awareness" (Blesa et al., 2014, p. 18)

For this research, when designing the qualitative survey for fourth grade students, it was important to adapt the language and format to make it accessible and understandable for their age, thus considering using a simple language, clear and appropriate, avoiding complicated terms or abstract concepts and asking short questions, handling words that students could easily understand, asking open questions that would allow them to express their ideas and opinions in their own words, focusing the questions on specific topics and finally including a space at the end of the survey where the children would write or draw any additional comments they wanted to share and related to the main objective of the research, giving them the opportunity to express themselves more freely and creatively.

4.2.3 Journal

Notes that were being observed during the study were recorded in this instrument. This tool that was used considering the identification and space-time contextualization of what was wanted to be observed, orienting attention to certain aspects and having clarity between what was described, to keep a faithful record of what was observed (description) and the comments that were arising during the writing (assessment).

According to Bonilla and Rodríguez (2005), "The journal should allow the researcher permanent monitoring of the observation process. It can be especially useful [...] the researcher takes note of the aspects he considers important for organizing, analyzing and interpreting the information he is collecting" (p. 229). A Journal (Annex D) report includes, concomitantly, quantitative, and qualitative, descriptive, and analytical information, as well as relevant elements

for statistical formulation, diagnosis, prognosis, studies and social or situational evaluations. Thus exposed, a good Field Diary provides very useful data in the work of the professional and allows a better quality of work with less effort.

4.2.4 Assessment Rubric

An assessment rubric can be conceptualized as a tool that establishes clear and specific criteria for evaluating students' performance on an assignment or project. It consisted of a matrix or table (Annex F) which lists the different aspects to be taken into account when carrying out an activity and the levels of performance that are expected at the end of said task, along with detailed descriptions of each level; Cano (2015) states it “is identified with any evaluation guideline (scale type), an evaluation matrix that incorporates on one axis the criteria for the execution of a task, on the other axis a scale and whose inner boxes are full of text” (p. 266)

This instrument was used as a guarantor of the development of research, so it was possible to evaluate relevant aspects that determined whether there was participation, understanding of concepts, use of the English language, creativity and expression and teamwork, which although they are not incident factors in the identification of the impact on English learning through the Montessori method and the CLIL method, if they are influential in the way those impact were interpreted, for that reason, the rubric was an instrument that helped to establish clear expectations, equally, it had an important role as a facilitator in the feedback process, providing an accurate and specific reflection of the students' performance in research participation.

Post-test:

To implement a tool that allows the verification of the knowledge acquired by the students, after the development of the activities contemplated within the didactic sequence, the post-test was used, which, Romero (2020) explains that:

It has application in those problems through which the attitudes and knowledge of the subjects in relation to the object of research can be investigated, while allowing to evaluate the degree of notions, knowledge and skills acquired through studies, practices or exercises. (p. 60)

Being of great support for the researcher, since it helps the collection of evidence of learning of the students, allowing to make a contrast with the pretest, from the results obtained.

In qualitative research, the post-test is a technique used to collect data after the intervention has been carried out by the researcher, where additional or complementary information can be collected, allowing to evaluate the results or impact of the research, for example in this case, on the implementation of the didactic sequence, obtaining information on the knowledge of the participants.

It also provides an opportunity to obtain more detailed or in-depth information about participants' experiences, opinions or perceptions, which helps to better understand the impact of the intervention and identify areas for improvement or necessary changes, allowing for feedback from students. This feedback can be used to improve the intervention in future implementations, and confirm and support the conclusions obtained previously, which increases the reliability and validity of the results.

4.3 In-Depth Description of Study Participants

The study population consists of 13 fourth-grade elementary students attending Liceo Psicopedagógico Montessori School located in Chocontá, Cundinamarca. These students, aged between 9 and 11 years, include both female and male participants, with eight girls and five boys. Their academic progress in the realm of foreign languages aligns with the desired training levels for this study. The Montessori Method has been systematically employed in their

educational journey, setting the stage for the introduction and observation of the CLIL (Content and Language Integrated Learning) methodology and its subsequent impact.

Fourth-grade children are capable of actively engaging in a comparative research process that introduces them to two distinct educational methodologies: the Montessori and the CLIL methods. This research acknowledges the integral role of these participants at every stage, from problem identification to final feedback.

In the initial stage of problem identification, students are presented with the research topic, "Montessori and CLIL Methods." They are encouraged to ponder the differences between these two methodologies, their educational philosophies, and the potential implications for their learning and development. Children are prompted to ask questions and articulate their initial thoughts about both methods, fostering their curiosity and critical thinking. During the subsequent stage, which centers on devising strategies, students actively contribute their opinions and collaborate on the creation of approaches that facilitate the research's implementation. Through this process, children gain valuable experience in teamwork, planning, and the effective adjustment of various skills.

With defined strategies, students begin to participate, developing and implementing each of the activities that are part of the research. They carry out the didactic sequence, allow to collect data and make observations in the classroom, to later analyze the information obtained. At this stage, participants learn to communicate their findings clearly and coherently. Finally, once the research has been carried out, the thirteen fourth grade participants present a post-test, and then make their own conclusions about the research performed. In this process, they play a crucial role in sharing their learning with their classmates and teachers, promoting discussion and debate in the classroom. The feedback received at this stage is valuable for the continuous

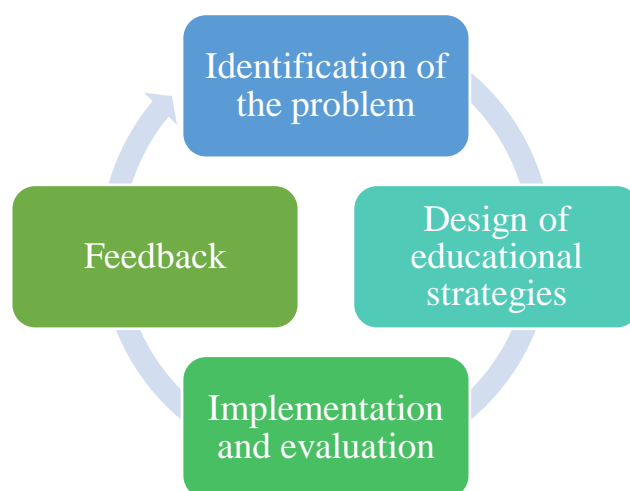
learning process and allows children to reflect on their own experiences, learning and perspectives.

4.4 Procedures for collecting data in action Research

For its optimal development, the research was divided into four stages, they are represented in Figure 2, which are presented with the purpose of contemplating the resources and the activities to be carried out to comply with the established objectives, considering that each of these cycles is carried out through implementation and following the course of the action research design.

Figure 2

Cycles of the research



Source: Own elaboration

4.4.1 First cycle: Identification of the problem

This first cycle is conducted with the purpose of achieving the first objective, which aims to collect data on the problem through a literature review, enabling an in-depth understanding of the context or environment. The goal here is to gain insight into the events that take place and

how they unfold, ultimately seeking clarity regarding the specific problem and its relevance to the individuals involved in the research. Additionally, it aims to identify any educational shortcomings and disparities between the Montessori and CLIL methods, as well as the curriculum and student training, teacher competencies, and the strategies employed by the educational institution in implementing these processes in the student curriculum.

Considering the qualitative approach adopted, the assessment was conducted through a theoretical-practical activity consisting of twelve elements that provide insights into both methods, enabling a diagnosis within this cycle. Additionally, a participant observation table was utilized. The theoretical-practical activity served the purpose of assessing the students' proficiency in Basic English concepts and the effectiveness of previously implemented strategies. Meanwhile, the participant observation table comprised eight items, allowing for a qualitative evaluation of each fourth-grade student's achievements and areas for improvement.

4.4.2 Second cycle: Design of educational strategies

Through the development of this second cycle, we want to fulfill two general purposes; the first is the collection of qualitative data that allow us to delve into the needs and importance of incorporating a method such as CLIL for the strengthening of a second language in fourth grade students and specifically in this research that identifies the impact that have been presented, the second focuses on the planning of it, through the creation of objectives, strategies, actions, resources and time scheduling.

Considering the above, for the realization of this cycle, it will start with all the information obtained in the previous stage, proceeding to design the training proposal or the strategy that allows solving the needs and problems presented, in this case referring to the integration of the CLIL methodology for the strengthening of the second language. Within this cycle, the design of the four workshops that were implemented is contemplated, considering the

areas of mathematics, natural sciences, social sciences and art that aim to enhance and promote the foreign language-English through the application of CLIL, in fourth grade students.

This cycle is subdivided into three categories aimed at enhancing its development. The first category involves the design or outline of the didactic sequence, which is based on the results obtained during the first cycle and the corresponding diagnostic test. The methodology employed here includes the creation of a didactic sequence and a journal, fostering dynamic and participatory engagement from the students.

The second category builds upon the activities or proposals introduced in the previous substage. Once these activities are presented and designed, the intention is to socialize them, showcasing the active participation of fourth-grade elementary students. This subcategory allows for firsthand recognition of impressions and potential areas for improvement.

In the third subcategory, adjustments will be made based on the contributions received during the previous subphase. Observations, suggestions, and proposals will be taken into account to implement the necessary modifications, ensuring that the proposal addresses the specific needs identified in this research.

4.4.3 Third cycle: Implementation and evaluation

This cycle is carried out to apply the proposal, or the action plan designed in the previous cycle, that is, the four workshops that are part of the didactic sequence, trying to respond to objective two and three of the research. This implementation also allows collecting data to evaluate the effectiveness of the proposal that was carried out, communicating the plan and actions to the entire community and subsequently reviewing the impact generated. Throughout the development of the research, the students carried out activities that allowed them to recognize the differences in terms of teaching-learning English, to later make a sketch of what was expected, and the result obtained.

Before implementing each of the didactic sequences, both a post-test and a survey were conducted to understand the concerns and expectations related to the proposed topic. This provided an opportunity for students to express their experiences, which may not have been conveyed during the initial diagnostic test. Each activity had a duration of 2 to 3 hours and involved all fourth-grade students, facilitating interaction and active participation.

Regarding the evaluation of the results, data collected from the tools used during the first and third phases of the research (observation table, pre-test, activities within the didactic sequence, journal, and rubric) yielded significant findings. These results allowed for the recognition and interpretation of the impact of teaching English using the Montessori Method versus CLIL on fourth-grade students at Liceo Psicopedagógico Montessori School located in Chocontá, Cundinamarca.

Selection of the information obtained: The answers acquired during the analysis and development of the research were examined, in order to clearly understand the effectiveness of the pedagogical instruments and tools, as well as their applicability in daily life.

Order and analysis of the results: The analysis of the collected data was carried out through the process of data triangulation, being the most widely used technique in the qualitative approach, which is based on analyzing the data collected using the different instruments, examining the problems from various angles, that is, it can be considered as a control that is based by using different sources, instruments or data collection techniques, according to Alzás et al. (2016) its purpose is “to help obtain a greater development and theoretical enrichment, conforming the search for data source according to space-temporal criteria and different levels of analysis according to the person and the object of study” (p. 641).

4.4.4 Fourth cycle: Feedback

The fourth cycle allows to create, through the information of the results of the actions to the whole community, feedback, allowing to make new adjustments, decisions, and redefinitions, as well as new diagnoses, seeking that the cycles are repeated, with the purpose of collecting data and re-evaluating the implemented plan, with consolidated agreements and arrangements. This phase, at the end, seeks to find inconsistencies (if they exist) within the previous cycles and instruments, with the purpose of redesigning and modifying them so that the research follows an optimal course and completion.

Table 2

Comparative Table: Cycles

Cycles	Objective	Phases	Activities	Techniques	Instruments
First cycle: Identification of the problem	Objective one.	Bibliographic review.	Collection of information and creation of the theoretical framework	Looking for jobs with similar approaches and needs Use of the PEI	Internet. Master's repositories.
	To identify the impact on English learning through the Montessori method and the CLIL method.	Characterization of the context.	Contextual framework		PEI
		Characterization of the study needs.		Participant observation	Observation table
		Characterization of the study population and sample.	Conceptual and practical activities to characterize the students.		Pre-test Semi-structured survey Data analysis
Second cycle:	Objective two.	Design of the didactic proposal	To construct and outline a didactic sequence,	Creation of the didactic sequence.	Pedagogical workshops where they are

Design of educational strategies	Design a didactic sequence to establish the differences between learning through the Montessori method and CLIL method in fourth grade students.	Contributions and modifications that are considered convenient to make to the didactic proposal Development of the modifications that are considered necessary so that the proposal responds to the raised and specific needs of this research.	comprised of four pedagogical workshops that allow the fourth-grade student to consolidate their knowledge about the CLIL method and its implementation for the strengthening of bilingualism.	incorporated: Concepts, uses and importance of the CLIL method in learning-strengthening a second language
Third cycle: implementation and evaluation	Objective three. To implement a didactic sequence to demonstrate learning through the Montessori method and CLIL method. Objective four. To interpret the impact on English learning through the Montessori method and the CLIL method.	Application of the didactic proposal. Data collection	Development of the four pedagogical workshops, by the fourth-grade students of the Educational Institution. Data collection, information, photographic evidence. Analysis of data collected during the research and the previous phases.	Didactic sequence Data analysis technique. Pedagogical workshops. Triangulation of data. Evaluation rubric for pedagogical workshops. Comparative between the traditional Montessori method and the information collected through the implementation of the CLIL method

Source. Own Elaboration

5 Data Analysis and Discussion

For this chapter, the first section explains the didactic sequence used as a strategy to achieve the main objective, which is also a part of the third and fourth specific objectives. Below, you will find the definition, composition, and authors that support it as a strategy to enhance learning.

5.1 Didactic sequence mediated by pedagogical: workshops.

The didactic sequence, as defined by the Ministerio de Educación Nacional-MEN (2013) is understood as: (2013):

An exercise and a possible model that is proposed to the teacher interested in exploring new ways of teaching mathematics... and that have the purpose... so of a material that will facilitate the teacher who works reflexively and critically, enrich their didactic knowledge of the mathematical content, and the student to find the meaning and the meaning of what he is learning, a purpose that involves both the contents to be taught and the didactics to do it. (p. 9)

Considering the qualitative approach and the action research design, a didactic sequence based on pedagogical workshops was chosen as an educational resource to achieve specific learning objectives. This approach facilitates teaching progressively and in a structured manner. According to González et al. (2010), pedagogical workshops are "a valuable tool in the self-regulated learning of the learner, as well as in the sequential planning of activities by the facilitator, involving a premeditated succession of activities, which will be developed in a certain

period of time" (p. 29). Therefore, it was considered a timely tool for fostering educational participation processes.

Four pedagogical workshops were implemented to identify knowledge and thoughts that were not well-established and conceptualized by the students, as indicated by the previous characterization and instruments. These workshops allowed for a deeper understanding of the second language by incorporating lesson plans from various subjects (sciences, social sciences, mathematics, and art) that have already been promoting the use of the CLIL method, thereby fulfilling specific objective number two of this research.

5.2 Analysis

The triangulation of qualitative data is a research strategy that aims to improve the validity and reliability of findings by using multiple data sources or methods to address a study phenomenon. For this case, an observation table, a diagnostic and post-test test, a semi-structured survey and a didactic sequence are used as tools to collect qualitative data.

In the constant search to provide students with enriching educational experiences, the interest arises to compare and analyze two different pedagogical approaches: the Montessori Method and the CLIL method, in the context of a group made up of twelve (12) 4th grade students of the Liceo Psicopedagógico Montessori School. Both approaches have proven effective in the integral development of students, focusing on both cognitive and linguistic aspects. While the Montessori Method is based on autonomy and learning through guided exploration, the CLIL method focuses on integrating curriculum content and learning a second language. This analysis seeks to reach the background on the strengths and weaknesses of each approach in the specific context, allowing a deeper understanding of how these methods impact on their academic and linguistic development in a bilingual environment.

5.2.1 Observation Analysis

Analysis of the observation table -Montessori Method

By using the observation technique focused on the twelve fourth grade students of the Liceo Psicopedagógico Montessori, which uses the Montessori method for learning English, provides an insight into how this methodology influences the educational process, known for its student-centered approach and active learning, adapting to the bilingual context to effectively encourage English language acquisition. Through this observation, both the positive aspects and the challenges of using the Montessori Method in a bilingual environment will be analyzed and its implications for learning English in fourth grade will be evaluated. Below are the 3 participant observation tables of the Montessori Method, one per group, each with a total of four students.

Table 3

Participant Observation Table-Method Montessori-First Group

Category of the observation	Observation Indicators	Observations
MONTESSORI METHOD		
Learning environment	There is an optimal organization of the Montessori classroom	Most of the time they chose the reading corner in English with enthusiasm, exploring different books and immersing themselves in readings of their interest. They approached the creative writing area in English and dedicated themselves to creating a story, showing creativity in writing skill.
	There is availability and access to Montessori materials	In mathematics, they worked with materials and demonstrated numerical skills while actively interacting.
	There is an excellent distribution of space for independent work	During the activities of the history area, they used elements such as a globe to identify different countries and regions, demonstrating curiosity for the world.
Active participation	There is evidence of an optimal degree of participation by the student in the proposed activities	The students showed optimal participation, answering questions and sharing their answers with the group, although their participation was more cautious compared to others. During the English reading activities, they chose a book and followed the plot with interest, but sometimes they needed a reminder to share their thoughts afterwards.
	The student has a good level of autonomy	They worked on mathematics activities in English, solving numerical problems with attention,

		although they occasionally showed no interest in sharing their solutions orally.
Communication	The student uses an appropriate language within the bilingual context.	They interacted in different English roles, taking an active role in group conversation, but sometimes retreating when the dialogue became faster.
	There is good student-teacher interaction.	Most participated actively in group activities in English, but occasionally the pronunciation of some students made it difficult to understand their words.
	The teacher is a guide during the learning process.	In activities related to reading in English, most of the students in the group needed additional support to understand some words and had difficulty asking clear questions about texts.
Concentration	A good degree of concentration of the student in the proposed activities is evidenced.	Concentration was evident in the English reading activity during the reading corner time, ignoring distractions and focusing on the story they were exploring.
	The student can work independently.	In mathematics, they worked with materials, demonstrating concentration while solving numerical problems.
Adaptation to the Montessori Method	The student uses Montessori materials properly.	During the creative writing activity in English, they devoted themselves to developing their story, choosing words and structures carefully to convey their imagination.
	The student understands and applies the Montessori principles.	During activities involving the use of English, they used didactic tools such as cards, and used them to create meaningful sentences autonomously, showing a deep understanding of the method.
	The student demonstrates improvements in academic development.	They worked in different areas with focus in English, using materials, which reflects the Montessori approach in the concrete construction of concepts.
	The student develops critical thinking skills.	They explored different topics in English using materials in the relevant area, demonstrating the connection between education and the Montessori approach.
	The student strengthens independence and responsibility.	In activities involving English language, they interacted and associated vocabulary and words with images, demonstrating the sensory and visual approach of the Montessori method.

Source. Own Elaboration

Table 4

Participant Observation Table- Montessori Method - Second Group

Category of the observation	Observation Indicators	Observations
MONTESSORI METHOD		
Learning environment	There is an optimal organization of the Montessori classroom	They chose the English reading corner to explore a book with detailed illustrations, diving into the story while practicing their reading comprehension.
	There is availability and access to Montessori materials	During English vocabulary activities, students approached the word card station and selected nature-related terms, demonstrating a genuine interest in expanding their vocabulary.
	There is an excellent distribution of space for independent work	In the area of history, they investigated using a globe and locating countries while using English labels to identify continents and oceans.
Active participation	There is evidence of an optimal degree of participation by the student in the proposed activities.	During English vocabulary activities, students chose word cards and used them to create complete sentences.
	The student has a good level of autonomy	They participated in different group and couple activities, where they exchanged questions and answers in English on topics related to different topics in academic areas such as biology. As they explored the reading corner, they checked different books in English, where reading was evident, interacting with the images and trying to understand the plot. In mathematics activities in English, they used different teaching resources (blocks) to solve numerical problems, demonstrating understanding.
Communication	The student uses an appropriate language within the bilingual context.	They participated in an English conversation with their peers, sharing their ideas and using a variety of phrases to express themselves.
	There is good student-teacher interaction.	Students were observed interacting in an English role play, where they assumed an active role and used expressions appropriate to the situation.
	The teacher is a guide during the learning process.	They approached, asking questions about the new English vocabulary, demonstrating an active search for comprehension and clarity in their communication.
Concentration	A good degree of concentration of the student in the proposed activities is evidenced.	During the group activity in English, each student contributed ideas and participated in discussions, demonstrating confidence in communicating with peers.
	The student can work independently.	They participated in the activities, although there were times when they were distracted and lost the thread of the conversation.
Adaptation to the Montessori Method	The student uses Montessori materials properly.	During the English history activity, their attention was sometimes dispersed, and they were more interested in visual details.
	The student understands and applies the Montessori principles.	They participated in the activities in English showing autonomy, although sometimes they needed reminders to focus.
	The student demonstrates improvements in academic development.	During the activities they took an active role, but sometimes they waited for the teacher's instructions.

The student develops critical thinking skills.	
The student strengthens independence and responsibility.	Occasionally they needed support to structure their ideas.

Source. Own Elaboration

Table 5.

Participant Observation Table- Montessori Method -Third Group

Category of the observation	Observation Indicators	Observations
MONTESSORI METHOD		
Learning environment	There is an optimal organization of the Montessori classroom	During the activities they participated with their peers, although sometimes they needed support.
	There is availability and access to Montessori materials	
	There is an excellent distribution of space for independent work	It was evident that students interacted with English language materials, but sometimes needed guidance to use vocabulary cards effectively.
Active participation	There is evidence of an optimal degree of participation by the student in the proposed activities.	Occasionally required reminders about how to perform certain tasks accurately. They used the English game space to interact with their peers, but on some occasions, they were undecided about how to start a conversation. During the conversation activities in English, most of the students in this group showed that it was difficult for their peers to hear their input. They participated in the play activity in English, but sometimes they seemed distracted and did not always respond to questions or suggestions from their classmates.
	The student has a good level of autonomy	When choosing a group activity, they needed encouragement to share their ideas.
Communication	The student uses an appropriate language within the bilingual context.	The students participated in an English conversation activity, although they were occasionally a little shy about sharing their group thoughts.
	There is good student-teacher interaction.	During the English language activity, each student seemed to be paying attention, but occasionally needed support to formulate complete sentences. They interacted with their English colleagues and teachers during the various academic activities, but sometimes they were confused.
	The teacher is a guide during the learning process.	They participated enthusiastically, but sometimes seemed a little uncertain about when to intervene in conversations and/or activities.

Concentration	A good degree of concentration of the student in the proposed activities is evidenced. The student can work independently.	Students were occasionally distracted during activities in English, looking around and losing the continuity of the story, They worked on math activities in English, but sometimes they quickly changed tasks without completing one before moving on to the next.
Adaptation to the Montessori Method	The student uses Montessori materials properly. The student understands and applies the Montessori principles. The student demonstrates improvements in academic development. The student develops critical thinking skills. The student strengthens independence and responsibility.	During the activities they seemed to lose the thread of the discussion, which affected their ability to participate consistently. In different activities, they sometimes did not explore the options available independently, which could be an opportunity to encourage more autonomy. They could benefit from more guidance in linking materials to the Montessori approach. Occasionally they needed support to structure their ideas. During English vocabulary activities, they seemed confused about how to use certain materials, suggesting the need for a better introduction to the method. They participated in the activities in English, but were sometimes hesitant about when to change materials, which might require further guidance.

Source. Own elaboration

Based on the data collection from the three previous tables, the following aspects were analyzed.

Positive aspects evidenced during the participant observation:

Autonomy and Participation: Observation revealed that fourth grade students were actively involved in various English learning activities. The Montessori Method promoted autonomy by allowing them to choose activities according to their interests and skill levels. Students engaged in reading, writing, history, art, conversation, and math tasks, demonstrating validity in their learning.

Sensory and Visual Interaction: Montessori methodology is evidenced in the sensory and visual interaction of students with learning materials. The children actively explored vocabulary cards, manipulative materials and visual resources in English. This multi-sensory immersion facilitated the understanding and retention of content in the new language.

Cultural Connection: Observation showed that students were learning the language and culture through thematic materials and activities in English. This allowed them to explore cultural and geographical concepts while acquiring the language, enriching their overall understanding.

Trust in Communication: Montessori's approach to oral and written communication in English helped students gain confidence in their ability to express themselves in the new language. The observation revealed that children were engaged in conversations in English with peers and teachers, suggesting that the method encourages effective communication.

Challenges and opportunities for improvement evidenced during the participant observation:

Variety of Materials: Although students interacted with a variety of materials, some seemed more inclined towards certain types of activities. The diversity of materials could be improved to ensure that all aspects of English learning are covered and to capture the attention of different learning styles.

Balance between Autonomy and Orientation: While autonomy is essential in the Montessori Method, some students seemed to need more guidance to maximize their learning. In certain situations, more individualized support may be considered to ensure that all students are progressing effectively.

Assessment and Feedback: Observation did not provide a complete overview of how student progress is evaluated and fed back. Ensuring a strong assessment system that reflects language skills in English and providing constructive feedback could be an opportunity to further strengthen the learning process.

Incorporation of Anglophone Culture: Although the introduction of cultural aspects in English was noted. Greater immersion in English-speaking culture could be considered to further

enrich the students' experience and improve the understanding of the context in which the language is spoken.

Analysis of the observation table-CLIL method

The observation developed with the twelve fourth grade students of the Liceo Psicopedagógico Montessori School, where the CLIL method for learning English is implemented, provides insight into how this methodology impacts language acquisition and curriculum content in different academic areas. The CLIL (Integrated Content and Language Learning) method aims to teach curricular subjects in the foreign language, in this case English, allowing students to develop language skills and knowledge simultaneously. Through this observation, we will analyze both the positive aspects and the challenges that the CLIL method presents in a bilingual environment. Below are the 3 participant observation tables of the Montessori Method, one per group of four students each.

Table 6

Participant Observation Table- CLIL Method -First Group

Category	Subcategory of observation	Observation Indicators	Observations
Participation and collaboration: This evaluates the student's active and collaborative participation in CLIL activities, his/her ability to work in a team and contribute constructively to the learning of the content and English	Active participation	MÉTODO CLIL The student actively participates in the CLIL activities.	There was excellent participation in social science activities, sharing their ideas on the subject and asking relevant questions, demonstrating an active commitment to learning.
		The student uses English during the proposed activities.	During the math lesson, students worked on problems collaboratively, expressing their solutions with confidence and collaborating with their classmates.
		Collaboration and teamwork are evident in CLIL tasks	In the art activity, students were enthusiastic as they explored artistic techniques and concepts while sharing their opinions and defending their creative choices.

<p>Use of language</p> <p>This evaluates the student's ability to apply the English language in the context of the subject or thematic content, using specific terminology and relating the content to the appropriate language.</p>	Motivation	<p>The student shows interest and enthusiasm for learning the different contents and the English language.</p> <p>The student is enthusiastic about exploring the culture and values of the English language and mother tongue community</p> <p>The student understands and respects his classmates and teacher.</p>	<p>Students were less motivated during the history lesson, sometimes showing signs of distraction and disinterest, although most of the time they proactively performed the activities.</p> <p>They participated in the various activities, but occasionally seemed less committed to the task, which could indicate an opportunity to encourage their interest.</p> <p>In the different activities, they showed a variable motivation.</p>
	Vocabulary and grammar	<p>The student has knowledge and uses in an appropriate way the vocabulary and grammatical structures related to the thematic content, both in comprehension and expression contexts.</p>	<p>Students used basic grammar during the social science lesson, communicating their ideas effectively, although occasionally they made mistakes.</p>
	Listening comprehension	<p>The student understands instructions, dialogues and recordings in English related to the specific thematic content.</p>	
	Reading comprehension	<p>The student understands texts in English related to the thematic content.</p> <p>The student identifies important information and answers comprehension questions.</p>	<p>During the math lesson, they demonstrated vocabulary according to mathematical concepts, although sometimes they needed support to structure more complex sentences.</p> <p>They participated in the natural science activity, showing a general understanding of the content and following hearing instructions with moderate clarity.</p>
	Oral expression	<p>The student communicates orally in English, using appropriate vocabulary and grammatical structures, participating in conversations, describing images or presenting information on a specific topic.</p>	<p>In the environmental education lesson, they used specific terms occasionally, but sometimes used more general descriptions to express ideas.</p>
	Written expression	<p>The student writes in English, using appropriate vocabulary and grammar, expressing ideas in a coherent and organized way, and applying the thematic content in writing.</p>	<p>Students worked on the artistic activity in English, using basic vocabulary and following instructions in English with an acceptable level of comprehension.</p>

Source. Own Elaboration

Table 7

Participant Observation Table- CLIL Method -Second Group

Category	Subcategory of observation	Observation Indicators	Observations
Participation and collaboration: This evaluates the student's active and collaborative participation in CLIL activities, his/her ability to work in a team and contribute constructively in the learning of the content and English	Active participation	CLIL METHOD The student actively participates in the CLIL activities.	In the activities carried out for the subject of natural sciences, students were active, participating in processes of creation and discussion, although occasionally they needed more time to organize their thoughts before speaking.
		The student uses English during the proposed activities.	They worked on the arts-related English activity, following instructions, but sometimes they were more comfortable following the example of their classmates
		Collaboration and teamwork are evident in CLIL tasks	During the social science lesson, they joined the activities, although sometimes they required additional motivation to contribute proactively.
Use of language This evaluates the student's ability to apply the English language in the context of the subject or thematic content, using specific terminology and relating the content to the	Motivation	The student shows interest and enthusiasm for learning the different contents and the English language. The student is enthusiastic about exploring the culture and values of the English language and mother tongue community	Students from this group showed interest during the social science lesson, actively participating in the discussions. They enthusiastically participated in the art lesson, exploring new techniques and expressing themselves creatively, reflecting their motivation to learn.
		The student understands and respects his classmates and teacher.	During the math activity, students faced challenges with a positive attitude, demonstrating perseverance and a continued interest in solving problems.
		The student has knowledge and uses in an appropriate way the vocabulary and grammatical structures related to the thematic content, both in comprehension and expression contexts.	Students used clear and precise language during the natural science lesson, explaining complex processes fluently and applying proper grammar.
Use of language This evaluates the student's ability to apply the English language in the context of the subject or thematic content, using specific terminology and relating the content to the	Vocabulary and grammar	The student understands instructions, dialogues and recordings in English related to the specific thematic content.	
	Listening comprehension		

appropriate language.	Reading comprehension	The student understands texts in English related to the thematic content.	During the math activity, students demonstrated an extensive vocabulary by expressing solutions to numerical problems and employed grammatical structures accurately.
	Oral expression	The student identifies important information and answers comprehension questions. The student communicates orally in English, using appropriate vocabulary and grammatical structures, participating in conversations, describing images or presenting information on a specific topic.	Students used the history activity in English, listening carefully and asking relevant questions to demonstrate a skill in listening. In the environmental education lesson, students used specific scientific terms with confidence, demonstrating an understanding of the content and an appropriate choice of vocabulary.
	Written expression	The student writes in English, using appropriate vocabulary and grammar, expressing ideas in a coherent and organized way, and applying the thematic content in writing.	Students actively participated in the various activities, using the language robustly and showing an understanding of the instructions in English.

Source. Own Elaboration

Table 8

Participant Observation Table- CLIL Method -Third Group

Category	Subcategory of observation	Observation Indicators	Observations
Participation and collaboration: This evaluates the student's active and collaborative participation in CLIL activities, his/her ability to work in a team and contribute constructively to the learning of the content and English	Active participation	CLIL METHOD The student actively participates in the CLIL activities.	Students in this group were reserved during the natural science class, sometimes seeming reluctant to share their ideas or ask questions. They participated in the historical activities, but there were times when they did not interact with the visual material that was presented, suggesting an opportunity to encourage their visual participation. In the environmental education class, they listened carefully, but sometimes did not take the initiative to provide concrete examples or make personal connections with the subject.
		The student uses English during the proposed activities.	
	Collaboration and teamwork are evident in CLIL tasks		
Motivation	The student shows interest and enthusiasm for learning the different contents and the English language.	Students became involved in the natural science lesson, following the activities, but occasionally needed a reminder to keep their attention.	

<p>Use of language</p> <p>This evaluates the student's ability to apply the English language in the context of the subject or thematic content, using specific terminology and relating the content to the appropriate language.</p>	Vocabulary and grammar	<p>The student is enthusiastic about exploring the culture and values of the English language and mother tongue community</p> <p>The student understands and respects his classmates and teacher.</p>	<p>They worked in the artistic activity, showing interest, although there were times when their level of attention decreased</p> <p>During the mathematics lesson they participated in the activities, but their level of enthusiasm varied depending on the nature of the activity</p> <p>Students used short, simple sentences in the natural science lesson, expressing basic ideas, but sometimes having difficulty with grammar.</p>
	Listening comprehension	<p>The student has knowledge and uses in an appropriate way the vocabulary and grammatical structures related to the thematic content, both in comprehension and expression contexts.</p> <p>The student understands instructions, dialogues and recordings in English related to the specific thematic content.</p>	
	Reading comprehension	<p>The student understands texts in English related to the thematic content.</p>	<p>They participated in the math lesson, using fundamental vocabulary to solve numerical problems, although they could benefit from a greater variety of terms.</p> <p>During the history activity, they followed the instruction in English, but their listening comprehension could be improved to capture more details in the explanations.</p>
	Oral expression	<p>The student identifies important information and answers comprehension questions.</p> <p>The student communicates orally in English, using appropriate vocabulary and grammatical structures, participating in conversations, describing images or presenting information on a specific topic.</p>	<p>They used specific words in the environmental education lesson, but sometimes found it difficult to express more complex concepts.</p>
	Written expression	<p>The student writes in English, using appropriate vocabulary and grammar, expressing ideas in a coherent and organized way, and applying the thematic content in writing.</p>	<p>In artistic activity, they followed instructions, although their vocabulary was limited, affecting their ability to accurately describe the characteristics of the environment around them.</p>

Source. Own Elaboration

Positive aspects were evidenced during the participant observation.

The CLIL method, which combines the teaching of academic contents with the acquisition of the English language, has proven effective for several fourth-grade students within the school. It was noted that six of these students achieved the method's expectations in various academic areas. Their achievements are evident in their ability to express themselves fluently in English while participating in activities related to social sciences, mathematics, art and natural sciences. These students demonstrated a knowledge of vocabulary and grammar, and actively participated in the discussions and assigned tasks.

Limited performance evidenced during participant observation.

On the other hand, three students were characterized by the development of limited activities, based on the CLIL method. Although these students participated in the lessons and showed some level of understanding of the content, sometimes they seemed to need a little more support to express their ideas more clearly. Your vocabulary and grammar may require further consolidation to improve your communication in English and your understanding of the instructions provided in the language.

Areas of Improvement evidenced during participant observation.

Finally, three students faced more obvious challenges in the implementation of the CLIL method in English learning. These students need to improve in several areas, such as the use of specific vocabulary related to academic content and listening comprehension. They may also benefit from additional support to understand instructions and tasks in English, which could contribute to their more effective participation in activities and the development of their language skills in general.

Overall, observation revealed that the CLIL method contributes to the deep development of English language skills. Students interacted in fluent conversations, presented projects and

debated topics in English, demonstrating a strong grammatical understanding and extensive technical vocabulary across academic areas such as science, mathematics and art, in English. This natural integration of content and language allowed students to acquire academic knowledge and skills while improving their English proficiency.

5.2.2 Diagnostic Test Analysis

In the Liceo Psicopedagógico Montessori school located in Chocontá, Cundinamarca, a diagnostic test was carried out which aimed at finding effective strategies for strengthening bilingualism and adapting teaching strategies to the individual needs of students. The main objective of this evaluation was to identify the strengths and weaknesses of the students, to design teaching and learning plans that effectively align with their individual needs, considering two key pedagogical methods: the Montessori and the CLIL (Integrated Content and Foreign Language Learning).

The results of this test were highly encouraging. The students exhibited a strong commitment and active participation throughout the process, reflecting their enthusiasm to address areas for improvement and leverage their strengths. The data collected provided a comprehensive insight into their skills and competencies in the foreign language, as well as in other subjects.

One of the approaches considered for designing teaching strategies was the Montessori Method. This approach is characterized by individualization and active learning, which allows content and activities to be adapted to the unique needs of each student. The results of the diagnostic assessment provided valuable information about each student's areas of strength and weakness, allowing them to design personalized class plans to maximize each student's learning.

On the other hand, the CLIL method was highlighted as an effective strategy for strengthening bilingualism. This approach integrates content teaching and foreign language

development into a single framework, allowing students to learn the language in a contextualized and meaningful way. The test results diagnosed specific areas where students needed more support in terms of understanding and communication in English, which guided English content teaching and cultural contextualization.

In addition, the assessment provided information on students' English communication skills, which was critical for the development of effective teaching strategies in the CLIL method. Areas of improvement in oral and written expression were identified, which allowed specific attention to these skills.

Ultimately, the diagnostic assessment not only helped identify students' needs, but also allowed for an exploration of different artistic currents. The students created works of art, researched and understood the characteristics and historical context of the movements that inspired them. This focus on research enriched the educational experience and promoted an appreciation of art history.

Diagnostic test analysis-Montessori method

Then, the analysis of the diagnostic test related to the Montessori method is carried out, which is focused on evidencing and looking for the strengths and/or weaknesses of fourth grade students, versus reading comprehension and writing in the English language. The results of the evaluation were positive and revealed significant areas of opportunity. Students participated and engaged in the process.

The Montessori Method, known for its individualized and active approach, proved to be a valuable resource in designing personalized teaching strategies to improve reading comprehension and writing in English. The results of the diagnostic assessment provided detailed information on the specific areas in which students needed additional support and the skills they had already mastered.

Based on these results, customized curricula could be designed for each student. Activities and materials were adapted to address individual needs, allowing students to move at their own pace. The focus on self-directed and practical learning, characteristic of the Montessori Method, facilitated the improvement of English reading and writing comprehension effectively and meaningfully.

In addition, reading and writing in English was promoted as an integral part. Students had access to different reading and writing materials in English, which allowed them to develop their skills in a contextualized way. Constant practice and access to stimulating reading material contributed to the continuous improvement of their English comprehension and writing skills.

Finally, the diagnostic assessment not only identified areas of improvement in students' English reading and writing comprehension, but also served as a platform for designing personalized and effective teaching strategies. The results of this evaluation highlighted the school's commitment to academic excellence and the integral development of its students in an environment that values active and self-directed learning.

Diagnostic test analysis- CLIL method

The CLIL method was implemented at the Liceo Psicopedagógico Montessori School with the aim of improving communicative competence in English. This pedagogical strategy was based on the results of a diagnostic evaluation that identified specific areas where students needed to improve their skills in describing characters, animals, environments and in some cases, colleagues or friends of the institution, all based on the English language.

The results of the diagnostic evaluation provided detailed information on specific areas requiring attention. Students demonstrated a genuine desire to improve their communication skills in English, and these results were used as a starting point to design effective teaching strategies through the CLIL method.

The CLIL method combines content teaching and foreign language development in a single approach. In this context, the students carried out activities, proposals in situations where the description of various aspects in English was essential. This included the description of characters, the presentation of animals, the narration of environments and the characterization of companions in social interactions.

The focus on competence in description in English focused on contextualized and meaningful learning. Students not only acquired language skills, but also developed an understanding of concepts related to the subjects of study. This integration of content and language allowed students to learn the language in a natural and applied way. The constant practice of description in English in a CLIL context also encouraged the development of oral and written communication skills in the language. Students were encouraged to express their ideas clearly and effectively and were encouraged to use rich vocabulary and appropriate grammatical structures.

The results of the diagnostic evaluation served as a starting point for a more meaningful and higher quality education, where students acquired language skills and conceptual knowledge in an integrated manner. This not only strengthened their proficiency in English, but also enriched their understanding of various aspects of life and knowledge in general.

5.2.3 Survey Analysis

Table 9

Transcript of survey answers- Montessori Method

Questions	Answers for Student
1. What kind of activities do you like to do most in school?	Student 1: Dancing in the dance class Student 2: Sport Student 3: Soccer Student 4: See and participate in plays Student 5: Group work Student 6: Contests and competitions Student 7: Dancing Student 8: Share with my classmates Student 9: Group work

Montessori Method	<p>Student 10: Games to learn Student 11: Watch videos Student 12: sport</p>
2. What activities make you feel more challenged?	<p>Student 1: Assessments Student 2: Sport games Student 3: Contests and competitions Student 4: Exhibitions of the works Student 5: Tasks Student 6: Contests and competitions Student 7: Homework Student 8: Soccer game Student 9: Talking about a topic in front of my classmates Student 10: Games to learn Student 11: Dance presentation Student 12: Tests</p>
3. Do you think that the activities you do in school have helped you to learn better?	<p>Student 1: Yes, because the activities are constant Student 2: Yes, because they are practical Student 3: Yes, because I like them Student 4: Yes, because every day I practice what I learn Student 5: Yes, because school is fun Student 6: Yes, because I can ask my teachers when I have doubts Student 7: Yes, because they always teach me something new Student 8: Yes, because they are interesting Student 9: Yes, because every day we learn more Student 10: Yes, because homework helps us improve Student 11: Yes, because it is interesting Student 12: Yes, because we can have fun and learn</p>
4. What kind of activities would you like to do more in the school?	<p>Student 1: Learning through different games Student 2: Practical activities Student 3: Music Student 4: Act Student 5: Art Student 6: Dynamic classes Student 7: Participative classes Student 8: Using different materials Student 9: Art Student 10: Spaces to talk about our interests Student 11: Competitions Student 12: Presentations of each subject and options to choose what we like</p>
5. Are there any particular activities that you don't like or that you find boring?	<p>Student 1: Writing in the notebook Student 2: Completing the book Student 3: Homework Student 4: Writing Student 5: Reading Student 6: Exhibitions Student 7: Tasks Student 8: Completing tasks Student 9: Homework Student 10: Long videos Student 11: Writing Student 12: Worksheets</p>

<p>6. How do you feel when you have the freedom to choose your own activity or homework in class? Why do you like being able to decide what to do?</p>	<p>Student 1: Happy, because I can do what I really like Student 2: Free, because I can do what interests me Student 3: Calm, because I know I'll do what I care Student 4: Happy, because I can prove my intelligence Student 5: Excited, because I can challenge myself to think of something interesting Student 6: Happy, because I can pick my favorite characters Student 7: Excited, because I can think of something fun Student 8: Happy, because I can do what I like Student 9: Free, because I can represent my knowledge Student 10: Free, because I like different things Student 11: Excited, because I can do what interests me Student 12: Happy, because I can choose what I like best</p>
<p>7. What kind of materials or resources are most interesting and fun for you to learn in school? Why are you attracted to these materials?</p>	<p>Student 1: Play-Doh, because it's fun Student 2: Sports equipment, because I love sports Student 3: Balls, because I like to play Student 4: Costumes, because I like to represent different characters Student 5: Textures, because I like to feel the textures of the materials Student 6: Painting, because I like to paint, and we hardly use it Student 7: Play-Doh, because I have fun mixing the colors Student 8: Markers, because we hardly use them Student 9: painting, because I like colors Student 10: Computers, because I like watching videos, I think I learn more Student 11: Technological materials, because they are current Student 12: Sports materials, because I like to play football</p>
<p>8. What do you like about working in small groups with your classmates instead of alone? Do you think this helps you learn differently? Why?</p>	<p>Student 1: I like working with my classmates because we can share time and knowledge. Student 2: When I work with another person, I enjoy the work Student 3: When I share my knowledge, I like to talk about what I like best Student 4: I like because I share time with other person Student 5: I like because I can do different things Student 6: I like because I can learn and share my own knowledge Student 7: I like because I enjoy Student 8: I don't like working with my classmates Student 9: I like because I can represent what I know Student 10: I like because I feel free and happy Student 11: I like because I can share with my friends Student 12: I like working with my classmates, but sometimes I prefer to work alone</p>
<p>9. When do you feel more focused on your schoolwork? Is there anything in</p>	<p>Student 1: When something interests me Student 2: When we talk about sports Student 3: When we go out at the park or other spaces Student 4: When we share a worksheet with other classmate</p>

particular that helps you focus better?	<p>Student 5: When the teacher shows a video</p> <p>Student 6: When I watch a video</p> <p>Student 7: When I practice a song, a dance or a presentation</p> <p>Student 8: When I talk about a topic</p> <p>Student 9: When we expose a topic</p> <p>Student 10: When we watch videos</p> <p>Student 11: When we use technology</p> <p>Student 12: When we play</p>
10. Do you remember any time you discovered something new while working in class? What did you learn and how did that discovery make you feel?	<p>Student 1: I remember when I got to school, and everything was different from my previous school. Here we are spoken a lot in English and every day we have this class. That made me feel bad because I didn't understand many things and I didn't know what to do in class</p> <p>Student 2: I remember that before we worked a lot in notebooks and now the classes are different. Now I like classes more because I don't like writing</p> <p>Student 3: I remember when we had to change the schedule because there were more classes in English and I liked that because we could learn arts, science and mathematics, I like it because now the classes are more fun.</p> <p>Student 4: I remember in one class we had to bring the computer to do a test and that class was very different from the others.</p> <p>Student 5: I remember that when we went to third, we had to present a virtual exam in English, I hardly understood anything, but now as we must present it every year it is easier</p> <p>Student 6: No, I don't remember anything new</p> <p>Student 7: I remember the art exhibitions we do in front of our parents, which makes me very happy because I can show my work and speak in English. My parents are proud of that</p> <p>Student 8: I remember we marked the notebooks in English, that was fun because I was very creative</p> <p>Student 9: I remember science day, we had to prepare a lot for the presentations and then everyone congratulated us</p> <p>Student 10: No, I don't remember anything new</p> <p>Student 11: I remember art day, when our parents came to school, that was so much fun</p> <p>Student 12: I remember when we sang for our mothers, the rehearsals with the English teacher were very long and we had to practice at home, that was a bit boring</p>

Source. Own elaboration

Interview Analysis-Montessori Method

The survey of fourth grade students of the educational institution Liceo Psicopedagógico Montessori, with the aim of exploring their favorite activities to identify how they would like to see each of the subjects, provides information about students' communication tastes and abilities.

The results can be divided into three groups according to the quality of the answers. Keep in mind that these are groups of answers, not of students, since the interview was done with each of them.

Group 1:

Within this group, there are those students who demonstrate an ability to express their ideas and preferences clearly and argumentatively. Their responses were organized and consistent, suggesting a high level of cognitive maturity and communication skills developed for their age. They showed a solid understanding of their preferences and convincingly explained why they enjoy certain activities or teaching methods. These students exhibit a promising ability for critical thinking and verbal expression, indicating a high potential in the development of their academic and communicative skills.

Group 2:

This group of students provided more detailed answers than Group 1. Their responses were shorter and less argumentative. Although they expressed their preferences, they did not support them with solid arguments or specific examples. These students may be developing their communication and expression skills. It would be beneficial to provide them with additional opportunities to strengthen their writing and argumentation skills as they advance in their education.

Group 3 - Lack of Argumentative and Writing Skills:

This group of students faces significant challenges in terms of argumentative and writing skills. Their responses lacked structure and clarity, making it difficult to understand their preferences and reasons. These students need additional support to develop basic writing and expression skills. It is important to provide them with specific learning resources and opportunities to help them improve on these fundamentals.

The survey revealed significant variability in the communication and expression skills of fourth graders. While some children demonstrated a high level of argumentative and writing skills, others were at different stages of development in these areas. These results underline the importance of adapting teaching strategies to meet the individual needs of students and providing additional support to those who require stronger development of their communication skills.

Table 10

Transcript of survey answers - CLIL method

	Questions	Students' Answers
CLIL Method	1. Do you remember the first time in school that you learned something in another language besides Spanish? What did you learn and how did you feel about it?	<p>Student 1: I remember when we started watching video about art in English and although I understood many things, I also had some doubts.</p> <p>Student 2: I remember when the teacher spoke to us during the whole class only in English, that was strange, but I like it and now I can talk some things in English</p> <p>Student 3: That was strange, we had to ask many times the same thing</p> <p>Student 4: That was strange, we had to ask many times to understand what we should do</p> <p>Student 5: When we bought the science and financial education books, I thought they were in Spanish and when I saw that it was all in English, I thought it would be very difficult to be able to develop the activities</p> <p>Student 6: When we started learning other subjects in English, I found it very interesting and something different from other schools</p> <p>Student 7: When we started learning other subjects in English, I found it very funny</p> <p>Student 8: That was strange, we didn't understand all the information</p> <p>Student 9: That was strange, we had to ask many times to understand what we should do</p> <p>Student 10: When we started learning other subjects in English, I found it very funny, and I think I learned this language a lot</p> <p>Student 11: The first time I had to exhibit an artwork in English was very challenging for me</p> <p>Student 12: The first time we presented our works, and we should speak in English I felt very nervous</p> <p>Student 1: The activity that I liked the most was the exhibition of art and science</p>
	2. Sometimes, in some subjects, pictures, songs or games in another language are used to learn. Do you remember any such activity? What	<p>Student 2: I like to watch videos in English, but I feel that they speak very fast</p> <p>Student 3: The activity that I like most is when we listen to a song, and we must complete spaces with words or phrases that we hear</p>

<p>did you do and what did you like about it?</p>	<p>Student 4: I like when we learn songs in English because it's fun Student 5: When teachers show us, pictures is interesting, and I like to listen to vocabulary Student 6: I like the art exhibition Student 7: I like when we talk about a topic in class Student 8: I like when we share experiences of trips Student 9: I like the science day Student 10: The best activity has been to represent the professions and dress to represent what we wanted to be Student 11: I like when we watch videos because I can see myself through pictures what we are hearing Student 12: I like the science day because it was a different day</p>
<p>3. Have you noticed any difference between learning something in Spanish and learning it in another language? What things do you find different or interesting when learning in another language?</p>	<p>Student 1: All things are the same, but in different language Student 2: It is different because all the words are strange Student 3: I like English, and I like learning vocabulary and grammar Student 4: When I grow up, I want to go to another country, that's why I like that we talk in English and that we can learn Student 5: Learning in Spanish and English is different because they are not the same words Student 6: The topics are the same but to understand we must know English Student 7: Arts it is easy because it is very similar in both languages Student 8: Everything is different in Spanish and English, words, sentences and activities Student 9: If they explain me the topics in Spanish it is very easy, but in English sometimes I do not understand everything Student 10: I think everything is the same, for example do a sum or subtraction in English is the same, only the words and pronunciation of the numbers change Student 11: Learning in Spanish and English is different because it is not the same grammar Student 12: It is easy because in both languages we can learn everything about the subjects</p>
<p>4. Sometimes words are mixed in Spanish and another language during classes. Do you ever remember hearing different words while you were learning something? What do you think about that?</p>	<p>Student 1: I always hear new words in Spanish and English Student 2: Sometimes I understand the explanations, but I don't know all the words I hear Student 3: Words sometimes look alike, for example: car Student 4: When the words are similar in Spanish and English, I understand them easier Student 5: Sometimes I try to speak in English and if I don't remember some words, I say them in Spanish</p>

5. Imagine you must learn about an interesting topic, but this time, you would learn it in another language. What do you think that experience would be like? Would you be excited or worried? Why?

6. What do you think of classes where you learn in a language other than Spanish?

Student 6: When we do not understand the information well the teacher speaks to us in Spanish or tries to make mimics to understand

Student 7: The words are very different and when someone speaks in English, I think they speak very quickly

Student 8: I have already learned many words in English, but there are some that I do not know

Student 9: In the videos it is easy to identify the vocabulary and understand that it is a story

Student 10: In all classes we write words in English, for example homework and the date of every day

Student 11: All teachers tell us words in English, but we already know what they mean

Student 12: In English class we always hear everything in that language and understand most things

Student 1: Excited, because is an interesting topic.

Student 2: Excited, because I like English

Student 3: Worried, because I don't understand all words in English

Student 4: Worried, because I feel that I can't understand very well

Student 5: Excited, because I like learning

Student 6: Excited, because if I don't understand I can ask

Student 7: Excited, because I like the new things

Student 8: Worried, because I need to improve my listening

Student 9: Scared, because sometimes I don't understand everything, and I can interpret the information differently

Student 10: Excited, because I like English

Student 11: Excited, because It is no common

Student 12: Worried, because I don't like to learn in another language, I prefer to learn in Spanish to understand and ask, after knowing, I can talk about the subject in English

Student 1: They are funny

Student 2: I like classes in English

Student 3: Sometimes it is difficult, but it is good to learn a new language

Student 4: The English classes are interesting

Student 5: This year I learned more, and I like it because we no longer write so much in the notebook

Student 6: This year the classes have been more dynamic, and we have improved our English skills

Student 7: They are funny

Student 8: They are interesting

Student 9: I like art, math and science in English because they are more fun than in Spanish

Student 10: English classes are very innovative and that makes us different from other schools

Student 11: The English classes are different and interesting

7. In what subject do you enjoy most when using another language to teach?	Student 12: The English classes are different now Student 1: Art Student 2: Science Student 3: Math Student 4: Math Student 5: Art Student 6: History Student 7: Financial education Student 8: Math Student 9: Technology Student 10: History Student 11: Science Student 12: Math
8. What suggestions or improvements would you have for classes in which another language is used	Student 1: We can put on the wall many pictures with the word in English to learn better Student 2: We can practice vocabulary before classes Student 3: Teachers can explain in Spanish and in English Student 4: Teachers can explain in Spanish and then in English to understand better Student 5: We can listen to songs in English to improve our vocabulary Student 6: We could choose activities that we like and learn all the vocabulary related to the topic Student 7: Use of pictures along with words and meaning Student 8: Teachers can explain in Spanish Student 9: Teachers can give us the instructions in Spanish Student 10: we could use mimics and representations that allow us to understand the information Student 11: We could watch videos and listen to audios, songs or stories before starting the class Student 12: Teachers can explain in Spanish and then in English to understand

Source. Own Elaboration

Survey analysis CLIL method

This survey was conducted with fourth grade students. The purpose of this was to explore their experiences and opinions on learning a language other than Spanish. An analysis of the responses provided is presented below:

Question 1: Do you remember the first time in school that you learned something in another language besides Spanish? What did you learn and how did you feel about it?

8 of the children responded in a structured way, mentioning specific examples, such as learning numbers in English. They expressed excitement about learning something new. 3

children showed difficulties in writing their answers but managed to remember similar experiences. 1 child could not specifically argue his answer in this question.

Question 2: In some subjects' pictures, songs or games in another language are sometimes used to learn. Do you remember any such activity? What did you do and what did you like about it?

Most children remembered activities with pictures, songs or games in another language. They mentioned specific examples, such as English songs or French word games. They noted that these activities were fun.

Question 3: Have you noticed any difference between learning something in Spanish and learning it in another language? What things do you find different or interesting when you learn in another language?

Most children noted differences and mentioned that learning in another language allowed them to know new words and cultures.

Question 4: Sometimes words are mixed in Spanish and another language during classes. Do you remember ever hearing different words while learning something? What do you think about that?

Most children recalled hearing words in other languages during classes. Most found it interesting and enriching, although some mentioned that it was sometimes confusing.

Question 5: Imagine that you must learn about an interesting topic, but this time you would learn it in another language. What do you think that experience would be like? Would you be excited or worried? Why?

Most children expressed excitement at the idea of learning about an interesting topic in another language. They mentioned that it would be an exciting and challenging experience.

Question 6: What do you think of classes where you learn in a language other than Spanish?

Children generally expressed a positive opinion about classes where another language is used. They noted that they like to learn about other cultures and that they find these classes interesting.

Question 7: In what subject do you enjoy most when you use another language to teach?

Students mentioned that they enjoy foreign language classes, such as English or French, more when they are used to teach.

Question 8: What suggestions or improvements would you have for classes in which another language is used?

Most students offered specific suggestions, indicating their desire for more interactive activities and a deeper exploration of different countries and cultures. In summary, most children displayed a positive attitude towards learning other languages at school. While some students faced challenges in writing and expressing their thoughts, their responses demonstrated a genuine enthusiasm for learning and an appreciation of linguistic and cultural diversity. This suggests that activities and classes involving other languages have a positive impact on their education and intercultural development.

5.2.4 Journal

This instrument collected important information during the implementation of the didactic sequence and based on these journals, one per session, the analysis of this could be developed.

Table 11

Journal first session

The CLIL method in bilingualism	
Date of observation	FIRST SESSION- SCIENCE

<p>Description of the observed activity</p> <p>Objectives of the activity</p> <p>Materials used</p> <p>Role of the student and teacher</p> <p>Duration of the activity</p> <p>Observations</p> <p>Student participation and focus</p> <p>Interaction with other students</p> <p>Level of understanding of English</p> <p>English communication skills</p> <p>Application of the contents of other subjects in English</p> <p>Response to the CLIL method</p> <p>Benefits and impact of the CLIL method on the teaching-learning of English</p> <p>Effective integration of content from other subjects in English</p> <p>Levels of understanding and application of the contents</p> <p>Key factors for the success of bilingual learning</p> <p>Recommendations to improve the learning experience</p> <p>Conclusions</p>	<p>Objective of the Activity:</p> <p>In this activity, the main objective was to enrich the vocabulary of students on topics related to nature and natural phenomena using the CLIL (Integrated Learning of Foreign Contents and Languages) method as a pedagogical approach.</p> <p>Description of the Activity:</p> <p>Class starts (9:00 a.m.): I greeted the students and explained the purpose of the activity.</p> <p>I introduced the concept of "CLIL" and how it would help us learn about nature in English.</p> <p>I showed images of nature and natural phenomena in a presentation to stimulate students' interest.</p> <p>First Part: Vocabulary (9:30 a.m. - 10:30 a.m.):</p> <p>I presented a list of key words related to nature and natural phenomena, such as "hurricane," "rainforest," "earthquake," "volcano," "ocean," "forest," "desert," etc.</p> <p>The students heard the pronunciation and repeated the words after me to improve their pronunciation. I used pictures and picture cards to help students associate words with their meanings.</p> <p>Part Two: Group Discussion (10:30 a.m. - 11:15 p.m.): I divided students into small groups and assigned each group a natural phenomenon or element of nature.</p> <p>The groups discussed and shared what they knew about their topic in English. I encouraged interaction in English and helped clarify concepts. Each group presented their findings to the rest of the class in English.</p> <p>Third Part: Reflection on the Activity:</p> <p>The activity was highly participatory for students. Through the CLIL Method, they were able to enrich their English vocabulary while exploring nature-related topics. Some students initially struggled with pronunciation, but as the activity progressed, they improved.</p> <p>The group discussion allowed students to share knowledge and express themselves in English, which increased their confidence in the language. The creation of posters gave them the opportunity to apply the vocabulary creatively.</p> <p>Lessons Learned:</p> <p>The CLIL Method is an effective tool for teaching vocabulary in context and fostering communication in English. Small group interaction allows students to learn from each other and practice the language more comfortably. The combination of visual images and practical activities proved to be very effective for vocabulary learning.</p> <p>Next Steps: Continue implementing the CLIL Method in other areas of the curriculum to strengthen integrated learning of foreign content and languages. Explore more practical activities that allow students to apply their vocabulary in real situations. This activity was a positive step towards the enrichment of the students' English vocabulary and their development in the language.</p>
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Signature of the observer

Source. Own Elaboration

Table 12

Journal second session

The CLIL method in bilingualism	
Date of observation	SECOND SESSION- MATHEMATICS
Description of the observed activity	Description of the Activity:
Objectives of the activity	Today, we carried out a mathematical problem-solving activity using the CLIL (Integrated Content and Foreign Language Learning) method. The main objective of this activity was to develop the problem-solving skills of fourth grade students, while encouraging the use of English as a second language.
Materials used	
Role of the student and teacher	
Duration of the activity	
Observations	Development of the Activity:
Student participation and focus	Class start (9:00 AM): The activity began with a brief introduction to the key concepts of solving mathematical problems, where English was used as the main means of communication from the beginning to introduce students to the language.
Interaction with other students	Mathematical problems (9:15 am to 11:30 am): The first mathematical problem was presented in English, where the application of mathematical concepts such as addition and subtraction was required. Students worked in groups to solve the problem and presented their solutions in English.
Level of understanding of English	Personal Reflections:
English communication skills	This activity proved to be highly effective in encouraging problem solving and the use of English in a mathematical context. I noticed that students were enthusiastic and engaged throughout the activity, indicating that they were enjoying the practical and challenging approach of teaching mathematics.
Application of the contents of other subjects in English	I also noticed that as the activity progressed, students gained confidence in their ability to communicate in English while solving mathematical problems. This integration of language and mathematical concepts seems to be an effective pedagogical strategy to improve both the students' mathematical and linguistic skills.
Response to the CLIL method	
Benefits and impact of the CLIL method on the teaching-learning of English	
Effective integration of content from other subjects in English	
Levels of understanding and application of the contents	
Key factors for the success of bilingual learning	
Recommendations to improve the learning experience	
Conclusions	
Signature of the observer	
Source. Own Elaboration	

Table 13

Journal third session

The CLIL method in bilingualism	
Date of observation	THIRD SESSION- SOCIAL SCIENCE
Description of the observed activity	Description of the Activity:
Objectives of the activity	Today, we carried out a discussion activity on the theme of the
Materials used	Discovery of America and the first and second world war using the
Role of the student and teacher	CLIL Method (Integrated Learning of Contents and Foreign
Duration of the activity	Languages). The main objective of this activity was to encourage
Observations	critical thinking and expression in English on an important
Student participation and focus	historical topic.
Interaction with other students	Development of the Activity:
Level of understanding of English	

English communication skills	<p>Beginning (9:00 AM): The activity began with a brief introduction to the topic of the Discovery of America and the first and second world wars, using English as the main means of communication from the beginning, to communicate with students.</p> <p>Preparation (9:15 AM): Students were divided into three groups, each having one of the historical situations. Each group received information and resources in English related to their respective topics. Students were encouraged to research and prepare solid arguments for the debate.</p> <p>First Debate (10:00 AM): The first debate focused on arguments in favor of the Discovery of America and wars. Students presented their arguments in English, using relevant vocabulary and grammatical structures. Participation and respect for opposing views were encouraged.</p> <p>Second Debate (10:45 AM): After a brief pause, the second debate took place, where students who were against the Discovery of America and the wars, presented their arguments in English. Again, effective communication and respect for different opinions were promoted.</p> <p>Open Discussion (11:30 AM): The activity concluded with an open discussion in English, where students could express their opinions and reflect on the arguments presented on both sides of the debate. Conversation was facilitated and students were encouraged to use specific vocabulary and appropriate grammatical structures.</p> <p>Personal Reflections: This discussion activity about the Discovery of America and the First and Second Wars was an exceptional learning experience for both students and me as a teacher. I noticed that the students were committed to defending their positions in English. It was clear that they had read and prepared for the debate effectively, demonstrating a high level of commitment to the learning process. In addition, I noticed that students were using English effectively to express their ideas and arguments. This activity gave them a valuable opportunity to apply their language skills in an academic and discursive context. The CLIL Method proved to be an effective pedagogical strategy for integrating historical content and developing English skills. It promoted critical thinking, speaking and understanding of historical concepts in an enriching learning environment. In the future, I plan to continue using the CLIL Method for activities that encourage critical thinking and expression in English on historical and contemporary issues. I believe that this methodology not only enriches the learning experience of students, but also prepares them to participate in informed and respectful debates in an increasingly globalized world.</p>
Application of the contents of other subjects in English	
Response to the CLIL method	
Benefits and impact of the CLIL method on the teaching-learning of English	
Effective integration of content from other subjects in English	
Levels of understanding and application of the contents	
Key factors for the success of bilingual learning	
Recommendations to improve the learning experience	
Conclusions	
Signature of the observer	

Source. Own elaboration

Table 14

Journal fourth session

<p>Date of observation</p> <p>Description of the observed activity</p> <p>Objectives of the activity</p> <p>Materials used</p> <p>Role of the student and teacher</p> <p>Duration of the activity</p> <p>Observations</p> <p>Student participation and focus</p> <p>Interaction with other students</p> <p>Level of understanding of English</p> <p>English communication skills</p> <p>Application of the contents of other subjects in English</p> <p>Response to the CLIL method</p> <p>Benefits and impact of the CLIL method on the teaching-learning of English</p> <p>Effective integration of content from other subjects in English</p> <p>Levels of understanding and application of the contents</p> <p>Key factors for the success of bilingual learning</p> <p>Recommendations to improve the learning experience</p> <p>Conclusions</p>	<p>FOURTH SESSION- ART</p> <p>Description of the Activity:</p> <p>Today we carry out activity focused on the exploration of forms of artistic representation using the CLIL Method (Integrated Learning of Contents and Foreign Languages). The main objective of this activity was to develop artistic appreciation and English language skills of fourth graders.</p> <p>Development of the Activity:</p> <p>Beginning (9:00 AM): The activity began with a brief introduction to different artistic movements, such as impressionism, cubism and surrealism, using English as the main means of communication from the beginning to immerse students in the language.</p> <p>Visual Exploration (9:15 AM): Students were shown photographs of works of art representative of these artistic movements. Students carefully observed each work and were encouraged to ask questions in English to arouse their interest and curiosity.</p> <p>First Analysis (10:00 AM): Small groups were formed, and each group was assigned a work of art to analyze in detail. Students were to describe the work, identify key elements and discuss its meaning in English. This encouraged communication and the use of artistic vocabulary in English.</p> <p>Artistic Creation (10:45 AM): In the second part of the activity, each student was assigned a specific artistic movement. Then, they had to create a work of art inspired by that movement using different artistic means, such as painting, drawing or collage. Each student explained in English how his work reflected the characteristics of the assigned movement.</p> <p>Exhibition and Discussion (11:30 AM): The activity ended with an exhibition of the works of art created by the students. Each student shared his work and explained in English how it related to the assigned artistic movement. This promoted oral expression and understanding of artistic concepts in English.</p> <p>Personal Reflections:</p> <p>This activity of exploring forms of artistic representation using the CLIL Method proved to be highly effective in developing students' artistic and linguistic skills. I noticed that the students were enthusiastic and motivated to learn about different artistic movements and to create their own works of art.</p> <p>In addition, I noticed that students were using English effectively to describe, analyze and explain their artworks and artistic movements in English. This activity gave them a valuable opportunity to apply their vocabulary and grammatical structures in an artistic context.</p> <p>The CLIL Method proved to be an effective pedagogical strategy for integrating artistic content and developing English skills. Promoted artistic appreciation, oral expression and understanding of artistic concepts in an enriching learning environment</p>
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Signature of the observer

Source. Own Elaboration

5.2.5 Analysis of Didactic Sequence

Didactic sequence analysis: First Activity - Science in English.

The development of the activity "SCIENCE IN ENGLISH" was highlighted by different aspects that reflected its positive impact on the learning process of the twelve participants. First, it was evident that the students showed an exceptional level of interest and commitment throughout the activity. This high participation and enthusiasm evident in each of the activities proposed by the teacher indicate that the activity managed to effectively capture their attention and motivation.

One of the most notable achievements of this activity was the acquisition of a thorough knowledge of scientific concepts in English and their context. Students not only limited themselves to learning the language, but also demonstrated the ability to understand and apply technical concepts in English. This result highlights the effectiveness of the activity in not only promoting language proficiency, but also in enriching the understanding of topics related to science in a bilingual context.

The strategy of group discussion and word play proved to be highly effective in encouraging interaction between students in English. The ability to communicate and debate in a second language is essential for the development of strong language skills. In addition, this interaction significantly enriched the learning environment, providing opportunities for the exchange of ideas and the construction of knowledge in a language other than the native language.

A crucial aspect that was highlighted during the activity was the improved confidence of participants in the use of English. Stimulating group discussion and engaging in word games provided a space where students felt safe to express themselves in English. This confidence is essential to overcome inhibitions and develop fluency in a second language.

Finally, the incorporation of creativity as a central element of the activity was particularly valuable. Word generation through clipping not only challenged students to apply their knowledge of English vocabulary, but also encouraged the expression of their individual and collective creativity.

Figure 3

Science CLIL -Evidence





Ciencias en inglés con Método CLIL.mp

Didactic sequence analysis: Second activity- Mathematics in English.

During the mathematics activity, which involved using dice for games, problem-solving, and mathematical challenges, several significant results were observed. Firstly, there was a high level of enthusiasm and participation among the students. Each participant exhibited noticeable interest in the proposed mathematical tasks, creating a dynamic learning environment.

The activity not only served to enhance math skills but also facilitated the learning of English vocabulary. Students engaged in mathematical activities within an English context, enabling them to comprehend and apply mathematical concepts in a bilingual environment. This integration of mathematics and language made a substantial contribution to their acquisition of academic and linguistic skills.

An essential aspect of the activity was communication in English. Students actively engaged in discussions and collaborated to overcome mathematical challenges using this language. This practice not only improved their English communication skills but also provided them with a valuable opportunity to apply the language in a practical and meaningful context. The continuous interaction among students while solving mathematical challenges with dice played a vital role in boosting their confidence in using English.

Figure 4

Mathematics CLIL -Evidence



Worksheet mathematical
Problem 1. solution:

1 Rta: $\frac{12}{8} = \frac{6}{4}$ Rta: for every 6 apples there are 4 pears 6:4

2 Rta: $\frac{5000}{20000}$ Rta: 20.000 is needed to buy 4 pencils

3 Rta: $\frac{40000}{28000} = \frac{10}{7}$ Rta: Juan has 12.000 left over after buying the toy

4 Rta: $\frac{32}{4} = 8$ Rta: The number of eggs reproduced daily is 64

5 Rta: $\frac{8}{16}$ Rta: What did a multiplication. The other side is 16 cm

6 Rta: $\frac{45}{180} = \frac{1}{4}$ Rta: it take 180 buses.

7 Rta: $\frac{24}{6} = 4$ Rta: Each friend get 4 cookies

8 Rta: $\frac{85}{127}$ Rta: There will be 127 books

9. Rta: $\frac{60}{5} = 12$

10. Rta: $\frac{25000}{18000} = \frac{25}{18}$

Worksheet
Mathematical problems

Group 2

Date: Tuesday, August 15, 2023

Solving Mathematical Problems with Argumentation

- There are 12 apples and 8 pears in a box. If we take out a random fruit, what is the probability that we will take out an apple? Explain how you arrived at your answer.
- If a pencil cost 5,000 and I want to buy 4 pencils, how much money do I need in total? Explain how you arrived at your answer.
- Juan has 40,000 and wants to buy a toy that costs 28,000. How much money will Juan have left over after buying the toy? Explain how you arrived at your answer.
- On a farm, there are 32 chickens and 20 ducks. If each hen lays 2 eggs a day and each duck lays 1 egg a day, how many eggs are produced in total in one day? Explain how you arrived at your answer.
- If a rectangle has one side of 8 centimeters and the other side is twice that value, how big is the other side of the rectangle? Explain how you arrived at your answer.
- If a bus takes 45 students for a ride and every seat on the bus is occupied, how many buses does it take to take 180 students in total? Explain how you arrived at your answer.
- If a package of cookies contains 24 cookies and I want to distribute them equally among 6 friends, how many cookies do each friend get? Explain how you arrived at your answer.
- In a library, there are 85 books on one shelf and 42 books on another shelf. If we want to put all the books on one shelf, how many books will there be in total? Explain how you arrived at your answer.
- If there are 60 pencils in a box and I want to divide them between 5 cases, how many pencils do each case have? Explain how you arrived at your answer.
- Ana has 25,000 and wants to buy a toy that costs 18,000. How much money will Ana have left after buying the toy? Explain how you arrived at your answer.

Remember to use clear and logical arguments to explain your answers to math problems.

Exercises

- $\frac{12}{10} =$ Rita Lee did a subtraction. She had 12 pencils, but she lost 2. So she has 10 left.
- $\frac{5000}{20000}$ Rita Lee did multiplication. I need 20000.
- $\frac{30000}{72000}$ Rita Lee did a subtraction. Juan has 30000 left after buying the toy.
- $\frac{32}{64} \times \frac{64}{84}$ Rita Lee did a multiplication and sum. There are 84 eggs.
- $\frac{8}{16}$ Rita Lee did a multiplication. The other side is 16 cm.
- $\frac{25}{100}$ Rita Lee did a multiplication. To take 100 buses.
- $\frac{240}{4}$ Rita Lee did a division. Each friend get 4 cookies.
- $\frac{85}{172}$ Rita Lee did a sum. There will be 172.
- $\frac{6015}{97}$ Rita Lee did a division. Each case have 92 pencils.

Mathematical Problems

- $\frac{72}{10}$ RTA: the probability is $\frac{72}{10} = \frac{36}{5}$
- 5,000 RTA: the cost is 20,000
- $\frac{30000}{72000}$ RTA: Juan will have 12,000 after buying the toy
- $\frac{20}{20} \times \frac{32}{84} = \frac{64}{84}$ RTA: there are 84 eggs in all.
- $\frac{8}{16}$ RTA: This centimeters is 16
- 45 RTA: it take 4 buses.
- 240 RTA: Each friend get 4 cookies
- 85 RTA: in all there will be 172 books
- 10 RTA: Have 12 pencils
- 25,000 RTA: much money 7,000

Worksheet mathematical problems solution

- Rita: $\frac{12}{10} = \frac{6}{5}$ Rita: every 6 apples there are 4 pears. 6:4
- Rita: 5000 Rita: 20,000 is needed to buy 4 pencils
- Rita: $\frac{30000}{72000}$ Rita: Juan has 12,000 left over after buying the toy
- Rita: $\frac{32}{64} \times \frac{64}{84}$ Rita: The number of eggs reproduced daily is 64.
- Rita: $\frac{8}{16}$ Rita: What did a multiplication. The other side is 16 cm.
- Rita: $\frac{45}{180}$ Rita: it take 180 buses.
- Rita: $\frac{240}{4}$ Rita: Each friend get 4 cookies
- Rita: $\frac{85}{172}$ Rita: There will be 172 books
- Rita: $\frac{6015}{97}$
- Rita: $\frac{25000}{7000}$



Source. Own Elaboration

Didactic sequence analysis: Third Activity-Social Science in English.

In the development of the Social Science activity, students participated in a debate and expressed their opinions on the discovery of America in English, showed some results. First, the enthusiasm and commitment of the students was noted. Each of the participants showed interest in the topic and actively participated in the discussion, which contributed to a dynamic and stimulating learning environment.

The activity was highlighted using English in a social science context; students not only participated in the discussion but were also actively encouraged to use vocabulary and

grammatical structures related to history during the debate. This gave them the opportunity to apply their language knowledge in a specific academic context, which is essential for meaningful learning.

Communication in English was a key part of this activity. Students expressed their views, argued their positions and participated in discussions in this language. This contributed significantly to the development of their communication skills in English, as well as their ability to express ideas and opinions clearly. The interaction between students during the debate also played a crucial role in confidence in himself to speak English. The regular practice of expressing oneself in a second language in a collaborative and respectful learning environment is essential to overcome barriers and improve English fluency.

In addition, the historical aspect of the activity enriched the learning experience. Students had the opportunity to explore historical events from different perspectives and develop critical skills when analyzing the discovery of America and some aspects of the first and second world wars.

This not only promoted an understanding of history, but also stimulated critical thinking and logical reasoning. In short, the activity in Social Sciences, where students participated in a debate on the discovery of America and the first and second world wars in English, proved to be a positive approach to interaction and communication based on English language skills and history.

Figure 5

Social Science CLIL-Evidence



Source. Own Elaboration

Didactic sequence analysis: Fourth Activity -Art in English.

First Session

This experience was designed to understand aspects of different artistic movements through communication in English, and its results highlight its effectiveness. First, there was a high level of interest and active participation by students. The images of the works of art of different artistic movements were a visual stimulus. This focus on visual stimulation helped

capture the attention of students from the beginning and generated an enriching learning environment.

One of the characteristics of this activity was the focus on communication in English. The students not only observed the artwork but were also encouraged to ask questions and actively participate in English. This aspect not only improved their communication skills in the language, but also allowed them to explore a specific vocabulary related to the arts and artistic movements.

The questions during the activity were an essential element to arouse the interest of the students. These questions encouraged reflection, participation and interaction in English. Students were motivated to express their opinions and debate about the artworks, which contributed to the development of critical skills and understanding of the art movements.

Interaction between students during the activity also played a key role in creating a collaborative learning environment and strengthening their confidence in the use of English. The continuous practice of communicating in English is essential for developing fluency in a second language.

Second Session

The second session of the activity in the Art class proved to be enriching and effective in terms of learning and student participation. This phase of the activity involved a level of commitment and creativity on the part of the students, since they were assigned the task of creating works of art based on specific artistic movements and presenting them in English to their classmates.

Students' interest in the creation of their works of art was noted. The assignment of forms of artistic representation and inspiration in specific artistic movements worked as a creative stimulus. Each student approached the task with enthusiasm, resulting in a variety of unique and significant works of art. The focus on the presentation of artworks in English had a significant

impact on the development of students' language skills. During these presentations, students explained in English how their works of art were inspired by a particular artistic movement. This practice strengthened their ability to express artistic ideas and concepts in a second language, which is essential for communication in a global context.

Figura 6

Art CLIL-Evidence



Artes en inglés con
Método CLIL.mp4





Source. Own Elaboration

5.2.6 Post Test Analysis

The implementation of the CLIL (Integrated Learning of Contents and Foreign Languages) method at the Liceo Psicopedagógico Montessori School has led to an evolution in the language skills of the students. Description assessments were carried out on different aspects, such as characters, animals, environments and peers, and the results showed positive progress.

Compared to the diagnostic test, a substantial improvement was observed in the structuring and elaboration of the descriptions in English. Students demonstrated an understanding of how to organize their ideas and present them coherently and effectively. This

improvement testifies to the positive impact of the CLIL method on your English communicative competence.

One of the notable areas for improvement was character description. The students not only identified physical and personality characteristics, but also delved into their descriptions. This indicates a higher level of understanding of English literature and the ability to apply vocabulary and grammatical structures in real situations.

In addressing the description of environments, students presented an understanding related to the places they described. His descriptions became more enriched with details, demonstrating a stronger contextual understanding. The description of peers also showed an improvement in the structure and vocabulary used. The students not only limited themselves to describing physical appearances, but also focused on personalities and interpersonal relationships. This indicates a greater communicative competence in English.

The post-test allowed to observe and evidence an improvement in the description of different characteristics in English by fourth grade students; this improvement is attributed to the integrated approach of content and language, which has allowed students to develop a deeper and more applied understanding of the language. These advances not only strengthen your language skills, but also enrich your understanding of various aspects of life and knowledge in general.

5.2.7 Discussion of the results obtained

The discussion of the results obtained after implementing the CLIL method at Liceo Psicopedagógico Montessori School reveals an encouraging outlook regarding the development of linguistic and communicative skills in fourth-grade students. Below, we analyze and discuss the main findings:

1. Improvement in Linguistic Skills: The results clearly demonstrate that students have experienced a substantial improvement in their English linguistic skills after the

application of the CLIL method. This improvement is reflected in the structuring and elaboration of more coherent and effective descriptions in the foreign language. This indicates that the CLIL method has been effective in enhancing the students' communicative competencies.

2. **Deep Understanding of English Literature:** The increase in the quality of character descriptions, which includes not only physical characteristics but also personality aspects, suggests that students have achieved a deeper understanding of English literature. This skill is not only fundamental for language proficiency but also fosters an appreciation for literature and the ability to analyze characters more critically.
3. **Enhanced Contextual Understanding:** The improvement in describing settings with richer details signifies a stronger contextual understanding on the part of the students. This implies that they are not only acquiring vocabulary and grammatical structures but are also capable of applying them in concrete situations and enriching their descriptions with relevant information.
4. **Development of Social and Emotional Skills:** The improved description of peers focusing on personalities and interpersonal relationships suggests that students are not only acquiring linguistic skills but also developing social and emotional skills. This is crucial for effective communication in English and for interacting with native speakers or in international contexts.
5. **The Role of the CLIL Approach:** The overall improvement in linguistic and communicative skills is directly attributed to the Content and Language Integrated Learning (CLIL) approach. This approach has proven effective in providing students with a deeper and applied understanding of the language, going beyond mere

vocabulary and grammar acquisition. It is evident that CLIL has enriched the students' learning experience and has had a positive impact on their holistic development

In summary, the results of this research indicate that the implementation of the CLIL method at Liceo Psicopedagógico Montessori School has been successful in strengthening linguistic skills, enhancing literature comprehension, improving contextual competence, and fostering the development of social and emotional skills in fourth-grade students. These findings support the importance of continuing to use the CLIL approach in the educational process to enhance students' comprehensive education in the realm of foreign languages.

6 Conclusions

According to the research results, the Montessori and CLIL methods represent different educational approaches that address different aspects of the learning process. Each method offers unique benefits and emphasizes different aspects of education. For example, at the Liceo Psicopedagógico Montessori school students develop linguistic proficiency while also gaining a deeper understanding of the subject matter, however, the following aspects stand out from each method:

Montessori Method:

- It emphasizes self-directed learning and independence of the child.
- It is based on the idea that children have a natural urge to learn through exploration and interaction with their environment.
- It provides an environment prepared with specific educational materials to encourage practical and sensory learning.
- It promotes age mixing in the classroom to foster collaboration and mutual support among students.
- It focuses on the holistic development of the child, including academic, social and emotional aspects.

CLIL method:

- It integrates content learning and learning a foreign language into a single educational experience.
- It aims to improve both language skills and knowledge of an academic subject.
- It can be applied in a variety of subjects, allowing students to improve their language skills while studying subjects of interest to them.
- It requires careful planning to ensure that content and language objectives are balanced.

Now, learning English is an essential skill in today's globalized world, and different pedagogical methods seek to improve this process. Two of these are the Montessori and the CLIL Methods, each with its own characteristics and orientations in teaching. Here are some conclusions about the impact of these methods on learning English from the results of this research:

Montessori Method:

Individualized approach: The Montessori Method focuses on individualized learning, which allows the teaching of English to be adapted to the needs of each student. This can be beneficial for those students who require a personalized approach.

Self-directed learning: The method promotes autonomy and self-regulation in learning. Montessori students can explore English through specific materials and activities that interest them, which can increase their motivation and commitment.

Development of communication skills: The focus on oral communication and social interaction in the Montessori environment can result in greater fluency and confidence in speaking English.

CLIL method:

Content and language integration: The CLIL Method teaches curriculum content through English, giving students the opportunity to improve their language skills while learning other subjects, such as science or history.

Real and relevant context: When learning English in the context of academic subjects, students experience the language in authentic and meaningful situations, which can increase their motivation and linguistic understanding.

Preparing for the Real World: The CLIL approach can prepare students to face language challenges in international academic and professional environments, where English is fundamental.

Diversity of methods: Both the Montessori and the CLIL Methods offer unique pedagogical approaches to learning English, adapting to different learning styles and needs of students.

Motivation and participation: Both methods can increase student motivation and participation by making the learning process more interactive, relevant and student-centered.

Integral development: Both the Montessori and the CLIL Methods not only focus on the acquisition of language skills, but also seek the personal and cognitive development of students.

Context and environment: The choice between these methods may depend on the educational context, available resources, and specific English learning goals.

Finally, both the Montessori and the CLIL Methods offer valuable and effective directions for learning English, but the choice between them will depend on pedagogical preferences, the needs of the students and the educational objectives of each institution.

Conclusions based on learning sequence results

On the other hand, the results that were given in the development of the implemented didactic sequence, which was carried out in the subjects of History, Science, Mathematics, Art, and where it could be concluded that:

Exposure to a second language through innovative and student-centered approaches seems to improve language acquisition significantly.

The didactic sequence implemented, which incorporated the Montessori and CLIL methods in subjects such as mathematics, science, history and art, provided students with a

variety of didactic strategies. This could have contributed to greater motivation and commitment to the learning process, while encouraging the integration of English into various subjects.

Applying the Montessori and CLIL methods in different subjects allowed students to make connections between English learning and other subjects. The interdisciplinary can improve the understanding of concepts in all subjects, while strengthening language skills in English.

The implementation of the Montessori and CLIL methods not only had an impact on the learning of English, but also contributed to the integral development of students. The focus on exploration, collaboration and practical application of linguistic concepts in real contexts enriched their educational experience.

Finally, something to highlight is that the didactic sequence is a dynamic strategy that helps prepare for a globalized world and given the growing importance of English proficiency. This study supports the idea that approaches like Montessori and CLIL can be valuable tools to equip students with language and cultural skills relevant to the 21st century.

7 References

- Acosta, L. (2017). Clasificación y tipos de bilingüismo. Más allá de una lengua. *inesem.es/revistadigital*.
<https://doi.org/https://www.inesem.es/revistadigital/idiomas/tipos-de-bilinguismo/>
- Alba, L. (2023). *Método de la Pedagogía Científica: María Montessori*. universidad-pedagogica-nacional-mexico: <https://www.studocu.com/es-mx/document/universidad-pedagogica-nacional-mexico/teoria-pedagogica-contemporanea/metodo-de-la-pedagogia-cientifica-de-maria-montessori/7434609>
- Alegre, L. (2022). *Método CLIL para mejorar la expresión oral en inglés de estudiantes, en la institución educativa N.º 88388 Nuevo Chimbote 2021 (Trabajo de grado Doctora en Educación)*. repositorio.ucv.edu.pe:
https://repositorio.ucv.edu.pe/bitstream/handle/20.500.12692/80308/Alegre_ALA-SD.pdf?sequence=1&isAllowed=y
- Alvear, C., & Padilla, J. (2023). *El Método Montessori en la enseñanza del Idioma Inglés. (Trabajo de Grado. Licenciatura en Ciencias de la Educación, Mención Plurilingüe)*. dspace.uce.edu.ec: <http://www.dspace.uce.edu.ec/bitstream/25000/29235/1/UCE-FIL-PL-ALVEAR%20CARMEN-PADILLA%20JEYMI.pdf>
- Alzás, T., Casa, L., Luengo, R., Torres, J., & Verissimo, S. (2016). Revisión metodológica de la triangulación como estrategia de investigación. *Investigação Qualitativa em Ciências Sociais//Investigación Cualitativa en Ciencias Sociales*, 3, 639-648.
<https://doi.org/https://www.proceedings.ciaiq.org/index.php/ciaiq2016/article/download/1009/985>.
- Attard, S., Walter, L., Theodorou, M., & Chrysanthou, K. (2015). *Guía CLIL*. Lifelong Learning Programme.
- Avolio, S., & Lacolutti, M. (2006). *Enseñar y evaluar en formación por competencias laborales: conceptos y orientaciones metodológicas*. BID.
<https://doi.org/https://www.oitcinterfor.org/sites/default/files/cap8.pdf>
- Bermúdez, J., & Fandiño, Y. (2012). El fenómeno bilingüe: perspectivas y tendencias en bilingüismo. *Revista de la Universidad de la Salle*, 59, 99-111.
https://doi.org/https://www.researchgate.net/publication/262687125_El_fenomeno_bilingue_perspectivas_y_tendencias_en_bilinguismo
- Blesa, B., Cobo, F., García, M., Gehrig, R., Muñoz, P., Palacios, J., & Rodes, J. (2014). *Guía de criterios básicos de calidad en la investigación cualitativa*. repositorio.ucam.edu:
<https://repositorio.ucam.edu/bitstream/handle/10952/1097/icuali%202014.pdf?se>
- Bonilla, E., & Rodríguez, P. (2005). *Más allá del dilema de los métodos: la investigación en ciencias sociales*. Bogotá: Grupo Editorial Norma.
<https://doi.org/https://books.google.com.co/books?id=REOIWoQuAL4C&printsec=frontcover&hl=es#v=onepage&q&f=false>

- Campos, G., & Nule, N. (2012). La observación, un método para el estudio de la realidad. *Revista Xihmai*, 13(7), 45-60.
<https://doi.org/https://dialnet.unirioja.es/servlet/articulo?codigo=3979972>
- Colmenares, A., & Piñero, M. (2008). La Investigación Acción. Una herramienta metodológica heurística para la comprensión y transformación de realidades y prácticas socio-educativas. *Laurus*, 14(27), 96-114.
<https://doi.org/https://www.redalyc.org/pdf/761/76111892006.pdf>
- Congreso de la República. (2013, julio 12). *Ley 1651 de 2013*. suin-juriscol.gov.co:
<https://www.suin-juriscol.gov.co/viewDocument.asp?ruta=Leyes/1685875>
- Contreras, A. (2022). *Propuesta de un Plan Educativo para la Generación de una Cultura Bilingüe al Interior de una Institución Educativa Ubicada en el Municipio de Agustín Codazzi de Colombia. (Trabajo de Grado Magister en Gestión y Evaluación Educativa)*. repository.usta.edu.co:
<https://repository.usta.edu.co/bitstream/handle/11634/45895/2022anixcontreras.pdf?sequence=2&isAllowed=y>
- Fundación Montessori. (2023). *Método Montessori*. fundacionmontessori.org:
<https://www.fundacionmontessori.org/sobre-montessori/el-metodo/#:~:text=El%20m%C3%A9todo%20Montessori%20se%20caracteriza,el%20respeto%20y%20la%20solidaridad.>
- García, E. (2018). *Elaboración de Actividades CLIL para Educación Primaria: "Hábitats Naturales"*. gredos.usal.es:
https://gredos.usal.es/bitstream/handle/10366/137925/2018_TFG_Elaboraci%C3%B3n%20de%20actividades%20CLIL%20para%20Educaci%C3%B3n%20Primaria.pdf?sequence=1&isAllowed=y
- González, M., Kaplan, J., Reyes, G., & Reyes, M. (2010). La secuencia didáctica, herramienta pedagógica del modelo educativo ENFACE. *Universidades*(46), 27-33.
<https://doi.org/https://www.redalyc.org/pdf/373/37318636004.pdf>
- Heick, T. (2018). *3 dominios de conocimiento para el estudiante del siglo XXI*. teachthought.com: <https://www.teachthought.com/the-future-of-learning/knowledge-domains-for-the-21st-century-student/>
- Latorre, A. (2005). *La investigación-acción. Conocer y cambiar la práctica educativa*. Graó.
<https://doi.org/https://www.uv.mx/rmipe/files/2019/07/La-investigacion-accion-conocer-y-cambiar-la-practica-educativa.pdf>
- Liceo Psicopedagógico Montessori de Chocontá. (2011). *Proyecto Educativo Institucional-PEI*. Liceo Psicopedagógico Montessori de Chocontá.
- Luján, I. (2016). *AICLE / CLIL, cinco cosas que desconocías*. uv.es:
<https://www.uv.es/uvweb/master-investigacion-didactiques-especificques/es/blog/aicle/-clil-cinco-cosas-desconocias-1285958572212/GasetaRecerca.html?id=1285960399706>

- Martínez, B. (2013). *Análisis y ejemplo de propuesta de la metodología AICLE*. repositorio.unican.es:
<https://repositorio.unican.es/xmlui/bitstream/handle/10902/2867/MartinezRodriguezBeatriz.pdf?sequence=2&isAllowed=y>
- MinEducación. (2005). *Altablero. El periódico de un país que educa y que se educa*. mineducacion.gov.co: <https://www.mineducacion.gov.co/1621/article-97500.html>
- Ministerio de Educación Nacional. (2013). *Secuencias Didácticas en Matemáticas para Educación Básica Secundaria*. mineducacion.gov.co:
https://www.mineducacion.gov.co/1759/articles-329722_archivo_pdf_matematicas_secundaria.pdf
- Ministerio de Educación Nacional-MEN. (2006). *Estándares Básicos de Competencias en Lenguas Extranjeras: Inglés*. https://www.mineducacion.gov.co/1759/articles-115174_archivo_pdf.pdf
- Montessori Village. (2020). *Los cuatro principios básicos del método Montessori*. montessorivillage.es: <https://www.montessorivillage.es/principios-basicos-metodo-montessori/#:~:text=Sobre%20todo%2C%20se%20fundamentan%20los,y%20autonom%C3%ADa%20f%C3%ADsica%20y%20ps%C3%ADquica>.
- Nina, N., Colque, L., & Alata, J. (2021). El bilingüismo: análisis y reflexiones para docentes y estudiantes. *Paidagogo. Revista de Investigación en Ciencias de la Educación*, 3(2), 41-54. <https://doi.org/https://educas.com.pe/index.php/paidagogo/article/view/66/280>
- Palacios, B., Sánchez, M., & Gutiérrez, A. (2013). Evaluar la calidad en la investigación cualitativa. Guías o checklists. *Comunicaciones* 3, 3, 581-596.
<https://doi.org/https://dialnet.unirioja.es/servlet/articulo?codigo=4229112>
- Pérez, G. (1994). *Investigación Cualitativa. Retos e Interrogantes*. La Muralla S.A.
https://doi.org/https://concreactraul.weebly.com/uploads/2/2/9/5/22958232/investigacion_cualitativa.pdf
- Romero, Á. (2020). *Análisis a la efectividad del uso de las redes sociales horizontales como recurso para el aprendizaje*. dialnet.unirioja.es:
<https://dialnet.unirioja.es/servlet/articulo?codigo=8731853>
- Sampieri, R., Collado, C., & Lucio, P. (2003). *El proceso de investigación y los enfoques cuantitativo y cualitativo: hacia un modelo integral*. metodos-comunicacion.sociales.uba.ar: <http://metodos-comunicacion.sociales.uba.ar/wp-content/uploads/sites/219/2014/04/Hernandez-Sampieri-Cap-1.pdf>
- Sánchez, L. (2020). *El método Montessori en el desarrollo de la Expresión Oral del Idioma Inglés. (Trabajo de grado. Licenciatura Educación)*. dspace.uce.edu.ec:
<http://www.dspace.uce.edu.ec/bitstream/25000/21224/1/T-UCE-0010-FIL-841.pdf>
- Sánchez, M., Fernández, M., & Díaz, J. (2021). Técnicas e instrumentos de recolección de información: análisis y procesamiento realizado por el investigador cualitativo. *Uisrael*.

Revista Científica, 8(1), 113-128.

<https://doi.org/http://scielo.senescyt.gob.ec/pdf/rcuisrael/v8n1/2631-2786-rcuisrael-8-01-00107.pdf>

Saura, A. (2018). CLIL: Una exitosa propuesta metodológica para fomentar el bilingüismo. .

Publicaciones Didácticas (E-Journal)(100), 515-529.

<https://doi.org/https://core.ac.uk/reader/235851462>

Visauta, B. (1989). *Técnicas de investigación social. Técnica de Recogida de datos*. unavarra.es:

http://www.unavarra.es/personal/vidaldiaz/pdf/tipos_encuestas.PDF

8 Annexes

Annex A Participant Observation

Participant Observation Table

Montessori Method

School: Liceo Psicopedagógico Montessori

Grade: Fourth

Student name:

Date:

Session number:

Objective: To value the teaching and learning of English through the Montessori Method, throughout the development of the didactic sequence.

Category of the observation	Observation Indicators	Observations
MONTESSORI METHOD		
Learning environment	There is an optimal organization of the Montessori classroom	
	There is availability and access to Montessori materials	
	There is an excellent distribution of space for independent work	
Active participation	There is evidence of an optimal degree of participation by the student in the proposed activities.	
	The student has a good level of autonomy	
Communication	The student uses an appropriate language within the bilingual context.	
	There is good student-teacher interaction.	
	The teacher is a guide during the learning process.	
Concentration	A good degree of concentration of the student in the proposed activities is evidenced.	
	The student can work independently.	
Adaptation to the Montessori Method	The student uses Montessori materials properly.	
	The student understands and applies the Montessori principles.	
	The student demonstrates improvements in academic development.	
	The student develops critical thinking skills.	
	The student strengthens independence and responsibility.	

Participant Observation Table

CLIL Method

School: Liceo Psicopedagógico Montessori

Grade: Fourth

Student name:

Date:

Session number:

Objective: To register the detailed observations in each category while fourth grade students are observed in a CLIL environment within the school, allowing to capture the key aspects of CLIL implementation and bilingual dynamics.

Category	Subcategory of observation	Observation Indicators	Observations
MÉTODO CLIL			
Participation and collaboration: This evaluates the student's active and collaborative participation in CLIL activities, his/her ability to work in a team and contribute constructively in the learning of the content and English	Active participation	The student actively participates in the CLIL activities.	
		The student uses English during the proposed activities.	
		Collaboration and teamwork are evident in CLIL tasks	
	Motivation	The student shows interest and enthusiasm for learning the different contents and the English language.	
		The student is enthusiastic about exploring the culture and values of the English language and mother tongue community	
		The student understands and respects his classmates and teacher.	
Use of language This evaluates the student's ability to apply the English language in the context of the subject or thematic content, using specific terminology and relating the content	Vocabulary and grammar	The student has knowledge and uses in an appropriate way the vocabulary and grammatical structures related to the thematic content, both in comprehension and expression contexts.	
	Listening comprehension	The student understands instructions, dialogues and recordings in English related to the specific thematic content.	

to the appropriate language.	Reading comprehension	The student understands texts in English related to the thematic content.	
		The student identifies important information and answers comprehension questions.	
	Oral expression	The student communicates orally in English, using appropriate vocabulary and grammatical structures, participating in conversations, describing images or presenting information on a specific topic.	
	Written expression	The student writes in English, using appropriate vocabulary and grammar, expressing ideas in a coherent and organized way, and applying the thematic content in writing.	

Annex B Diagnostic Test

DIAGNOSTIC TEST

Objective: To identify the strengths and weaknesses of the students, to design teaching and learning strategies that fit their individual needs, considering the Montessori Method, versus the CLIL method for the strengthening of bilingualism / second language in the Liceo Psicopedagógico Montessori School, Chocontá Cundinamarca.

Resources: Recordings. Interactive material (cutouts, cards with graphics). Photocopies. White sheets.

Duration: One hour for each proposed phase. Total time: Two hours.

Activity: The following test is implemented as an instrument to initially recognize the knowledge, skills and competencies of the students of the educational institution, according to the area of English, allowing to collect data that allow to analyze the strengthening of a second language, forging bilingualism in fourth grade students of primary. To fulfill the assigned purposes, the diagnostic test will be divided into two phases (use of the Montessori method and use of the CLIL method), emphasizing that it is not performed with evaluative intentions.

Diagnostic Test

Phase one. Montessori Method

➤ **Theoretical-practical:**

Listen to a short story and answer comprehension questions.

My daily routine

My name is Haley. Today I will tell you about my daily routine. I get up in the morning then I get ready for my school. I go to my school with my school bus. After coming back from school I change my clothes wash my hands and do my lunch. Then I go to sleep and play in the evening.



1) Haley get up in the morning and get ready for ____.

- a) office b) party c) school

2) Haley goes to her school with her _____.

- a) school bus b) friends c) mother

3) What does Haley do after coming back from school?

- a) go to play b) change her clothes c) dance

4) When does Haley play?

- a) afternoon b) evening c) night

Note. Retrieved from Wh Question Worksheets 6CC. Source. Mungfali.com <https://pin.it/2duDmJv>

2. Read a short text and answer comprehension questions.

My friend Elisabeth

This is my best friend Elisabeth. She is ten years old. She is from Scotland. She is Scottish. She is tall and thin. She has got long brown hair. She has got big brown eyes. She can dance and swim, but she can't play tennis. She likes dancing very much! She studies French Her favourite colour is pink. Her favourite food is pizza and she likes dogs. She has got a small puppy: Spike. She is friendly and nice. She is happy.



1. What's her name? _____
2. How old is she? _____
3. Can she play tennis? _____
4. Has she got short hair? _____
5. Does she study German? _____
6. Has she got a dog? _____
7. What's her favourite colour? _____
8. Can she dance? _____
9. Does she eat pizza? _____
10. What does she look like?



Note. Retrieved from Wh Question Worksheets 6CC. Source. Mungfali.com <https://pin.it/3t8uDbk>

3. Complete sentences or questions based on the information provided in an English language text.

Lisa

Today is Sunday. Lisa is walking to the library. The library is not far from her house. She likes going there on weekends. She is going to meet her friends and read some books with them. She loves reading. She usually reads with her friends in a nice and quiet place. Reading is good, and it always makes her happy.



1. Lisa _____ to the library.
2. The library _____ from her house.
3. She is going to meet _____.
4. She likes going to the library _____.
5. She is going to read _____ with her friends.

Note. Retrieved from Wh Question Worksheets 6CC. Source. Mungfali.com <https://pin.it/4kn3vcT>

4. Write a short paragraph in English on a specific topic that has been assigned to you.
5. Identify the mistakes in the sentences and correct them.
 - He goes to the park yesterday.
 - I don't likes to eat vegetables.
 - The cat are sleeping on the sofa.
 - She have two dogs and a cat.
 - My friend goes to the beach last summer.

Diagnostic Test

Phase two. CLIL Method













Theoretical-practical:

- Listen to the following video of a description and draw what you heard.
<https://www.youtube.com/watch?v=oGhV0QeNsiQ> – That's not my monkey

- Listen to the instructions and perform the corresponding actions.
 - Stand up and raise your right hand.
 - Turn around in a circle three times.
 - Clap your hands twice and then stomp your feet three times.
 - Find a partner and give them a high-five.
 - Sit down and fold your arms on your desk.

- Write the name of these habitats.

Tundra Pond River Polar region Grassland Savanna Rainforest
Wetland Taiga Stream Desert Lake

1) 	2) 	3) 	4) 
_____	_____	_____	_____
5) 	6) 	7) 	8) 
_____	_____	_____	_____
9) 	10) 	11) 	12) 
_____	_____	_____	_____

Note. Adapted from Elaboration of CLIL Activities for Primary Education: "Natural Habitats" Source. García (2018)

- Write a short summary of the text below.

It is a beautiful summer. I am thinking of planning a trip to Hawaii with my best friend, I'm going to tell my parents today because I am spending time with my family. My mother, Josie is in the kitchen preparing a snack for all of us. She is making some juice and talking to my father, Jack, she is also making my favorite butter caramel popcorn while we're waiting for her to start talking about my trip. My brother, Joel, is in his bedroom playing computer games. Flopi, our cat, is sleeping on the kitchen's sofa.

Note. Retrieved from deEFK (2017). Source. <https://www.englishforkids.com.ve/ingles-ninos-7-11-anos/>

- Make a description of the following animal, indicating its habitat, diet, physical characteristics and peculiarities that you find interesting.



Note. Adapted from Elaboration of CLIL Activities for Primary Education: "Natural Habitats" Source. García (2018)

- Write a short letter to a friend in English, sharing a recent experience related to studying, a fun game or activity you did.

Annex C Survey

SURVEY

Take the following survey. Remember that these questions are open and allow detailed and complete answers according to the concepts you have clear and your point of view.

Montessori Method

1. What kind of activities do you like to do most in school?
2. What activities make you feel more challenged/challenged?

3. Do you think that the activities you do in the educational institution have helped you to learn better?
4. What kind of activities would you like to do more in the educational institution?
5. Are there any activities that you don't like or that you find boring?
6. How do you feel when you have the freedom to choose your own activity or homework in class? Why do you like being able to decide what to do?
7. What kind of materials or resources are most interesting and fun for you to learn in school? Why are you attracted to these materials?
8. What do you like about working in small groups with your peers instead of alone? Do you think this helps you learn differently? Why?
9. When do you feel more focused on your schoolwork? Is there anything in particular that helps you focus better?
10. Do you remember any time you discovered something new while working in class? What did you learn and how did that discovery make you feel?

Any additional comments you wish to make: _____

Thank you for participating in this survey.

CLIL Method

1. Do you remember the first time in school that you learned something in another language besides Spanish? What did you learn and how did you feel about it?
2. Sometimes, in some subjects, images, songs or games in another language are used to learn. Do you remember any such activity? What did you do and what did you like about it?
3. Have you noticed any difference between learning something in Spanish and learning it in another language? What things do you find different or interesting when learning in another language?

4. Sometimes words are mixed in Spanish and another language during classes. Do you ever remember hearing different words while you were learning something? What do you think about that?
5. Imagine you have to learn about an interesting topic, but this time, you would learn it in another language. What do you think that experience would be like? Would you be excited or worried? Why?
6. What do you think of classes where you learn in a language other than Spanish?
7. In what subject do you enjoy most when using another language to teach?
8. What suggestions or improvements would you have for classes in which another language is used?

Any additional comments you wish to make: _____

Thank you for participating in this survey.

Annex D Journal

JOURNAL

The Montessori method in bilingualism	
Date of observation	
Name of the student	
Age	
Description of the observed activity	
Objectives of the activity	

Materials used	
Role of the student and teacher	
Duration of the activity	
Observations	
Student participation and focus	
Interaction with other students	
Level of understanding of English	
English communication skills	
Level of autonomy and decision-making	
Answer to the Montessori Method	
Strengths and challenges observed	
The impact of the Montessori method on English learning	
Effectiveness of bilingual education	
Recommendations	
Conclusions	
Signature of the observer	

The CLIL method in bilingualism	
Date of observation	
Name of the student	
Age	
Description of the observed activity	
Objectives of the activity	
Materials used	
Role of the student and teacher	
Duration of the activity	

Observations	
Student participation and focus	
Interaction with other students	
Level of understanding of English	
English communication skills	
Application of the contents of other subjects in English	
Response to the CLIL method	
Benefits and impact of the CLIL method on the teaching-learning of English	
Effective integration of content from other subjects in English	
Levels of understanding and application of the contents	
Key factors for the success of bilingual learning	
Recommendations to improve the learning experience	
Conclusions	
Signature of the observer	

Annex E Didactic Sequence

DIDACTIC SEQUENCE

Opening Activity: Introduction to CLIL and its benefits

Objective: To understand the basic concepts of the CLIL method and the benefits of learning curriculum content in English.

Activities:

- Interactive presentation about the CLIL method and its importance in bilingual education.
- Crossword game to get acquainted with the terms related to the CLIL.
- Small group discussion about the benefits of learning in English.

WORKSHOP 1: SCIENCE IN ENGLISH

Estimated time: 60 minutes

Objective: Develop oral and written comprehension skills in English while learning concepts related to science.

Materials:

- Board
- Cards with images of different elements of nature (plants, animals, natural phenomena, etc.)
- Pencils and paper

Development of the workshop:

Introduction (10 minutes):

- Introduces the concept of CLIL and explains how one can learn science in English.
- Discusses the benefits of learning in English and how it helps to better understand the natural world.

Main activity: Science Vocabulary (30 minutes):

- Show the cards with pictures and name each item in English.
- Ask the students to write the corresponding English words on their paper.
- Check the answers and make a discussion about each element, explaining its function and characteristics in English.

Closing activity: Word game (20 minutes):

- Divide the students into groups and give each group a list of English words related to the natural sciences.
- Ask the groups to form as many new words as they can using the letters of the given words.
- The group that forms the newest words wins the game.

WORKSHOP 2: MATHEMATICS IN ENGLISH

Estimated time: 60 minutes

Objective: To practice basic mathematical skills and encourage communication in English through the CLIL method.

Materials:

- Worksheets with simple math problems in English
- Pencils and paper
- Dice or cards

Development of the workshop:**Introduction** (10 minutes):

- Review the basic concepts of mathematical operations in English.
- Explains how the CLIL method helps to understand and apply mathematics in English.

Main activity: Problem solving (40 minutes):

- Give the worksheets with math problems in English to the students.
- Ask students to work in pairs or groups to solve the problems and write the answers in English.
- Circulate around the classroom to provide support and answer questions.

Closing activity: Math game (10 minutes):

- Use dice or cards to perform math games in English, such as "Quick Addition" or "The greatest number".
- Students should communicate in English while playing and solving math challenges.

Worksheet with simple mathematical problems in English

Name: _____

Date: _____

Solving Mathematical Problems with Argumentation

- There are 12 apples and 8 pears in a box. If we take out a random fruit, what is the probability that we will take out an apple? Explain how you arrived at your answer.
- If a pencil cost 5,000 and I want to buy 4 pencils, how much money do I need in total? Explain how you arrived at your answer.
- Juan has 40,000 and wants to buy a toy that costs 28,000. How much money will Juan have left over after buying the toy? Explain how you arrived at your answer.

- On a farm, there are 32 chickens and 20 ducks. If each hen lays 2 eggs a day and each duck lays 1 egg a day, how many eggs are produced in total in one day? Explain how you arrived at your answer.
- If a rectangle has one side of 8 centimeters and the other side is twice that value, how big is the other side of the rectangle? Explain how you arrived at your answer.
- If a bus takes 45 students for a ride and every seat on the bus is occupied, how many buses does it take to take 180 students in total? Explain how you arrived at your answer.
- If a package of cookies contains 24 cookies and I want to distribute them equally among 6 friends, how many cookies do each friend get? Explain how you arrived at your answer.
- In a library, there are 85 books on one shelf and 42 books on another shelf. If we want to put all the books on one shelf, how many books will there be in total? Explain how you arrived at your answer.
- If there are 60 pencils in a box and I want to divide them between 5 cases, how many pencils do each case have? Explain how you arrived at your answer.
- Ana has 25,000 and wants to buy a toy that costs 18,000. How much money will Ana have left after buying the toy? Explain how you arrived at your answer.

Remember to use clear and logical arguments to explain your answers to math problems.

WORKSHOP 3: SOCIAL SCIENCES IN ENGLISH

Estimated time: 60 minutes

Objective: To improve oral and written comprehension in English while learning historical concepts.

Materials:

- Books or materials about relevant historical events in English
- Paper and pencils
- Cards with historical characters

Development of the workshop:

Introduction (10 minutes):

- Introduces the topic of history in English and explains how the CLIL method helps to understand and learn about historical events in English.

Main activity: Research and presentation (40 minutes):

- Divide the students into groups and assign each group a historical event.
- Students should research about the event using books or materials in English and take notes.
- Ask each group to prepare a presentation in English about the historical event, using cards with historical characters to represent the information.

Closing activity: Historical debate (10 minutes):

- Organize a debate where students can express their views on a relevant historical topic in English.
- Encourages students to use vocabulary and grammatical structures related to the story during the discussion.

WORKSHOP 4: EXPLORING THE ART MOVEMENT IN ENGLISH

Estimated time: 90 minutes (divided into two sessions of 45 minutes each)

Objective: To introduce students to the basic concepts of the art movement and to develop skills of artistic expression and understanding in English.

Materials:

- Pencils and paper
- Sheets of paper of different sizes
- Markers or paints
- Images of different artworks from different art movements
- Board

Development of the workshop:

Session 1: Introduction to Art Movements (45 minutes)

Introduction (10 minutes):

- Introduces the theme of the workshop and explains how the CLIL method will be applied to explore art movements in English.
- Show pictures of different artworks representative of different artistic movements and ask questions to arouse students' interest.

Main activity: Research and presentation (30 minutes):

- Divide students into small groups and assign each group a specific art movement to research.
- Provides resources in English, such as books or websites, for students to research about the assigned movement.

- Each group must prepare a short presentation in English about its artistic movement, highlighting its characteristics and key artists.

Closing activity (5 minutes):

- Each group presents their research to the rest of the class in English.
- Encourages participation and questions from other students to promote understanding and the exchange of ideas.

Session 2: Creating Art Inspired by Art Movements (45 minutes)

Objective: To create a work of art inspired by a specific art movement.

Introduction (10 minutes):

Review the artistic movements studied in the previous session and highlights their key characteristics in English

Main activity: Creation of inspired art (30 minutes):

- Provides each student with a sheet of paper and drawing or painting materials.
- Ask students to choose an art movement and create a work of art that reflects the characteristics and style of that movement.
- Circulate around the classroom to provide support and guidance in English while students work on their creations.

Closing activity (5 minutes):

- Each student shows their artwork to the rest of the class and explains in English what artistic movement inspired their work.
- Encourage discussion and the exchange of opinions about the artworks created.

Annex F Assessment Rubric

ASSESSMENT RUBRIC

Criteria to take into account	Level one 0-5 points	Level two 6-10 points	Level three 11-15 points	Level four 16-20 points
Active participation	The student shows little or no participation in the proposed activities	The student participates occasionally in the proposed activities.	The student actively participates in most of the activities proposed in the workshops.	The student participates in all the activities of the workshop, contributing ideas and showing interest.
Understanding of the concepts	The student shows a limited understanding	The student shows a partial	The student demonstrates a solid understanding of most	The student demonstrates an understanding of all

	of the concepts presented in the workshop.	understanding of the concepts presented in the workshop.	of the concepts presented in the workshop.	the concepts presented in the workshop.
Use of English language	The student has difficulty communicating in English and uses a limited vocabulary.	The student tries to communicate in English but makes grammatical mistakes and his vocabulary is limited.	The student communicates effectively in English, using an appropriate vocabulary and grammatical structures.	The student communicates fluently in English, using a wide vocabulary and complex grammatical structures.
Creativity and expression	The student shows little or no creativity in the workshop activities and has difficulty expressing himself.	The students show some creativity in the workshop activities, but their expression is limited.	The student shows creativity in most of the activities of the workshop and expresses himself clearly and coherently.	The student shows great creativity in all the activities of the workshop and has good speaking skills
Teamwork	The student has difficulty working in a team and does not show collaboration with others.	The student works in a team but has difficulty collaborating effectively.	The student works collaboratively in most of the activities of the workshop, contributing to the achievement of common objectives.	The students work as a team, collaborating effectively and contributing to the success of the group.

Annexe G Evidence

Diagnostic Test: Montessori Method

Diagnostic Test
Phase one. Montessori Method

Student Name: AA Grade: Fourth

Theoretical-practical:

1. Listen to a short story and answer comprehension questions.
My daily routine
My name is Haley. Today I will tell you about my daily routine. I get up in the morning then I get ready for my school. I go to my school with my school bus. After coming back from school I change my clothes wash my hands and do my lunch. Then I go to sleep and play in the evening.

1) Haley get up in the morning and get ready for _____
a) office b) party c) school

2) Haley goes to her school with her _____
a) school bus b) friends c) mother

3) What does Haley do after coming back from school?
a) go to play b) change her clothes c) dance

4) When does Haley play?
a) afternoon b) evening c) night

2. Read a short text and answer comprehension questions.
My friend Elisabeth
This is my best friend Elisabeth. She is ten years old. She is from Scotland. She is Scottish. She is tall and thin. She has got long brown hair. She has got big brown eyes. She can dance and swim, but she can't play tennis. She likes dancing very much! She studies French. Her favourite colour is pink. Her favourite food is pizza and she likes dogs. She has got a small puppy Spike. She is friendly and nice. She is happy.

1. What's her name? Elisabeth
2. How old is she? She is 10
3. Can she play tennis? No, she can't
4. Has she got short hair? No, she has long hair
5. Does she study German? No, she doesn't
6. Has she got a dog? Yes, she has a puppy
7. What's her favourite colour? Pink
8. Can she dance? Yes, she can
9. Does she eat pizza? Yes, she does
10. What does she look like?
She is tall and thin

Diagnostic Test
Phase one. Montessori Method

Student Name: _____ Grade: _____

Theoretical-practical:

3. Complete sentences or questions based on the information provided in an English language text.

Lisa

Today is Sunday. Lisa is walking to the library. The library is not far from her house. She likes going there on weekends. She is going to meet her friends and read some books with them. She loves reading. She usually reads with her friends in a nice and quiet place. Reading is good and it always makes her happy.

1. Lisa is walking to the library.
2. The library is not far from her house.
3. She is going to meet her friends.
4. She likes going to the library on weekends.
5. She is going to read some books with her friends.

4. Write a short paragraph in English on a specific topic that has been assigned to you.
Family
I love my family, we watch movies, my mother is kind and my father is Jon David

5. Identify the mistakes in the sentences and correct them.

- He goes to the park yesterday. He went to the park yesterday
- I don't likes to eat vegetables. I don't like to eat vegetables
- The cat are sleeping on the sofa. The cat is sleeping on the sofa
- She have two dogs and a cat. She has two dogs and a cat
- My friend goes to the beach last summer. My friend went to the beach last summer.

Diagnostic Test
Phase one. Montessori Method

Student Name: AA Grade: 4th

Theoretical-practical:

1. Listen to a short story and answer comprehension questions.
My daily routine
My name is Haley. Today I will tell you about my daily routine. I get up in the morning then I get ready for my school. I go to my school with my school bus. After coming back from school I change my clothes wash my hands and do my lunch. Then I go to sleep and play in the evening.

1) Haley get up in the morning and get ready for _____
a) office b) party c) school

2) Haley goes to her school with her _____
a) school bus b) friends c) mother

3) What does Haley do after coming back from school?
a) go to play b) change her clothes c) dance

4) When does Haley play?
a) afternoon b) evening c) night

2. Read a short text and answer comprehension questions.
My friend Elisabeth
This is my best friend Elisabeth. She is ten years old. She is from Scotland. She is Scottish. She is tall and thin. She has got long brown hair. She has got big brown eyes. She can dance and swim, but she can't play tennis. She likes dancing very much! She studies French. Her favourite colour is pink. Her favourite food is pizza and she likes dogs. She has got a small puppy Spike. She is friendly and nice. She is happy.

1. What's her name? Elisabeth
2. How old is she? she is 10 years old
3. Can she play tennis? she can't play tennis
4. Has she got short hair? she has long hair
5. Does she study German? No, she has
6. Has she got a dog? Yes, she has
7. What's her favourite colour? pink
8. Can she dance? Yes, she can
9. Does she eat pizza? Yes, she does
10. What does she look like?
she is tall and thin

Diagnostic Test
Phase one. Montessori Method

Student Name: Number 3 Grade: 400

Theoretical-practical:

1. Listen to a short story and answer comprehension questions.
My daily routine
My name is Haley. Today I will tell you about my daily routine. I get up in the morning then I get ready for my school. I go to my school with my school bus. After coming back from school I change my clothes wash my hands and do my lunch. Then I go to sleep and play in the evening.

1) Haley get up in the morning and get ready for _____
a) office b) party c) school

2) Haley goes to her school with her _____
a) school bus b) friends c) mother

3) What does Haley do after coming back from school?
a) go to play b) change her clothes c) dance

4) When does Haley play?
a) afternoon b) evening c) night

2. Read a short text and answer comprehension questions.
My friend Elisabeth
This is my best friend Elisabeth. She is ten years old. She is from Scotland. She is Scottish. She is tall and thin. She has got long brown hair. She has got big brown eyes. She can dance and swim, but she can't play tennis. She likes dancing very much! She studies French. Her favourite colour is pink. Her favourite food is pizza and she likes dogs. She has got a small puppy Spike. She is friendly and nice. She is happy.

1. What's her name? Elisabeth
2. How old is she? she is 10
3. Can she play tennis? No, she can't
4. Has she got short hair? No, she has long hair
5. Does she study German? No, she doesn't
6. Has she got a dog? Yes, she has a puppy
7. What's her favourite colour? pink
8. Can she dance? Yes, she can
9. Does she eat pizza? Yes, she does
10. What does she look like?
she is tall and thin


Diagnostic Test: CLIL Method

Phase two. CLIL Method

Student Name: #1 Grade: fourth













Theoretical-practical:

- Listen to the following video of a description and draw what you heard.



- Listen to the teacher instructions and do the corresponding actions.
- Write the name of these habitats.

Tundra Pond River Polar region Grassland Savanna Rainforest
Wetland Tapa Stream Desert Lake


 tundra	 Pond	 River	 polar region
 Wetland	 Tapa	 Stream	 Desert
 Grassland	 Savanna	 Rainforest	 Lake

4. Write a short summary of the text below.

It is a beautiful summer. I am thinking of planning a trip to Hawaii with my best friend. I'm going to tell my parents today because I am spending time with my family. My mother, Josee is in the kitchen preparing a snack for all of us. She is making some juice and talking to my father, Jack, she is also making my favorite butter caramel popcorn while we're waiting for her to start talking about my trip. My brother, Joel is in his bedroom playing computer games. Flopi, our cat, is sleeping on the kitchen's sofa.

A girl is planning a trip Hawaii with her best friend

➤ Make a description of the following animal, indicating its habitat, diet, physical characteristics and peculiarities that you find interesting.



The animal is big yellow, brown, dangerous

➤ Write a short letter to a friend in English, sharing a recent experience related to studying, a fun game or activity you did.


Dear Victoria
In the afternoon I am going to play in the park, next to your house.
See you there
Maria
Bye

Phase two. CLIL Method

Student Name: #2 Grade: 4th













Theoretical-practical:

- Listen to the following video of a description and draw what you heard.



- Listen to the teacher instructions and do the corresponding actions.
- Write the name of these habitats.

Tundra Pond River Polar region Grassland Savanna Rainforest
Wetland Tapa Stream Desert Lake


 Pond	 River	 polar region	 tundra
 Lake	 Desert	 Grassland	 Savanna
 Wetland	 Stream	 Rainforest	 Lake

4. Write a short summary of the text below.

It is a beautiful summer. I am thinking of planning a trip to Hawaii with my best friend. I'm going to tell my parents today because I am spending time with my family. My mother, Josee is in the kitchen preparing a snack for all of us. She is making some juice and talking to my father, Jack, she is also making my favorite butter caramel popcorn while we're waiting for her to start talking about my trip. My brother, Joel is in his bedroom playing computer games. Flopi, our cat, is sleeping on the kitchen's sofa.

A person wants to go to Hawaii and is in the family house

➤ Make a description of the following animal, indicating its habitat, diet, physical characteristics and peculiarities that you find interesting.



The lion is big

➤ Write a short letter to a friend in English, sharing a recent experience related to studying, a fun game or activity you did.


Dear Camb
Hello sister, I like to play with you in the farm.
See you later

4. Write a short summary of the text below.

It is a beautiful summer. I am thinking of planning a trip to Hawaii with my best friend. I'm going to tell my parents today because I am spending time with my family. My mother, Josie, is in the kitchen preparing a snack for all of us. She is making some juice and talking to my father, Jack, she is also making my favorite butter caramel popcorn while we're waiting for her to start talking about my trip. My brother, Joel, is in his bedroom playing computer games. Flopi, our cat, is sleeping on the kitchen's sofa.

A boy wants to go on a trip with his friend.

➤ Make a description of the following animal, indicating its habitat, diet, physical characteristics and peculiarities that you find interesting.



The lion is yellow and has a big, big hair.

➤ Write a short letter to a friend in English, sharing a recent experience related to studying, a fun game or activity you did.


Hi, Father. I love you.
I love you, my family, my sister and my cat.
I want to play with you.
Bye

Phase two, CLIL Method

Student Name: number 42 Grade: 4^o


Theoretical-practical:

- Listen to the following video of a description and draw what you heard.



- Listen to the teacher instructions and do the corresponding actions.
- Write the name of these habitats.

Tundra	Pond	River	Polar region	Grassland	Savanna	Rainforest
Wetland	Taiga	Stream	Desert	Lake		




1 rain forest
2 pond
3 wetland
4 taiga
5 savanna
6 lake
7 polar region
8 desert
9 stream
10 grassland
11 desert
12 river

4. Write a short summary of the text below.

It is a beautiful summer. I am thinking of planning a trip to Hawaii with my best friend. I'm going to tell my parents today because I am spending time with my family. My mother, Josie, is in the kitchen preparing a snack for all of us. She is making some juice and talking to my father, Jack, she is also making my favorite butter caramel popcorn while we're waiting for her to start talking about my trip. My brother, Joel, is in his bedroom playing computer games. Flopi, our cat, is sleeping on the kitchen's sofa.

A boy is going to travel with her friend.

➤ Make a description of the following animal, indicating its habitat, diet, physical characteristics and peculiarities that you find interesting.



The lion is yellow and fluffy. It likes meat and lives in the forest.

➤ Write a short letter to a friend in English, sharing a recent experience related to studying, a fun game or activity you did.


Dear friend,
I love my family and we are happy,
we want to share time with you.
Bye.

Phase two, CLIL Method

Student Name: number 11 Grade: fourth


Theoretical-practical:

- Listen to the following video of a description and draw what you heard.



- Listen to the teacher instructions and do the corresponding actions.
- Write the name of these habitats.

Tundra	Pond	River	Polar region	Grassland	Savanna	Rainforest
Wetland	Taiga	Stream	Desert	Lake		



1 pond
2 rain forest
3 stream
4 taiga
5 savanna
6 grassland
7 polar region
8 desert
9 stream
10 lake
11 desert
12 river