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**"MIND MAPPING STRATEGY TO IMPROVE COHERENCE AND
COHESION IN WRITTEN TEXTS IN A2 LEVEL STUDENTS"**

**Research project prior to obtaining the degree of Master in Pedagogy OF National and
Foreign Language, with a major in English Language Teaching.**

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DEDICATORY

I would like to dedicate this work to my family, my mother, my father, and my brother, who were always by my side and supported me, who have been my strength every step of the way. Their unconditional love and constant support gave me the courage to keep moving forward, even in difficult times. They have shown me that no one else will be there for me throughout all the stages of my life as much as they have. I also dedicate this achievement to myself. Despite going through very low moments and facing tough situations, for every tear, every sleepless night and every moment I chose to be strong, keep going, and reach this goal. Lastly, to my lovely cat Pinky, who was there with me through so many long nights. His small but comforting company meant the world to me.

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TEMA: "MIND MAPPING STRATEGY TO IMPROVE COHERENCE AND COHESION
IN WRITTEN TEXTS IN A2 LEVEL STUDENTS"

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RESUMEN EJECUTIVO

La presente investigación analiza la efectividad de la estrategia de mapas mentales para mejorar la estructura de párrafos y la cohesión en los textos escritos de estudiantes con nivel A2 de inglés en una institución educativa ecuatoriana llamada Unidad Educativa Fiscomisional La Inmaculada. El estudio se desarrolló bajo un enfoque cuantitativo, utilizando un diseño cuasi-experimental con pretest y posttest, aplicados a estudiantes de octavo año de EGB. La muestra estuvo compuesta por dos grupos: un grupo experimental que contaba con 36 estudiantes, quienes recibieron la intervención mediante actividades basadas en mapas mentales y un grupo de control que contaban con 36 estudiantes, quienes no participaron en la intervención. Los instrumentos empleados incluyeron una rúbrica adaptada del Marco Común Europeo de Referencia para las Lenguas (MCER) y producciones escritas de los estudiantes. Los resultados fueron analizados a través de métodos estadísticos descriptivos e inferenciales, permitiendo observar mejoras significativas en la organización y cohesión textual de los estudiantes que utilizaron mapas mentales. Este estudio aporta evidencia del valor pedagógico de los mapas mentales como herramienta didáctica para fortalecer habilidades de escritura en estudiantes de nivel básico de inglés.

Palabras clave: mapas mentales, escritura en inglés, cohesión textual, estructura de párrafos, nivel A2.

UNIVERSIDAD TECNOLÓGICA INDOAMÉRICA
FACULTY OF EDUCATION SCIENCES
MASTER IN PEDAGOGY OF NATIONAL AND FOREIGN LANGUAGES

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ABSTRACT

**MIND MAPPING STRATEGY TO IMPROVE COHERENCE AND COHESION IN WRITTEN
TEXTS OF A2 LEVEL STUDENTS**

This research analyzes the effectiveness of the mind mapping strategy to improve paragraph structure and cohesion in the written texts of students with an A2 level of English at an Ecuadorian Educational Institution called “Unidad Educativa Fiscomisional La Inmaculada”. The study utilized a quantitative approach with a quasi-experimental design, including both pretest and posttest assessments administered to eighth-grade students in basic education. The sample had two groups: an experimental group of 36 students, who received the intervention through mind mapping-based activities, and a control group of 36 students, who did not participate in the intervention. The instruments used included a rubric adapted from the Common European Framework of Reference for Languages (CEFR) and students' written output. The results were analyzed using descriptive and inferential statistical methods, revealing significant improvements in textual organization and cohesion among students who used mind maps. This study provides evidence of the pedagogical value of mind maps as a teaching tool for strengthening writing skills in beginner English learners.

KEYWORDS: A2 level, English writing, mind maps, paragraph structure, text cohesion.



INTRODUCTION

Relevance of the topic

Learning a foreign language is a significant issue for individuals. Particularly in English, there are four main linguistic skills that are emphasized: reading, writing, listening, and speaking. In reading and listening, individuals perceive ideas, while in writing and speaking, they produce ideas (Chicho, 2022). Consequently, it is essential for learners to develop these skills effectively if they want to communicate in this language.

On the other hand, the productive skills are those that transmit the information produced by the user orally, or in writing, but these skills cannot go without the help of the receptive skills of listening and reading. It is worth mentioning that this rule is based to be able to learn any language, in other words, these skills cannot exist without the others, usually the first to be developed are the receptive ones and then go the productive ones, in which if the learning process does not have one of them, it could not be complete. However, these productive skills must be put into practice as they involve the active use of grammatical structures, vocabulary, and repetition of sounds (Golkova & Hubackova, 2014).

Moreover, the process of writing is of utmost importance since students have the ability to capture all the information structured in the mind, taking this into account students must also develop well the ability to listen and read, because based on this where they get their ideas and transcribe them, which emerges as a new method that can be used in students so that they can present texts with an organized structure and can visualize it in their minds. On the other hand, the objective of teaching writing to students is to help them express their ideas and emotions in an adequate way, as well as to focus on correct grammar (Karadeniz, 2017).

In the Ecuadorian educational context, there are various issues related to the different English language skills as a Foreign Language. As previously mentioned, students generally exhibit a low level of English proficiency, and at least 85% of them do not demonstrate the level of English and cognitive skills required by the language (Orosz et al., 2021). To address this issue, it is necessary to apply different strategies adapted to the various skills.

The research line of this thesis is focused on the line of innovation in pedagogy with the subline of teaching strategies, which is based on the methods and strategies for teaching and pedagogical development through the application of resources, in which is carried out this study, the skill that will be discussed is writing and how it is that students have certain difficulties when they have to write and give cohesion to a paragraph or a written text, likewise this study focuses on looking for pedagogical strategies for enhancing writing skills and textual cohesion in English as a Foreign Language (EFL) learners at the A2 level. Specifically, on how the use of mind mapping is effective as a cognitive tool to improve paragraph structure and cohesion in elementary students in Ecuador.

Considering this, the Ecuadorian education system implements English through the use of a curricular proposal, which is based on the principle that communicative language is best learned through interaction and communication efforts. Additionally, this approach involves the effective use of methodologies by teachers, thus facilitating the process of learning a Foreign Language for students. It also encompasses the development of thinking skills when learning a foreign language, enhancing social and creative abilities. Moreover, the CLIL (Content and Language Integrated Learning) approach is employed, which develops cultural and cognitive aspects to facilitate the acquisition of a foreign language (Ministry of Education, 2016).

According to the Ministry of Education (2016), the national English curriculum has as one of its fundamental objectives to improve students' understanding of the language and

enhance their ability to communicate with people from different cultures. This implies that English language learning should go beyond the mastery of grammatical structures or vocabulary, seeking for students to be able to express their views, emotions and ideas clearly, within real and intercultural contexts. Language teaching is therefore conceived as a tool for dialogue and global understanding, enabling students to interact in an increasingly connected society.

In addition, the curriculum aims at the integral development of personal, social and intercultural competencies, which implies that learning English should contribute to the formation of productive, autonomous individuals who are aware of their role in society. In this sense, language is not taught only as an isolated subject, but as a means to enhance skills such as self-expression, critical thinking and collaboration, skills that are highly valued in both the educational and professional environments (Ministry of Education, 2016).

Orosz et al. (2021) reports that Ecuador has prioritized English as a Foreign Language (EFL) within its educational system, viewing it as a tool that can help globalize the country. On the other hand, the reality of English language learning in Ecuador can present some challenges for students. For some, learning the language may be too difficult, or for others, it might not be of interest, and they do not prioritize it. Additionally, there is the issue that teachers might employ traditional methodologies that do not significantly impact the students or fail to engage pupils in a way that would best develop their language skills.

According to Sevy-Biloon et al. (2020), the level of English proficiency in Ecuador has progressively decreased over the years, especially when compared to other Latin American countries. This situation reflects a persistent problem within the national education system, in which students are not achieving the level of language proficiency expected at the end of their education. As a result, many graduates fail to meet the standards established by international reference frameworks such as the CEFR (Common European

Framework of Reference for Languages), which limits their access to academic and employment opportunities. This knowledge gap not only affects students' personal and professional development but also represents a challenge for the quality of education and the objectives of globalization that many institutions aspire to achieve.

Bearing this in mind, in English, the skill that needs to be developed most effectively is writing. This skill is based on the production of written ideas, which need to be well-developed to ensure coherence and cohesion. Considering that students often face writing challenges because they do not know how to organize their ideas effectively to express them in written texts, it is crucial to focus on enhancing their writing abilities.

According to Haider et al. (2020), the skill of writing is a psychological or intellectual domain that involves combining ideas, thoughts, and words in written form to communicate with other people or just express themselves. Furthermore, it is also considered a social activity that is acquired from an early age. In addition, it is considered that the majority of students have a low percentage in the production of writing skills. At least 85% of students exhibit low core writing skills and weak development of cognitive abilities (Paragas & Francisco, 2020).

For starters, how important it is to develop writing skills, as it is known that this skill is optimal to communicate with other people in writing, as well as to express ideas or opinions. According to Barre and Villafuerte (2021), the ability to write correctly in English is not only fundamental in the educational context, but is also essential in various communicative environments, such as academic, professional and personal. This skill allows students to express their ideas in an organized, clear and precise manner, which is indispensable for effective communication in the foreign language. In this process, the elements of cohesion and coherence play a key role, since they are the ones that give unity, fluency and logical sense to the written text.

Cohesion allows sentences and paragraphs to be properly linked through the correct use of connectors, pronouns and grammatical structures, while coherence ensures that ideas are organized in a logical and comprehensible way for the reader. Therefore, without the presence of these two elements, a text loses clarity and quality, regardless of the topic addressed or the level of vocabulary used. In this sense, Barre and Villafuerte emphasize that the teaching of writing should go beyond the simple construction of sentences, it should focus on forming writers capable of structuring well-organized texts with communicative purpose, which is especially important in contexts where English is learned as a foreign language (2021).

However, this skill has proved to be difficult for the students, as RahmtAllah (2020), mentions that the difficulties faced by the students are vocabulary, grammatical features, and the organization of the texts, as well as lack of knowledge in students about writing strategies. Students find it difficult to produce written texts because they do not know strategies to improve the writing abilities, giving the texts zero coherence and cohesion in their script. For this reason, it is of utmost importance to teach students strategies for writing texts.

On the other hand, when discussing the coherence and cohesion that texts must have, it's crucial because this ensures that ideas or concepts are clear and well-organized. Cohesion is responsible for connecting words and sentences, while coherence involves all the mechanisms provided to organize content logically and make it interpretable. Zambrano (2017) mentions, reading coherently is part of the writing features that should be considered in order to produce a good written text, also mentions that a written text must be coherent as it maintains the connection between writer and reader. It is very important to present ideas as a unified entity so that readers can retain the ideas as they read.

Zambrano (2017) points out that textual cohesion refers to the appropriate use of grammatical elements within a written text, which includes both the vocabulary used and two fundamental components of grammar: grammatical cohesion and lexical cohesion. Grammatical cohesion is manifested through the use of references, such as pronouns and determiners that replace or point to other parts of the text, and also through conjunctions, which allow sentences and paragraphs to be linked logically. On the other hand, lexical cohesion focuses on aspects such as the repetition of key words, the use of synonyms, and the placement of terms that are usually combined in the language, which helps to reinforce the message and avoid ambiguities.

In written texts we need the elements mentioned above, which are coherence and cohesion, to develop them in the best way it is necessary to address strategies which help a lot in the writing of texts. One of the strategies addressed is mind mapping, which helps students to better identify the main ideas or create their own main ideas when they need to write a text. The mind mapping strategy helps learners to identify the information in the form of a diagram or image which is much easier to understand, likewise when a mind mapping is done in an organized manner, it is easier for students to develop the ideas that you want to write in the texts, thus providing coherence and cohesion in writings (Berminati et al., 2023).

Considering this, the study will present the strategy of mind mapping so that students can have a good paragraph structure and writing considering the cohesion in their written paragraphs. According to Basri and Syamsia (2020), mind mapping is a method that facilitates the acquisition and recovery of key information in the brain, as it allows ideas to be organized visually, clearly and hierarchically. This technique helps not only to remember data more easily, but also to extract or generate ideas from the mind and then capture them in a structured way in a text.

By using a mind map, the student can more easily identify the main concepts, organize the secondary ones and visualize the connections between them, which significantly improves the planning and coherence of the written content. In addition, this resource stimulates creative thinking and allows students to make better use of their cognitive capabilities by activating different areas of the brain involved in the processing and expression of ideas. In the context of English language teaching, the use of mind mapping is presented as an effective tool to support written production, as it provides a clear starting point, reduces disorganization and reinforces clarity in the structure of texts.

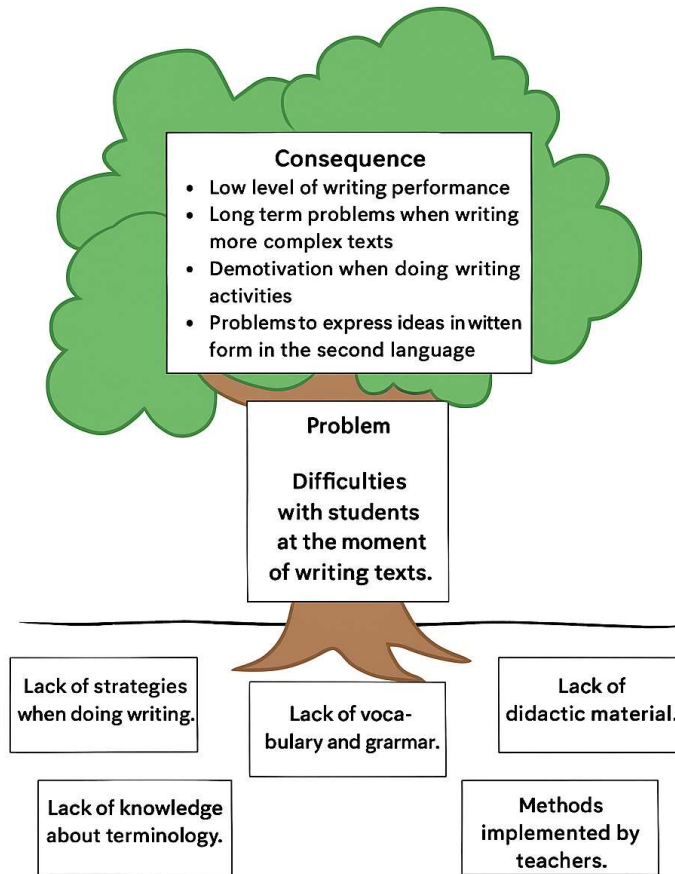
Based on these points, the study has a great impact in the educational field since students can better develop the cohesion in the writing of their paragraphs, as well as develop their critical thinking, linguistic skills and learning process, allowing them to reach a better level of English.

Students often face significant difficulties when writing in a second language, which affects their academic writing performance. These difficulties result from several key issues. Many students have difficulty expressing their ideas with clarity and cohesion, especially when asked to write more complex texts. This lack of confidence can lead to long-term problems, such as decreased motivation and frustration during writing activities. Among the root causes of these problems are a lack of effective writing strategies, insufficient knowledge of vocabulary and grammar, and limited understanding of the terminology required for writing. In addition, the teaching methods employed by some educators may not adequately support students' development, and the lack of appropriate instructional materials may further block their progress. All these factors together create an environment in which it is difficult for learners to succeed in writing tasks.

Problem statement

Figure 1

CAUSES, PROBLEMS, AND CONSEQUENCES



Note: Visual representation of the underlying factors contributing to students' difficulties in writing texts in English, the central issue identified, and its academic consequences.

Source: Author's own elaboration.

The presented tree represents in a visual and structured way the central problem related to the difficulties faced by students when writing texts in English. This graphic tool facilitates the identification of the fundamental elements of the problem, such as its causes (the roots), the manifestation of the problem (the trunk), and the consequences (the top of the tree). Through this analysis, it is possible to understand the complexity of the situation

and propose pedagogical strategies to improve the teaching and learning of writing in English as a foreign language.

The trunk of the tree symbolizes the main problem, which is: “Difficulties with students at the moment of writing texts”. This statement summarizes the educational reality observed in many school contexts where students, especially those with a basic level of English, present limitations at the moment of writing. Difficulties can manifest themselves in various ways, such as poor organization of ideas, lexical poverty, frequent grammatical errors and lack of connection between sentences. These deficiencies not only affect the quality of the texts, but also the student's confidence to express him or herself in writing in a foreign language.

According to Mega (2022), the difficulties that exist at the time of writing are very common in students because it leads to areas of productivity, and complexity in grammar, this means that the ability to write is not simple and more in another language which in this case is English, also if difficulties arise at the time of writing students are affected in written communication and should need a clear vision of what involves the organization of their ideas and how to capture their imagination on paper.

The roots of the tree represent the root causes of the problem. In total, six factors are identified as directly contributing to difficulties in written production. One of them is Lack of writing strategies. Many students start writing without previous planning, which generates unorganized texts, with lack of coherence and cohesion. Lack of knowledge about techniques such as brainstorming, graphic schemes or mind mapping limits their ability to organize and connect ideas. Alostath (2021), mentions that since students have difficulties when writing is due to poor writing skills and this is caused by two reasons, on the part of the teacher and the student, teachers do not impart writing strategies for written texts, contributing negatively to their process.

Another determining factor is poor vocabulary and grammatical proficiency. Students do not have an adequate lexical range to express their ideas clearly, and their limited grammatical knowledge makes it difficult for them to construct correct sentences. This causes their texts to be full of errors or to use extremely simple structures. Haryadi et al. (2021), mention that if the students do not have a good vocabulary, they cannot understand the ideas that the others express, since it is one of the central skills in the English language, as well as the grammar has a very large list of meanings to be able to express the ideas.

Limited access to up-to-dated and contextualized teaching materials also has a negative impact on the teaching of writing. Books, worksheets, graphic organizers, examples of model texts and other resources are essential to guide the student during the writing process. The absence of these materials prevents effective pedagogical support. According to Umuhoza and Uworwabayeho (2021) the lack of didactic material in the classroom does harm the students' study progress, since these materials help to enhance the development of their learning.

Also, the teaching methods used by some teachers may not be adapted to the current needs of students. Traditional teaching, focused on the memorization of rules, may be highly ineffective if it is not combined with active and meaningful methodologies. The lack of didactic innovation reduces the opportunities for students to develop real communication skills. Finally, students do not understand key terms related to writing, such as “main idea”, “supporting sentence” or “cohesive device”. This lack of knowledge makes it impossible for them to recognize the internal structure of the paragraph or to apply concepts correctly.

The students' difficulties in writing texts in English generate a series of significant and prolonged consequences that affect both their academic performance and their linguistic and personal development. One of the most evident effects is poor performance in written activities, as students fail to meet the established criteria for writing texts with coherence,

cohesion and clarity. This situation has a direct impact on their grades, but also on their perception of competence, generating insecurity and doubts about their ability to develop themselves in the language.

Another important consequence is demotivation in the face of writing activities. When students repeatedly face failures or receive negative feedback without improvement strategies, they develop an attitude of rejection or apathy toward writing. Feedback is a key element for both teachers and students where it can develop their learning, as well as motivate them to learn (Wulandari, 2022). In this way if teachers provide negative feedback, students stop actively engaging in assignments, avoid participating in writing exercises, and show little interest in improving. This loss of motivation not only slows down their development, but also affects classroom dynamics, generating generalized disinterest and resistance to language learning.

Additionally, the lack of writing development also impacts students' ability to express their ideas, opinions, and emotions in English. Writing is an essential communication tool, and without the necessary skills, students are limited in organizing and communicating their thoughts effectively. Writing allows students to develop their thinking and creative abilities, as well as giving them the ability to express their ideas. Thanks to this ability, it is possible to keep writing registers, which ensures the documentation of thoughts. Consequently, the student can recover or retake those previously expressed ideas, reactivating old or almost forgotten memories that can be useful in the present (Bora, 2023).

Therefore, the lack of writing development not only affects the quality of their texts but also limits their communicative autonomy in school and everyday contexts. Taken together, these consequences show that writing should not be seen as just another academic skill, but as an essential component of language learning that, if not worked on properly,

can generate negative effects that impact the student's educational trajectory and self-esteem as a second language learner.

The tree of causes, problems and consequences shows that writing difficulties in A2 level students are not unique, but have deep roots related to pedagogical, linguistic and motivational aspects. To improve this situation, a comprehensive approach is required, including the strengthening of teaching strategies, the use of adequate didactic materials, teacher training and constant support for students.

In addition, it is evident that the development of writing skills cannot be approached only from the correction of errors, but from the construction of a learning environment that stimulates creativity, planning and reflection. Strategies such as mind mapping can be key to promote the organization of ideas, textual clarity and grammatical cohesion, essential aspects for effective writing in a foreign language.

At the moment of writing texts, it is essential to have the ability to write in a coherent and cohesive manner as it helps students to develop and be successful academically. However, in Ecuador students do encounter difficulties when writing in English, either due to lack of knowledge about vocabulary and grammar, lack of knowledge about the strategies that exist to be able to write texts in a coherent way, or even because teachers do not provide the appropriate methodologies and strategies to achieve a great impact on student learning. This variety of factors is the problem that causes students to have difficulties.

Consequently, these factors affect the students in the future, and during class hours, at the time of writing activities, students may become bored or demotivated because they cannot achieve a good written text, it also affects them academically in the learning of the English language, since writing is a primary skill in this language, students find it difficult, therefore lowering their academic performance. In addition, difficulties may appear when students are at an advanced level of A2 they will find problems when writing since they do

not have the basic knowledge to be able to write a text in a coherent and cohesive way in the Foreign Language, it is worth mentioning that these texts may also be affected when students want to express ideas or opinions when it comes to writing texts and they may get trapped in the activities that are related to them.

With all these in mind, it was decided to conduct this study, in order to help students with the writing of paragraphs in a cohesive manner, with the help of the mind mapping strategy, which can be very useful for students with an A2 level, since they are at a suitable level to write paragraph in a simple way with the vocabulary and grammar of their knowledge, in this way they can also continue advancing in level and continue acquiring more knowledge and ability to write coherently and cohesively.

Research question

For this study, the following research question has been proposed:

- How effective is the implementation of mind mapping strategy in developing paragraph structure and the cohesion of students' paragraph texts with A2 level of English at a selected fiscomisional high school?

Hypothesis

The implementation of the mind mapping strategy is effective for improving cohesion in paragraph texts of 8th grade EGB students.

Beneficiaries

This study is aimed at 8th grade students of EGB with A2 level, which are 71 students, who are around 12 – 13-year-old 6children who will be the beneficiaries of the mind mapping strategy designed to help them develop paragraph structure and improve their cohesion in writing.

Objectives

General Objective

To analyze the effectiveness of mind mapping strategy to enhance paragraph structure and cohesion in written texts of 8th grade students with A2 level of English in an Ecuadorian school.

Specific Objectives

- To assess the English proficiency level of 8th grade students in terms of writing skills.
- To design proposal activities using the mind mapping strategy to improve paragraph structure and cohesion in written texts.
- To evaluate the effectiveness of the mind mapping strategy in enhancing paragraph structure and cohesion in written texts after its implementation.

CHAPTER I

THEORETICAL FRAMEWORK

In this chapter, two sections are carried out, which are the previous studies that are related to the proposed topic and the theoretical framework in which key concepts are defined in order to understand the study deeply. In the first section, the previous studies, two international research are mentioned which are related to the use of mind mapping and how students achieved significant changes in the writing of their texts. Furthermore, it also mentions two studies that have been conducted in Ecuador, regarding the use of strategies to be able to adequately develop the written text in a cohesive and coherent manner, as well as mentioning the difficulties that students frequently have at the time of writing texts.

On the other hand, the second section deals with the theoretical framework, in which the following concepts are defined: Teaching English Writing skills is discussed its definition, the importance and some characteristics of teaching writing, likewise the concept of coherence and cohesion in written texts, which focuses on talking about the definitions of these terms and the importance they have in academic texts. Also, grammatical cohesion, in other to talk about its meaning. In addition, reference cohesion, because the study focuses on enhancing students to use correctly the reference at the moment they write, is taken the topic of the difficulties in teaching writing.

Another concept to discuss is the cognitivism, the role of Cognitivism in Writing Instruction, the mind mapping as cognitive strategy to teaching writing skills, focusing on the definition, characteristics, and implementation in the Educational Field. Finally, it considers the concept of Mind mapping to develop paragraph structure in written texts.

Previous Studies

Naomy and Dian (2021) conducted a study in which the main objective was to find the differences before and after the implementation of the mind mapping technique in the

descriptive writing text and what was the perception of students regarding this technique, this study was conducted with 33 students of SMA Surya Dharma 2 Bandarlampung, the approach they used was quantitative, using a questionnaire, and two tests (pre-test - post-test). The results of this study were optimal and significant, as they compared the pre and post tests and performed an analysis in which they showed that the students increased their scores by using the mind mapping technique, thus developing the organization of information, vocabulary and the use of English language. Likewise, the study also shows the students' perspectives on this technique, which mostly had positive comments.

Students mentioned that they had the opportunity to write their own ideas, the technique is interesting and allows them to interact with their peers and express their ideas in a simple way and not as technical or as long as they usually do in writing activities.

This research supports this study because the technique or strategy of mind mapping helps students to have more organization in the texts, which leads them to have more coherence and cohesion in the texts they create at the time of the activities carried out in the classroom, as well as using the instruments that are required in a guided and described manner.

Shah (2020) developed a research with the objective of comparing how effective it is to teach mind mapping so that students can develop coherence and cohesion in writing. This study used as a sample 60 students, 30 boys and 30 girls in tenth grade, it was divided in a control group and an experimental group and used an SAT as a pre-test and post-test. The results of this study were positive because they showed that students using mind mapping were able to strengthen their thoughts and manage to understand their ideas in a better way, likewise, it helped them to activate their previous knowledge to build new ideas based on the activities that have been proposed in the study. However, this study also indicates that there are certain results in boys very different from girls, since the authors mention that girls

were able to use mind mapping in the best way for the composition of texts, compared to boys.

This research supports the study that is carried out because mind mapping is a strategy or technique that can be applied in any skill to learn the English language, however, as the main skill is writing, this strategy helps students to have a clear idea of what they want to write about in their texts, since it presents a graphic structure at the time of applying it and it is very accessible for the brain to capture the different ideas.

Abata (2021) carried out a study which aims to identify strategies to improve coherence and cohesion in professional students with B1 level at the Technical University of Cotopaxi. Since students are not able to write essays or texts adequately in the language, they also have a lack of knowledge in grammar and vocabulary so as not affect their level of writing. In this study, a qualitative and descriptive methodology was used to demonstrate the problems that exist when writing academic texts in a coherent and cohesive manner. They also used a rubric as an instrument to analyze the students' writing. With respect to the results obtained with this study, they identified as strategies to improve the coherence and cohesion of the texts, the implementation of the teaching connectors, providing concepts of coherence and cohesion, as well as unity and clarity, one of which is considered most important is the outlining, which are schemes in which students can provide their clear ideas and the way in which the text can be.

In view of this, the study serves as a guide because it identifies the most important strategies that help students to develop coherence and cohesion in the texts and which would be the problems that students have when writing texts, and the one that can benefit this work are the different problems, since it should be determined what is the level of English that students have when producing writing, which in the study of Abata can be beneficial to identify those problems.

Llanos (2020) develop an article that aims to identify the effects of strategies or techniques to generate ideas in pre-writing in EGB students in the city of Guayaquil of an educational unit called Francisco Huerta Redon, which as a sample used as 59 students in tenth grade. Through the use of a qualitative method. For the results, the students highlighted that teachers do not help them to carry out a process in which they help them to facilitate writing, and it takes them a long time to organize ideas, however, they wrote that teachers should be highly related to the new techniques or strategies that exist to help students with this process and to adapt them in the classroom. It should be noted that in Llanos study it mentions that students did not know how to use mind maps to generate ideas in the easiest way, and students agree that using the mind map helps them a lot to generate ideas.

Llanos' study mentions the min maps and how they helped the writing of texts in the tenth-grade students in the city of Guayaquil, so this study can be beneficial because it even determines the problems and perspectives that students had in front of the pre writing activities, and how professors should teach more techniques or strategies to help them.

Theoretical Framework

Teaching writing in English is challenging for both students and teachers because of the need for coherence and cohesion in the texts to be written, as these elements are essential to be able to write in a clear way, however, teaching strategies that are in the hands of teachers to help students achieve this. The mind mapping strategy has emerged as a cognitive strategy that can help students to write their texts in a cohesive and coherent way. Therefore, the theoretical framework explores concepts related to the teaching of writing in English, coherence and cohesion in written texts, Grammatical Cohesion, Reference cohesion, the difficulties in teaching writing, Cognitivism, the role of cognitivism in writing instruction, Mind mapping as cognitive strategy to teach writing skills, and Mind mapping to develop paragraph structure in written texts.

Teaching English Writing skills

The writing skill is one of the main skills required in the English language, and it is one of the most difficult skills for students to develop. Writing is the communication process that people use to communicate, which contains a system of messages for the reader, therefore it is a skill of greater complexity, since students have to learn grammar, vocabulary, semantics, syntax, vocabulary and various structures required by the language, in this case the English language (Hadi et al., 2021). Through writing, students should be able to express their thoughts and opinions so that others can understand the students' objectives when writing (Mushir et al., 2023).

On the other hand, the importance of teaching writing skills should be of utmost effectiveness, however, according to Gurung, elementary school teachers do not give enough importance to this skill, since they believe that it is a skill where students only write sentences or minimize the importance of teaching grammar, but this problem is reflected with the course of time, In the university, students will be affected because they do not know how to write texts, this skill is of utmost importance because students in the academic course will have to develop texts with evidence and logical reasons to write, even teachers should take strategies or techniques to help students to not have gaps in the knowledge of writing (2023).

The writing skill also presents certain characteristics that are related to critical thinking skill. Hanim et al. mentions that the writing process requires certain characteristics of the process of developing critical thinking, since the writing skill is part of memory, for the writing process begins with planning, translating and reviewing, which are associated with conceptualizing, applying, analyzing, synthesizing and evaluating that are the process of critical thinking skills, therefore a specific process must be followed which characterizes the writing skill in order for students to be able to write effectively (2020).

Coherence and cohesion in written text

Coherence and cohesion in the written texts are important elements since they give sense to the ideas we think and express in the written texts. For starters, one of the characteristics of writing is coherence, having coherence in academic texts implies that the ideas written have a connection with the rest so that a single theme can be created, coherence also helps writers to organize their ideas, so that the reader can follow the idea that authors want to express, which is why coherence becomes an important element for writing to flow in a clear and logical way (Septiwan & Al Hafizh, 2021).

On the other hand, there is also the element of cohesion, which based on the cohesion and coherence that a written language has, since these elements give unity to the text, cohesion also manages to capture the attention of students both in the analysis of texts and in the teaching of the Foreign Language, and how the lexical grammatical patterns are applied helps to develop the unity of the texts providing students to develop cohesion in the written texts (Septiwan & Al Hafizh, 2021).

For example, in academic writing, cohesive devices such as connectors contribute to improving the quality of students' writing, in addition by helping to characterize the written texts with coherence, cohesion, and unification (Alawerdy & Alalwi, 2022).

Another example is the lexical cohesion where it is used as a cohesive device since this lexical includes conjunction, reference and ellipsis. Which are very important because they help to create cohesion in the text (Zahra et al., 2021).

Now discussing these two elements as a whole, students in writing activities should create coherent and cohesive texts, this means that the text will have coherence when the ideas or sentences are connected between them, while cohesion indicates the continuity that is given between the discourse, for this relationship of elements would be applying semantic

ties, which means the creation of a unified text providing a smooth reading to the lector (Zahra et al., 2021).

Grammatical cohesion

Additionally, in the teaching of the Foreign Language, lexical grammatical patterns are applied to develop textual unity, providing students with strategies to construct well-structured and connected paragraphs. According to Jayanti & Hidayat, the use of cohesive devices is required to have a cohesive text, in which there are different types, which are reference, substitution, ellipsis and conjunction, however, there are also lexical cohesion, in which there are two types, reiteration and collocation (2021). With this in mind, in this study focuses on the use of grammatical cohesion in paragraphs.

Grammatical cohesion is a semantic connection which is based on and expressed in a grammatical system, between elements that are marked by grammatical devices (Daud et al., 2023). As mentioned before, grammatical cohesion is divided into certain parts: reference substitution, ellipsis and conjunction. In this study will talk about focusing in reference.

Grammatical cohesion refers to all the linguistic features that create a sequence of sentences or phrases in a text. This grammatical cohesion is also defined as the explicit cohesion that intertwines the sentences and parts of the text, it means, that the more structure and lexicons it has, the more unified text can be created (Alarcon & Morales, 2011).

Reference Cohesion

Reference describes how there is a connection between one sentence and the other, which points to another component of the sentence. This reference cohesion has two parts, the pointing part and the pointed part, this means that if in one sentence is used with a subject, the other sentence can be referred to with a pronoun. Furthermore, the cohesion of reference points out two parts which are anaphoric and cataphoric. In anaphoric cohesion it

highlights an element of the sentence, which has been pointed out or mentioned in another sentence (Isodarus, 2023).

For example, “Cristina went to the supermarket, she bought apples and grapes” in which Cristina is mentioned in the first sentence and the anaphoric reference is the She which is mentioned in the second sentence and refers to Cristina (Indriyani, 2022).

On the other hand, there is also the term cataphoric cohesion, which is the opposite of anaphoric, which refers to a named element of another word or phrase that appears later in the text. That is, the cataphoric reference is prior to the explanation of the person or object being referred to, so the reader looks for the person being referred to by looking or reading further ahead in the next sentences (Surdyanto, 2022).

For example, in the cataphoric reference could be “There she is the girl who bought me some flowers” in this way the “she” is the cataphoric reference since it is before the sentence where the reference is made to the person being referred to (Janjua, 2012).

Difficulties in teaching writing

Teaching English skills, in this case the skill of writing, presents many challenges for both teachers and students. For teachers, it can be complicated trying to convey a specific idea of how to write in the English language, and trying to find a methodology, strategy or technique that can be implemented for students, as well as students can present numerous challenges in writing, including trying to use a strategy to develop a written text. Likewise, for students, it is sometimes uncomfortable for them to use old strategies or to get into the ambiguity of these strategies, so they avoid them, causing problems in the writing of texts (Harrison et al., 2024).

Akramovna et al. (2020) mentions that the writing skill can be devastating for students both academically and in their self-esteem during their school performance, however this skill goes hand in hand with other techniques and strategies where students can make

mistakes but also learn from them, on the other hand teachers must understand that each student has their strengths and weaknesses where we with constant observation and feedback to them we can develop the writing skill. The difficulties in writing are due to the level they present in the writing of texts and because of their emotional state, which is based on the cognitive resources that students require to develop this skill (Fan & Wang, 2024).

Another difficulty that is presented consists in the fact that the students have problems in expressing what they want to write in the Foreign Language, as well as in joining their ideas in the English language, since they tend to relate their native language with the Foreign Language, having problems with the grammatical rules, and the lack of knowledge they present with respect to vocabulary and linguistic structures related to the English language (Sidabutar, 2021). On the other hand, Ismayanti and Kholiq mention that the lack of knowledge in strategies for planning texts causes students to have certain problems in writing texts, since if some strategies were implemented, students would develop a cognitive approach where it becomes a process of writing production (2020).

Cognitivism

Cognitivism refers to the whole process of thinking which includes memorization, forgetting, and elaboration of ideas. Cognitive theories also focus on the process that exists in the learning development of students and address these various questions of how their mind receives, organizes, stores, and retrieves information (Al-Jarrah et al., 2019).

According to Dilshad (2017), cognitivism implies using the mind for the development of learning, which focuses on internal thoughts, and behavior, likewise, cognitivism is divided into two theories: social cognitive and behavioral cognitive.

Taking this into account the social cognitive is based on how the student has the acquisition of behavior or how to behave in a social environment and the development of behavioral learning is based on observation (Dilshad, 2017).

Cognitivism in learning is of utmost importance because it emphasizes the social and intellectual environment in which learning is developed, as well as the mean and form in which thoughts and knowledge are acquired. Cognitivism is a theory in which it is designed for learners to receive and retrieve information (Malik, 2021).

The Role of Cognitivism in Writing Instruction

Cognitivism asserts that learning occurs through structured mental processes. This approach aligns with the use of mind mapping, which aids in organizing thoughts before producing written texts. Sari et al. (2021) discuss how activating students' cognitive abilities through visualization enhances critical thinking and knowledge retention.

Sharma & Mahavidhyalaya, mentions that in the writing skill cognitive learning is present since it includes mental processes, which leads to problem solving, as well as a process that helps students to be active, and can actively produce ideas in writing from previous knowledge or experiences (2023).

The role of cognitivism in writing attempts to capture and express the writer's thoughts or knowledge, allowing him or her to capture his or her ideas in his or her own words. Despite criticism, the development of this model tried to represent more accurately how writers express themselves. In the field of rhetoric and composition, this model broke with traditional ideas and supported what many researchers already suspected: writing is not a linear process, but dynamic and constantly under construction (Betz, 2022).

Paragraph Structure

In the English language, teachers use various tools to encourage students to write in English, since it is considered one of the important elements in the skills to communicate in the language, therefore, it is considered that the ability of writing has certain essentials, it also helps to promote the educational system by identifying errors and providing the

corresponding feedback to students (Yaseeni et al., 2024). Consequently, writing in English is not only an isolated skill, but a transversal component of the teaching-learning process.

Some components of the paragraph in order to be one of clarity and understanding are the topic sentences, the supporting sentences and the concluding sentences, these elements must be connected to each other so that it can have unity and clarity, likewise the paragraph must end with the idea you want to provide or describe in order to start the other paragraph, therefore the components in the structure of a paragraph are essential for the reader to find it easy to understand (Maulida et al., 2022).

Speaking about each of the elements that present the structure of a paragraph, the first is the topic sentences, which are mentioned to be included in each paragraph in order to facilitate the reader, the topic sentences are very specific, which give an understanding of what the paragraph is going to talk about (Paraskevas, 2021). Continuing with the supporting sentences, they perform the function of explaining or defending the topic sentences, thus providing extra information or help to have a wider topic of what is required to talk about (Zagoto et al, 2022). Similarly, the concluding sentences are those that defend the two points, and reveal the most important part of the paragraph, they provide a summary of the entire paragraph, giving a general idea of what the supporting sentences contained (Maulida et al., 2022).

Mind mapping as cognitive strategy to teach writing skills

The mind mapping strategy was proposed by Buzan in 1970, which has been a strategy that is continuously used to write notes or important ideas, brainstorming, and visual organization, with this diagram what is done is to place the main topic in the center and around it the main ideas related to the topic to be discussed, and this whole set of ideas or keywords can represent everything that is wanted to express, taking into account the different levels in which it has been organized, as well as the mind mapping helps students to understand and organize by applying the knowledge they have regarding the topic they want to talk about (Zheng et al. , 2020).

In addition, Sari et al., (2021) mentions that the mind map strategy has certain characteristics of activating students' brains so that through the shape, colors and organization of the mind map, students can write down their ideas, as well as give them the opportunity to inquire about previous knowledge they have in their brains and learn from certain experiences.

Mind maps help the production of knowledge either as a receptor or producer of words in order to improve comprehension and learning development of students in a general way (Yen, 2024). The strategy of mind mapping in the implementation of the educational environment is very relevant because it is part of a group of techniques or strategies in which students can present or capture their ideas. Polat and Aydın (2020) mention that in the educational field, students use their imagination independently, in order to bring their brain to a constant development where they can relate their concepts or ideas in a single organizer, in order to have a wide and clear view about what they want to write, therefore the mind mapping strategy in the educational field helps students to develop their critical thinking in any of the skills of the Foreign Language.

Mind mapping to develop paragraph structure in written texts.

As has been mentioned in this study, writing skills are essential in the learning of students since they are young, to be able to produce effective written texts, however, there are some students who still have problems during the production of these texts. Roza et al., (2021) mentions that the main problem is that students do not organize their ideas in the right way, therefore it is necessary to implement strategies to help them produce these texts focusing especially on coherence and cohesion, as a result implementing mind mapping in writing activities, helps them to brainstorm ideas to develop visual notes and thus write their paragraphs in a coherent and cohesive way, demonstrating a text or paragraph with grammatical structure without missing the key elements of coherence and cohesion.

“A text is a unit of language in use” (Halliday & Hassan, 1976) in other words, it is a unit that is related and complemented by the rest of the sentences in order to give meaning to the written text. For this, what is needed is coherence and cohesion in texts, and through the use of appropriate strategies and techniques can be achieved clarity and relationship that teachers seek to provide students, these strategies which helps students to implement words, ideas or sentences a meaning which are related to each other providing clarity to the reader (Priangan et al., 2020).

As a result, this study will show the effective implementation of the mind mapping strategy to develop cohesion in paragraph texts for A2 level students in an Ecuadorian school, in order to provide affirmation or efficacy to the implemented hypothesis.

CHAPTER II

METHODOLOGICAL DESIGN

This chapter emphasizes the methodology used in this study, which investigates the effectiveness of mind mapping strategy to improve coherence and cohesion of written texts in A2 level students at an Ecuadorian school, using an approach and a design to implement the proposal. Furthermore, this chapter highlights the description of the participants and where this research will be carried out, it is worth mentioning that it also highlights the techniques with which it will be carried out to collect data, the instruments that will be used, as well as the validity or reliability of the research. Finally, the possible analysis of the results that will be developed during the research will also be presented.

Research approach and design

The study is carried out by a quantitative approach, in which the data will be collected and analyzed through the use of pretest and posttest, a didactic unit which is going to be the right hand of the teachers to help students improve their paragraph structures and cohesion of their written texts. In addition, techniques that are based on the implementation of the proposal that in this research are about mind mapping strategy. Ali (2021) mentions that quantitative approach refers to a process of collecting and evaluating data, which contains an assessing mechanism. This approach aims to validate the hypothesis that is raised about a study, it also has the benefit of illustrating and demonstrating the results obtained.

On the other hand, in this study we will use the quasi-experimental design, Campell (1968) mentions is a type of research in which it is used to show the impact that the interventions have on the sample group that is chosen, in other words, the participants do not have a previous preparation for what is going to be investigated. Therefore in this type of research two groups are needed, a control group and an experimental group, in which the control group does not apply the intervention, and in the experimental group the intervention

is applied and the results are compared, leading to a final result of how effective the intervention is or how it affects the participants. Considering this, the control group will be the 8th grade of EGB parallel C and experimental groups will be the 8th grade students of EGB parallel A, which does not receive the intervention.

This groups are from an Ecuadorian high school called La Inmaculada, for the development of paragraph structure and cohesion in the written texts with A2 level of English.

Description of the sample and the context of the research

The high school where the intervention will take place is the Unidad Educativa fiscomisional la Inmaculada, located in the city of Loja, Ecuador, which currently has 1400 students. The participants were selected randomly, taking into account the experience and the problems identified during the academic period. In this case, the eighth year of General Basic Education Parallel “C” with A2 level of English was chosen to do the intervention, which consists of 36 students, only women, with approximate ages of 12 and 13 years. As an experimental group there will be students from the eighth grade of EGB parallel A, who are not going to have any intervention. As a professor of the group, it has been observed that the students have difficulties in writing an adequate paragraph, they get confused with the connectors, transition words, and in a coherent and cohesive way, which is why it was decided to focus on working with them.

Data collection process:

Techniques and Data collection instruments

The data collection for this study, different techniques will be developed, the first technique will be measuring, which is a technique through which will interpret the level of proficiency in the written texts of students in the eighth year of General Basic Education, and how coherence and cohesion are present in. According to Toni (2020), measuring is a

process by which information and objects are measurable, and by which data are obtained in order to analyze them. Furthermore, the instrument that will be used for this technique is a pre-test, which will consist of a task in which students create short stories from a list of key words that will be provided. This activity will help assess students' level of proficiency in producing coherent and cohesive written texts. The results of the pre-test will serve as reference data for comparison with the post-test.

A pre-test and post-test design is a widely used assessment method in experimental research to measure the impact of an intervention by comparing participants' performance before and after its implementation. According to Dimitrov and Rumrill, the pre-test and post-test designs are instruments that are used for the experimental groups that are required to have an intervention or treatment so that later a comparison can be made with the control groups, which have not received any intervention. In addition, these instruments are mainly used to carry out behavioral research and measure the change that has taken place thanks to the intervention (2003).

Finally, the measuring technique will be applied again using the post-test instrument, which contains the same activities as the pre-test but with the slight difference that the students in this case will already know how to develop a written text in a cohesive and coherent manner and allow for a comparison of the results before and after the intervention to evaluate the impact of the treatment.

Validity /Reability

Validity is considered as a concept that can be measured in a quantitative study, and if the instruments that are presented are appropriate to be able to develop the data collection, which must be approved by experts (Heale & Twycross, 2015). On the other hand, Heale and Twycross mention that reability is what gives constancy to the instrument so that it can give an appropriate measurement to be able to collect data (2015). In this study, validity will

be given to the instruments such as the pre-test, post-test and the implementation of the proposal, to know if the hypothesis can be resolved.

Analysis of the results

In this study, the results will be analyzed using qualitative and quantitative methods. A specific rubric, developed from the Common European Framework of Reference for Languages (CEFR), will be used to assess coherence and cohesion in the written texts produced by the students. This rubric constitutes an effective tool for assessing the development of language skills at level A2, the focus of this study. To determine whether the mind mapping strategy helps students improve their coherence and cohesion, a comparison will be made between the pre-test and post-test results. Descriptive statistics will be used to summarize students' performance before and after the intervention.

The rubric, together with the written exercises used for the pre-test and post-test, will serve as the main instruments to evaluate the impact of the mind mapping strategy. This approach will allow us to assess whether the hypothesis that the mind mapping technique improves the paragraph structure and cohesion of students' writing is supported by the data.

To analyze the results, rubric will be used to assess coherence and cohesion in students' written texts. This rubric will be specifically designed based on CEFR guidelines, ensuring alignment with internationally recognized language assessment standards (Council of Europe, 2001). However, it is important to note that the rubric itself will not be used as part of the statistical analysis. Instead, it will serve as an instrument to evaluate qualitative aspects of students' writing performance before and after the intervention. Statistical analysis will focus on measuring improvements using quantitative methods such as descriptive and inferential statistics, ensuring an objective assessment of the mind mapping strategy's effectiveness.

Presentation and analysis of results

In this section will be presented and examined the results obtained with respect to effectiveness of mind mapping strategy to enhance paragraph structure and cohesion in written texts of A2 level students at an Ecuadorian primary school. Therefore, the results obtained in the pre-test will be detailed first, describing what was evaluated and what errors the students made, both in the experimental group and the control group, after this, the results of central tendency in the pre-test of both groups will be described. Then the results obtained in the post-test will be analyzed, describing the content that was evaluated and the mistakes made during the post-test of both groups, as well as the results of central tendency. finally, the verification of the hypothesis will be carried out, which is aimed at showing if the implementation of the mind mapping strategy is effective in order to develop cohesion in paragraphs in 8th grade students of general basic education in an Ecuadorian school. This analysis will be able to measure the achievement or the improvement that the students have had at the moment of developing their written paragraphs.

The pre-test was evaluated in which the students had to create a paragraph of 30 words based on the images shown to them, in which the students had to write the paragraph correctly, using appropriate vocabulary and appropriate language. For this pre-test a writing rubric based on the CEFR Common European Framework of Reference for Languages was used to evaluate the coherence and cohesion in written texts with an A2 level, within this rubric is presented the Content, related to the use of content that is relevant to the reader, the Organization that has to do with the ideas are well connected between them, the whole paragraph is well organized and if the connectors or linking words are well used, as well as the number of words, and finally the Language which has to do with the correct use of vocabulary and grammar. This rubric is scored out of 5, where 5 is excellent, 4 is very good, 3 is typical of A2 level, 2 is below A2 level, 1 is a weak score and 0 does not meet the criteria of A2 level.

Table 1

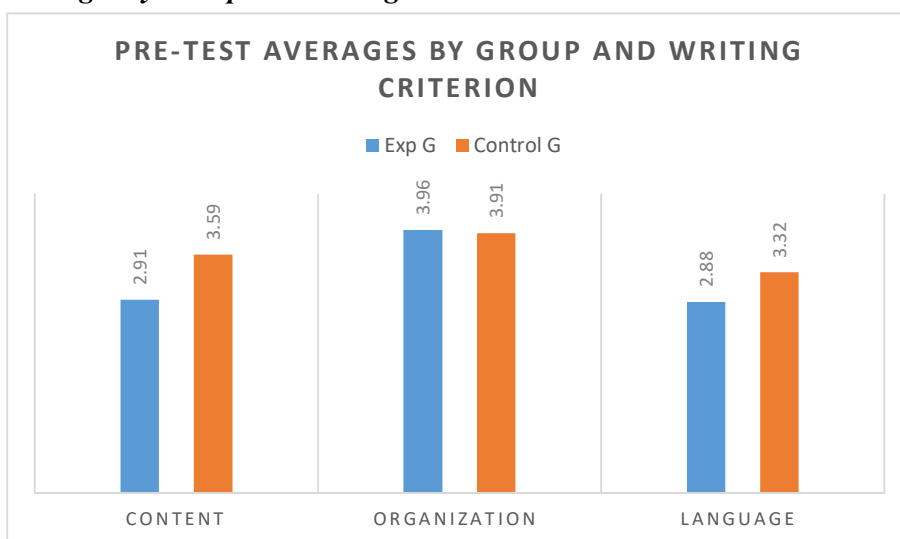
Pre-Test Averages by Group and Writing Criterion

Pre test	Exp G	Control G
Content	2,91	3,59
Organization	3,96	3,91
Language	2,88	3,32

Note: the average scores obtained by the experimental group (Exp G) and the control group (Control G) in the pre-test writing task.

Graphic 1

Pre-Test Averages by Group and Writing Criterion



Note: comparison of the pre-test writing performance of both groups across the three evaluation criteria.

The table shows the comparative scores of the experimental group and the control group, where the experimental group in content presents a score of 2.91, however the control group has a score of 3.59, where it is evident that the experimental group presents a low score but also according to the A2 level, it is worth mentioning that the reasons for these grades, it was analyzed by the results of the pretest and the analysis of the most frequent errors in the written paragraphs by the students, it was identified that one of the main difficulties was the lack of coherence and cohesion. Although the students were clear about what they wanted to

express, they did not know how to adequately connect their ideas. This difficulty was mostly due to the lack of knowledge of grammatical structures and the limited use of connectors.

As a result, many opted to ask how to say certain things in English or wrote very simple, but disconnected sentences, failing to form paragraphs that made logical and fluent sense. According to Septiwan and Al Hafizh (2021), coherence is one of the most important characteristics since it helps writers to organize ideas so that the reader can flow with the reading in a clear and logical way. Likewise, when creating cohesive texts, it is to provide the text with a certain continuity so that ideas and sentences can be connected to each other, providing a smooth reading (Zahra et al., 2021).

The following result, which is based on the organization of the paragraphs, which must be organized by the topic sentences, supporting sentences and concluding sentences for a paragraph to be complete and have coherence and cohesion. This reaffirms what the authors Maulida et al. (2022) mention, where they emphasize that for a paragraph to have clarity and unity it must have the three components of the structure which are the topic sentences, supporting sentences, and the concluding sentences, where they show the ideas so that they can be connected among them, giving the reader an ease to read and understand what is written. Experimental group presents a 3.96 while the control group presents a 3.91. It was analyzed that one of the main errors was the fact that the students did not know how to start writing, they did not know how to express what they wanted to write in the English language. According to Sidabutar (2021), one of the difficulties when writing texts is that students do not know how to express what they think or how to connect ideas, because they tend to relate everything to the native language, that is Spanish, which they cannot or get stuck thinking only in Spanish, having problems in the grammatical rules, and the lack of vocabulary and linguistic structures of the English language.

Finally, in the use of English, the experimental group has a score of 2.88, but the control group has a score of 3.32 out of 5. The results were analyzed, suggesting that the students have many difficulties in the use of vocabulary, grammatical cohesion and reference cohesion. Regarding grammatical cohesion, it was evidenced that students did not adequately use cohesive devices, which are essential to achieve unity and clarity in a written text. According to Duad et al. (2023), cohesion is a semantic system that is expressed through grammatical devices such as reference, substitution, ellipsis and conjunction. However, when analyzing the most common errors made by the students, it was identified that the greatest difficulty was in the use of grammatical reference, specifically in referential substitution.

Students tended to be very redundant in the use of pronouns and subjects, constantly repeating words such as *she*, which affected the fluency and clarity of the text. In many cases, sentences lacked logical sense, as ideas were not correctly separated and connected. In addition, there was frequent confusion between the pronouns *he* and *she*, which generated ambiguity and made it difficult to understand the message.

Taking this into account, reaffirms Isodaurus (2023), that the reference cohesion is the two parts of the sentence where first the elements of the sentence are highlighted, in other words, the main subject appears and in the second sentence the pronoun is used in reference to the aforementioned subject, however, as mentioned before, most of the students only used the pronoun or simply no subject at all, giving zero coherence and cohesion to their texts.

Table 2

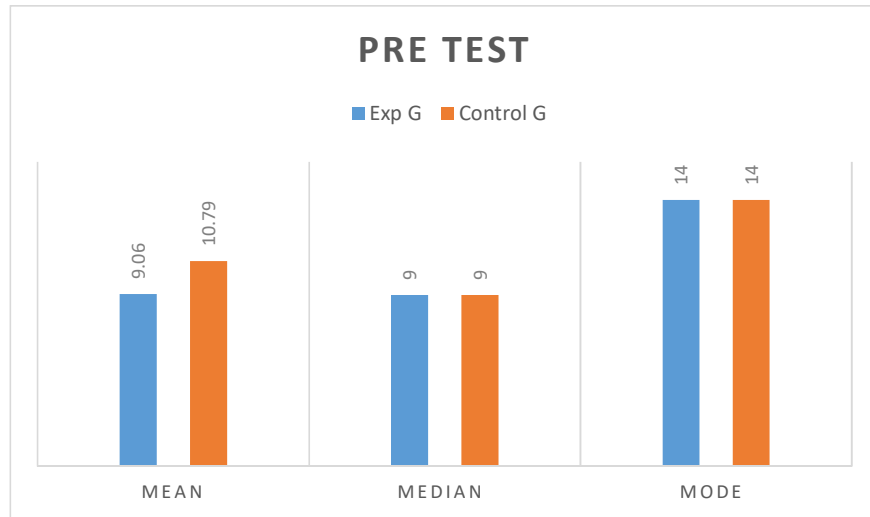
Comparison of the averages from the central tendency in the pre-test

Pre Test	Exp G	Control G
Mean	9,06	10,79
Median	9	9
Mode	14	14

Note: the central tendency scores obtained by the experimental group (Exp G) and the control group (Control G) in the pre-test writing task.

Graphic 2

Comparison of the averages from the central tendency in the pre-test



Note: comparison of the central tendency scores from the pre-test writing performance of both groups.

Table 2 and Graphic 2 present the measures of central tendency; mean, median, and mode obtained by the experimental group (Exp G) and the control group (Control G) in the pre-test stage. The mean score of the control group 10.79 is higher than the experimental group 9.06. This suggests that, on average, students in the control group performed better in the pre-test writing task.

Talking about in a general way the students of the control group were able to reach a required grade, in which they used correctly the grammar, they had certain parts of their texts coherence and cohesion, the students were able to make use of the reference cohesion which is technically based on making use of the pronoun referring to the subject that has been mentioned first. It is worth mentioning that most of the students used the anaphoric reference, where they mentioned first the name of the subject and then the pronoun, this reaffirming what the author Isodarus (2023) says, that the first to be mentioned is the element of the sentence, in which in the second sentence it is mentioned, but with the pronoun making reference to the first sentence.

On the other hand, the students of the experimental group were affected or with a lower average because they did not know how to begin to develop their paragraph, this group had lack skills or strategies to begin developing a paragraph, one of the aspects evidenced was the difficulty the students had in expressing themselves or writing in English. In general, they had a very limited vocabulary, which prevented them from expressing their ideas adequately. This limitation was aggravated at the moment of trying to join ideas, because, due to the lack of knowledge in the area, they did not know how to structure their sentences or use appropriate connectors.

This coincides with Sidabutar (2021), who points out that one of the most recurrent problems in students is precisely the poor acquisition of vocabulary, which prevents correct written expression. Likewise, they face difficulties in establishing coherence between sentences, due to the insufficient use of connectors. It should be noted that another factor that has a negative influence is the lack of explicit teaching of grammatical rules by some teachers. It is due to this that the students of the experimental group could not develop the paragraph that was provided in the pre-test.

The median score for both groups is equal to 9, indicating that the middle score in both distributions is the same. This implies a similar central tendency in terms of the most typical performance. Regarding the mode, both groups share the same value 14, which means the most frequently occurring score was high in both groups. This may indicate that several students in each group achieved strong results, despite differences in the mean.

These results indicate that prior to any instructional intervention, the control group had a slightly stronger average performance. However, the equal median and mode suggest that both groups had similar clusters of high performers, and that the observed mean difference could be influenced by lower individual scores in the experimental group.

Table 3

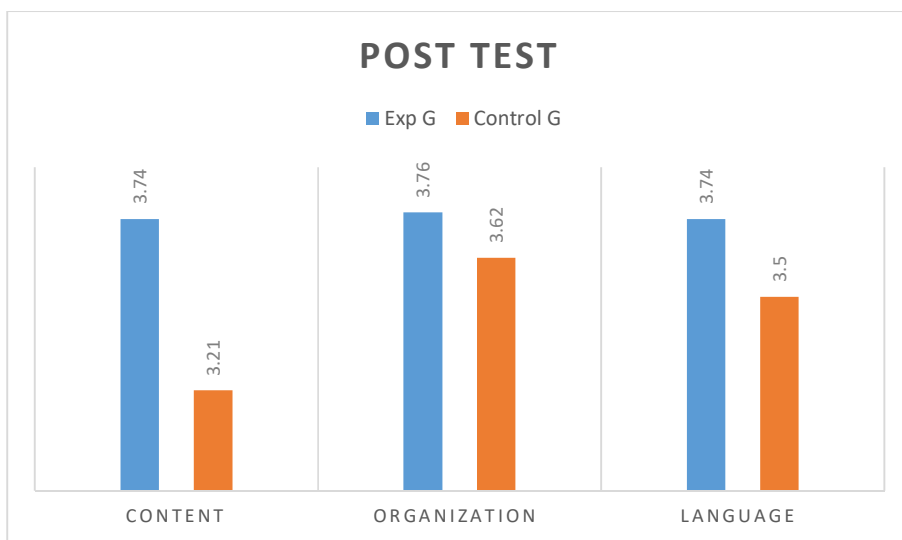
Post-Test Averages by Group and Writing Criterion

Post test	Exp G	Control G
Content	3,74	3,21
Organization	3,76	3,62
Language	3,74	3,5

Note: the average scores obtained by the experimental group (Exp G) and the control group (Control G) in the post-test writing task.

Graphic 3

Post-Test Averages by Group and Writing Criterion



Note: comparison of the post-test writing performance of both groups across the three evaluation criteria.

Table 3 and Graphic 3 show the comparative level of the experimental group and the control group in the post-test. In which a difference of averages can be evidenced in which the students of the experimental group were able to overcome the score they had in their pre-test and improve the score of the control group.

The table shows how the experimental group has 3.74 out of 5, in the content section, unlike the control group that has 3.21, this means that the students of the experimental group made their paragraphs with content that is evident in the images and also relevant content about the images provided in the post test.

This section reaffirms what the author Hanim et al. (2020) mentions where the writing process has several elements such as the development of critical thinking, the process that has to do with planning, translating and revision, the students in the content section what they did was a scanning of what comes to be the images presented in the post test, where they applied the use of mind mapping to organize the content that they are going to mention.

With this in mind, we move on to the next section, which is organization, where the experimental group obtained a score of 3.76, while the control group had a score of 3.62, which shows the improvement of writing skills in the experimental group. Thanks to the use of mind mapping, in which this experimental group was able to organize the ideas they presented, also thanks to the teaching of what is contained in a paragraph, such as what is the main idea and what are the supporting ideas, and the concluding ideas.

Taking this into account it is possible to reaffirm what the author Sari et al. (2021), mentions the cognitivist approach, which is considered relevant within writing instruction, since it understands this process as a mental and structured activity. Within this approach, the use of strategies such as mind mapping, a tool that facilitates both the production and organization of ideas, stands out. Its application allows students to activate various cognitive skills, including critical thinking and knowledge retention, which are fundamental elements for meaningful learning in writing.

Finally we have the language section where the experimental group achieved a score of 3.74 and the control group a score of 3.5 out of 5, where thanks to the fact that the students in the book unit they were seeing was about daily routines, they learned the use of vocabulary and were able to write their ideas with the use of this vocabulary of daily routines, likewise, this section not only mentions vocabulary but also the proper use of mind mapping to develop paragraph structure in written texts, This reaffirms that the proper use of writing strategies

allows students to achieve clarity and unity in their paragraphs through the effective use of coherence and cohesion. By applying these strategies, students can incorporate words, ideas or sentences that are related to each other, which contributes to structuring more comprehensible and fluent texts. In this way, it is possible to provide greater clarity to the reader, as pointed out by Priangan et al. (2020).

Table 4

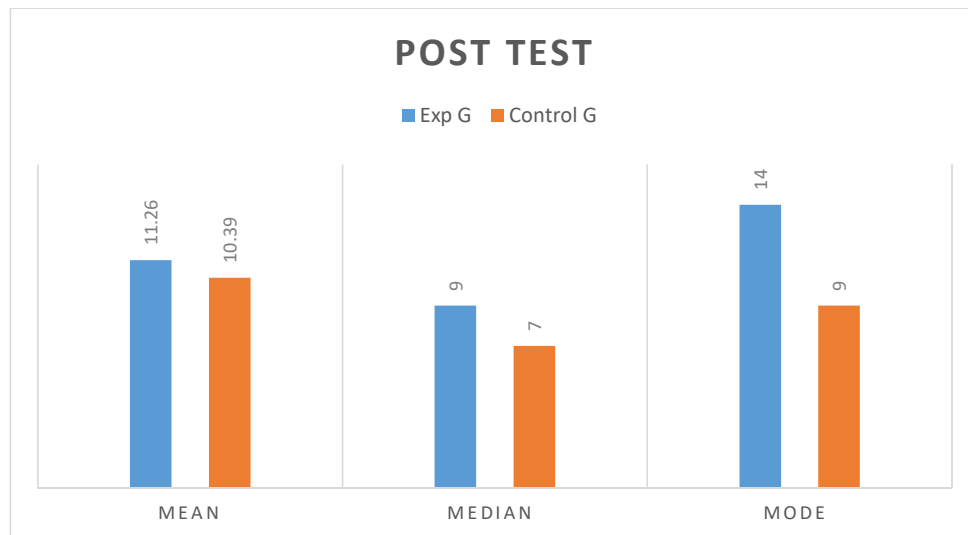
Comparison of the averages from the central tendency in the post-test

Post Test	Exp G	Control G
Mean	11,26	10,39
Median	9	7
Mode	14	9

Note: the central tendency scores obtained by the experimental group (Exp G) and the control group (Control G) in the pre-test writing task.

Graphic 4

Comparison of the averages from the central tendency in the post-test



Note: comparison of the central tendency scores from the post-test writing performance of both groups across the three evaluation criteria.

Table 4 and Graphic 4 summarize the post-test performance of both the experimental group (Exp G) and the control group (Control G) through the measures of central tendency; mean, median, and mode.

The mean score of the experimental group 11.26 is higher than that of the control group 10.39, indicating that the average performance of the experimental group improved more after the intervention. The median score also favors the experimental group 9, while the control group obtained a lower median 7. This suggests that the typical student in the experimental group performed better than the typical student in the control group. The mode reinforces this tendency; the most frequent score in the experimental group was 14, while in the control group it was 9. This indicates a concentration of high performers in the experimental group, suggesting greater consistency at the top end of the distribution.

The data suggests that the experimental group benefited more from the instructional process, achieving higher central tendency values across all three measures. These results provide evidence that the mind mapping strategy may have had a positive effect on students' writing performance, particularly in raising the average and typical scores. In this sense, Buzan (1970) reaffirms that the mind mapping strategy is frequently used to note down main ideas and brainstorm ideas. This technique allows the student to have a clearer vision of what they wish to write, since it facilitates the identification of the main idea and the central theme, and the organization of the secondary ideas around these elements. In this way, a structured planning of the text is promoted and the understanding of how ideas should be organized according to the topic to be developed is improved.

It should be noted that, due to the effectiveness observed in the use of this strategy, it is also supported by Polat and Aydin (2020), who state that mind mapping is highly effective, since it allows students to use their imagination and generate a great variety of ideas, which they can organize in a single visual scheme. This, at the same time, contributes to the development of critical thinking within the educational context.

Table 5

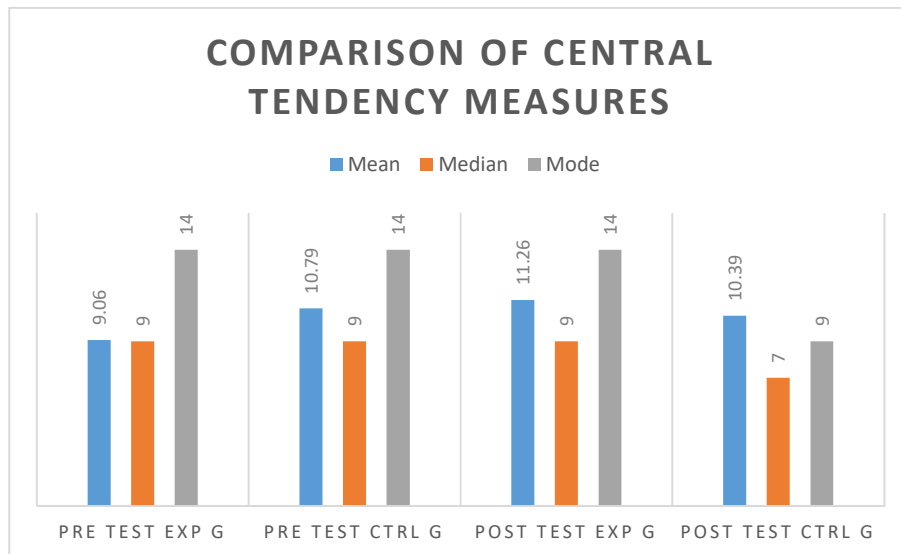
Comparison of the averages from the central tendency between the pre-test and post-test from both groups

Measure	Pre Test Exp G	Pre Test Ctrl G	Post Test Exp G	Post Test Ctrl G
Mean	9,06	10,79	11,26	10,39
Median	9	9	9	7
Mode	14	14	14	9

Note: Central tendency comparison scores between the pre-test and post-test from the experimental and control group

Graphic 5

Comparison of the averages from the central tendency between the pre-test and post-test from both groups



Note: Central tendency comparison scores between the pre-test and post-test from the experimental and control group

Regarding the mean, the experimental group shows a clear improvement, going from 9.06 in the pre-test to 11.26 in the post-test. On the other hand, the control group shows a slight decrease, going from 10.79 to 10.39. This suggests that the instructional intervention applied to the experimental group had a positive effect on their achievement in writing overall. It should be noted that the students achieved a significant improvement in the cohesion of their texts thanks to the application of the proposal, since they were able to give unity and clarity to their paragraphs. This was possible due to the use of the mind mapping technique, as well as the

knowledge of key aspects of writing, such as paragraph structure and the appropriate use of cohesive devices. As a result, students were able to capture and maintain the reader's attention in their written productions.

This finding also supports the statement of Septiwan and Al Hafizh (2021), who affirm that cohesion is a fundamental element to achieve text unity, since it allows linking ideas in a logical and structured way. The authors point out that the conscious use of lexical and grammatical patterns not only improves text construction, but also facilitates the writing process, as it provides students with clear tools to organize their ideas. Furthermore, they emphasize that coherent and cohesive writing has a greater communicative impact by allowing the reader to easily understand the message and maintain interest in the content of the text. This reinforces the idea that teaching strategies that strengthen cohesion contributes significantly to the development of communicative competencies in academic contexts.

Concerning the median, the experimental group maintained a constant score of 9 in both tests, while the control group decreased from 9 to 7, indicating a decrease in the central value of their performance distribution.

In terms of mode, the experimental group consistently achieved the highest frequent score of 14 in both phases. Meanwhile, the control group's most frequent score decreased from 14 in the pretest to 9 in the posttest. This reflects a greater consistency and concentration of high scores in the experimental group.

This reaffirms the hypothesis that the implementation of the mind mapping strategy is effective in improving cohesion in texts written by eighth grade students. Furthermore, these results support Yen (2024), who argue that mind mapping facilitates the production of knowledge, allowing students to organize their ideas, transform them into words and translate

them into a text. This strategy contributes to the development of comprehension and learning in a comprehensive manner.

CHAPTER III

PRODUCT

Innovative Proposal to the Problem / Result

This section presents the didactic proposal designed to address the writing difficulties identified during the research process, focusing specifically on students' challenges in structuring paragraphs and achieving cohesion in their written texts. The proposal is based on the implementation of the mind mapping strategy, which serves as a visual and cognitive tool to help A2 level English learners organize their ideas effectively before and during the writing process. The target group for this intervention is a class of students from an Ecuadorian elementary school, Unidad Educativa Fiscomisional La Inmaculada, where the problem was identified through diagnostic assessments and writing analysis.

The central objective of the proposal is to improve paragraph structure and cohesion, two essential components of writing that allow students to communicate ideas in a clear, logical and meaningful way. The strategy aims to guide students in developing topic sentences, supporting ideas, and logical connections through cohesive devices, which were areas of weakness observed during the pretest phase. To address these challenges, the proposal includes a set of teaching units that incorporate mind map-based activities adapted to the linguistic level and contextual needs of the learners.

Through integrating visual thinking into the writing process, the proposal aims not only to improve students' ability to write coherent and structured paragraphs, but also to promote engagement, creativity and autonomy in English language learning. This pedagogical intervention is aligned with the objectives of the national curriculum and responds directly to the needs identified in the classroom context.

Proposal Name

“MIND MAPPING STRATEGY TO ENHANCE PARAGRAPH STRUCTURE AND COHESION IN A2-LEVEL WRITING”

TYPE OF PRODUCT

As mentioned before, a Didactic Unit is created. In the field of educational psychology, the Didactic Unit is defined as a dynamic learning environment where students collaborate by engaging in practical, job-related tasks, it refers to a setting that enables the development of complex skills and a deep understanding of concepts (Randovan & Randovan, 2015).

Furthermore, the didactic unit is created based on objectives, competencies, lesson plans and evaluations, in the didactic unit there are around 5 objectives and there are four competencies in which students must develop, it also offers an evaluation that focuses entirely on the activities and lesson plans in detail, with the aim of having an optimal learning development, with progress and improvements in students (Barea, 2014).

The didactic units presented in this proposal have been designed according to the academic needs of the students, with the objective of reinforcing previously acquired content and activating previous knowledge. This methodology allows establishing a connection between what students already know and the new learning they are required to develop. The units follow a logical and progressive sequence, which facilitates the gradual development of written skills. Each unit includes activities that promote the organization of ideas, the appropriate use of cohesive elements and the improvement of paragraph structure, employing as a main resource the strategy of mind maps, also didactic units should respond to the real needs of the student and be organized in a way that facilitates comprehension and the achievement of learning objectives (Garcia,2023).

It is worth mentioning that the didactic unit is related as a thematic block, which highlights the development of the learning process, so it must be related to the purposes of the curriculum, which is integrated by students' knowledge and sociocultural environment, that is the reason why the didactic units encompass everything in order to improve the development of student learning, using different strategies and methodologies (Zapata, 2016).

Based on this, a didactic unit was developed which contains activities for students to develop their learning process based on writing skills.

The proposal focuses on 3 units which are the introduction to mind mapping as a resource to help writing paragraphs with cohesion, the second unit focuses on the effective development of a paragraph which will help the implementation of mind mapping to be able to organize the ideas in a paragraph in a structured way, in other words, it helps the process of developing the topic sentence, supporting details and concluding paragraph. As a last unit is the implementation of cohesion in the text, where cohesive devices such as linking words and transition words are given. Each of the units includes activities and assessment methods in order to understand and identify students' progress in each session.

Structure Proposal

This section is divided into two sections: the first is the cover page which summarizes the didactic units and the objective as well as the table of contents, and the second section is the structure of the didactic units.

Title of the Proposal: “Mind Mapping Strategy to Enhance Paragraph Structure and Cohesion in A2-Level Writing”

Subtitle: A Didactic Unit Plan for Primary School Students in Ecuador

Author: Lic. Daniela Poma

Institution: UNIDAD EDUCATIVA FISCOMISIONAL LA INMACULADA

Subject Area: English as a Foreign Language (EFL) / Writing Skills Development

Didactic Units:

Unit 1: “Organizing Ideas Visually”

Unit 2: “Building Stronger Paragraphs”

Unit 3: “Connecting Ideas Effectively”

Structure of the Didactic Units

	<p>Learning Outcome</p>	<p>Students will be able to use mind mapping as a pre-writing strategy to organize ideas logically before writing.</p> <p>Students will identify main ideas and supporting details in a topic.</p> <p>Students will create a mind map based on visual prompts.</p>
<p>Unit 1: Organizing Ideas Visually</p>	<p>Action Steps</p>	<p>Warm-up Discussion</p> <p>Presentation</p> <p>Group Activity</p> <p>Reflection</p>
	<p>Assessment Methods</p>	<p>Pre-Test</p> <p>Formative Assessment</p> <p>Student Self-Assessment</p>
	<p>Resources & Materials</p>	<p>Mind Mapping Templates</p> <p>Visual Writing Prompts</p>

		Markers, sticky notes, or online tools
Unit 2: Building Stronger Paragraphs	Learning Outcome	<p>Students will be able to structure a coherent paragraph using a mind map.</p> <p>Students will recognize and apply topic sentences, supporting details, and concluding sentences in their writing.</p> <p>Students will write a well-organized paragraph based on a structured mind map.</p>
	Action Steps	<p>Warm-up Activity</p> <p>Presentation</p> <p>Guided Practice</p> <p>Individual Writing Task</p> <p>Peer Review</p> <p>Reflection</p>
	Assessment Methods	<p>Writing Task</p> <p>Rubric-Based Assessment</p> <p>Peer Review</p>
	Resources & Materials	<p>Worksheets on Paragraph Structure</p> <p>Model Paragraphs with Corresponding Mind Maps</p> <p>Peer Review Checklists</p>

Unit 3: Connecting Ideas Effectively	Learning Outcome	<p>Students will be able to use cohesive devices (e.g., transition words) to create logical connections between ideas.</p> <p>Students will improve paragraph cohesion and coherence using mind mapping as a writing tool.</p> <p>Students will analyze their writing progress by comparing their pre-test and post-test results.</p>
	Action Steps	<p>Warm-up Discussion:</p> <p>Presentation</p> <p>Guided Practice</p> <p>Individual Writing Task</p> <p>Peer and Teacher Feedback</p> <p>Reflection</p>
	Assessment Methods	<p>Post-Test</p> <p>Comparison of Pre-Test and Post-Test</p> <p>Teacher and Peer Feedback</p>
	Resources & Materials	<p>Word Banks with Cohesive Devices</p> <p>Sample Well-Structured Paragraphs</p> <p>Cambridge Writing Rubric</p>
References	All academic sources, books, articles, and materials	

Annexes	Extra materials.
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Note: Structure and content of the Didactic Units.

Link for the Didactic Unit:

https://www.canva.com/design/DAGr24L97gM/PKPRc7AldcBcTggz_4fgkw/edit?utm_content=DAGr24L97gM&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton

Evaluation of the proposal

The proposal will be evaluated through a comprehensive approach that includes both a pre-test and a post-test, in order to accurately measure participants' progress. In addition, the Cambridge Writing Assessment Rubric will be implemented, which will allow for a detailed and standardized assessment of the participants' writing skills. This evaluation process is intended not only to quantify the knowledge acquired, but also to provide qualitative feedback that encourages continuous development and improvement in language skills.

Formative evaluations will also be conducted in each session, as it is essential to consider the entire learning process of the students. In addition, self-assessments and peer assessments will be conducted, which will benefit students by allowing them to adequately develop their writing skills.

Validation of the proposal

According to the Indoamerica University Manual Thesis, there are 3 methods to evaluate the proposal, which are: METHOD 1: Evaluation by peer specialists; METHOD 2: Assessment by users, METHOD 3: Validation through practical application of the proposal.

Based on this proposal, it is considered that the optimal Validation will be Method 3: Validation through its application in practice of the proposal, point number one, which

mentions “Verification of the results by demonstrating a transformation with respect to the initial diagnosis by implementing the proposal the total or partial results of the study”

Taking this into account, the proposal focuses on the application of the mind mapping strategy and measure the impact they have on the development of paragraphs and cohesion in the texts, it will also be measured through a pre-test and post-test, therefore it is considered that this method will be the most suitable, The students will be evaluated before and after the application of the mind mapping strategy, using the Cambridge Writing Rubric, as well as the comparison of data between the pre-test and post-test in order to observe the evolution of the students' writing.

Conclusions

Based on the achievement of the general and specific objectives of this study, it is concluded that the application of the mind mapping strategy had a positive and measurable impact on the development of writing skills of eighth grade students of General Basic Education with English level A2. Through the implementation of this strategy, it was possible to enhance the planning, structuring and organization of ideas, which was directly reflected in the quality of the texts produced by the students. Writing was no longer an improvised process and became an activity guided by visual diagrams, which facilitated the construction of clearer and more coherent paragraphs.

First, the analysis of the results obtained in the pretest showed that most students faced significant difficulty in writing organized paragraphs, especially in terms of grammatical cohesion and the logical connection among ideas. A very limited use of cohesive devices and a tendency to repeat words or structures were detected, causing a lack of unity and clarity in sentences. Likewise, students presented confusion when using pronouns, connectors and verb tenses, which directly affected the reader's comprehension of the text. These findings allowed establishing a clear basis for the design of the intervention proposal.

Second, the planning and implementation of activities based on the use of mind mapping allowed students to visualize their prior ideas before writing, encouraging the logical organization of content. Through this strategy, students learned to identify the main idea of their paragraphs, developing coherent supporting sentences and employing appropriate connectors to link their thoughts. This improvement was evident in the later written constructions, in which a greater internal structure was observed, with clear topic sentences, clearly structured secondary ideas, and relevant conclusions. The use of the mind map not only facilitated the writing process but also motivated the students by providing them with a visual tool that helped them to order their ideas with more confidence.

Finally, the results obtained in the posttest confirmed a notable improvement in the use of cohesive elements and in the students' ability to write texts with unity, clarity, meaning and coherence. The application of the strategy not only enhanced technical aspects of writing, such as grammar and vocabulary, but also developed essential cognitive skills, such as organization of ideas, critical thinking and textual planning. This empirical evidence demonstrates that the use of mind mapping is an effective strategy to enhance writing skills in A2 level students, as it allows them to construct meaningful and communicatively effective texts, which has a positive impact on their general academic performance.

Recommendations

Based on the results obtained in this research, it is recommended that English teachers systematically integrate the mind mapping strategy as a support tool in the prewriting phase. This technique, as well as facilitating the production and organization of ideas, allows students to structure their thoughts in a clearer way before starting the writing process. One of the most frequently detected problems was the lack of cohesion and the lack of organization regarding content. Therefore, providing students with a visual resource that allows them to plan their texts contributes directly to improving the structural and semantic quality of their productions. The implementation of this strategy should be supported by guided explanations and progressive exercises, in order for students to understand its usefulness and adopt it as regular practice in the classroom.

It is also important for teachers to support the use of mind maps with a methodological approach that explicitly teaches the components of the paragraph. This involves not only teaching what a topic sentence or how to use connectors but also practicing how to develop secondary ideas in a coherent way, how to conclude a paragraph properly and how to connect one to another within a text. By integrating these practices with the use of mind mapping, students will be able to establish a logical connection between ideas and improve the fluency of their writing. In addition, mind mapping can be adapted to different learning styles, which promotes more participation and engagement for all learners, independent of their level of language proficiency or cognitive abilities.

On the other hand, it is recommended that curriculum designers include activities oriented to the explicit teaching of cohesive devices and paragraph structure as part of the curriculum, especially from the beginning levels of learning English as a foreign language. This will allow students to develop from the very early stages of learning a linguistic awareness about the way in which texts are constructed, avoiding improvisation or unnecessary repetition

of words or ideas. The combination of these contents with visual tools such as mind maps not only enhances meaningful learning, but also stimulates critical thinking, creativity and autonomy in written production. In addition, it is suggested that curricular activities promote metacognitive reflection, allowing students to evaluate their own writing process and make conscious decisions on how to improve their texts.

For future investigations, it is proposed to apply the mind mapping strategy for longer periods of time and in different educational contexts, in order to evaluate its impact not only on textual cohesion, but also on other dimensions of the writing process such as global coherence, discursive creativity and the production of academic texts. Increasing the range of application would allow validation of the strategy at different levels of language proficiency, and with different age groups. It would also be interesting to explore how the use of mind mapping influences other language skills, such as reading comprehension or speaking, as the process of organizing ideas visually can have positive implications for other areas of English language learning. Future research could also incorporate mixed methods (quantitative and qualitative) to explore more deeply students' perceptions of mind mapping use and its relationship to their performance on written tasks.

At the same time, it is suggested that teachers and institutions encourage students to use mind mapping as a personal and cross-cutting learning strategy, that is, that it is not limited only to the subject of English but can be used in other subjects such as social sciences, language, history or even mathematics. By adopting this tool as part of their study routine, students will not only improve their ability to structure ideas and organize information, but also develop skills such as knowledge retention, task planning and reading comprehension. This interdisciplinary approach will help develop more autonomous students, capable of confronting academic challenges more confidently and effectively.

In addition to the previous mentioned, it would be advisable for teachers to receive specific training on the didactic use of mind mapping, so that they can effectively integrate it into their pedagogical practices. These trainings could include workshops on graphic organizer design, techniques to guide writing from the mind map, and strategies to evaluate students' progress. Teacher training is key to ensure that methodological tools, such as mind mapping, are not applied superficially or in isolation, but are incorporated into a coherent and focused pedagogical approach to the development of communication skills.

Another recommendation is that educational institutions promote a culture of active and reflective writing, where students have multiple opportunities to write, revise and improve their texts. Mind mapping, in this sense, can act as a starting point for students not only to plan what they are going to write, but also to review their own ideas, reorganize them and improve the coherence of their productions. By creating spaces where the process is valued as much as the product, a positive attitude towards writing is promoted and the basis for sustainable learning is strengthened.

In conclusion, the use of mind mapping as a didactic strategy has proven to be a valuable tool for improving writing in A2 level students. However, to maximize its benefits, it should be implemented in a structured and sustained manner and articulated with other elements of the teaching learning process. Its application not only has an impact on the quality of the written text but also contributes to the integral development of the student, reinforcing his or her autonomy, critical thinking and ability to communicate ideas effectively.

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Appendixes

Appendix 1: Pre-Test



UNIVERSIDAD TECNOLÓGICA INDOAMÉRICA

INSTRUMENT TO VALIDATE THE INTERVIEW

UNIVERSIDAD TECNOLÓGICA INDOAMÉRICA (UTI) PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS CON MENCIÓN INGLÉS

Cuestionario dirigido a estudiantes de octavo año de EGB paralelo A de la Unidad Educativa
Fiscomisional La Inmaculada

“PRE-TEST”

Students' name:

Grade:

Date:

Objective: To assess the changes in paragraph structure and cohesion in students' written compositions before and after implementing mind mapping strategies.

Instructions:

- You will be given a set of pictures.
- Use these words to construct a coherent and well-structured paragraph.
- Make sure your ideas are logically connected and clearly expressed.

1. Look at the pictures and write a 30-word paragraph.



Appendix 2: Post-Test



UNIVERSIDAD TECNOLÓGICA INDOAMÉRICA

INSTRUMENT TO VALIDATE THE INTERVIEW

**UNIVERSIDAD TECNOLÓGICA INDOAMÉRICA (UTI)
PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS CON MENCIÓN
INGLÉS**

Cuestionario dirigido a estudiantes de octavo año de EGB paralelo A de la Unidad Educativa
Fiscomisional La Inmaculada

“POST-TEST”

Students' name:

Grade:

Date:

Objective: To assess the changes in paragraph structure and cohesion in students' written compositions before and after implementing mind mapping strategies.

Instructions:

- You will be given a set of pictures.
- Use these words to construct a coherent and well-structured paragraph.
- Make sure your ideas are logically connected and clearly expressed.



UNIVERSIDAD TECNOLÓGICA INDOAMÉRICA

1. Look at the pictures and write a 30-word paragraph.



Appendix 3: Validation for the instruments

Link for Pre-test validation:

https://drive.google.com/drive/folders/1FQk0y_bjuQCOSlgSX9Tve4XMgaR2Nidf?usp=sharing

Link for Post test validation: <https://drive.google.com/drive/folders/1-pHsO-mWJJC7EcoiBmUOBBCgudbT66IM?usp=sharing>

Appendix 4: Permission from the Institution

Drive link to the PDF:

<https://drive.google.com/drive/folders/1SAsdW1nvqDJcpizMdblTtVWkrVZCFtSJ?usp=sharing>

Appendix 5: Permission and consent from parents

Drive link to the folder: <https://drive.google.com/drive/folders/11K-tLqXgawiX0hRsMPd9mcbVEyB3ohpY?usp=sharing>

Appendix 6: Pre-test taken by the students

Drive link to the folder: <https://drive.google.com/drive/folders/1Q4K5Q-1yNnfsJEb8zQopsf-jHu3u1Km?usp=sharing>

Appendix 7: Post-test taken by the students

Drive link to the folder:

https://drive.google.com/drive/folders/1wNYy0aqPJqr_9I_MD1tqoefthy4J3VOJ?usp=sharing

Appendix 9: Proposal

Canva Link for the Proposal:

https://www.canva.com/design/DAGr24L97gM/PKPRc7AldcBcTggz_4fgkw/edit?utm_content=DAGr24L97gM&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton

Appendix 8: Excel results

Drive link to the folder:

<https://drive.google.com/drive/folders/1OWTZ5BYBQnPFyyb7ThOxIqipZ-OE8jmN?usp=sharing>

Appendix 9: Evidence

Drive link to the folder:

<https://drive.google.com/drive/folders/1DVgFdeK0CpT9gFM4simfHI-6m2kPNI4v?usp=sharing>