



**THE EFFECTIVENESS OF MIND
MAPPING TECHNIQUES ON IMPROVING
LITERAL READINJG COMPREHENSION
SKILLS OF B1 LEVEL LEARNERS**



UNIVERSIDAD BOLIVARIANA DE ECUADOR

MAESTRÍA EN PEDAGOGÍA DEL INGLÉS COMO LENGUA EXTRANJERA

TRABAJO DE TITULACIÓN

**PREVIO A LA OBTENCIÓN DEL TÍTULO DE
MAGÍSTER EN PEDAGOGÍA DEL INGLÉS COMO LENGUA EXTRANJERA**

TEMA

**THE EFFECTIVENESS OF MIND MAPPING TECHNIQUES ON IMPROVING
LITERAL READINJG COMPREHENSION SKILLS OF B1 LEVEL LEARNERS**

Autor/es:

**Jean Jayro Segovia Muños
Jonathan David Alava Varas**

Tutor/a:

Ph.D Yana Inzhivotkina

**ECUADOR
2024**



**THE EFFECTIVENESS OF MIND
MAPPING TECHNIQUES ON IMPROVING
LITERAL READING COMPREHENSION
SKILLS OF B1 LEVEL LEARNERS**

Dedication

This research is made thanks to our families who were always pushing us forward to give everything we can and to our beloved lord who played an important role in our motivation for the completion and accomplishment of this study. We always trusted in our lord to give us confidence and perseverance and now we can enjoy the results of our strength.

By Alava Jonathan and Jayro Segovia



**THE EFFECTIVENESS OF MIND
MAPPING TECHNIQUES ON IMPROVING
LITERAL READING COMPREHENSION
SKILLS OF B1 LEVEL LEARNERS**

Acknowledgement

We would like to give thanks to our Tutor Yana Inzhivotkina since her knowledge contributed immensely to the elaboration of the following study and to our teachers of the institution who gave us the insight and tools necessary to contribute to the educational community with this research. We hope every teacher and student from our country can benefit from our experience in mastering a new language

By Alava Jonathan and Jayro Segovia

Resumen

El enfoque de esta investigación es explorar cómo la implementación de mapas mentales en el inglés académico, específicamente en el nivel B1, influye en el desarrollo de las habilidades de comprensión lectora y en las percepciones de los estudiantes. Para ello, se utiliza un diseño experimental que incluye dos grupos: uno de control y otro experimental.

En el Capítulo 1, se establece el marco teórico de la investigación, abordando el uso de mapas mentales en la adquisición de habilidades lingüísticas y en la enseñanza de idiomas.

Aquí se revisan estudios previos y se presentan los fundamentos conceptuales que respaldan la aplicación de esta herramienta en el aprendizaje de lenguas.

El Capítulo 2 describe el diseño del estudio, los participantes y los instrumentos de evaluación empleados, como la prueba de diagnóstico que permitió seleccionar la muestra, el pretest y el post-test. Además, se detallan los procedimientos de recolección y análisis de datos. Los resultados se presentan y discuten en el Capítulo 3.

Después de la intervención, se observaron mejoras significativas en las habilidades de los estudiantes, así como una percepción más positiva hacia esta herramienta de aprendizaje.

En el contexto del inglés académico, se destaca la importancia de los mapas mentales como recursos pedagógicos efectivos para mejorar la comprensión lectora. En conclusión, este estudio contribuye con evidencia empírica al conocimiento existente, demostrando la eficacia de los mapas mentales en la enseñanza del inglés académico y su impacto

favorable en las actitudes y percepciones de los estudiantes hacia el aprendizaje del idioma

PALABRAS CLAVE: (Mapas Mentales, Comprensión Lectora literal, Estudiantes de nivel B1, Adquisición de idiomas, Estrategias de enseñanza)

Abstract

The effectiveness of using Mind mapping techniques to B1 in the advancement of literal reading comprehension skills and learners attitudes is the aim of the current research. The investigation applied an experimental approach: Pre and posttest were applied to get learners progress and perceptions.

The application of mind mapping techniques in English classes and the advancement of reading skills is stated in Chapter 1, and it sets the theoretical framework of the research, delving concepts and similar studies which use mind mapping techniques in improving literal reading comprehension.

The research elaborated evaluations instruments to be implemented, ranging from pre-test and post-test which are mentioned in Chapter 2. The steps for gathering information and analysis are also displayed. The results are shown and assessed in Chapter 3.

The proposal involves the integration of mind mapping techniques into language lessons, applying elaborate resources to enhance literal reading comprehension skills. Benefits were observed in learners' proximity, on the designed tools. In addition, there is a positive impact on reading and understanding of unfamiliar text. The outcomes of the findings on teaching application are addressed with recommendations for future investigations in this field. In summary, this research integrates solid evidence in contribution of fresh insight to the current view of language acquisition by demonstrating evidence of how mind mapping techniques facilitate the instruction of academic language and their influence on learner's viewpoints regarding the process of acquiring a new language.

Keywords: Mind mapping, literal reading comprehension, B1 learners, language acquisition, teaching strategies

LIST OF CONTENTS

| | |
|--|----|
| Introduction | 1 |
| CHAPTER 1: Theoretical Framework | 10 |
| 1.1. Mind mapping definition | 11 |
| 1.2. Important Findings..... | 13 |
| 1.3. Teachers and students' roles during mind mapping techniques | 14 |
| 1.3.1. Teachers' role | 15 |
| 1.3.2. Facilitator | 16 |
| 1.3.3. Mediator..... | 16 |
| 1.4. Encourage an approach to mind mapping..... | 18 |
| 1.5. Benefits of Mind Mapping Techniques..... | 18 |
| 1.6. Main characteristics of mind mapping techniques..... | 19 |
| 1.7. Examples of mind mapping techniques in the classroom..... | 20 |
| 1.7.1. Mind-mapping techniques for warm-ups..... | 20 |
| 1.7.2. Mind mapping techniques as a pre reading stage | 20 |
| 1.7.3. Mind mapping techniques during the reading stage | 21 |
| 1.7.4. Mind mapping techniques as the post-reading stage | 21 |
| 1.8. Reading skills..... | 22 |
| 1.9. Importance of reading skills..... | 23 |
| 1.10. Reading sub-skills for literal reading comprehension..... | 24 |

| | | |
|---|---|----|
| 1.10.1. | Fluency..... | 25 |
| 1.10.2. | Vocabulary | 25 |
| 1.10.3. | Sentence Construction and Cohesion | 26 |
| CHAPTER 2: methodology for the development of research and diagnostic study | | 28 |
| 2.1. | Research approach:..... | 29 |
| 2.2. | Quantitative Method | 30 |
| 2.3. | Qualitative Method | 30 |
| 2.4. | Concurrent Triangulation Strategy | 30 |
| 2.5. | Research Scope..... | 31 |
| 2.6. | Type of Investigation | 32 |
| 2.7. | Methods Used in This Investigation..... | 32 |
| 2.7.1. | Deductive Method..... | 32 |
| 2.7.2. | Inductive Method..... | 33 |
| 2.7.3. | Observation..... | 33 |
| 2.8. | Description of Instruments Based on the Selected Research Approach..... | 33 |
| 2.8.1. | Description of the Diagnostic Test..... | 33 |
| 2.8.2. | Scoring and Interpretation..... | 34 |
| 2.8.3. | Results of the Diagnostic Test..... | 35 |
| 2.8.4. | Survey Questionnaire..... | 35 |
| 2.9. | Description of Participants and Their Characteristics | 36 |
| 2.10. | Ethical Considerations and Legal Permissions..... | 37 |

| | |
|--|----|
| 2.10.1. Strengths | 37 |
| 2.10.2. Weaknesses | 38 |
| 2.11. Population and Study Sample | 38 |
| 2.12. Data Analysis Procedure and Ethical Considerations..... | 39 |
| 2.12.1. Results of the Diagnostic Test..... | 40 |
| 2.12.2. Results of the Survey | 41 |
| 2.12.3. Pretest Description and Results | 42 |
| CHAPTER 3: Presentation and Validation of the proposal | 44 |
| 3.1. Presentation | 44 |
| 3.2. General objective of the proposal | 44 |
| 3.3. Specific objectives of the proposal | 44 |
| 3.4. Proposal Theoretical foundation..... | 45 |
| 3.5. Characteristics of the proposal | 48 |
| 3.6. Mind mapping techniques | 49 |
| 3.7. Description of the Type of Proposal | 50 |
| 3.8. Forms of Application, Implementation, and Evaluation..... | 51 |
| 3.9. Resources..... | 54 |
| 3.10. Posttest Description and Results..... | 56 |
| 3.11. Assessment of Student Progress through Pretest and Posttest Evaluation | 58 |
| 3.12. Comparative Analysis of Pretest and Posttest Results..... | 61 |
| 3.13. Pedagogical Implications for Teaching English as a Foreign Language (EFL) | 63 |

| | |
|---------------------------|----|
| 3.14. Beneficiaries | 64 |
| Conclusions | 66 |
| Recommendations | 68 |
| Bibliography | 70 |
| Annexes | 78 |

LIST OF TABLES

| | |
|---|-----|
| Table 1. Conceptualization and Operationalization of Variables..... | 28 |
| Table 2. Proficiency level results..... | 34 |
| Table 3 Diagnostic Test Averages for 2 nd and 1 st Bach courses..... | 40 |
| Table 4 . Improvement in Understanding English Texts (Objective Test Scores)..... | 41 |
| Table 5 Performance in Identifying Main Ideas and Key Details (Pre-Test and Post-Test Results)..... | 62 |
| Table 13. Reading Texts and Mind Mapping Techniques..... | 52 |
| Table 14. Budget for the Implementation of the Proposal..... | 53 |
| Table 6 Improvement in Summarizing English Texts (Objective Assessment)..... | 102 |
| Table 7 Emotional Responses to Unfamiliar Vocabulary (Survey Results) | 103 |
| Table 8 Ability to Maintain Sequence of Events or Ideas (Test Performance)..... | 105 |
| Table 9 Improvement in Connecting Ideas Within Texts (Objective Assessment and Survey Results)..... | 106 |
| Table 10 Enhancement of Predictive Reading Skills (Test Scores and Confidence Levels) | 107 |
| Table 11 Difficulty in inferring the meanings of words or phrases in English texts. | 109 |

LIST OF FIGURES

Figure 1. Improvement in Understanding English Texts (Objective Test Scores)

Improvement in Understanding English Texts (Objective Test Scores)..... 42

Figure 2 Performance in Identifying Main Ideas and Key Details (Pre-Test and Post-Test Results)..... 62

Figure 9. Pre-test vs post-test scores by students 59

Figure 3 Improvement in Summarizing English Texts (Objective Assessment)..... 103

Figure 4 Emotional Responses to Unfamiliar Vocabulary (Survey Results)..... 104

Figure 5 Ability to Maintain Sequence of Events or Ideas (Test Performance) 105

Figure 6 Improvement in Connecting Ideas Within Texts (Objective Assessment and Survey Results)..... 107

Figure 7..... 108

Figure 8..... 109

LIST OF ANNEXES

| | |
|---|-----|
| Annex 1. Diagnostic test..... | 79 |
| Annex 2. Diagnostic test scores – 1 st Bach course | 82 |
| Annex 3. Diagnostic test scores – 2 nd Bach course | 83 |
| Annex 4: pre-test | 84 |
| Annex 5. Pre-Test Scores..... | 87 |
| Annex 6: post-test..... | 89 |
| Annex 7. post test scores | 92 |
| Annex 8. Pre-test scores | 94 |
| Annex 9. Pot-test scores | 95 |
| Annex 10. Survey | 96 |
| Annex 11. Interview | 98 |
| Annex 12. Checklist | 100 |
| <i>Annex 13:</i> Survey applied to students..... | 102 |
| Annex 13: Outline of mind mapping techniques..... | 112 |
| Annex 14. Teachers’ handbook of mind maps techniques to improve literal reading comprehension..... | 112 |
| Annex 15. Assigned Tutoring Notification..... | 132 |
| Annex 16: Ethical Considerations and Legal Permissions..... | 133 |
| Annex 17. Letter to request permission to conduct the research in Unidad Educativa Particular Jose Benito Benitez San Andres High school | 134 |
| Annex 18. Principal authorization to conduct research..... | 135 |
| Annex 19. Letter asking parent consent for participation | 136 |

Annex 20. Photo of evidence using Mind mapping techniques to improve literal reading
comprehension skills 137

Annex 21. Application to present the topic 138

Annex 22. Research plan 139

Annex 21. Need analysis in my Research context..... 149

Introduction

The effectiveness of Mind Mapping Techniques on Improving Literal Reading Comprehension skills of B1 level learners.

These days English has become the spoken language globally. Mastering English is essential, for individuals who want to remain competitive in the job market pursuing education abroad and improving their communication skills for information access and forming connections. Moreover, English serves as a language for travelers, across countries.

In Ecuador, English is a pivotal tool that has been used throughout the past years in many different branches of society. In the pedagogical field, many educational centers are focusing on teaching literacy skills in a foreign language because reading is paramount for language acquisition. Razali (2019) states that through the process of literal reading in the ELT setting, learners are able to be active members within the text of the writer through prediction, analysis, summaries, and various other strategies and techniques. Shaaban (2022) acknowledged that literal reading plays a role in the development of language comprehension skills among students. In this context, this receptive skill exposes learners to a variety of sentence structures and idiomatic expressions.

Their studies have been applied in many nations and their outcomes have shown that mind mapping techniques are beneficial for the improvement of literal reading comprehension because the posttest marks of the participants after the application of the mind maps in reading lessons were remarkably higher than their pre- test marks. In this

context, students' development demonstrated an important improvement in understanding written tests.

Similarly, these graphic organizers were applied in a high school named Unidad Educativa Jose Benito Benitez San Andres, this is a private high school located in the north of the city of Guayaquil which is in the Guayas province.

To clearly convey the background of this study, this high school has 55 students enrolled as a whole and as the population. One group of 1st baccalaureates of 23 students and another group of 2nd baccalaureates, which consist of 22 learners, will take part in the research study. There are 12 girls and 10 boys which will be the sample of the project. The school has one tutor teacher and 4 CLIL (content and language integrated learning) teachers. In addition, most of the students are kind, participative and eager to work.

Furthermore, the high school has a playground, five bathrooms and a big soccer field, 12 classrooms. Each classroom has a tutor in charge of taking care of the facilities and equipment. It also has basic services such as purifying water and access to the Internet with an air conditioner. Most of the students live far away from its location.

The objective of these techniques is to elaborate ideas through mind maps and graphic organizers and notice the cause-and-effect connection between student performances during reading lessons. Before and after the application of these techniques, pre- and post-tests will be administered to gather essential information.

Statement of the problem:

The problem of this research is to determine the relationship between mind mapping techniques and literal reading comprehensions skills among B1- Level students.

Justification of the research:

In our current times, teachers do not perform well in the development of reading competence in pupils. Teachers are looking for new ways to allow students to have a better understanding of unfamiliar text. It is positive to apply this project to the Unidad Educativa Jose Benito Benitez San Andres since it will allow learners to overcome the many adversities, they face in understanding the reading material.

This research is aimed at supporting both teachers and students in discovering the best techniques that will enhance the development of reading skills such as comprehension and inference in the target language. In addition, this project is essential since the mind mapping techniques can greatly increase student intrinsic motivation.

This project aims to explore the benefits of mind mapping on literal reading comprehension for second-year English (B1) students. These students are subjected to an international proficiency exam every year and reading will be part of the skill to be assessed. During the last years, students have gotten low marks on the reading section from the Pearson Test of English Exam (Primicias, 2019).

Therefore, these mind maps techniques focus on improving their understanding of academic text and facilitate high marks on the reading section. Providing pre-designed graphic organizers can significantly improve reading outcomes, further supporting the potential of mind mapping in language acquisition. Successful language learning encompasses vocabulary, grammar, pronunciation, and cultural understanding. Mind mapping offers a valuable tool for integrating these elements into a cohesive and engaging learning experience.

Description of the relationship between the proposal and the research lines of the University:

Title: The effectiveness of Mind Mapping Techniques on Improving Literal Reading Comprehension skills of B1 level learners.

General research line: Teaching-learning strategies.

Specific research line: Implementation of a practical handbook on effective mind mapping techniques for improved English language comprehension.

Precision of the research topic

The topic “The effectiveness of Mind Mapping Techniques is wrapped with the study lines of didactics, education, and administration on pedagogy based on language teaching to improve literal reading comprehension skills in B1-level students, as well as with the study topics of the project, assessment, and implementation of educational models and didactic innovations. Both were set by the Universidad Bolivariana del Ecuador. It strengthens the educational and pedagogical comprehension of language through the development of language teaching and discovers the implementation of a particular educational technique, mind mapping activities, in the context of enhancing comprehension skills in reading lessons.

Description of the research object:

The object of the research involves mind mapping techniques and their influence on the improvement of literal reading comprehension skills in English students. By discovering this research object, the research aims to provide current information in the

field and contribute pivotal perspectives for language teachers, curriculum designers, and investigators eager to promote effective teaching techniques and enhance reading comprehension skills and performance for B1-level learners.

General research objective

- To determine the impact of mind mapping techniques on the development of literal reading comprehension skills

Specific research objectives:

- To analyze the current literal reading comprehension level of Unidad Educativa Jose Benito Benitez San students
- To design and implement mind mapping techniques to improve literal reading comprehension of the students
- To evaluate the efficacy of the mind mapping techniques in improving literal reading comprehension of the students from Unidad Educativa Jose Benito Benitez San Andreas

Description of the conceptual and operational categories

Independent variable: mind mapping techniques

In the conceptual category, Mind mapping is a method that visually organizes and presents information or ideas in a diagrammatic format. It usually revolves around a theme. Concept, employing a hierarchical approach (Shi, 2022). Mind mapping highlights the importance of including branches or subtopics that extend from a point connecting keywords, phrases or visual elements to these branches.

This helps create an easily understandable representation of ideas, which assists in brainstorming, planning and understanding different subjects or projects (Mubarok, 2021). The operational categories within mind mapping contribute practical guidance for application and assessment of the technique. Some important writers like Tony Buzan and Paul Foreman have participated to the comprehension of these activities are technique design, technique sequencing, technique instructional strategies and evaluation of task performance

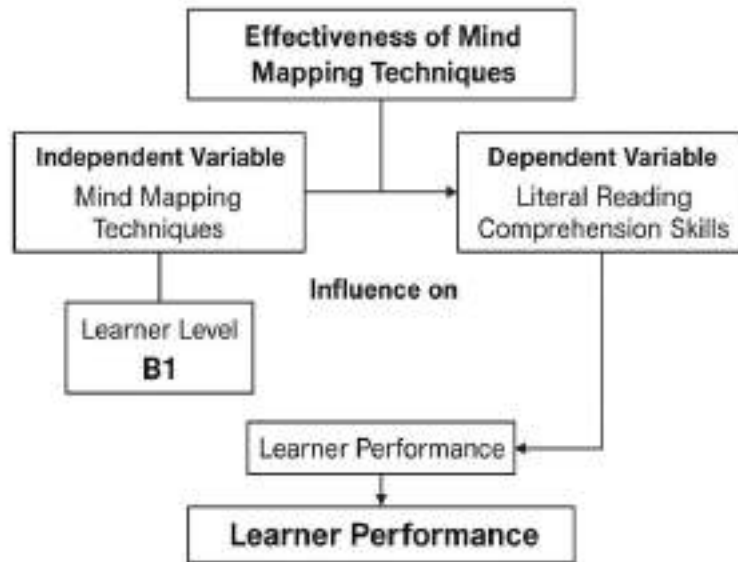
Dependent variable: literal reading comprehension skills:

It refers to the ability to understand and interpret what the author of this text tries to convey. To accomplish this, a series of strategies are involved, such as skimming or getting the main idea of a text, scanning or looking for specific words or ideas, and inference or trying to predict outcomes or results in any reading material. Protsenko (2021) emphasizes that skimming is a technique for handling large amounts of reading material and getting a sense of what to expect, which is important in many educational and professional situations.

According to Ghaith (2019) scanning, which plays a role in understanding text by allowing us to quickly and accurately find information. This technique does not only save time but it also helps us stay focused, making it invaluable for activities like research problem-solving and goal-oriented reading in academic and professional contexts. It greatly assists in retrieving relevant information (Pritania V. V. Mokal, 2020) and inference, which relates to the understanding of the meaning behind written texts, is crucial as it helps readers uncover hidden messages, improve their ability to think critically and fill in any missing information. It allows for a comprehension of the context

(Ahmed Y, 2019). To better understand the relationship between the variables explored in this study, the following conceptual map illustrates how the use of mind mapping techniques (independent variable) influences literal reading comprehension skills (dependent variable) and ultimately impacts learner performance (see figure 1.)

Figure 1. Conceptual Map of the Relationship between Mind Mapping Techniques and Reading Comprehension Skills



Elaborated by: Alaba & Segovia (2025)

This figure shows individual student progress in literal reading comprehension after the application of mind mapping techniques.

The proposed study on the effectiveness of mind mapping techniques in improving the literal reading comprehension skills of 22 B1-level teenagers from Unidad Educativa Jose Benito Benitez San Andres aims to benefit the students, teachers, and the high school itself. Through the application of mind mapping techniques, teenagers at the B1 level will

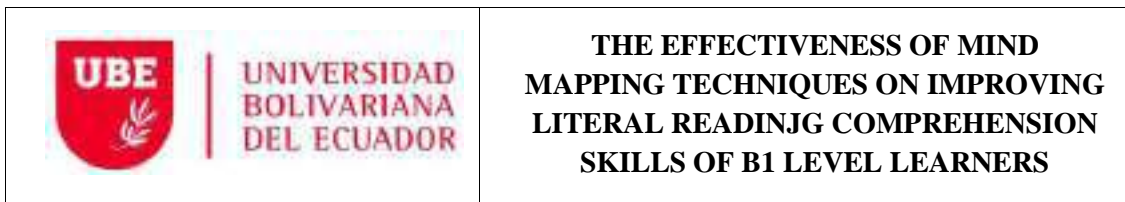
have the opportunity to enhance their literal reading comprehension of text in a meaningful manner. The study results will also benefit teachers at the high school by demonstrating meaningful insight and proof-based evidence practices improving their impartation techniques. In addition, the beneficial results of the study can support the standards of the high school as a quality educational institution, catch the attention of parents from other parts of the city, and strengthen the success of learners.

According to the diagnostic test, the level of students is B1 based on the Common European Framework of Reference. The population of the school is 520 students. However, the beneficiaries of this research are 22 2nd baccalaureate students of Unidad Educativa Jose Benito Benitez San Andres High school. They are learners from 14 to 16 years old with an intermediate level of English language.

Description of the research context

This study will be carried out at Unidad Educativa Jose Benito Benitez San Andres, a high school located in Guayaquil, Ecuador (Refer to Annex 24 for the location and photo of the educational institution). The institution opens in the morning. There are an estimated 520 learners who are enrolled in this institution. This study will focus on 2 baccalaureate courses which is made of 22 B1 level learners and they are going to be the sample of this research proposal, with classes starting at 7:30 a.m. from Monday to Friday.

In this high school, English is not mandatory for all learners. On the other hand, it is required that learners achieve the B2 English level before they graduate. The classroom will help to provide the research context, where mind-mapping techniques will be applied to improve literal reading comprehension skills. The learners come from many



backgrounds. English instructors will facilitate the process and gathering of information. The study context promotes a helpful, meaningful learning setting, motivating participation during the activities.

Description of the practical contributions of the proposal, its importance, and its social need

This is important from a professional perspective because it seeks to improve the academic performance of students at the José Benito Benítez San Andrés Educational Unit through the application of mind mapping strategies. These strategies are anticipated to improve students' literal reading comprehension by allowing them to visually organize information and identify essential details within texts, helping them recall important words more easily. Consequently, students are likely to perform better on standardized tests and improve their overall self-confidence in reading activities.

In the same way, this research is beneficial for other investigators since it applies blended method research which allows them to facilitate an understanding of the efficacy of mind mapping techniques in a precise and clear way. In addition, data compilation techniques like the pre- test and post- test, surveys and observational check list provide strong information for analysis.

From a general overview, this proposal targets to provide a solution in getting good scores in the PTE general exam which is an international certification proficiency evaluation. Finally, this research targets to incorporate mind mapping techniques in reading lessons with the purpose to improve learners literal reading comprehension skills.

CHAPTER 1: Theoretical Framework

There were multiple remarkable studies carried out by Tony Buzan that support the effectiveness of mind mapping techniques. It refers to a strong graphic organizer technique that allows users to improve their concentration on tasks for optimal outcomes (Buzan, 2020).

Muassomah (2022), in his article named Mind Mapping: Reading Comprehension Technique of Arabic Texts for Students in Higher Education, mentions that mind mapping is one of the fastest and easiest techniques to retrieve information into the mind and extract concepts or ideas from the brain. Therefore, the implementation of colorful visual lines and images can allow ELT learners to understand the main ideas of unfamiliar text effortlessly.

Likewise, Silvia (2022), expresses that mind mapping allows English learners to think freely and associate a given topic from general to specific ideas, which will make any kind of text digestible for the students to learn. In other words, students can develop their literal reading comprehension skills if they represent their ideas using colorful curve lines and pictures.

Similarly, (Riane Chiakha, 2020) explains that a mind map is a diagram in which the core idea of a topic is in the center and then is associated with supporting ideas. This automatically improves an EFL student's way of thinking since learners can memorize and recall important information effectively for any kind of purpose or situation.

According to Muhammad Javed Aftab (2022), mind mapping supports learners in connecting, constructing, analyzing, and synthesizing information based on existing knowledge. These techniques can also permit learners to process new material and integrate it with their present background knowledge. This technique will also boost imagination and foster creativity since learners will be able to remember any type of content by employing visual features.

1.1. Mind mapping definition

Mind mapping is a technique that allows you to visually organize and connect concepts, ideas, and information in a certain way. It involves creating a diagram with a theme or idea at the center and branches radiating outward to represent related subtopics or details. To make these connections more apparent and aid in memory retention, nodes, colors, and symbols are often used. This versatile tool stimulates both thinking and critical analysis by engaging both sides of the brain. It is widely used for tasks such as note-taking, brainstorming, and problem-solving as it helps in organizing thoughts, promoting understanding, and enhancing the learning process.

As (Nor Fikriah, 2021) explains, mind mapping techniques provide opportunities, for students who are learning English as a Foreign Language (EFL) to improve their language skills. Through the use of representations, mind maps help students organize and grasp vocabulary and grammar concepts. They serve as tools for expanding vocabulary, facilitating word connections and understanding shades of meaning. Additionally, mind maps visually illustrate grammar principles making it simpler for students to understand the languages' structure.

Apart from these advantages mind mapping fosters creativity by encouraging students to express themselves and actively engage with the language. These visual aids are particularly useful for summarizing texts, improving reading comprehension and structuring ideas during presentations to strengthen speaking and presentation skills.

Furthermore, mind maps contribute to thinking development by requiring students to analyze connections between aspects of the language. They are also beneficial for exam preparation as they help students condense information for review purposes.

Encouraging collaboration mind mapping can be an activity that promotes teamwork and communication, among EFL learners as they collectively reinforce their grasp of concepts.

Likewise, for Zheng (2020), mind mapping techniques have been shown to improve reading comprehension among English as a Foreign Language (EFL) students. Besides their benefits, mind maps are tools for summarizing texts and extracting key information. When students break down passages, they can visually represent the ideas, supporting details, and connections between concepts.

This does not help condense information. It also enhances students' ability to identify crucial elements in a text. By creating branches that link ideas and themes, learners develop an understanding of the material, which improves their comprehension skills (Nilson, 2016). Furthermore, mind maps can incorporate cues like images or colors to strengthen associations and make abstract concepts more tangible (Kadagidze, 2016).

This multisensory approach engages learners on a level that is appropriate for those with diverse learning styles, fostering a comprehensive grasp of the nuances of the English language. Additionally, constructing mind maps requires engagement with the text,

reinforcing skills, and providing students with a personalized roadmap for navigating through complex English literature and academic materials. In essence, mind mapping emerges as an effective strategy that EFL students can employ to navigate reading materials with greater comprehension.

1.2.Important Findings

According to Puspitasari (2020), mind mapping techniques can have a positive impact on student's literal reading comprehension if it is a pre reading stage before the application of the graphic organizer since students would connect previous knowledge with the target topic of the lesson. Although it required a long process of reading selection for important information, association, and organization of concepts through visual arts and key ideas, they felt that they were in a better position to decode new information at both the word level and the text level.

Al-Jarf (2021) specifies in the results of his study called "Teaching Reading to EFL Freshman Students with Mind Mapping Software" that mind mapping boosts cognitive processing and builds a cognitive structure of ideas in a reading text. Furthermore, they can also increase motivation in students because these graphic organizers represent how much an EFL learner has comprehended a topic Hazaymeh (2021) explains that a visual mind-mapping strategy can improve students' critical thinking and reading skills by helping them comprehend, analyze, and deduce meaning from the English language context. In addition, they inspire students in the organization of their thoughts and ideas.

Moreover, Yan (2023) mentions that the use of graphic organizers in teaching is a convenient technique that permits collaboration, boosts learners' cognitive skills, and supports their thinking, understanding, and recall skills. Furthermore, mind-mapping

techniques allow learners to construct visualized and meaningful experiences for both individuals and groups. Likewise, research done at an Iranian high school by Alviaderi Novianti (2021) demonstrated that 9th-grade students can have better performance in identifying the main idea of a text, recognizing secondary ideas, and understanding the author's message of a text.

In the same way Kepirianto, (2022) establishes that mind mapping collaborated TPS (Think, Pair, and Share) can allow students to think on their own without too much support from an English instructor. Therefore, it is an effective tool for improving students' reading comprehension of descriptive text.

1.3. Teachers and students' roles during mind mapping techniques

As the central promoter of pedagogical activities, English instructors must create many appropriate studies to reach learning goals and therefore grow thinking skills and learning objectives. Sabry Abdel-Hamid Ahmed Helwa (2020), whose research describes the application of digital mind mapping to develop students' teachers' EFL critical reading and writing skills, mentions that graphic organizers play a key role in students since they become active participants in their learning and they can connect background knowledge with new information.

Regarding Supriadi literature review (2020), as cited by Hazaymeh (2021), the article emphasizes the importance of teachers following practices related to mind mapping techniques. These practices involve teachers acting as guides introducing the concept of mind maps and providing exercises to demonstrate mapping strategies. They should encourage creativity. Inspire students to personalize their maps.

In addition, teachers lead class discussions on mind maps encouraging students to explain their representations and discuss the connections they have established.

Conversely students actively engage by creating and refining their mind maps incorporating information from texts. They also participate in activities by sharing and discussing their maps with peers to deepen their understanding of the reading materials. The collaboration between teacher guidance and student involvement is crucial, for maximizing the benefits of using mind mapping in enhancing reading comprehension.

On the other hand, according to Kepirianto (2022), before students start using mind mapping techniques in the classroom, they need to meet requirements. Firstly, it is crucial for them to understand the basic language, like vocabulary and grammar. This knowledge enables students to comprehend texts effectively which is essential for extracting information to include in their mind maps. Moreover, students must possess thinking skills to identify ideas supporting details and their interconnections. Actively interacting with the content and visualizing concepts also plays a role in creating mind maps.

Furthermore, it is important to embrace creativity and be open to exploring mapping styles and structures when creating representations. Additionally having skills can be advantageous as students can benefit from sharing and discussing their maps with classmates, which helps solidify their comprehension. In essence a blend of language proficiency critical thinking skills, creativity and collaborative strategies serves as the foundation for utilizing and improving mind mapping techniques to enhance reading comprehension, among EFL students.

1.3.1. **Teachers' role**

Puspitasari (2020) explains that some possible teachers' roles are:

1.3.2. Facilitator

When it comes to assisting students learning English as a Foreign Language (EFL) through mind mapping activities the teacher serves as a guide and mentor. Initially the teacher introduces the concept of mind mapping, explains its purpose and demonstrates techniques. By offering guidance and examples students can better grasp the process. This sets a foundation for mapping.

The teacher also assigns exercises that align with the curriculum allowing students to practice and apply their mind mapping skills to language materials. Acting as a facilitator the teacher fosters creativity by encouraging students to explore mapping styles that suit their individual learning preferences. Additionally, they provide feedback to help students refine their mind maps for clarity and coherence.

In terms of collaboration the teacher organizes discussions where students can share and compare their maps promoting an understanding of the language material. Throughout this process the teacher's role is one of support in empowering EFL students to independently and confidently utilize mind mapping techniques, for improved comprehension and language acquisition.

1.3.3. Mediator

At the same time, teachers should moderate their intervention in correcting students' mistakes when it comes to the development of graphic organizers. Some English instructors tend to overcorrect students' performances. This issue can make students feel unmotivated or increase their unwillingness to work with any kind of technique. Teachers must have a balance and be aware of when to correct students and when to keep them

working on their own. This will indeed allow students to work with security and independently.

Tips

Using mind mapping techniques effectively can significantly enhance students understanding of written English in environments where it is taught as a language (EFL) (Aziz & Yamat, 2016). To start introducing the concept of mind mapping with texts and then advancing to intricate materials is crucial. Guide students, through the process of creating mind maps emphasizing the identification of ideas supporting details and connections. Encourage them to utilize keywords, phrases and visuals to represent concepts.

To integrate mind mapping with reading assignments to get the most out of it. Provide students with articles to be used in mind mapping activities, allowing them to practice the method consistently. Foster peer collaboration opportunities where students can exchange and discuss their mind maps. This helps create a learning atmosphere. Allow students to gain insights, from various viewpoints.

Offer feedback on their mind maps by emphasizing clarity, coherence, and accuracy in representing the content. Encourage self-reflection by having students evaluate the effectiveness of their mind maps and identify areas for improvement.

Introduce technology by incorporating tools and applications that enhance aspects of mind mapping. Online platforms offer features such as multimedia integration and collaborative editing, which expand possibilities for expression and collaboration.

1.4. Encourage an approach to mind mapping

Promote the incorporation of meaningful images and shapes into mind maps, as this will foster greater engagement and improved retention. As Buzan (2018) states, color, imagery, and structure in mind maps facilitate the brain's ability to process and retrieve information. For instance, using mind maps as a writing exercise can help students organize their ideas before writing essays or answering questions related to reading comprehension.

Lastly, organizing review sessions where students revisit their mind maps may reinforce long-term memory and facilitate the establishment of meaningful connections between ideas. By following these suggestions teachers can effectively harness the power of mind mapping techniques to improve the reading comprehension skills of EFL students. This method ensures learning experience.

1.5. Benefits of Mind Mapping Techniques

According to Tony Buzan Learning Centre (Buzan, 2020), mind mapping techniques can be applied correctly during an English lesson to ignite motivation in students, enhance critical thinking, incorporate new learning strategies that can be used in any language skill (reading, listening, speaking, or writing), and provide opportunities to understand new concepts, ideas, or information.

According to Supriadi (2020), the results of his research, "An Analysis of Students' Reading Skills by Using Mind Mapping Technique," Research findings indicated that

utilizing mind mapping strategies had an impact, on the ability to make inferences and comprehend information. The responses provided during the follow up assessment demonstrated that individuals engaged in activities such as making predictions generating ideas and summarizing content prior to the test. These practices facilitated the creation of learning aids and enabled students to integrate fresh knowledge effectively. Consequently, students improved their existing learning methods. Acquired skills applicable, to various language learning tasks.

Furthermore, the use of mind mapping methods allows students to engage in self-assessment, enabling them to review their progress and learn from errors in evaluations. Overall, these results underscore the impact of employing mind mapping strategies to enhance reading comprehension, encourage introspection regarding performance and offer resources for various language assessments.

1.6. Main characteristics of mind mapping techniques

Mind mapping is a technique that visually represents ideas, concepts, and information in an interconnected way (Riane Chiakha, 2020). In other words, these graphic organizers involve the creation of diagrams with an idea or topic at its core, surrounded by branches that represent categories or key concepts related to the central theme. These branches then have sub-branches that capture details, examples, or subtopics. The use of keywords, short phrases, and images helps to condense information and make the diagram visually engaging.

The non-linear structure of mind maps reflects how thoughts naturally connect in the mind, which promotes an understanding of the subject matter. Mind mapping encourages creativity by allowing individuals to personalize their representation of

information using colors, symbols, and different fonts to add emphasis and aid memory. Importantly, mind maps can be used in contexts such as language learning, brainstorming sessions, project planning, and reading comprehension. Their dynamic nature enables users to continuously expand and adapt their diagrams as they actively engage with ideas for exploration. Overall, the main characteristics of mind mapping include organization, hierarchical structure, flexibility, adaptability, thinking promotion, creative thinking, and interconnected thinking promotion.

1.7. Examples of mind mapping techniques in the classroom

There are many mind-mapping techniques in the classroom. Here are some possible ideas on how to implement them to improve literal reading comprehension.

1.7.1. Mind-mapping techniques for warm-ups

Before diving into the reading lesson students can brainstorm ideas related to a topic using an aid like a graphic organizer. This activity encourages students to consider aspects, characteristics and ideas setting the stage for the lesson. As stated by (Novak, 2010), mind maps stimulate both creative thinking and memory making them an effective tool for activating students' prior knowledge and boosting engagement in reading tasks. It demonstrates students' enthusiasm for engaging with topics. Provides insights into their prior knowledge. By guiding them step by step, through the material students can enhance their grasp of what the lesson entails thereby improving their comprehension of the text at hand.

1.7.2. Mind mapping techniques as a pre reading stage

Using mind mapping techniques as a strategy before delving into a text can help learners arrange their thoughts and organize their ideas. Prior to starting to read students

can visually represent their existing knowledge on the topic, identify concepts and explore connections between them. This process does not trigger their understanding but also provides them with a guide for engaging with the reading material. The mind map serves as a framework that enhances comprehension by illustrating the relationships among ideas. By engaging in this reading stage students can approach the text with a more focused and structured mindset leading to an improved overall reading experience.

1.7.3. Mind mapping techniques during the reading stage

As students' progress through the reading lesson, they continuously update their mind maps in time by adding concepts, ideas and relationships as they come up. This visual representation serves as a tool allowing learners to connect ideas and maintain an understanding of the content. The structured layout of mind maps helps students distinguish between ideas and supporting details encouraging a grasp of the nuances within the text.

By structuring information this way learners actively engage with the material enhancing their focus and aiding concept identification. Additionally mind maps assist in recognizing patterns and relationships, within the text facilitating an interpretation. This interactive mapping approach transforms reading into an experience that enhances both comprehension and retention. In essence integrating mind mapping into the reading process is a method that empowers students to construct meaning and navigate through complex texts in an organized and dynamic manner.

1.7.4. Mind mapping techniques as the post-reading stage

Upon completion of reading the utilization of mind mapping techniques continues to be highly beneficial, for reinforcing and solidifying understanding. Once students finish

a text, they can utilize mind maps to condense the concepts, important details and connections present in the material. This reflective process does not aid in summarizing information. Also, it contributes to long term retention. According to (Caipa, Tuta, & Potosi), transforming information into visual and summarized formats facilitates cognitive processing and improves memory retention. Through mind maps, students can identify areas of poor understanding and reveal sections of the text that need clarification.

Moreover, post reading mind maps can serve as study tools by offering an overview of the entire text and facilitating efficient review. The act of transforming information into summarized and synthesized formats enhances skills by prompting students to assess their understanding and articulate it effectively (Walvoord & Anderson, 2011). Furthermore, educators can leverage reading mind maps as assessment instruments to gauge students grasp of the subject matter. In essence integrating mind mapping during the reading phase acts as a consolidative strategy that promotes a level of comprehension while aiding in review which is a resource that proves invaluable, for both learners and teachers.

1.8. Reading skills

Tadesse (2020), claimed that reading skills refer to the competence to understand a written text. Furthermore, It refers to the ability to identify facts shown in a text (literal comprehension), make judgments related to an author's work or content (evaluative comprehension), and make associations between the text and other types of written works and situations (inferential comprehension).

Reading skills involve a variety of competencies that are necessary for understanding the meaning of written texts. These skills include deciphering, reading

fluently, acquiring vocabulary, and comprehending what is being read. Skilled readers do not recognize words and phrases. They also grasp context, infer meanings, and analyze content critically. Developing reading skills improves performance, promotes lifelong learning, and nurtures a deeper comprehension of different subjects and viewpoints.

Septiyana (2021) declares that reading is the cooperation between the reader and the text to get a message from it. Moreover, reading is the construction of the meaning of an author's work. It is also clear that reading involves a complex process that not only involves the decoding of words and sentences but also involves semantic knowledge of the text. This means that when it comes to understanding a text, readers need to interpret and negotiate both elements to get a clear picture of any written work.

Reading is more than deciphering words; it's about comprehending the meaning behind written symbols. It involves understanding the context critically analyzing information and expanding readers' perspective. Reading isn't a skill; it serves as a gateway to knowledge fostering growth and broadening our horizons. Proficient reading demands fluency, comprehension and the ability to extract information. Whether for pursuits or personal enrichment reading enables us to interact with ideas and perspectives.

1.9. Importance of reading skills

Gustanti (2021) believed that to get the best English language proficiency, literacy skills must be incorporated into their study plan. Firstly, in the field, having reading skills is crucial for learning and understanding all subjects. Proficient readers can easily grasp concepts, independently access information, and excel in their studies. Additionally, being a reader plays a role in effective communication. It helps improve grammar and the ability to express oneself clearly and convincingly. In today's world, having reading skills is vital

for tasks such as conducting research, staying updated on industry trends, and comprehending complex documents.

According to Al-Jarf (2021), reading enhances thinking and analytical abilities. It encourages individuals to question, evaluate, and combine information to develop a rounded intellect. Moreover, reading provides opportunities for learning and personal growth by offering insights into cultures, historical events, and different perspectives. It promotes empathy and a deeper understanding of the world around us.

In today's information-dominated era, individuals with reading skills can navigate through a range of written materials effectively. Making them adaptable individuals who are well-informed contributors to society. Overall, reading skills are not only crucial for success but also serve as a foundation for lifelong learning experiences, facilitating effective communication while enriching one's intellectual capabilities.

1.10. Reading sub-skills for literal reading comprehension

Reading sub-skills requires some aspects for an effective literal reading comprehension process. These elements or components of reading are decoding, fluency, vocabulary, sentence construction, and cohesion.

According to Lee (2023), deciphering is a step in the reading process for students to link individual sounds with letters. For instance, when reading the word "song" students must recognize that the letter "s" produces the /s/ sound. Establishing this connection between a letter and its phonetic sound is a stride in sounding out words. Essentially this sub skill entails the capability to recognize and articulate words by interpreting symbols and letter associations. Proficient decoding is indispensable for enabling readers to read

The role of decoding in the reading process is to aid individuals in identifying and pronouncing words. It entails converting written symbols into language enabling readers to comprehend the text. Decoding contributes to cultivating reading fluency and comprehension. According to (Fitria, 2024), decoding skills empower readers to grasp materials of varying complexity by interpreting written language. It lays groundwork for reading proficiency facilitating the transition from mere word recognition to understanding the message conveyed in the text. Ultimately decoding is a skill that enriches literacy and fosters effective communication, through reading.

1.10.1. Fluency

According to Harnly (2023), reading fluency is more, than recognizing words; it involves reading quickly and with expression. Proficient readers show fluency by understanding the text's meaning and conveying the intended tone through their phrasing and intonation. Fluency isn't about speed but about comprehension and effortlessly grasp meaning. Skilled readers can maintain a rhythm making it easy to transition between words and phrases. This skill shows a reader's competence in decoding, vocabulary and comprehension. Developing fluency requires practice, exposure, to texts and strategies that enhance word recognition. Ultimately fluency significantly improves the reading experience. Serves as an indicator of reading proficiency.

1.10.2. Vocabulary

Having a grasp of vocabulary plays a role in reading as it significantly impacts a reader's ability to understand and interpret written content. A strong vocabulary enables readers to identify, comprehend and use a variety of words thus enhancing their reading skills. With vocabulary readers can make inferences and grasp meanings based on context when they come across words. Additionally possessing a range of words helps in

recognizing meanings and implications within a text. It empowers readers to express themselves effectively and aids in interpreting concepts. To enhance their abilities readers can benefit from engaging in activities that aim to expand their word knowledge and understanding within contexts.

In essence building a rounded vocabulary is crucial, for the act of reading because it does not assist in word recognition but also fosters deeper comprehension and enjoyment of the material being read.

1.10.3. Sentence Construction and Cohesion

Alviaderi Novianti (2021) argues that sentence structure and cohesion play a role in reading comprehension as they provide the foundation for understanding the meaning of a text. When sentences are well constructed with grammar and syntax, they bring clarity. Help effectively convey ideas. Cohesive sentences establish connections between thoughts, ensuring a flow of information. This cohesion is achieved using phrases and pronoun references, which link sentences and paragraphs together coherently, resulting in a cohesive text.

Clear sentence structures enable readers to identify ideas and comprehend the relationships between them. Furthermore, mastery of sentence structure allows readers to navigate texts, uncover meanings, and fully grasp the author's intended message. Ultimately, sentence structure and cohesion are vital for facilitating understanding in reading by allowing readers to extract meaning from written material and engage with it on a personal level.

To conclude, this chapter shows a full guide of different theories and frameworks for post investigations on the effectiveness of Mind Mapping Techniques on Improving

Literal Reading Comprehension skills of B1 level learners. In addition, the subsequent chapter studies the action research of these theories, intervention and analysis of scientific research, elaboration, intervention and analysis of a scientific research. In addition, the chapter stresses the role of graphic organizer in literal reading comprehension skills, highlighting learners need to grasp unfamiliar academic text in international examination assessments.

Besides, the chapter highlights the application of mind mapping techniques in reading lessons, concentrating on visual aids for getting the main ideas of ungraded text. The research shows the benefits of mind mapping techniques to enhance literal reading comprehension skills, analyzing the theories of reading as a receptive skill. This study stresses the active use of mind maps based on learners' ability to decode text, so by applying graphic organizers, learners can be engaged with any reading material, fostering its overall comprehension.

Finally, it covers the reading skills and their phases in the lesson, literal reading comprehension skills. By getting the main idea of these parts, instructors can create great learning experiences that concentrate on setting of reading comprehension.

CHAPTER 2: methodology for the development of research and diagnostic study

Two methods of research design were applied in this research proposal because the quantitative method can produce statistical data on the investigation, while the qualitative method reveals how learners feel and think about each of these variables. Furthermore, this sort of study is called field research because it seeks to address a specific problem in an institution where students are learning. Moreover, non-probabilistic convenience sampling was used in this study to find out the background of learners since it is easy and practical to use.

Table 1. Conceptualization and Operationalization of Variables

| OPERATIONALIZATION MATRIX – ROTATION STATION | | | | | |
|--|---|---|-----------------------------|--|---|
| Independent Variable | Conceptual Definition | Operational Definition | Dimension | Indicators | Scales |
| Mind – Mapping | Learning ability where students use diagram to organize important information | Participation of students reading abilities for improving literal reading comprehension | Mind maps for main ideas | English Level to design the mind map | Always Usually Hardly ever Never |
| | | | Mind maps for specific idea | Application of graphic organizers with students' competences | |

| | | | | | |
|--|--|--|------------------------------------|--------------------------------|--|
| | | | Mind maps guidance and instruction | Instructions oriented to goals | |
|--|--|--|------------------------------------|--------------------------------|--|

Elaborated by: Alava, J (2025)

| Dependent Variable | Conceptual Definition | Operational Definition | Dimension | Indicators | Scales |
|----------------------------|---|---|---------------|--|--------------------------------------|
| Reading skills development | Improvement of an individual skill to understand literal concepts and ideas in reading text important information | Scorable enhancement in comprehension summarizing, predicting after the application of mind maps techniques reading comprehension | Comprehension | Analyze and explain the significance of the text | Multiple choice open-ended questions |
| | | | Summarizing | A brief description of the main points of the text | |
| | | | Predicting | Expect what might occur based on prior knowledge in the text | |

Elaborated by: Alaba & Segovia (2025)

2.1. Research approach:

Researchers adopted a mixed-methods approach in the investigation of this research. Both the qualitative and quantitative methods were employed as two means that would allow them to focus on the research topic (RABII, 2021). Furthermore, researchers integrate their understanding by utilizing a mixed-methods approach to evaluate the effectiveness of the mind mapping tool in enhancing literal reading comprehension skills among students from Jose Benito Benitez San Andreas School.

2.2. Quantitative Method

Before proceeding with the research, there was a preliminary survey which sought to obtain a thorough account of the students' literal reading experiences and skills, their opinions, and their previous exposure to mind-mapping. The purpose of this preliminary study was to collect baseline information about the students, as well as their attitudes, which was useful during the analysis of the data. All subjects took both the pre-test and the post-test which were aimed at determining their competence in literal reading skills at two different times.

2.3. Qualitative Method

To obtain rich and qualitative information from the participants, various interviews and observations were carried out to gauge the opinions and feelings of students towards mind mapping. These were qualitative procedures that have been designed in a very controlled way to enable an understanding of the individual students' experiences which in unison provided a more comprehensive view of their learning participation and involvement.

2.4. Concurrent Triangulation Strategy

The mixed-method approach was implemented to support the tactic that was used in this study, carefully ensuring that at every stage of the research both qualitative and quantitative data were collected simultaneously. For example, it is through combining these two methods of data collection that the research design sought to utilize their distinct strengths to give a holistic view of how mind mapping affects an individual's ability to understand text.

On one hand, for instance, interviews and observations as qualitative measures provided valuable contextual information about students' feelings, attitudes, and emotions as regards their learning process while surveys and standardized tests as quantitative tools offered objective numerical findings indicating how much progress on reading proficiency had happened.

For the purpose of making it more valid and reliable, this research employed a strict triangulation technique, which at the same time relied on several sources of data and information. Mind-mapping techniques are demonstrated as effective through statistical patterns combined with student experiences in this study that is both comprehensive and multidimensional. In the broader sense, this has made it easier to understand the benefits of graphic organizers for students.

2.5. Research Scope

As Rodriguez (2022) reveals, applied research usually solves specific problems experienced by one group as opposed to general unresolved issues in society. In this regard, the study uses creative techniques that engage graphic organizers in enhancing students' literary reading comprehension at José Benito Benítez San Andreas School. The main purpose is to improve a student's reading skills directly via objective measures that cater to their unique learning difficulties.

By addressing different challenges and requirements of such class members, this survey aims at proffering feasible answers that will usefully apply within their teaching surroundings. Thus, graphic organizers including mind maps as well as other visual aids are meant to make students comprehend more effectively and retain reading materials better. What makes these findings important is grounded on an applied research approach

which guarantees that they directly relate and benefit learners thereby yielding quicker outcomes in academic achievements.

2.6. Type of Investigation

Harvey (2021) recognizes field research as a methodology that makes it possible for scientists to have a clear and nearly full understanding of the subject of their study, through watching and interacting directly with people in their natural settings. Such an approach may provide a wide-ranging and nuanced contextual perspective usually not attainable using other research techniques. Field research was invaluable in this study, where data collection occurred directly among students in José Benito Benítez San Andreas School.

27. Methods Used in This Investigation

2.7.1. Deductive Method

A structured approach was employed in a calculated manner to systematically develop the problem statement, state research hypotheses, and enumerate possible outcomes. This systematic application of a structured methodology was necessary for outlining the core issues, hence setting up a sturdy foundation for the study. By working within a structured framework, this research was able to clarify what exactly its problem statement is and also made certain that its scope and focus were well defined right from the start.

2.7.2. Inductive Method

The basis on which this technique was tactfully developed was to define research objectives, pick, and apply research tools. The study had a strong foundation as it encompassed a holistic approach that allowed the researcher to examine the area of interest with much precision and concentration, confidently and effectively. Right from the start, the methodology made clear what it would like to achieve. The choice of research tools was done within this framework so that each tool could collect appropriate and reliable data. The implementation process was rigorous; thus, making use of selected tools in an orderly manner to consolidate the methodological strength of this study.

2.7.3. Observation

In the ongoing research context, this way of evaluating systematically played an essential part in weighing out the merits and defects of educational practices. The study was able to scrutinize comprehensively its effectiveness, drawbacks, as well as possible aftermaths on diverse educational strategies by using this methodological approach. This critical analysis became the foundation for making informed decisions that helped researchers to identify areas they would improve on and make nuanced recommendations that would enhance educational practice.

2.8. Description of Instruments Based on the Selected Research Approach

2.8.1. Description of the Diagnostic Test

All 22 participants, aged between 15 and 16 years and enrolled from second baccalaureate, were included in the study. Prior to their participation, official permission was obtained from both the educational institution and the students' parents or legal guardians (See

annex 1). The participants undertook a reconnaissance language proficiency test, which served as a baseline to determine whether any changes or improvements occurred as the research progressed over time (see annex 2).

Private aims of the test took the form of assessing the overall proficiency level achieved by learners in a foreign language with specific emphasis on English and as per their level within the European framework which was A2 specifically. The test had some elements of the common European framework CEF, and the elements included two core components at level A2 proficiency level, and these were components of reading comprehension and language use. The Language Use component measured knowledge of grammar and vocabulary through the items that measured the understanding of simple grammar points and commonly used vocabulary at A2 level.

2.8.2. Scoring and Interpretation

A set of standardized scoring rubrics was applied to evaluate students' responses. The total score of the test was 50 points, with 10 points assigned to each subsection. The proficiency levels were classified as follows: High A2 (41–50), Medium A2 (31–40), and Low A2 (21–30).

Out of the 22 participants:

Table 2. Proficiency level results

| Proficiency Level | Score Range | Number of Students | Percentage |
|--------------------------|--------------------|---------------------------|-------------------|
| High A2 | 41–50 | 2 | 9% |
| Medium A2 | 31–40 | 15 | 68% |
| Low A2 | 21–30 | 5 | 23% |

Elaborated by Alaba & Segovia (2025)

These results indicate that the majority of the participants (68%) demonstrated a Medium A2 proficiency level at the start of the study.

2.8.3. Results of the Diagnostic Test

The results of the diagnostic test showed that, indeed, the students had a very basic grasp of English but found it hard to work on more complex reading comprehension activities. Among the major weaknesses reported were poor summarization of long passages, prediction using texts features, and poorly done vocabulary which directly cut across comprehension.

The diagnostic test results highlighted the need for instructional interventions targeting literal reading comprehension skills. The data obtained informed the development of tailored lesson plans incorporating mind mapping and graphic organizers to address the identified weaknesses.

2.8.4. Survey Questionnaire

The survey questionnaire was designed and administered as a key instrument to assess students' beliefs, perspectives, and practices regarding reading comprehension strategies, graphic organizers, and mind mapping techniques. Its primary purpose was to gather qualitative data that would complement the quantitative results obtained from the tests, thereby providing a more comprehensive understanding of students' learning processes.

The questionnaire included 14 items and was subdivided into 2 sections. The first section was about reading comprehension strategies, and a few things were measured using Likert-type scale items that ask students about their confidence and interest in

reading English texts. The first and the second sections incorporated interviews to clarify the strategies students use when faced with difficult texts. The second section dealt with graphic organizers and mind mapping techniques and yes/no questions on whether students had previously learned about mind mapping. Open-ended questions on the students' ideas about how graphic organizers may enhance their learning were also included in this section (See annex 10).

2.9. Description of Participants and Their Characteristics

This time the research involved a group of twenty-two pupils of José Benito Benítez San Andreas School settled in the northern zone of Guayaquil city in Ecuador. The participants were made up of 12 girls and 10 boys, who were between the ages of twelve to thirteen years with the majority being twelve years old. Every pupil was in the seventh grade, which corresponds to their age and current educational level.

As per the Common European Framework of Reference for Languages (CEFR), the students were evaluated and rated at the medium A2 level of English proficiency. This level can be achieved when students are able to comprehend and use simple words and expressions for everyday use in addressing certain demands, as well as introduce themselves and other people and pose and respond to questions concerning personal information.

This level of achievement was attained, as was the case with the present study, with the use of the English language assessment tool which was performed at a pre-study stage. The assessment tested language skills in four main areas, namely, reading, writing, listening and speaking, using multiple-choice questions, short response and practical tasks

constructed to meet CEFR recommendations. This confirmed the results of the English language level testing which was the medium A2 of the students enabling the study to have an accurate baseline.

2.10. Ethical Considerations and Legal Permissions

Before the research began, ethics approval was obtained to avoid breaching any legal or ethical standards. On January 28, 2024, a letter was sent to students' parents and trustees, stating the aim of the research, its implementation, and risks and advantages. Consent forms for the intended participants' signatures to validate their participation were also part of the letter. All consents were obtained by getting signed consent forms from the parents by February 10, 2024, allowing the students to participate in the study. Also, the school head endorsed the study and sanctioned it (see annex 12).

2.10.1. Strengths

The participants were eager to explore the boundaries of the English language, a passion which they possessed inside themselves that helped them actively use graphic organizers, thus enhancing their reading skills. This ardent desire to learn new languages was not just scratching the surface but rather seemed like a need to expand on their current language levels. The enthusiastic participation in this study signified their true dedication towards self-improvement both academically and personally since it portrayed holistic education which goes beyond mere memorization of facts into involving dynamic and interactive teaching strategies. The intrinsic motivation sparked their involvement in research, hence setting grounds for successful collaboration among students and meaningful learning.

Moreover, a small class of only twenty-two students facilitated personalized interaction between teacher and learners, thus enabling them to get the best out of one another by giving them tailored support. In this home-like environment, children were helped on a one-to-one basis, taught how to read, as well as given a sense of belonging in school.

2.10.2. Weaknesses

It should be noted that students' levels of language proficiency are assessed at level A2, which means they are pre-intermediate. This classification shows that, when involved in mind mapping activities, students may not easily grasp meanings of texts or unfamiliar academic terms. Thus, such individuals may find it hard to understand and participate in their learning processes since they must decipher complex texts and make sense out of jargon words used therein. Moreover, the lack of leveled books has always been a problem as far as availability of reading materials is concerned.

In fact, this absence of suitable reading material for children has hindered their ability to improve their reading skills. Those students who access materials at their instructional level can't may have difficulties in applying language and reinforcing what they learned, thus hindering the growth of language completely. An inadequate supply indicates the need for targeted intervention and equal human resources allocation so that all learners can have an equal opportunity to learn across borders within vast regions with no infrastructure.

2.11. Population and Study Sample

The class has 22 students made up of ten boys and twelve girls. A non-probabilistic sampling technique, specifically convenience sampling, was used for selecting them. The

argument behind choosing this sampling approach is its capacity to address accessibility concerns in case there are any availability aspect between the context, and resources constraints. Also, it is more appropriate for studies involving mixed methods such as quantitative followed by qualitative investigations.

These students are not just to be left alone in their understanding, but they have to get involved and think about what they read, by reading between the lines, synthesizing ideas, identifying trends, and envisaging what is going to happen next. Graphic organizers could support this process as they help students make visible the organization of the text, and that would go a long way in predicting future outcomes of a story. This, therefore, means that students must learn how to deal with different types of texts and become proficient readers who can easily move through complex textual terrains like those found in academic disciplines as well as everyday life contexts.

2.12. Data Analysis Procedure and Ethical Considerations

In attempting this research, however, letters were first drafted and mailed to both the parents and the authorities of the respective schools on January 28, 2024 as a means of getting pertinent consent to carry out the study within the zone boundaries of the school. Allowances were ultimately obtained on February 10, 2024, following a thorough assessment of moral and legal prerequisites as well as the foundations of this scientific study.

The survey approach was designed to answer the objective of the research on the problem of the core issue of where one struggles with the literal reading comprehending level and included questions that have been put into two categories such as reading comprehension strategies and graphic organizer techniques. These interdependent

categories were supposed to explain the more intricate parts of students' comprehension and their competency in the use of graphic organizers. The analysis of responses from this tool enabled research workers to discern patterns, identify problems, and locate gaps that needed specific measures, thus enhancing evidence-based practice in literacy education.

Data analysis

2.12.1. Results of the Diagnostic Test

Table 3
Diagnostic Test Averages for 2nd and 1st Bach courses

| Parallel | Listening | Speaking | Reading | Writing | Avg Total |
|----------------------|-----------|----------|---------|---------|--------------|
| 2 nd Bach | 5.8 | 5.7 | 5.5 | 5.4 | 22.4 |
| 1 st Bach | 6.4 | 6.5 | 7.3 | 6.5 | 26.1 |

Note: Elaborated by Jonathan Alava and Jayro Segovia

The results indicate that one of the two courses examined, 1st Bach course, achieved a higher mean score of 7.3 out of 10 (65% overall) whereas 2nd Bach course scored lower with an average of 5.5 out of 10 (56% overall). Therefore, for the purposes of this research, the 2nd Bach course with a lower reading average has been selected as the experimental group, whereas the 1st Bach course as the control group.

In making this selection, all students in both parallels were given a comprehensive diagnostic test (Listening, Speaking, Reading and Writing), which determines the level of language competence of the students accurately. This way we are able to direct our efforts to the group that needs the most help while still measuring the results against a control

group of the same level, thereby reducing the changes of bias and increasing the accuracy of the results from focused reading strategies that promote proficiency in English.

2.12.2. Results of the Survey

The survey served as a foundational stone for this research, administered prior to and after implementing the intervention suggested. As such it is an important instrument in evaluating how effective or ineffective the intervention has been in students' attitudes, perceptions and learning outcomes. As a result of this, a detailed examination of the survey findings is necessary to identify possible changes, trends or progress during the study period. Researchers can trace students' experiences and thoughts about the intervening process by examining responses from the beginning and end of the survey.

The survey in table 4 showed that following intervention, students' literal reading comprehension skills have improved significantly. The students had low levels of comprehension because they lacked vocabulary knowledge, reading fluency and inference-making skills as proved by their average scores ranging from 31.82% to 59.09%. However, after the intervention in all areas there was a great improvement with the mean scores increasing to 45.45%-77.27%.

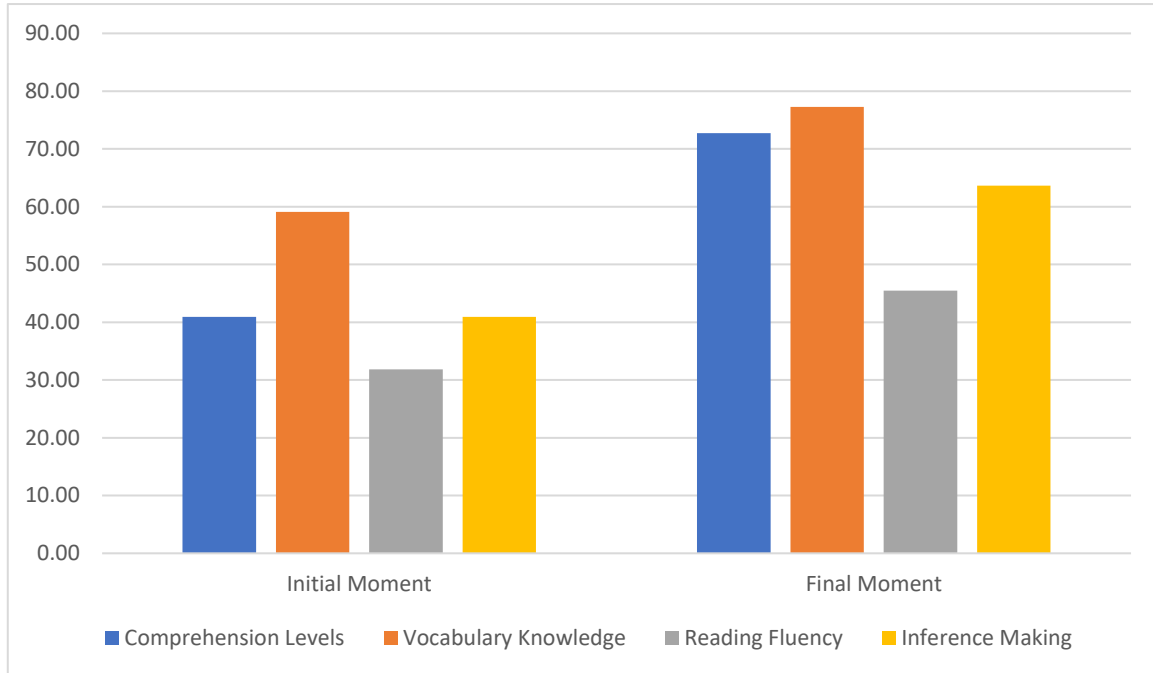
Table 4 . *Improvement in Understanding English Texts (Objective Test Scores)*

| | Comprehension Levels | Vocabulary Knowledge | Reading Fluency | Inference Making |
|----------------|-------------------------|-------------------------|--------------------|------------------|
| Initial Moment | 40.91 | 59.09 | 31.82 | 40.91 |
| Final Moment | 72.72 | 77.27 | 45.45 | 63.64 |

Note: Elaborated by Jonathan Alava and Jayro Segovia

Figure 1. *Improvement in Understanding English Texts (Objective Test Scores)*

Improvement in Understanding English Texts (Objective Test Scores)



Note: Elaborated by Jonathan Alava and Jayro Segovia

This means that strategies used including graphic organizers were effective in enhancing students’ comprehension levels, vocabulary knowledge, reading fluency and inference-making skill. In general terms these results confirm that the intervention had a constructive effect on improving overall English language reading comprehension proficiency among ELLs.

2.12.3. Pretest Description and Results

To assess students’ literal reading comprehension before the implementation of the proposal, a pretest was administered to 22 B1-level students at Unidad Educativa Jose Benito Benitez San Andrés. The test consisted of 7 questions related to identifying main

ideas, details, and literal information from a selected reading passage. Each question was scored, and the total was scaled to a 10-point system.

The average score was 7.41, with the highest score being 9 and the lowest score 5. These results provided the baseline for measuring the impact of mind mapping techniques applied throughout the intervention (see annex 8). The chart above visually illustrates the variation in students' performance prior to the intervention. It is evident that a significant portion of the participants scored between 7 and 9 points, indicating a moderate to high initial level of literal comprehension. However, several students scored 5 or 6 points, reflecting the need for targeted strategies to strengthen reading skills. This distribution justifies the application of differentiated techniques, such as mind mapping, to support both struggling and proficient learners.

This chapter presented the description and results of the pretest conducted to assess the initial level of literal reading comprehension among B1-level students. The findings revealed a range of performance levels, with most students demonstrating moderate comprehension and a few showing lower proficiency. These results established a baseline for the proposal and highlighted the need for implementing differentiated instructional strategies, such as mind mapping, to enhance reading skills and address students' diverse learning needs.

CHAPTER 3: Presentation and Validation of the proposal

3.1. Presentation

The following proposal is made of mind mapping activities that target to develop literal reading comprehension in the English language in students of Jose Benito Benitez San Andreas School. González-Lloret (2020) points out that, in order to understand what learners, need in terms of language skills and the situations where they will use English the goal is to customize teaching methods and a need analysis is needed. So, the mind mapping techniques were based on this information which the level of the techniques was A2 Level and the chronological order in the use of the graphic organizers was based on a steps and planned mind mapping techniques in the classroom.

3.2. General objective of the proposal

To elaborate and apply mind mapping techniques with the purpose to enhance literal reading comprehension of Jose Benito Benitez San Andreas school students.

3.3. Specific objectives of the proposal

To design creative and authentic graphic organizer activities

To implement these techniques during four lessons in Jose Benito Benitez San Andreas school students

To assess the efficacy of these mind mapping techniques

3.4. Proposal Theoretical foundation

The proposal is based in Tony Buzan techniques which stress the relevance of a powerful technique called concept mapping. He also emphasizes a criterion that must be followed for the correct implementation of concept mapping (Buzan, 2020). To develop reading comprehension, it's worth noting to consider the following steps:

Select a Text. It is crucial to select a reading passage that is appropriate for the students' specific level and interests. When selecting a text, both linguistic complexity and thematic relevance should be taken into account. Texts that are within the students' level of linguistic proficiency, combined with the Zone of Proximal Development (Vygotsky & Cole, 1978), facilitate better instructional mediation and improve learning outcomes.

Furthermore, when content is aligned with students' interests, it increases motivation and promotes deep processing, thus facilitating meaningful learning (Krashen, 1982). The correct text selection strategy is essential for the effective application of mind mapping strategies because it allows learners to integrate prior knowledge with new information, thereby improving their literal comprehension of the text.

Before Reading, collaborate on words and concepts related to the text. This stage is crucial for activating students' prior knowledge and building a foundation for understanding new content. According to Guanoluisa Toapanta (2024), pre-teaching key vocabulary and discussing related ideas enhance learners' ability to process and comprehend the reading material. Engaging students in collaborative prediction and brainstorming activities also fosters engagement and prepares them for more effective interaction with the text (Webb, 2009). These pre-reading strategies are particularly

beneficial when integrated with mind mapping, as they allow students to visually organize background knowledge and expectations before encountering the text.

Reading Time. Suggest that students read the text individually or in groups. The variety of reading formats promotes self-direction and adapts to different learning styles. Grabe and Stoller (2019) argue that independent reading helps students develop strategic comprehension skills, while group readings are dominated by cooperative learning and peer support. Both methods help students self-regulate and monitor their reading comprehension and fluency. Furthermore, combining these modalities can help improve motivation during reading sessions and the exchange of interpretations and clarifications of the text.

Create mind maps. As a post-reading activity, students should develop mind maps that capture the main ideas and supporting details derived from the reading material. This activity encourages higher levels of thinking, as it allows learners to organize information, determine relationships between concepts, and reflect deeply on the content.

Mind maps, as Novak (2010) argue, facilitate meaningful learning because students can visualize new concepts in the context of what they already know. Furthermore, the technique helps strengthen comprehension and support retention while providing students with a means to visually synthesize and review essential parts of a passage.

Group Discussion; Students discuss their mind maps in small groups, sharing their thought processes, interpretations, and connections drawn from the text. This collaborative exchange fosters metacognitive awareness and deepens understanding through peer interaction. According to Vygotsky's (1978), cited by Hardman & Hardman (2017)

sociocultural theory, learning is enhanced through social interaction, where students co-construct knowledge and clarify their thinking.

Group discussion also promotes critical thinking and communication skills, as learners must explain, justify, and sometimes revise their ideas based on feedback from others.

This process helps consolidate comprehension and encourages multiple perspectives on the same reading material.

Review and Expand. Students reflect on how mind mapping helped them understand the materials and contemplate how the strategy could be implemented in future educational contexts. This stage of reflection is important for developing metacognitive skills and self-regulated learning. Purwanto et al. (2023) emphasize that reflection as a component of the learning process allows students to evaluate the effectiveness of their approaches, identify gaps, and adopt successful strategies. Furthermore, discussing the advantages and possible uses of mind mapping not only reinforces its importance but also empowers students to apply the strategy to new academic tasks such as writing, studying, or clarifying and structuring complex ideas.

Extra Activities. Additionally, students can be tasked with writing summaries, delivering summary speeches, or creating visual representations using the mind maps they developed. These extension activities allow students to deepen their understanding, practice language production, and translate or adapt their understanding to different formats or representations. As Macalister and Nation (2019) explain, productive language use, whether in speaking or writing, enhances the retention of vocabulary and content knowledge. Through the process of creating summaries or presentations, learners transform mind maps into summaries, which involves synthesizing and reorganizing ideas.

This transformation improves students' communication skills along with critical thinking skills in relation to what they have read.

Evaluation: Provides an assessment of student understanding and creation of mind maps. Assessment should focus on both the content and organization of the mind map, such as order, clarity, hierarchy, relevance, and information conveyed, as well as understanding through connections and details. According to Andrade (2010), prompt feedback is the most effective. It is specific, relevant to the goal, and therefore helps students reflect and grow through targeted self-assessment. With the help of rubrics, teachers can provide specific suggestions designed to encourage continued progress while maintaining support for positive experiences with the strategy during subsequent reading activities.

3.5. Characteristics of the proposal

This proposal is a teaching intervention aimed at improving learners' literal comprehension skills to reach B1 proficiency level through mind mapping techniques. It is framed within a face-to-face methodology and was applied over five weeks, one technique per week in a sequence of four reading sessions. The proposal addresses a particular educational problem identified at the José Benito Benítez San Andrés Educational Unit, where students showed inadequate performance on internationally benchmarked tests such as the Pearson Test of English.

The instructional design applies a constructivist model, which places greater emphasis on the student, highlighting the importance of building visual skills. The selected mind mapping strategies were adapted to meet specific reading objectives such as summarizing, comparing, analyzing causes and effects, and structuring information

hierarchically. Each lesson includes activities aimed at fostering deeper comprehension before, during, and after reading.

The methodological sequence includes:

3.6. Mind mapping techniques

| | |
|--|--|
| 1. Time order (sequence) Mind map | To list the logical progression of ideas in a written text |
| 2. Comparison and Contrast Mind map | To organize if two related concepts are different or alike |
| 3. Cause and Effect Mind map | to identify the events on a text leading to a result |
| 4. Brace Mind map | To organize multiple ideas around a central idea |
| 5. Questioning cluster Mind map | To summarize the ideas of a written text by WH using Questions |

Elaborated by: Alava, J (2025)

In addition to reading, the proposal encompasses collaboration, self-reflection, and oral and written expression through complementary activities such as summaries, group presentations, and discussions based on students' mind maps. These activities aim to consolidate vocabulary, foster critical thinking skills, and nurture metacognitive development.

As mentioned above, the proposal includes systematic assessment with checklists, surveys, and pre- and post-tests. Student progress was assessed using an observation rubric, allowing for continuous feedback and data collection throughout the intervention. The proposal is practical and flexible, but also illustrates the effectiveness of mind maps as a

dynamic pedagogical tool for improving comprehension in English as a Foreign Language (EFL) contexts.

3.7. Description of the Type of Proposal

The current proposal is pedagogical and didactic in nature because it focuses on the planning and implementation of teaching strategies aimed at improving literal reading comprehension for students at the B1 level. More specifically, it is a methodological intervention that incorporates the use of mind maps as a facilitated technique to foster reading development in English as a foreign language (EFL).

This type of proposal is characterized by its applied orientation, as it addresses a real educational requirement that was defined through a diagnostic assessment at the José Benito Benítez San Andrés Educational Unit. The intervention is situated within the action research paradigm, seeking not only to solve a pedagogical problem but also to transform classroom practice in an innovative and evidence-based way.

Furthermore, this proposal can serve as a replicable model for other similar educational contexts. It combines theoretical aspects of reading comprehension and graphic organizers with practical classroom applications, offering students and teachers functional and engaging tools adaptable to multiple texts. Mind mapping techniques are integrated sequentially and deliberately over five reading lessons, allowing for the gradual development of comprehension skills and metacognitive awareness.

In other words, this is a context-based, flexible educational intervention designed to improve students' reading achievement using a visually structured methodology that places students at the center, aligned with contemporary educational principles in language pedagogy.

3.8. Forms of Application, Implementation, and Evaluation

The implementation consisted of a five-week classroom intervention targeting the application of five specific concept mapping techniques with the goal of improving the literal reading comprehension of B1 students. This methodological approach is detailed in the teaching manual, which contains outlined steps intended to guide teachers and students in achieving objectives within their reading lessons.

These techniques are designed to enable students to highlight, classify, relate, connect, and summarize significant details within different types of texts. Students worked with a different concept map designed for each reading skill during the week, which included temporal sequencing, comparison, cause and effect, categorization, and comprehension through questioning. The goal was to improve comprehension of individual texts but also to provide students with versatile strategies for addressing subsequent academic tasks.

The instructors who implemented these processes guided students through each step of the introduction and modeled all the techniques that the students were expected to use individually afterward. Graphic organizers and didactic instruction combined to help students utilize the concept mapping strategy to its full potential. Lessons were divided into pre-reading, during-reading, and post-reading stages to help students activate prior knowledge, extract relevant information, and organize their understanding visually.

In addition, one reading passage was incorporated per week, culminating in a total of five passages. Each week, the reading passage was chosen according to the corresponding concept map type and learning objectives. It was the teachers' responsibility to adjust the text structure and difficulty level to the appropriate mapping approach. The

relationship between the reading texts and concept maps is shown in Appendix 13, which summarizes the weekly topics along with the objectives.

For the evaluation, a mixed-methods approach was used. A pre-test and post-test were administered, each measuring literal comprehension on a 10-point scale. The impact of the proposal was confirmed by these quantitative results. In addition, performance assessment was conducted using observation rubrics for the activities, focusing specifically on the understanding, organization, and application of concept mapping elements. Perceptions and attitudes toward the techniques were also assessed through surveys and group reflections, which seek to employ appropriate instructional strategies while fostering student-centered instruction and active learning. These combined methods of application, implementation, and evaluation ensure that the proposal is pedagogically sound, contextually relevant, and proven effective in developing reading comprehension through active, visual, and student-centered instruction.

Table 5. Reading Texts and Mind Mapping Techniques

| Week | Text topic | Mind mapping technique | Reading skill focus |
|--------|---------------------------------------|-----------------------------|--|
| Week 1 | A Personal Experience | Time Order Map | Identify sequence of events |
| Week 2 | Cultural Traditions Around the World | Comparison and Contrast Map | Compare similarities and differences |
| Week 3 | The Impact of Technology on Education | Cause and Effect Map | Analyze causes and consequences |
| Week 4 | Healthy Habits and Lifestyle | Brace Map | Break down concepts into components |
| Week 5 | Environmental Issues | Questioning Cluster Map | Synthesize and respond to WH-questions |

Elaborated by: Alava, J (2025)

Table 6. Budget for the Implementation of the Proposal

| Budget of the Proposal | | | |
|--|---|--------|-----------------------------|
| Expenses in Human Resources | | | |
| Activity | Time Assigned | Salary | Person in Charge |
| Design of mind mapping templates | 3 days | \$30 | EFL Teacher / Researcher |
| Planning of 5 reading sessions | 2 days | \$20 | EFL Teacher |
| Data collection and analysis | 3 days | \$25 | Research assistant |
| Total | | \$75 | |
| Expenses in Tools and Materials | | | |
| Tools / Resources | Implementation Activities | Cost | |
| Laptop (existing) | Used for lesson planning, editing worksheets, and analyzing data | \$0 | |
| Printing materials | Handouts, worksheets, templates, and evaluation rubrics | \$25 | |
| Stationery | Markers, colored paper, tape, and poster boards for mind map creation | \$30 | |

| | | |
|---------------------------|---|-------|
| | To store lesson plans, | |
| USB drive | student work, and digital mind maps | \$15 |
| | For accessing digital | |
| Internet access | materials, references, and communication | \$10 |
| | Reproduction and | |
| Survey and pre/post tests | application of instruments to measure comprehension improvement | \$20 |
| | Certificates, small tokens | |
| Incentives for students | for participation (optional) | \$25 |
| Total | | \$125 |

Elaborated by: Alava & Segovia (2025)

3.9. Resources

The proposal presented in the mind mapping lesson plan seeks to integrate this technique into reading classes. This requires funding and resources that, within the context of instructional design, allow for the construction, generation, and evaluation of materials appropriate to student progress.

Human resources include an English teacher, who is responsible for the design, planning, and implementation of lessons, guides students through assessments and the application of mind mapping techniques, administers evaluations, and establishes general

assessments. A research assistant may also participate in overseeing data collection, monitoring the teaching-learning processes, evaluating the processes, and interpreting the data.

Material resources are essential for preparing and conducting reading sessions, specifically referring to the following:

- Printed audiovisual resources such as flyers, brochures, textbooks, blank mind map templates, and assessment rubrics.
- Office supplies such as markers, colored pencils, highlighters, cardboard, and glue for mind mapping.
- Class planners and documentation can be easily managed using a technological device such as a laptop. Additionally, materials can be printed using a printer, while digital files can be stored and transferred using a USB flash drive.
- Reading materials and theoretical resources, as well as updates and results, can be accessed through an internet connection.
- Assessment tools such as pre- and post-test forms, student surveys, and observation checklists will be used.

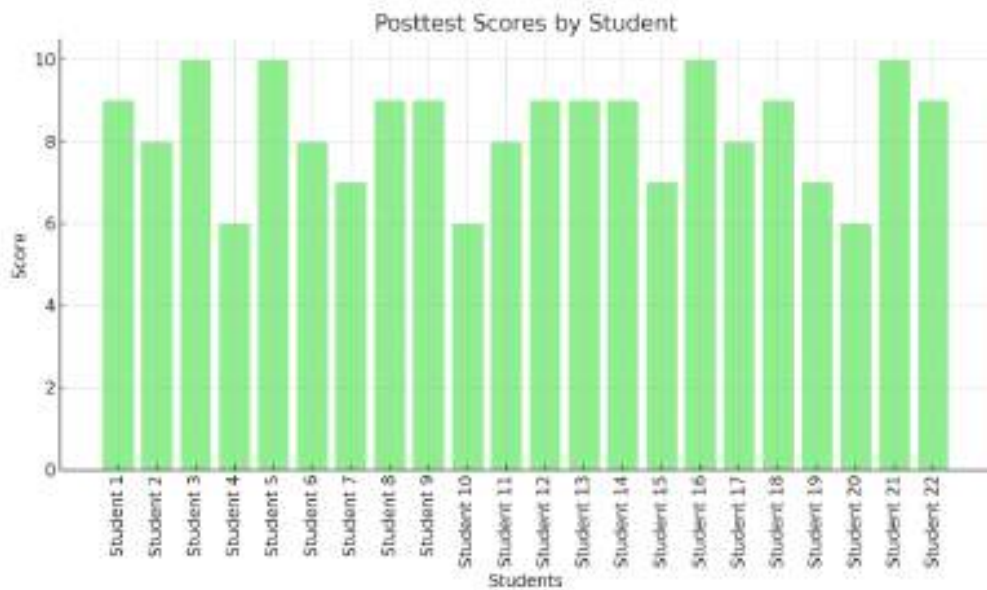
All resources were selected based on their practicality and appropriateness for the context and setting at Unidad Educativa Particular José Benito Benítez. This particular English as a Foreign Language (EFL) approach was designed to be cost-effective and easy to replicate in other EFL environments where only basic teaching and instructional materials are needed, which are found in most educational institutions.

Discussion of Results

3.10. Posttest Description and Results

After conducting a teaching intervention using mind mapping techniques, a post-test was administered to the same 22 B1 students at the José Benito Benitez San Andrés Educational Unit. This assessment was developed simultaneously with the pre-test and consisted of seven questions focused on literal comprehension. Scoring was standardized to a ten-point system to maintain consistency in comparison.

The concentration of scores obtained as the test progressed adjusted to an average of 8.32, which represents a clear improvement compared to the average of 7.41 obtained in the pre-tests. The highest score was 10 and the lowest was 6. These data highlight the significant impact that mind mapping techniques had on student performance in reading comprehension. As evidenced in the aforementioned and table (Annex 9), a very high percentage of students achieved scores equal to or higher than 8, indicating significant progress in describing, documenting, and compiling the texts provided.



Elaborated by: Alava & Segovia (2025)

The results show a significant decrease in the number of students scoring below 7, demonstrating that the intervention successfully mitigated comprehension gaps prior to the comprehension assessment. The structured, visual nature of the mind maps helped identify the most relevant features of the concepts presented, how they relate to each other, and their finer details, all of which are very important for literal comprehension.

From an educational perspective, these findings suggest that mind maps not only improved students' comprehension of texts but also increased student self-efficacy and engagement, particularly in the context of English as a Foreign Language (EFL) classes. The technique was effective in activating students' prior knowledge, facilitating comprehension during reading and consolidating information afterward.

Furthermore, this is a significant improvement considering that many of the participants were starting from an upper A2 level. The post-test results indicate a shift towards solid B1 level competencies, supporting the validity of mind maps as strategic remedial tools aimed at filling gaps in the learner's knowledge.

These findings are based on previous research that points to visual learning strategies as facilitators of comprehension, especially for students who struggle with text or its content. Mind maps or concept maps provide students with the opportunity to materialize their thinking by constructing visual relationships that are not only simple interpretations but also useful for memorization and deep understanding of the topic being studied. In the case of foreign language learning, these strategies allow students to carry the cognitive load and focus their attention on understanding rather than having to decode elements that are out of textual context.

The results also highlight the need for differentiated instruction. The variability in the results of the first test indicated different degrees of reading proficiency among the students. With the use of mind maps, both high-performing and low-performing students benefited from a flexible and structured strategy that reflected their different individual learning needs. This opens the possibility that adopting these strategies as part of classroom routines can facilitate not only academic achievement but also equity in educational achievement levels.

Finally, the sustained improvement observed in the post-test encourages further research on mind maps as part of a broader repertoire of reading instructional strategies. Teachers can design strategies with this resource for other skills, such as critical and inferential comprehension, and integrate them across disciplines. Furthermore, the collaborative use of this resource allows students to construct mind maps, thus promoting peer learning and strengthening understanding through dialogue and group reasoning. The results of this intervention justify greater efforts in these more relevant educational contexts, especially those that seek to establish active, student-centered environments.

3.11. Assessment of Student Progress through Pretest and Posttest Evaluation

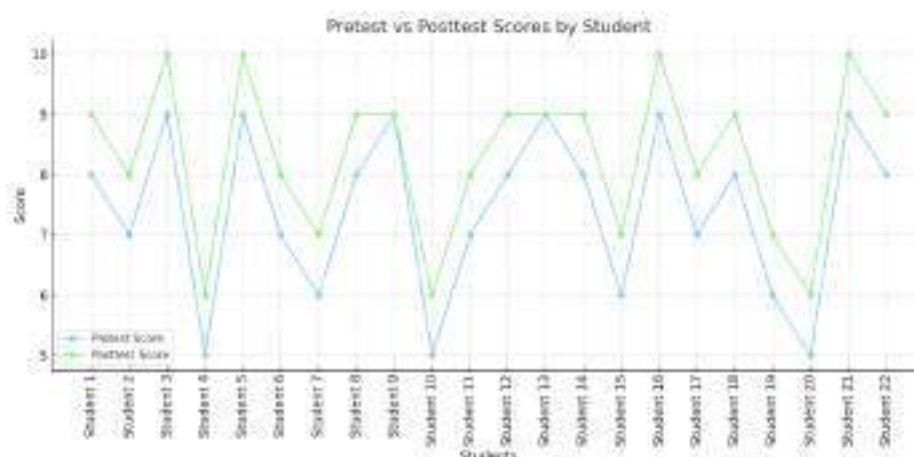
To measure the effectiveness of mind mapping techniques during the intervention, a pre-test and post-test assessment were administered to the 22 participating students. These assessments aimed to test their literal reading comprehension skills both before the implementation of the strategies and after their implementation during the intervention. The pre-test was intended to establish a baseline of the students' initial proficiency levels, while the post-test was intended to measure their reported level of improvement.

Both assessments included seven questions addressing specific areas of reading skill and were scored out of 10. The scores received by each student were evaluated in relation to their observed changes, both individually and collectively, on the established criteria. For a detailed analysis of the results of the pre- and post-assessment assessments, (see annexes 8 and 9). The findings of these analyses will be captured and discussed in detail in the next section.

The evidence indicates that students' performance improved considerably with the application of mind mapping techniques. Most participants improved their post-test scores, clearly suggesting the success of the pedagogical intervention. The average improvement of almost one point emphasizes the positive impact on students' literal reading comprehension skills.

- **Pretest Average Score:** 7.41 / 10
- **Posttest Average Score:** 8.32 / 10
- **Average Improvement:** +0.91 points

Figure 2. Pre-test vs post-test scores by students



Elaborated by: Alava & Segovia (2025)

The results of the diagnostic assessment show a clear upward trend in student performance following the application of mind mapping techniques. The average pre-test score was 7.41 out of 10, and the average post-test score increased to 8.32. This result indicates an average improvement of 0.91 points across all participants, as shown in Annexes 5 and 7, which present the individual scores recorded before and after the implementation of the proposal.

The improvement of almost one point is even more remarkable considering second language acquisition and reading comprehension, as such gradual improvements typically require much more effort to achieve. The data confirm that learners benefit from the structured and visual nature of mind maps, as they will help them better identify key ideas, retain vocabulary, and organize information.

Furthermore, most students showed some individual progress, with some even improving by one to two points. Only a small portion showed no change, and no participants experienced any decline, highlighting the reliability of the intervention. The line graph provides further support for these assertions by showing that most students scored higher on the post-test compared to the pre-test, demonstrating the positive academic use of mind maps in teaching strategies and reinforcing the findings already reached through the table analysis.

These results validate the use of graphic organizers as an effective tool for improving literal reading comprehension among learners at the B1 level. They also advocate the use of mind mapping in the English curriculum as an approach to improving comprehension and critical thinking skills. Moreover, the majority of students demonstrated individual progress, with some improving by one or even two full points.

Only a minority showed no change, and none of the participants regressed, which underscores the consistency and reliability of the intervention's effectiveness.

These results validate the use of graphic organizers as an effective tool for improving literal reading comprehension skills among B1-level learners. They also support the inclusion of mind mapping in English language curricula as both a comprehension and critical thinking enhancement strategy.

3.12. Comparative Analysis of Pretest and Posttest Results

Comparing student performance on the pretest versus the posttest provides a clear indicator of how much progress they have made during the intervention. As mentioned above, the pretest had a moderate level of literal comprehension, with a significant number of students scoring around the 5 to 7 mark. These scores suggest that they had difficulty identifying main ideas and recalling explicit details from the texts, which is very typical for EFL learners at the B1 level (see table 5).

In contrast, the ranges in the posttest scores seemed to show a consistent upward trend, with the majority of students scoring between 8 and 10. This improvement reflects not only better comprehension skills but also greater self-efficacy and fluency in reading the texts. The use of mind mapping strategies proved to be essential instructional aids insofar as they facilitated students' ability to visually organize main concepts, thereby improving text processing and detail retrieval.

The passage sheds light on the importance of using both formative and summative assessments to track progress in reading comprehension through comparative analysis. The difference in results makes it evident that, when properly planned and monitored, strategic pedagogical frameworks have the potential to foster significant academic growth.

The information from table 5 and figure 2 indicates that there were changes in how good students are at knowing the main ideas and key details of English texts from the beginning to the end . A considerable number of students reported having problems at the initial stage, where only 27.27% indicated they could always identify main ideas as well as key details and 36.36% said they sometimes do so.

Table 7
Performance in Identifying Main Ideas and Key Details (Pre-Test and Post-Test Results)

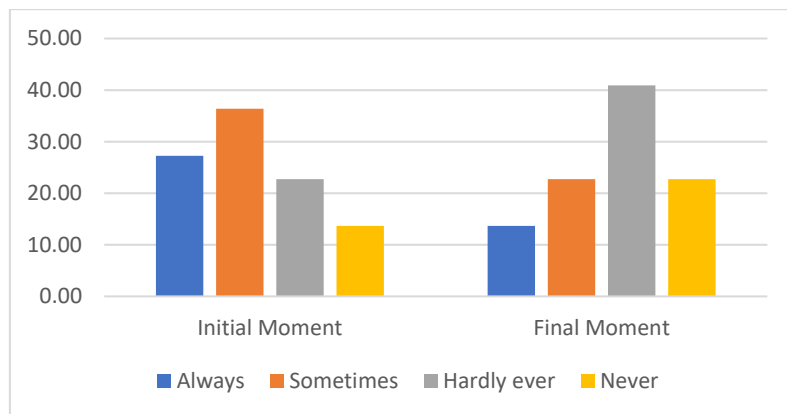
| | Always | Sometimes | Hardly ever | Never |
|----------------|--------|-----------|-------------|-------|
| Initial Moment | 27,27 | 36,36 | 22,73 | 13,64 |
| Final Moment | 13,64 | 22,73 | 40,91 | 22,73 |

Note: Elaborated by Jonathan Alava and Jayro Segovia

Below this data can be seen in graphics (Figure 2)

Figure 3

Performance in Identifying Main Ideas and Key Details (Pre-Test and Post-Test Results)



Note: Elaborated by Jonathan Alava and Jayro Segovia

However, after interventions, a significant improvement was noted with only 13.64% indicating they always had difficulties and 22.73% reporting sometimes.

Conversely, there was an increase in those who rarely or never struggled hence suggesting

that this intervention positively influenced their ability to identify main ideas and key details within English texts.

3.13. Pedagogical Implications for Teaching English as a Foreign Language (EFL)

The effectiveness of intervention models in teaching English as a foreign language (EFL) integrates the mind mapping technique with other teaching methods, forming a problem-based teaching model. Mind mapping not only improves comprehension skills but also promotes autonomy and metacognition. Students who create cognitive maps become more aware of how they understand and maintain information, which improves their critical thinking skills and reflective learning practices.

Incorporating visual tools into EFL teaching provides solutions to the language barrier by organizing information in a nonlinear and accessible way. Tools such as mind maps can be used to teach vocabulary, clarify grammatical structures, or simplify reading passages. This strategy adheres to constructivist learning theories in that it emphasizes active, participatory learning situations where students construct meaning from their environment through interaction and exploration.

Furthermore, these findings advocate for a more comprehensive and differentiated approach to teaching reading and writing. Students with different levels of language proficiency, learning styles, or cognitive profiles can benefit from the visual and systematic nature of mind maps. Therefore, teacher training programs should include the application of these strategies to improve pedagogical responsiveness and flexibility.

3.14. Beneficiaries

The primary beneficiaries of this research are the 22 B1 students at the José Benito Benítez San Andrés Educational Unit, who will practice the mind mapping technique during its implementation. These students achieved improvements in literal reading comprehension through visually structured strategies that allowed them to organize, interpret, and recall the information contained in the texts. As evidenced by the final test results, the intervention contributed to more consistent overall gains in comprehension and helped even students who struggled academically cope with the situation by using sustained support tailored to their needs, improving performance regardless of their initial level.

However, the impact of this strategy extends beyond this particular group. English as a Foreign Language (EFL) students across the institution can benefit from incorporating mind mapping into their reading practices. This technique fosters strategic reading, cognitive engagement, and learner autonomy, making it appropriate for different levels of language proficiency. When applied consistently, it can help students form stronger connections between vocabulary, grammar, and comprehension—crucial components for success in language learning.

Furthermore, English teachers also become indirect beneficiaries of this study. The implementation of mind mapping represents a flexible and complementary pedagogical approach, helping teachers guide reading assignments, assess comprehension, and encourage active participation in class. This technique promotes inclusion by improving the ability to differentiate instruction.

Finally, if this policy is adopted at the institutional level, it has the potential to improve language learning outcomes, increase learner satisfaction with their education, and enhance overall educational quality. With appropriate strategies to assist students in understanding written texts, educational institutions can contribute to developing confident and independent readers, thereby enhancing the institutional academic reputation of their English programs.

Conclusions

In the English academic environment, the application of mind maps, a useful resource which has distinguished to be beneficial for improving literal reading comprehension skills. This application has been favorable in enhancing students' receptive skills as well as reinforcing their understanding of unfamiliar text. This effective methodology through the application of the mind mapping techniques used in the classroom as a powerful post reading activity which turns out to be an enhancer on improving reading literal skills.

The benefit that learners get from mind mapping techniques from different reading contexts such as historical readings, storytelling text, or fun facts text, shows the flexibility of this pedagogical methodology. This meaningful graphic organizer may have promoted learners to get a core idea of ungraded text which turn out to be advantageous in any educational setting.

The elaboration of target lessons designed for each week, concentrating on different literal reading comprehension skills, shows attentive focus on designing and planning by the instructors. The general achievement of the proposal was promoted by this framework, in which learners were able to perform on specific reading skills and get improvement continuously.

During the last weeks, learners were given the chance to enhance their comprehension of reading literal skills through the implementation of the mind mapping methods due to weekly assessments following the progression of the graphic organizers.

To fulfil overall success in this receptive skill, rely on the discipline of the teacher and learners through this methodology, which is on the engaging learners to be motivated on this learning process.

English literal reading comprehension is greatly enhanced by using mind mapping techniques as a pedagogical resource. In this research, it is assumed that implementing mind mapping techniques for enhancing understanding of ungraded text, could remarkably enhance students B1 literal reading comprehension. Mind mapping techniques allow learners to be engaged in reading lessons and are flexible tools for the last reading stage which is the post reading phase.

The outcomes of the interview and pre - posttest which was carried out at the early stages and the final stages of this research demonstrated learner's favorable attitude towards the use of mind mapping techniques. During the application of the proposed methodology, most of the learners were able to show significant and favorable opinions and an elevated satisfaction on their reading lesson.

Recommendations

Once the research has been applied, the current suggestions are recommended:

It is advisable to involve the use of mind mapping techniques as part of the weekly plan of the Unidad Educativa Jose Benito Benitez San Andreas curriculum for all the students who are subjected to international examination, especially for students whose reading scores in proficiency test is low. This methodology can allow students to continuously enhance their literal reading comprehension skills.

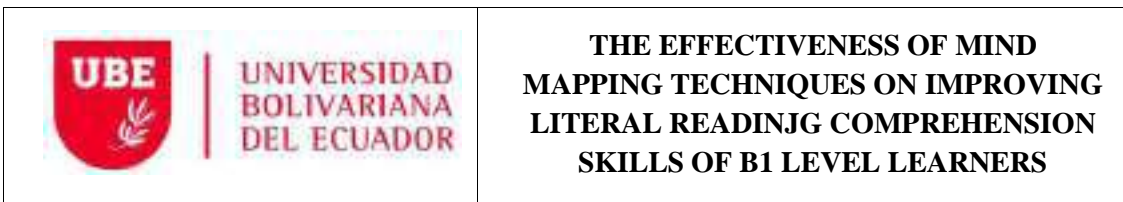
Besides, it is recommendable to motivate learners to implement mind mapping techniques in various reading lessons of different contexts such as Historical or science topics to build up adaptability for getting the best learning experience with an outstanding and positive outcome.

It is suggested to applied weekly assessments with the intention to show students ability of understanding unfamiliar reading text.

Engage the use of mind maps to enhance the ability to inference such as differentiating main with secondary ideas, becoming a pedagogical resource for reading lessons.

One more suggestion is to implement continuous research or gather data to assess its reliability of the enhancement in literal reading comprehension skills.

To conclude, it is advisable to demonstrate the application of these techniques to other colleagues from different areas such as history or science teachers to promote its effectiveness as a valuable post reading phase or output.



By considering these suggestions, instructors can exploit its capacity since these graphic organizers can boost engagement and boost favorable learning environment to enhance learners English literal reading comprehension skills.

Bibliography

Ahmed Y, F. D. (2019). Validation of the direct and inferential mediation (DIME) model of reading comprehension in grades 7 through 12. *Contemporary Educational Psychology*, 68 - 79.

Alam, M. (19 de October de 2023). *Benefits of Mind Mapping*. Obtenido de IdeaScale: <https://ideascale.com/blog/mind-map-advantages/>

Al-Jarf, R. (2021). Teaching Reading to EFL Freshman Students with Mind Mapping Software. *SSRN*. Obtenido de <http://dx.doi.org/10.2139/ssrn.3825817>

Alviaderi Novianti, N. A. (3 de February de 2021). MIND MAPPING TECHNIQUE TO ENHANCE JUNIOR HIGH STUDENT'S READING COMPREHENSION. *ELA (Journal of English Language Teaching, Literature and Applied Linguistics)*, 1-13. Obtenido de <https://doi.org/10.37742/jela.v2i2.31>

Andrade, H. (2010). *Summing up and moving forward: Key challenges and future directions for research and development in formative assessment*. In *Handbook of formative assessment (pp. 344-351)*. Routledge.

Buzan, B. (2018). The Mind Map Book: Unlock your creativity, boost your memory, change your life. *BBC Active*, 449-476.

Buzan, T. (14 de March de 2020). *Tony Buzan Learning Centre*. Obtenido de <https://www.tonybuzan.edu.sg/about/mind-maps/>

Caipe, L., Tuta, L., & Potosi, L. (s.f.). Fortalecimiento de los procesos de comprensión lectora, integrando leyendas de la Investigación educativa. 209-224.

Fiares, M. (2022). *Hashtag* (Vol. 2). Bangkok: Pearson.

Fitria, T. N. (2024). Using an Institution Platform of E-Learning in English Language Teaching (ELT) Process. *International Journal of Computer and Information System (IJCIS)*, 5(1), 22-25.

Flake, J. K. (May de 2022). Construct validity and the validity of replication studies: A systematic review. *American Psychologist*, 576–588.

doi:<https://doi.org/10.1037/amp0001006>

Ghaith, G. (2019). Reading comprehension: The mediating role of metacognitive strategies. *American University of Beirut*, 20 -21 .

González-Lloret, M. (June de 2020). Collaborative tasks for online language teaching. *Foreign Language Annals*, 260–269. doi:<https://doi.org/10.1111/flan.12466>

Google Maps. (2 de March de 2022). *adapted from Google Maps* . Obtenido de <https://www.google.com/maps/@-2.1157145,-79.9002519,109m/data=!3m1!1e3?hl=en-US&entry=ttu>

Grabe, W., & Stoller, F. (2019). *Teaching and researching reading*. Routledge.

Guanoluisa Toapanta, C. (2024). *Pre-teaching vocabulary strategies and reading comprehension*.

Gustanti, Y. &. (31 de December de 2021). THE CORRELATION BETWEEN COGNITIVE READING STRATEGIES AND STUDENTS' ENGLISH

PROFICIENCY TEST SCORE. *Journal of English Language Teaching and Learning*, 95-100. doi:<https://doi.org/10.33365/jeltl.v2i2.1452>

- Hardman, J., & Hardman, F. (2017). Guided co-construction of classroom talk. *Encyclopaedia of language and education. Discourse and education*, 199-210.
- Harnly, A. &. (9 de November de 2023). *he importance of reading fluency in effective literacy instruction*. Obtenido de Amplify: <https://amplify.com/blog/science-of-reading/the-importance-of-reading-fluency-in-effective-literary-instruction/>
- Harvey, G. (2021). *The Routledge Handbook of Research Methods in the Study of Religion*. Kansas: Taylor and Francis Group. Obtenido de <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003222491-20/field-research-participant-observation-graham-harvey>
- Hazaymeh, W. A. (15 de November de 2021). The Effectiveness of Visual Mind Mapping Strategy for Improving English Language Learners' Critical Thinking Skills and Reading Ability. *European Journal of Educational Research*, 141-150 . Obtenido de <https://doi.org/10.12973/eu-jer.11.1.141>
- Kadagidze, L. (2016). Mind Mapping as a Teaching Tool in Higher Education Language Learning Settings. *Kultura i Edukacja*, 78-88.
- Kepirianto, C. M. (2022). Integrating Mind-Mapping Collaborated with Think-Pair-Share to Teach Reading Comprehension in Descriptive Text. *AROLE: Journal of Linguistics and Education*, 119-29. Obtenido de https://d1wqtxts1xzle7.cloudfront.net/90359094/21441-libre.pdf?1661669671=&response-content-disposition=inline%3B+filename%3DIntegrating_Mind_Mapping_Collaborated_

wi.pdf&Expires=1705076047&Signature=OOUIT8Zb3nTxFpMcIGwVILABrj~M
0KKroLApbhSwGMPDomWQ8Kp82QX4

Krashen, S. (1982). *Principles and practice in second language acquisition*.

Lee, A. M. (27 de November de 2023). *essential skills for reading comprehension*.

Obtenido de understood.org: <https://www.understood.org/articles/6-essential-skills-needed-for-reading-comprehension>

Macalister, J., & Nation, I. (2019). *Language curriculum design*. Routledge.

Machado, C. T. (2020). Concept Mapping: Benefits and Challenges in Higher Education.

The Journal of Continuing Higher Education, 68(1), 38–53. Obtenido de
<https://doi.org/10.1080/07377363.2020.1712579>

McCall, B. (2021). *The Routledge Handbook of the Economics of Education*. London:
Routledge.

Muassomah, P. R. (2022). Mind Mapping: Reading Comprehension Technique of Arabic
Texts for Students in Higher Education. *Jurnal Al Bayan*, 439-440.

Mubarok, C.-J. L. (2021). Learning Analytics for Investigating the Mind Map-Guided AI
Chatbot Approach in an EFL Flipped Speaking Classroom. *JSTOR educational
technology and society*, 16 - 35 .

Muhammad Javed Aftab, H. H. (2022). EFFECT OF MIND MAPPING APPROACHES
IN IMPROVING STUDENTS'. *Pakistan Journal of Social Research*, 889-900.

Nilson, L. (2016). *Teaching at its best: A research-based resource for college instructors*.
John Wiley & Sons.

- Nor Fikriah, I. P. (2021). *The use of mind mapping technique in teaching English Vocabulary type at seventh grade students of SMPN 2 Sungai Pandan*. Kalimantan : slamic University of Kalimantan MAB Banjarmasin.
- Novak, J. (2010). *Learning, creating, and using knowledge: Concept maps as facilitative tools in schools and corporations*. Routledge.
- Polat, Z. &. (2020). The effect of mind mapping on young children's critical thinking skills. *Thinking Skills and Creativity*. *Thinking Skills and Creativity*, 38(100743). doi:<https://doi.org/10.1016/j.tsc.2020.100743>
- Primicias. (11 de 12 de 2019). Sociedad. *Ecuador tiene el peor nivel de inglés de América Latina*. Obtenido de <https://www.primicias.ec/noticias/sociedad/idioma-ingles-estudiantes-convenio-educacion-profesores/>
- Pritania V. V. Mokalú, E. Z. (2020). Improving Students' Reading Comprehension Through Skimming and Scanning Techniques at the Tenth Grade of SMA. *Universitas Negeri Manado*, 669 - 700.
- Protsenko, Y. N. (2021). Reading Comprehension, The significance, features and strategies. *Lviv State University of Physical Culture*, 106 -107.
- Purwanto, Y., Saepudin, A., & Sofaussamawati, S. (2023). The development of reflective practices for Islamic religious education teachers. *Jurnal Pendidikan Islam*, 107-122.
- Puspitasari, E. (2020). Mind Mapping in CLIL: How It Facilitates Students' Reading Comprehension. *Journal of English Education and Teaching*, 154–169. Obtenido de <https://doi.org/10.33369/jeet.4.2.154-169>

- RABII, N. (1 de October de 2021). Mixed-Methods Research: A Discussion on its Types, Challenges, and Criticisms . *International Journal of Humanities and Educational Research*, 213-224. Obtenido de https://www.ijherjournal.com/journaldetail/comparative-religions-reality-and-challenges-methodological-approach_118#:~:text=COMPARATIVE%20RELIGIONS%2C%20REALITY%20AND%20CHALLENGES%3A%20METHODOLOGICAL%20APPROACH
- Razali, A. M. (2019). A Review of Studies on Cognitive and Metacognitive Reading Strategies in Teaching Reading Comprehension for ESL/EFL Learners. *Canadian Center of Science and Education*, 94 - 96 .
- Riane Chiakha, K. B. (2020). Investigating the Usefulness of Mind Mapping in Reading. *Faculty of letters and languages, University of Guelma*, 25-26.
- Rodriguez, P. L. (1 de January de 2022). Word Embeddings: What Works, What Doesn't, and How to Tell the Difference for Applied Research. *The Journal of Politics*, 101–115. doi:<https://doi.org/10.1086/715162>
- Sabry Abdel-Hamid Ahmed Helwa, H. (1 de January de 2020). Integrating Telegram Application into Digital Mind Mapping to Develop Student Teachers' EFL Critical Reading and Writing Skills. *Egyptian Journals, Faculty of Education - Benha University* . Obtenido de <https://doi.org/10.21608/jfeb.2020.121389>
- Septiyana, L. S. (30 de July de 2021). HE CORRELATION BETWEEN EFL LEARNERS COHESION AND THEIR READING COMPREHENSION. *journal of Research on Language Education*, 68 - 69.

- Shaaban, S. S. (2022). Video-Based Reflection and Peer Coaching in Enhancing TEFL Student-Teachers'. *Journal of Education and e-Learning Research*, 103 - 105 .
- Shi, Y. Y. (4 de March de 2022). Effects of mind mapping-based instruction on student cognitive learning outcomes: a meta-analysis. *Asia Pacific Education Review*; *Springer Science+Business Media*, 20 - 23 . Obtenido de <https://doi.org/10.1007/s12564-022-09746-9>
- Silvia, J. N. (2022). The Application of Mind Mapping Technique to Increase Student's Reading Comprehension Achievement at the Eight Grade SMPN 38 Palembang. *Global Expert*, 16-17.
- Supriadi, I. A. (1 de October de 2020). AN ANALYSIS OF STUDENTS' READING SKILLS BY USING MIND MAPPING TECHNIQUE. *Edu-Ling: Journal of English Education and Linguistics*, 237-248. doi:<https://doi.org/10.32663/edu-ling.v3i2.1415>
- Tadesse, T. (20 de october de 2020). *Reading skill and its significance* . Obtenido de Research Gate: https://www.researchgate.net/post/what_is_reading_skill_and_its_significance/5937e81393553ba16e569293/citation/download
- Vygotsky, L., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Harvard university press.
- Walvoord, B., & Anderson, V. (2011). *Effective grading: A tool for learning and assessment in college*. John Wiley & Sons.

Webb, N. (2009). The teacher's role in promoting collaborative dialogue in the classroom.

British Journal of Educational Psychology, 1-28.

Yan, X. &. (4 de January de 2023). The effects of schema strategy training using digital

mind mapping on reading comprehension: A case study of Chinese university

students in EFL context. *Cogent Education*, 10 - 11 . Obtenido de

<https://doi.org/10.1080/2331186x.2022.2163139>

Zheng, X. J. (10 de November de 2020). A pilot study examining the impact of

collaborative mind mapping strategy in a flipped classroom: learning achievement,

self-efficacy, motivation, and students' acceptance. *Educational Technology*

Research and Development, 99-122. doi:[https://doi.org/10.1007/s11423-020-](https://doi.org/10.1007/s11423-020-09868-0)

09868-0

Zibeniene, G. (2021). Improving the tenth grade students reading skill by using mind

mapping technique. *ELTE journal*, 99-122.



UNIVERSIDAD
BOLIVARIANA
DEL ECUADOR

**THE EFFECTIVENESS OF MIND
MAPPING TECHNIQUES ON IMPROVING
LITERAL READING COMPREHENSION
SKILLS OF B1 LEVEL LEARNERS**

ANNEXES



Annex 5. Pre-Test Scores

UNIVERSIDAD BOLIVARIANA DEL ECUADOR

MAESTRÍA EN PEDAGOGÍA DE LA ENSEÑANZA DEL IDIOMA INGLÉS

COMO Pre-Test Scores

| No | ID | Student's names | Q1 (1Mark) | Q2 (1 Mark) | Q3 (1Mark) | Q4 (1Mark) | Q5 (2Marks) | Q6 (2Marks) | Q7 (2 Marks) | Total (10 Marks) |
|----|------------|--------------------------------------|---------------|----------------|---------------|---------------|----------------|----------------|-----------------|------------------------|
| 1 | 931564462 | Aguilar Armijos, Juan Pablo | 1 | 1 | 0 | 1 | 2 | 2 | 1 | 8 |
| 2 | 1208308096 | Arias Escobar, Shelsey Camila | 1 | 0 | 1 | 1 | 1 | 2 | 1 | 7 |
| 3 | 959419870 | Castañeda Estacio, Ariana Daniella | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 9 |
| 4 | 957916638 | Castañeda Matamoros, Diego Andres | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 5 |
| 5 | 930317128 | Castro Sanchez, David Ariel | 1 | 1 | 0 | 1 | 2 | 2 | 2 | 9 |
| 6 | 941217903 | Chacon Cruz, Kristel Angelyna | 1 | 0 | 1 | 0 | 2 | 2 | 1 | 7 |
| 7 | 959127093 | Floril Arce, Diego Andres | 0 | 1 | 0 | 1 | 1 | 2 | 1 | 6 |
| 8 | 930718846 | Marañon Cabrera, Renatta Beatriz | 1 | 1 | 1 | 0 | 2 | 2 | 1 | 8 |
| 9 | 930743091 | Marcillo Aizprua, Kamila Olivia | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 9 |
| 10 | P044908214 | Medina De la Cueva, Astrid Valentina | 1 | 0 | 0 | 0 | 2 | 1 | 1 | 5 |
| 11 | 930486451 | Mendoza Mantilla, Hugo Guillermo | 1 | 1 | 0 | 0 | 2 | 2 | 1 | 7 |
| 12 | 930480108 | Mora Navarrete, Ammy Alejandra | 1 | 1 | 0 | 1 | 2 | 2 | 1 | 8 |
| 13 | 951778059 | Pico Moran, Madeline Elizabeth | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 9 |
| 14 | 958279044 | Proaño Tapia, Danna Daniela | 1 | 0 | 1 | 1 | 2 | 2 | 1 | 8 |
| 15 | 943923219 | Ricaurte Asencio, Ian Franco | 0 | 1 | 1 | 0 | 2 | 1 | 1 | 6 |
| 16 | 1313726232 | Rojas Lima, Mia Anahi | 1 | 1 | 1 | 0 | 2 | 2 | 2 | 9 |
| 17 | 952891802 | Rosado Calderon, | 1 | 0 | 1 | 1 | 2 | 1 | 1 | 7 |



| | | Angelica Judith | | | | | | | | |
|----|-----------|-------------------------------------|---|---|---|---|---|---|---|---|
| 18 | 930696174 | Sagal Peralta, Maria Gabriela | 1 | 1 | 0 | 1 | 2 | 2 | 1 | 8 |
| 19 | 930458260 | Tanus Riera, Jamile Arianna | 1 | 0 | 1 | 0 | 2 | 1 | 1 | 6 |
| 20 | 959422551 | Tejada Rodriguez, Valeria Alejandra | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 5 |
| 21 | 951565563 | Torres Rojas, Jose Alejandro | 1 | 1 | 0 | 1 | 2 | 2 | 2 | 9 |
| 22 | 931330039 | Velasquez Balladares, Gabriel | 1 | 1 | 1 | 0 | 2 | 2 | 1 | 8 |

Elaborated by: Alava & Segovia (2025)



Annex 7. post test scores

UNIVERSIDAD BOLIVARIANA DEL ECUADOR
MAESTRÍA EN PEDAGOGÍA DE LA ENSEÑANZA DEL
IDIOMA INGLÉS COMO LENGUA EXTRANJERA

Post-Test Scores

| No | ID | Student's names | Q1 (1mark) | Q2 (1 Mark) | Q3 (1 Mark) | Q4 (1 Mark) | Q5 (2 Mark) | Q6 (2marks) | Q7 (2 Marks) | Total (10 Marks) |
|----|------------|---|---------------|----------------|----------------|----------------|----------------|----------------|-----------------|------------------------|
| 1 | 931564462 | Aguilar Armijos, Juan Pablo | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 9 |
| 2 | 1208308096 | Arias Escobar, Shelsey Camila | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 8 |
| 3 | 959419870 | Castañeda Estacio, Ariana Daniella | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 10 |
| 4 | 957916638 | Castañeda Matamoros, Diego Andres | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 6 |
| 5 | 930317128 | Castro Sanchez, David Ariel | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 10 |
| 6 | 941217903 | Chacon Cruz, Kristel Angelyna | 1 | 1 | 1 | 0 | 2 | 2 | 1 | 8 |
| 7 | 959127093 | Floril Arce, Diego Andres | 0 | 1 | 0 | 1 | 1 | 2 | 1 | 6 |
| 8 | 930718846 | Marañón Cabrera, Renatta Beatriz | 1 | 1 | 1 | 0 | 1 | 2 | 1 | 7 |
| 9 | 930743091 | Marcillo Aizprua, Kamila Olivia | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 9 |
| 10 | P044908214 | Medina De la Cueva, Astrid Valentina | 1 | 0 | 1 | 0 | 2 | 1 | 1 | 6 |
| 11 | 930486451 | Mendoza Mantilla, Hugo Guillermo | 1 | 1 | 0 | 1 | 2 | 2 | 1 | 8 |
| 12 | 930480108 | Mora Navarrete, Ammy Alejandra | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 9 |
| 13 | 951778059 | Pico Moran, Madeline Elizabeth | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 9 |
| 14 | 958279044 | Proaño Tapia, Danna Daniela | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 9 |
| 15 | 943923219 | Ricaurte Asencio, Ian Franco | 0 | 1 | 1 | 1 | 2 | 1 | 1 | 7 |
| 16 | 1313726232 | Rojas Lima, Mia Anahi | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 10 |
| 17 | 952891802 | Rosado Calderon, | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 8 |



| | | Angelica Judith | | | | | | | | |
|----|-----------|-------------------------------------|---|---|---|---|---|---|---|----|
| 18 | 930696174 | Sagal Peralta, Maria Gabriela | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 9 |
| 19 | 930458260 | Tanus Riera, Jamile Arianna | 1 | 1 | 1 | 0 | 2 | 1 | 1 | 7 |
| 20 | 959422551 | Tejada Rodriguez, Valeria Alejandra | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 7 |
| 21 | 951565563 | Torres Rojas, Jose Alejandro | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 10 |
| 22 | 931330039 | Velasquez Balladares, Gabriel | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 9 |

Elaborated by: Alava & Segovia (2025)

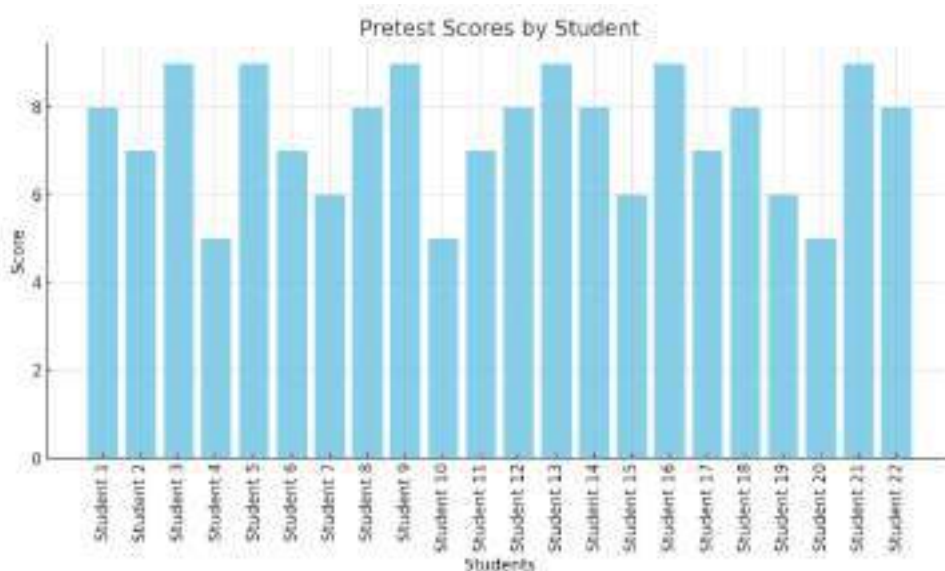


Annex 8. Pre-test scores

| Student | Pre-test Score | Student | Pre-test Score |
|------------|----------------|------------|----------------|
| Student 1 | 8 | Student 11 | 7 |
| Student 2 | 7 | Student 12 | 8 |
| Student 3 | 9 | Student 13 | 9 |
| Student 4 | 5 | Student 14 | 8 |
| Student 5 | 9 | Student 15 | 6 |
| Student 6 | 7 | Student 16 | 9 |
| Student 7 | 6 | Student 17 | 7 |
| Student 8 | 8 | Student 18 | 8 |
| Student 9 | 9 | Student 19 | 6 |
| Student 10 | 5 | Student 20 | 5 |
| Student 11 | 7 | Student 21 | 9 |
| Student 12 | 8 | Student 22 | 8 |

Elaborated by: Alava & Segovia (2025)

Figure 1. Individual pretest scores of the participants.



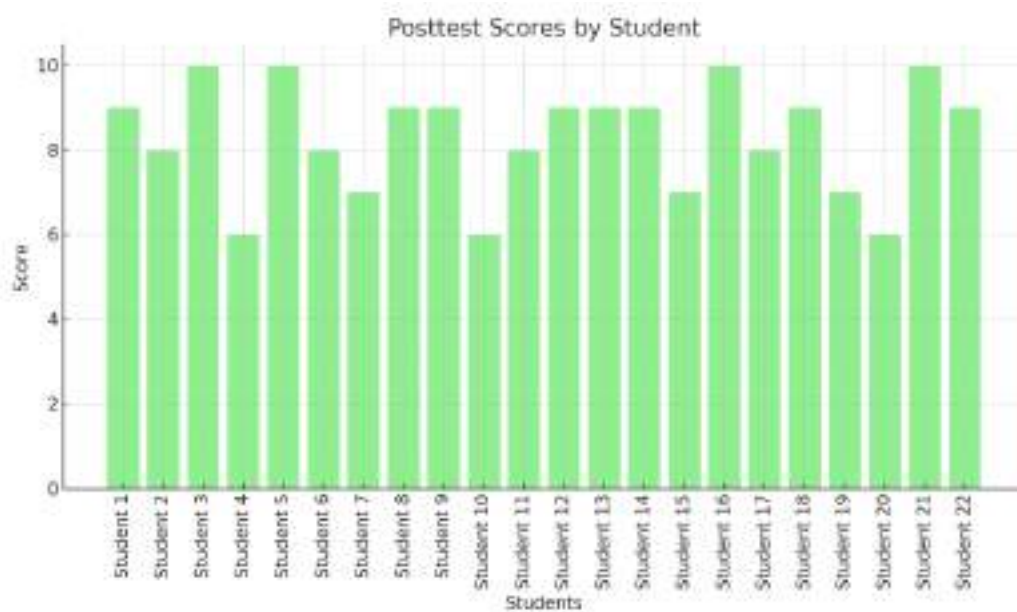
Elaborated by: Alava & Segovia (2025)

Annex 9. Post-test scores

| Student | Post-test Score | Student | Post-test Score |
|-------------------|------------------------|-------------------|------------------------|
| Student 1 | 9 | Student 11 | 8 |
| Student 2 | 8 | Student 12 | 9 |
| Student 3 | 10 | Student 13 | 9 |
| Student 4 | 6 | Student 14 | 9 |
| Student 5 | 10 | Student 15 | 7 |
| Student 6 | 8 | Student 16 | 10 |
| Student 7 | 7 | Student 17 | 8 |
| Student 8 | 9 | Student 18 | 9 |
| Student 9 | 9 | Student 19 | 7 |
| Student 10 | 6 | Student 20 | 6 |
| Student 11 | 8 | Student 21 | 10 |
| Student 12 | 9 | Student 22 | 9 |

Elaborated by: Alava & Segovia (2025)

Figure 2. Individual posttest scores of the participants.



Elaborated by: Alava & Segovia (2025)

Annex 13: Survey applied to students

The data taken from table 6 and graph 3 suggests an amazing improvement in the summarizing skills of students learning English from when they began to the end. Only 36.36% of students in fact believed that they could summarize while 63.64% found it difficult. Nevertheless, by the close of the process, there was a rise in the number of learners with better skills in summarizing by 59.09%. Secondly, other areas like paraphrasing, comprehension retention and critical analysis also had a positive impact from this intervention.

These findings mean that this intervention enhanced not only students' summarizing but also their overall understanding and analytical abilities. The good results for this change indicate that the methods used during the research were effective. According to these results, such teaching strategies as should be referred to as tutoring can certainly promote reading and writing skills among young people, turning them into more successful people.

Table 8

Improvement in Summarizing English Texts (Objective Assessment)

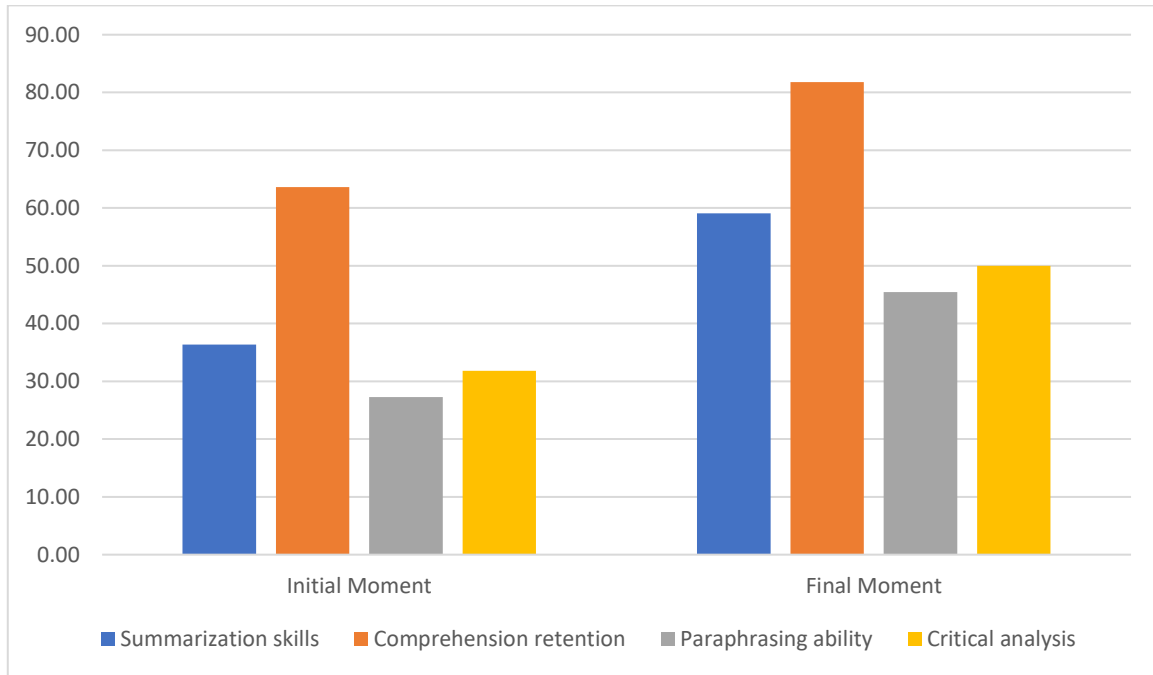
| | Summarization skills | Comprehension retention | Paraphrasing ability | Critical analysis |
|----------------|----------------------|-------------------------|----------------------|-------------------|
| Initial Moment | 36,36 | 63,64 | 27,27 | 31,82 |
| Final Moment | 59,09 | 81,82 | 45,45 | 50 |

Note: Elaborated by Jonathan Alava and Jayro Segovia

Below this data can be seen in graphics (Figure 3)

Figure 4

Improvement in Summarizing English Texts (Objective Assessment)



Note: Elaborated by Jonathan Alava and Jayro Segovia

Table 9

Emotional Responses to Unfamiliar Vocabulary (Survey Results)

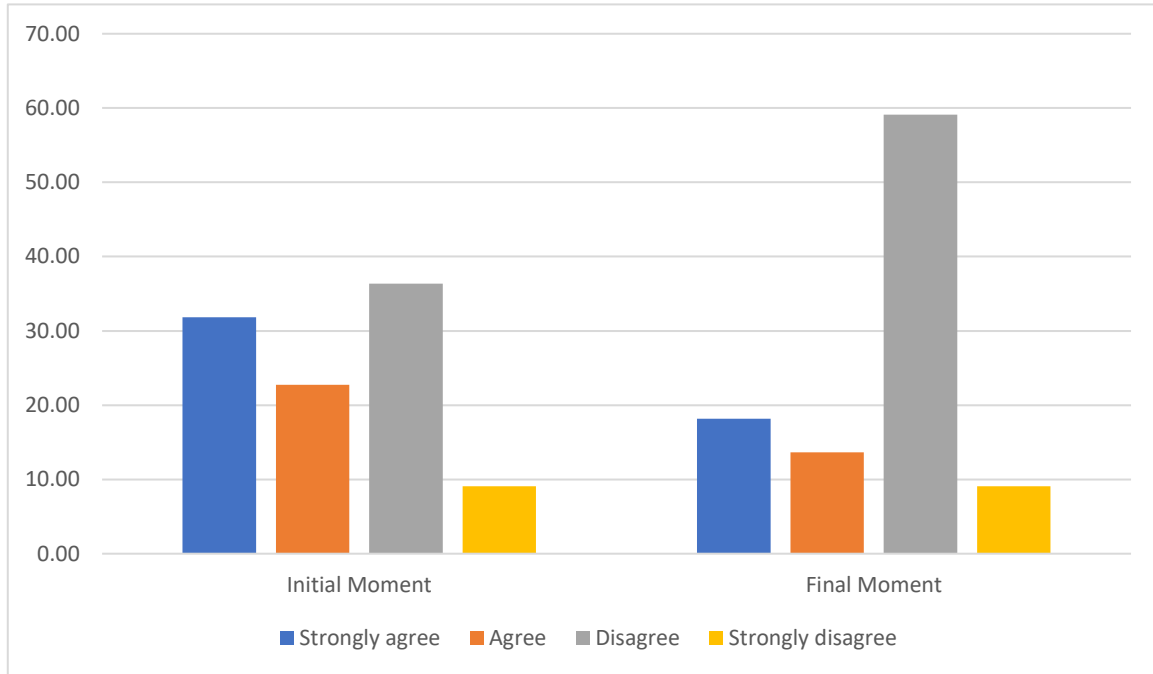
| | Strongly agree | Agree | Disagree | Strongly disagree |
|----------------|----------------|-------|----------|-------------------|
| Initial Moment | 31,82 | 22,73 | 36,36 | 9,09 |
| Final Moment | 18,18 | 13,64 | 59,09 | 9,09 |

Note: Elaborated by Jonathan Alava and Jayro Segovia

Below this data can be seen in graphics (Figure 4)

Figure 5

Emotional Responses to Unfamiliar Vocabulary (Survey Results)



Note: Elaborated by Jonathan Alava and Jayro Segovia

Students' emotions about English texts containing unknown words pointed differently at the beginning and at the end of the study. In the beginning, 54.55% of students either strongly agreed or agreed that they felt overwhelmed as opposed to only 31.82% who disagreed or strongly disagreed. However, after implementing it, a stunning alteration happened: only 31.82% reported feeling overwhelmed compared with 68.18 % that disagreed or strongly disagreed (see table 7 and graph 4 in annex 13).

The effectiveness of this intervention is well depicted by this huge reduction in students' emotional responses towards vocabulary overload. This data reveals that during the research techniques implemented among the students successfully equipped them with effective mechanisms for coping with unknown English vocabularies thus enhancing their reading confidence and reducing anxiety over such texts (Data). It reveals also how

changes in emotional responses can be informing teacher practices creating an atmosphere which is more supportive and efficient for learning while reflecting on the positive effects of intervention (Kelley & De Simone, 2017).

Table 10

Ability to Maintain Sequence of Events or Ideas (Test Performance)

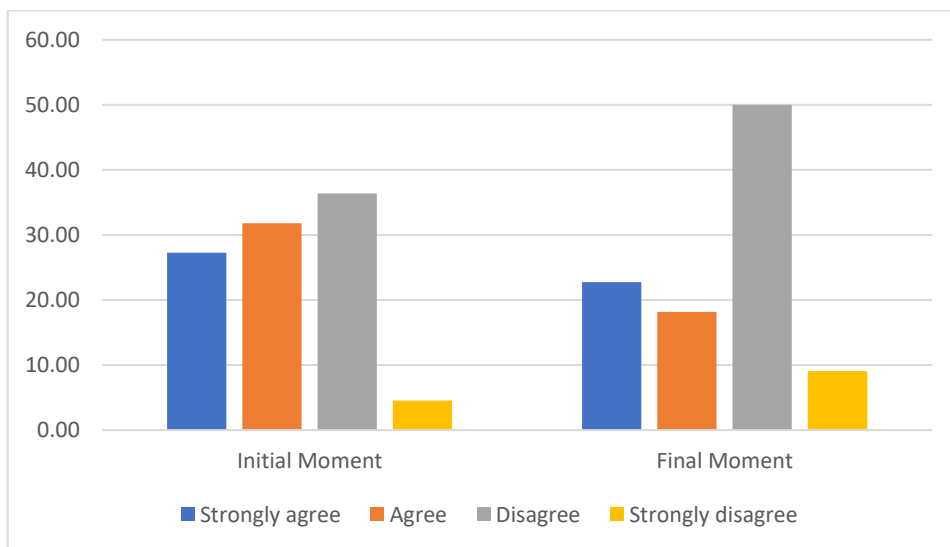
| | Strongly agree | Agree | Disagree | Strongly disagree |
|----------------|-------------------|-------|----------|----------------------|
| Initial Moment | 27,27 | 31,82 | 36,36 | 4,55 |
| Final Moment | 22,73 | 18,18 | 50 | 9,09 |

Note: Elaborated by Jonathan Alava and Jayro Segovia

Below this data can be seen in graphics (Figure 5)

Figure 6

Ability to Maintain Sequence of Events or Ideas (Test Performance)



Note: Elaborated by Jonathan Alava and Jayro Segovia

Nevertheless, in table 8 there is a shift in students' perceptions on losing touch with the order of events or ideas in English texts. A significant proportion (59.09%) agreed strongly or agreed with the statement at first which demonstrated reading while holding continuity as difficult. Nevertheless, after intervention, there was a decline in the numbers of students who either agreed or strongly and an increase in those who disagreed or strongly disagreed (40.91% and 59.09% respectively). This implies that through intervention, students became better able to comprehend and follow through texts flow during reading thereby promoting comprehension as well as continuity (see annex 13).

Table 11

Improvement in Connecting Ideas Within Texts (Objective Assessment and Survey Results)

| | Very Good | Good | Acceptable | Poor |
|----------------|-----------|------|------------|------|
| Initial Moment | 9,09 | 1,82 | 54,55 | 0 |
| Final Moment | 22,73 | 0,91 | 36,36 | 0 |

Note: Elaborated by Jonathan Alava and Jayro Segovia

Below this data can be seen in graphics (Figure 6)

Figure 7

Improvement in Connecting Ideas Within Texts (Objective Assessment and Survey Results)



Note: Elaborated by Jonathan Alava and Jayro Segovia

The statistics (see in figure 6) indicate that students' ideas on connecting ideas within English texts have changed. At first, most students rated themselves either fair (54.55%) or low (31.82%). This contrasts with the period after where a large number of learners improved their rating from fair (40.91%) to very good (22.73%). Consequently, this implies that the intervention had an influence on student's ability to connect ideas in English Texts thereby enhancing comprehension and the ability to recognize relationships among different parts of the text (see annex 13).

Table 12

Enhancement of Predictive Reading Skills (Test Scores and Confidence Levels)

| | | | |
|--------------------|------------|----------------|--------------|
| Predictive Ability | Projection | Predictability | Anticipatory |
| | Confidence | Comprehension | Skill |

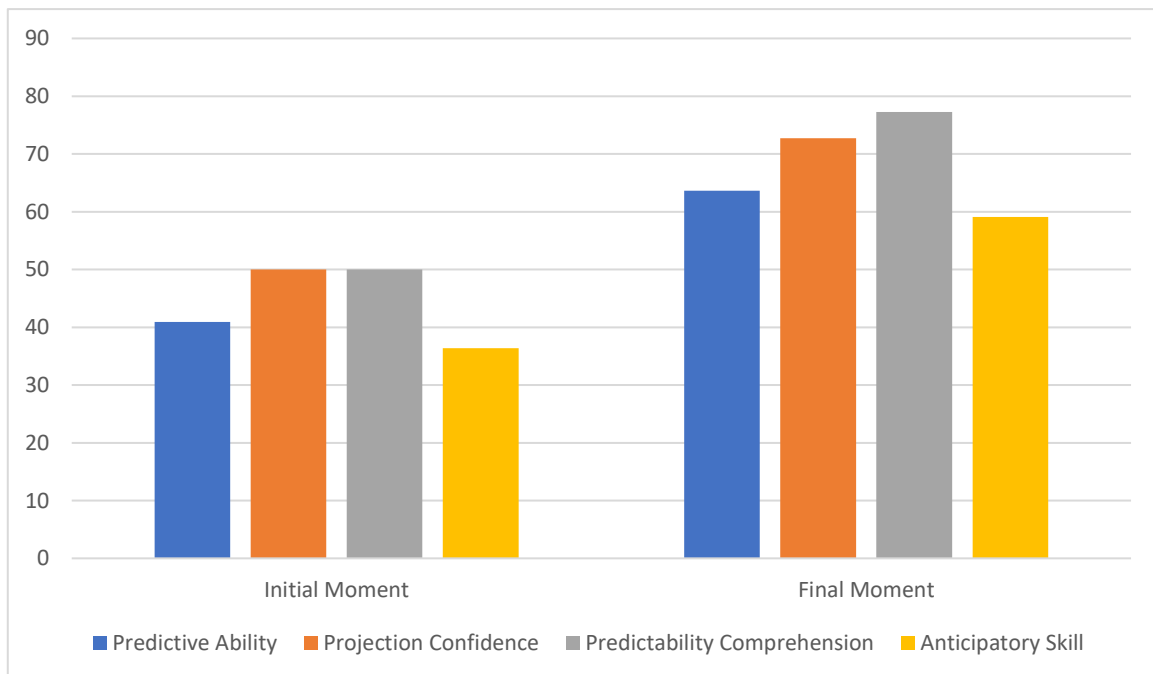
| | | | | |
|----------------|-------|-------|-------|-------|
| Initial Moment | 40,91 | 50 | 50 | 36,36 |
| Final Moment | 63,64 | 72,73 | 77,27 | 59,09 |

Note: Elaborated by Jonathan Alava and Jayro Segovia

Below this data can be seen in graphics (Figure 7)

Figure 8

Enhancement of Predictive Reading Skills (Test Scores and Confidence Levels)



Note: Elaborated by Jonathan Alava and Jayro Segovia

Data reveals a huge development in learners' understanding of being able to predict the outcome of English passages (see table 10 and figure 7). In the beginning, they graded their ability to foretell at 40.91%, confidence in projection at 50%, comprehension of predictability at 50%, and anticipation for skillfulness at 36.36%. These ratings soared significantly after intervention reaching; 63.64% in predicting, 72.73% in having

confidence in projections, understanding predictability was rated as 77.27% while anticipating ended up with rating of 59.09%. This means that students were confident about predictions and understood what could happen afterwards and also got an idea about content before learning it which shows that there is enhanced involvement and understating skills through this intervention.

Table 13

Difficulty in inferring the meanings of words or phrases in English texts.

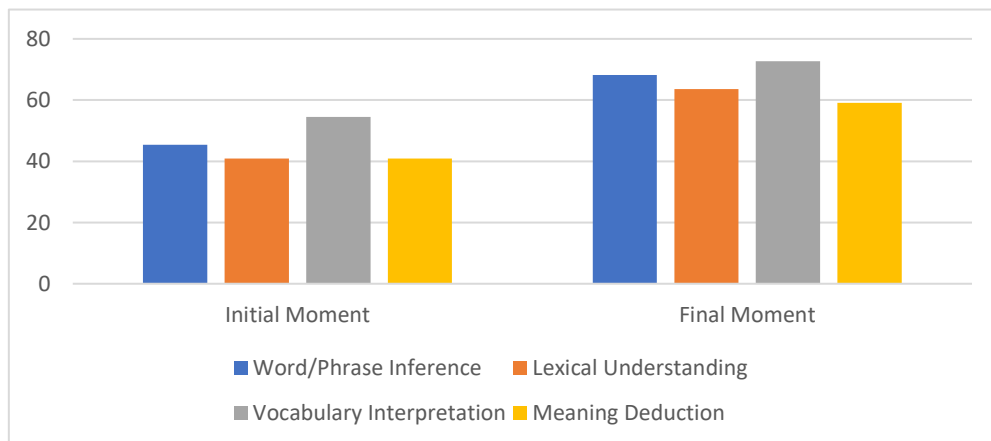
| | Word/Phrase Inference | Lexical Understanding | Vocabulary Interpretation | Meaning Deduction |
|----------------|-----------------------|-----------------------|---------------------------|-------------------|
| Initial Moment | 45,45 | 40,91 | 54,55 | 40,91 |
| Final Moment | 68,18 | 63,64 | 72,73 | 59,09 |

Note: Elaborated by Jonathan Alava and Jayro Segovia

Below this data can be seen in graphics (Figure 8)

Figure 9

Improvement in Inferring Meanings of Words or Phrases (Objective Assessment).



Note: Elaborated by Jonathan Alava and Jayro Segovia

Finally, the information from table 11 portrays a significant increasing in pupils' ability to deduce word/phrase meanings from English texts. In the beginning, word/phrase inference proficiency was given a rating of 45.45%, lexical competence at 40.91%, vocabulary interpretation at 54.55% and meaning deduction at 40.91%. After that, these rates rose sharply to reach 68.18%, 63.64%, 72.73% and 59.09% respectively following the intervention as well as indicating students had improved skills in understanding textual meaning using context and this had positive implications on their vocabulary understanding and overall reading comprehension skills see (annex 13).

Annex 14: Outline of mind mapping techniques

| Reading | Mind map technique |
|-----------------------------|----------------------------------|
| World War 2 | Time order (sequence) Mind map |
| Rome and Carthage | Comparison and Contrast Mind map |
| The Russian Revolution | Cause and Effect Mind map |
| Tim's addiction | Brace Mind map |
| The discovery of Penicillin | Questioning cluster Mind map |

Elaborated by: Alava & Segovia (2025)

Annex 15. Teachers' handbook of mind maps techniques to improve literal reading comprehension



Index

* Topic I

Reading: Word War 2

Mind map: Time order

* Topic II

Reading: Rome and Carthage

Mind map: Comparison and Contrast

* Topic III

Reading: The Russian Revolution

Mind map: Cause and Effect

* Topic IV

Reading: Tim's Addiction

Mind map: Brace map

* Topic V

Reading: Meet Paddy the teen coach

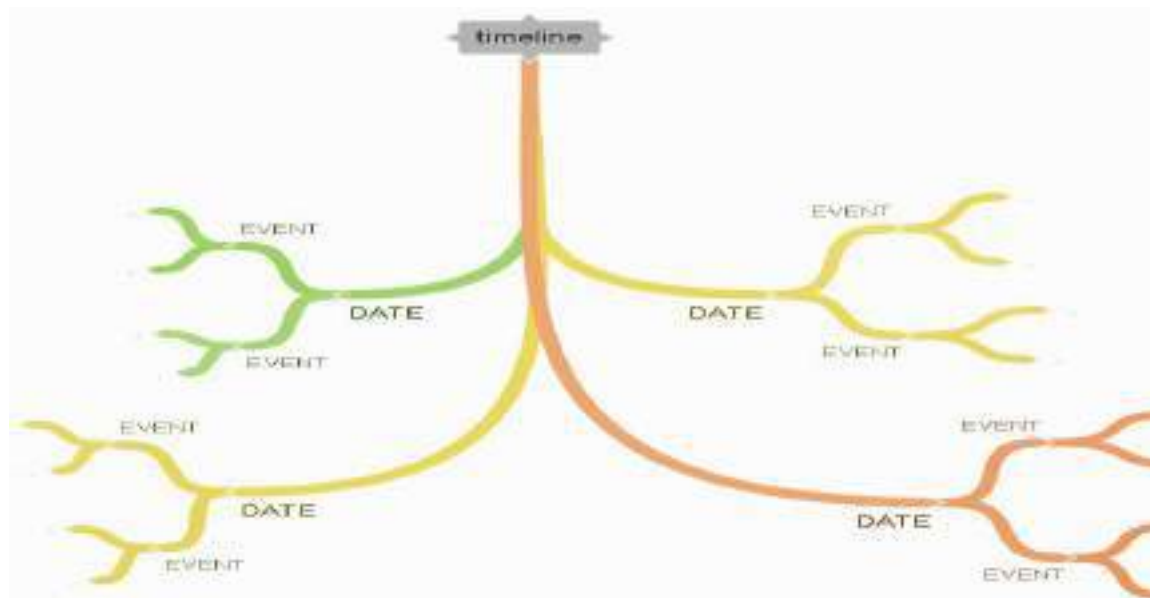
Mind map: Questioning Cluster

Reading: World War 2

Mind map 1: Time order

Objective: to visually represent chronological information, assignments or procedures in an organized and structured manner.

Mind map suggested: Time order



Note: Elaborated by Jonathan Alava and Jayro Segovia

Description:

This mind map visually depicts events, tasks or processes in chronological order, facilitating clear organization and understanding.

| When is it applied? | How is it developed? |
|---------------------|--|
| Pre reading | Students will brainstorm armed conflicts which have happened throughout our history. A brainstorm may be |



| | |
|----------------------|---|
| | carried out by a picture of World War 2 passed on the board. |
| While reading | Students will scan the text and write down key dates and words related to the topic |
| Post reading | Students will complete the mind map to summarize the major events, helping them to consolidate their understanding of the sequence of events and their significance |
| Practice: 1 | |
| Pre reading | <p>Look at the following picture, Think and list at least 4 armed conflicts which has happened throughout our modern history.</p> <p>Examples:</p> <ul style="list-style-type: none">• Napoleonic Wars• The Great War• Crimean war• American war of independence |
| While reading | <p>Read and scan the following text. Then write down dates and key words next to the reading text.</p> <p>Examples:</p> <ul style="list-style-type: none">• 1939: Start of the War• 1940: France surrendered |



Reading: World War 2

World War 2

On September 1, 1939, Hitler ordered an invasion of Poland. Two days later Great Britain and France declared war on Germany. World war 2 had started. The Germans fought hard and fast, they used planes and tanks. They also use a tactic called Blitzkrieg or a fast war. In only a month, Poland gave up. Then, Hitler looks at western Europe.



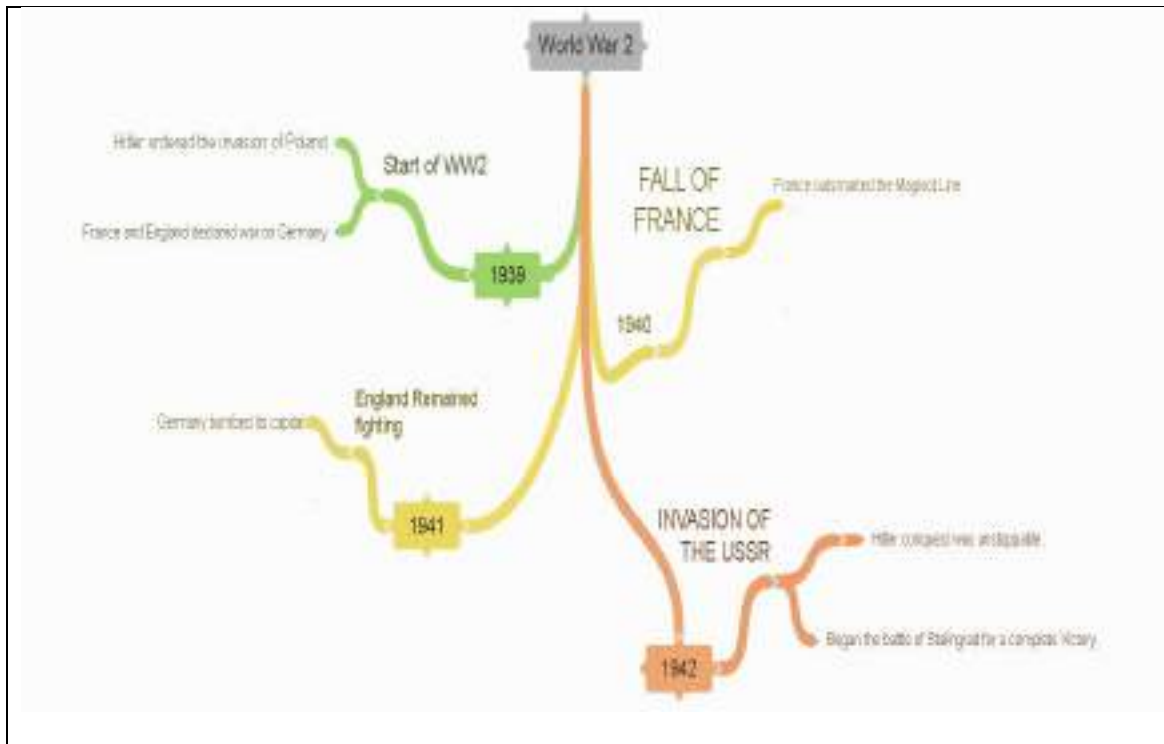
The German army was superior on Denmark, the Netherlands Belgium and Norway. They were no match for the German army. France built strong defences, they were called the Maginot line, but it was useless. France fell to the Germans in June 1940. Great Britain was the only western country to challenge Hitler. So, Hitler dropped bombs on London in January 1941. Hitler's desire for expansion was emboldened by the lack of action of the allies, so he decided to begin the battle of Stalingrad for a decisive victory against the Soviet Union in July 1942.

Note: taken and adapted from (Fiares, 2022)

Post reading

In the following worksheet, use information of the text and your notes to complete and summarize the mind map, in chronological order

Time Order mind map Completed:



Elaborated by: Alava & Segovia (2025)

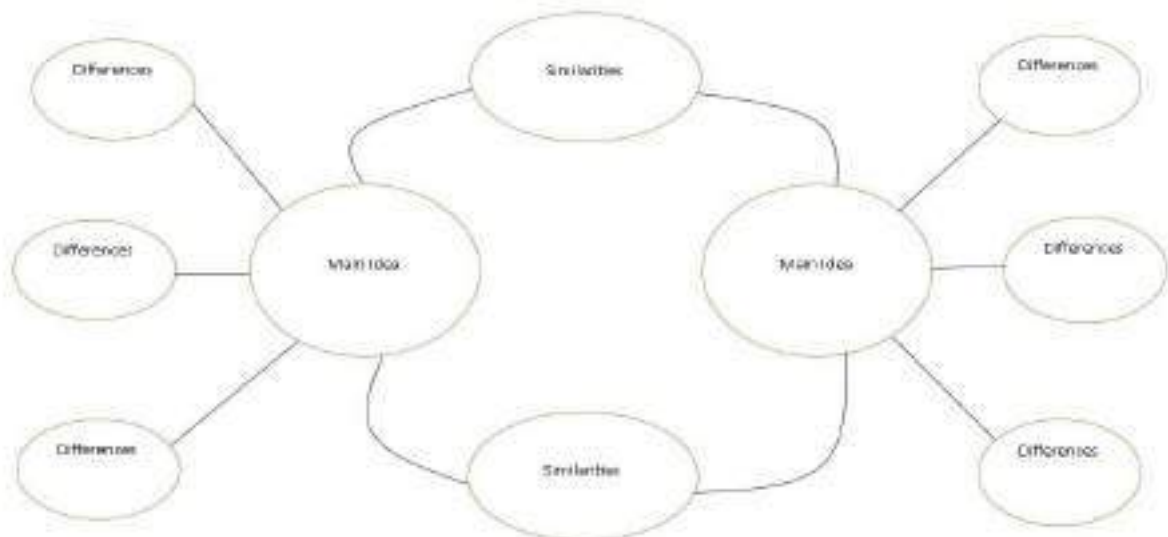
Topic II

Reading: Rome and Carthage

Mind map 2: Comparison and Contrast

Objective: to represent the similarities and differences among two or more subjects, making it easier to conduct an organized analysis.

Mind map suggested: Comparison and Contrast



Note: Elaborated by Jonathan Alava and Jayro Segovia

Description:

To visually arrange similarities and differences between topics allowing for an examination, in a layout.

| When it is applied? | How it is developed? |
|---------------------|--|
| Pre reading | Students discuss some questions written on the board about the reading text. They will see the title and the picture on the text to have ideas |



| | |
|----------------------|--|
| While reading | Students will be asked to complete a chart by using the information of the text. They will need to classify the information based on the point of view of each civilization. |
| Post reading | After reading, Students can use these annotations to fill in the gap collaboratively the mind map fostering deeper comprehension of the topic. |

Practice 2

Pre - reading activity:

| | |
|-----------------------|--|
| Before reading | <p>Open discussion in the classroom</p> <p>Answer the questions in pairs</p> <ol style="list-style-type: none"> 1. Is it important to trade with other countries? 2. Why did civilizations have armies? 3. What do you know about Rome and Carthage? |
|-----------------------|--|

Complete the following chart by using the information of the text

For example:

| | |
|---------------------------|-------------------------------|
| Rome point of view | Carthage point of view |
|---------------------------|-------------------------------|

| |
|-----------------|
| Merchants |
| Famous soldiers |
| Italy |
| Spain |

Reading: Rome and Carthage



Rome and Carthage

The romans were famous for constructing palaces and long roads. They were also famous for being very strong warriors. In times of peace men were farmers and shopkeepers. In times of war, they were soldiers. Because they usually fought, the romans were experienced soldiers and they didn't lose many battles. By the 200s BC, Rome had conquered all of Italy.



In the Mediterranean Sea there was another powerful city called Carthage, it was located in the northern part of Africa. Carthage Also conquered many cities like Spain and Portugal. The people from Carthage were called Carthaginians and they were merchants. They like to sail their ships and established colonies. Because Rome and Carthage were in the same sea, they usually fought each other. These wars were called the Punic wars

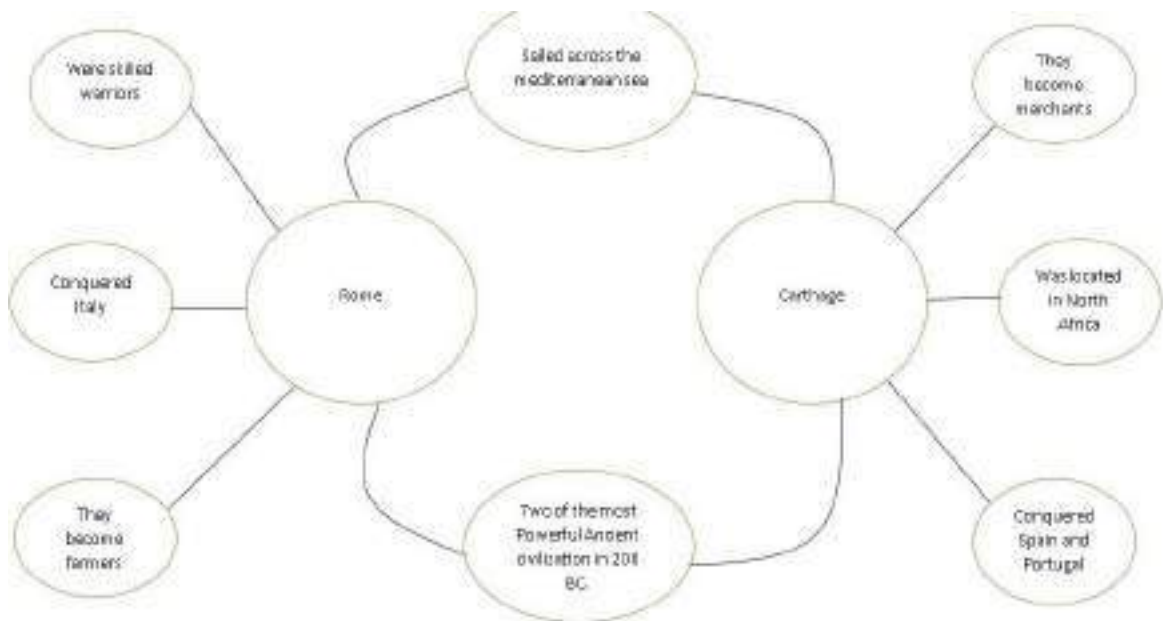
Note: taken and adapted from (Fiares, 2022)

Post reading

Complete the following activity

Fill in the gaps the differences and similarities of the two civilizations. Then, compare your ideas with a partner.

Mind map completed: Rome and Carthage



Elaborated by: Alava & Segovia (2025)



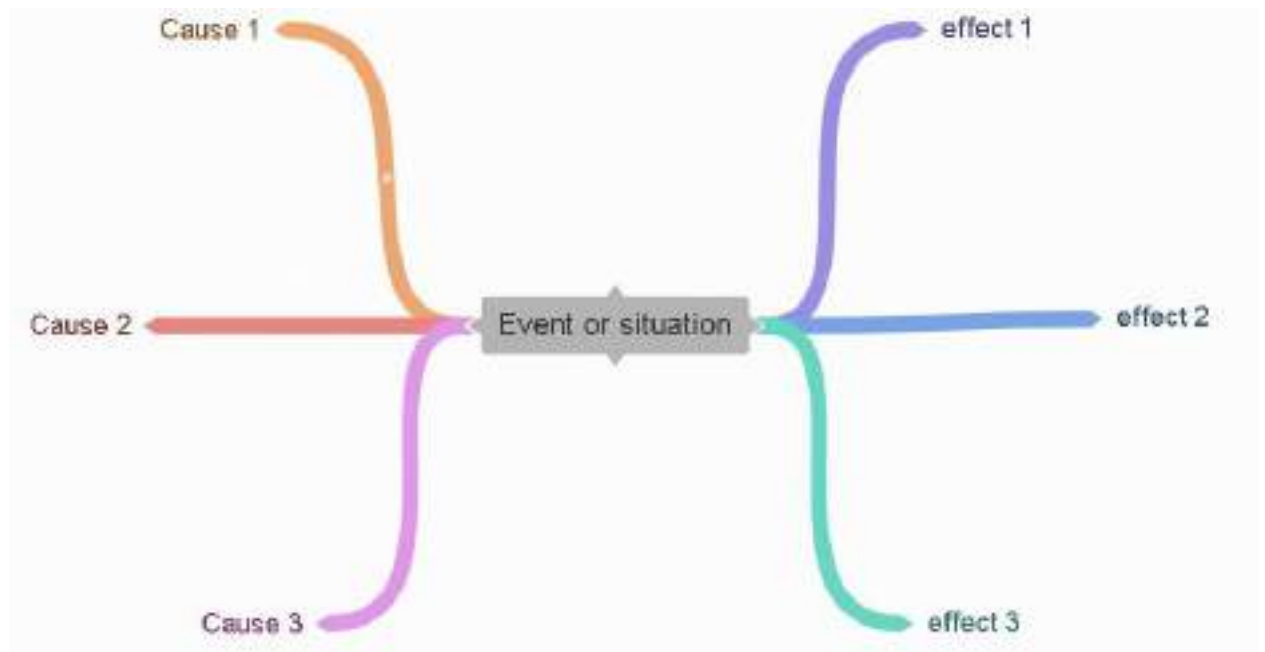
Topic III

Reading: The Russian revolution

Mind map 3: Cause and Effect

Objective: to visually illustrate the causal relationships between events or actions and their resulting consequences, facilitating a deeper understanding of the interconnected nature of various factors

Mind map suggested: Cause and effect



Note: Elaborated by Jonathan Alava and Jayro Segovia

Description:

This mind map illustrates how actions lead to outcomes, helping people to understand chain of events



| When is it applied? | How is it developed? |
|----------------------------|--|
| Pre reading | Students will predict ideas related to the theme of the class according to the pictures which will be shown by the teacher. They will jot down their ideas. |
| While reading | Students will compare their predictions with their previous ideas while they read the text by drawing a tick if they are a bit accurate or an x if they are not related to the topic |
| Post reading | By using the mind map, students will figure out they have new information and they will be asked to complete the graphic organizer. |

Practice 3

| | |
|-----------------------|---|
| Before reading | Before reading, each student will write down their predictions about the theme of the lesson by using these questions: <ol style="list-style-type: none">1. What is the topic about?2. What famous characters do you think will appear on the text?3. Is this going to have a good ending or bad ending? |
| While reading | Check your predictions with the reading text. Write a ✓ if your ideas are related to the topic or mark an x if you're your predictions aren't For example: The topic is about war (✓) There are no characters in the text (x) |

Reading: The Russian Revolution



The Russian Revolution

The Russian Revolution, in 1917 was driven by a mix of economic and political factors. The root causes stemmed from the regime, which maintained widespread poverty, inequality and discontent among the Russian population. World War I worsened these issues as resources

were strained and ordinary Russians faced increased hardships. Furthermore, industrialization during Tsar Nicholas II's reign brought working conditions. Fueled revolutionary sentiments among the working class.



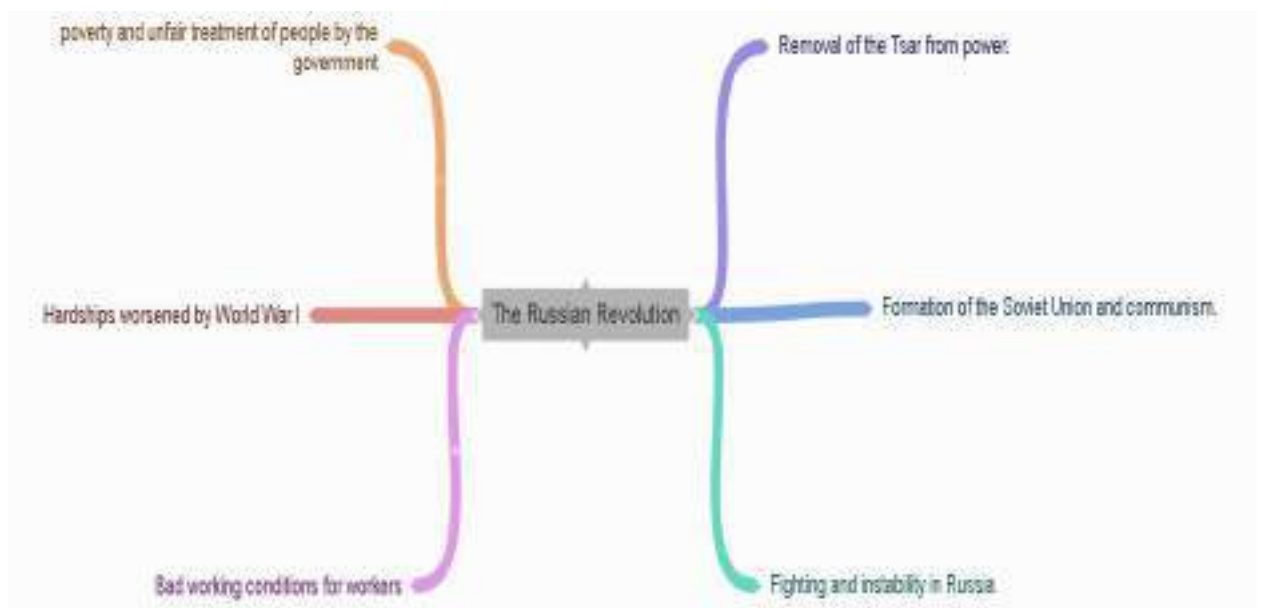
The revolution brought changes to Russia and the world. The fall of the autocracy paved the way for the formation of the Soviet Union and the global spread of communism, as an ideology. However, it also plunged Russia into war and political turmoil leading to suffering and instability. Ultimately the Russian Revolution altered history significantly leaving a lasting impact that continues to shape social movements today.

Note: taken and adapted from (Fiares, 2022)

Post reading

Complete the following mind map by reading again the information of the text

Mind Map Completed: Cause and Effect



Note: Elaborated by Jonathan Alava and Jayro Segovia



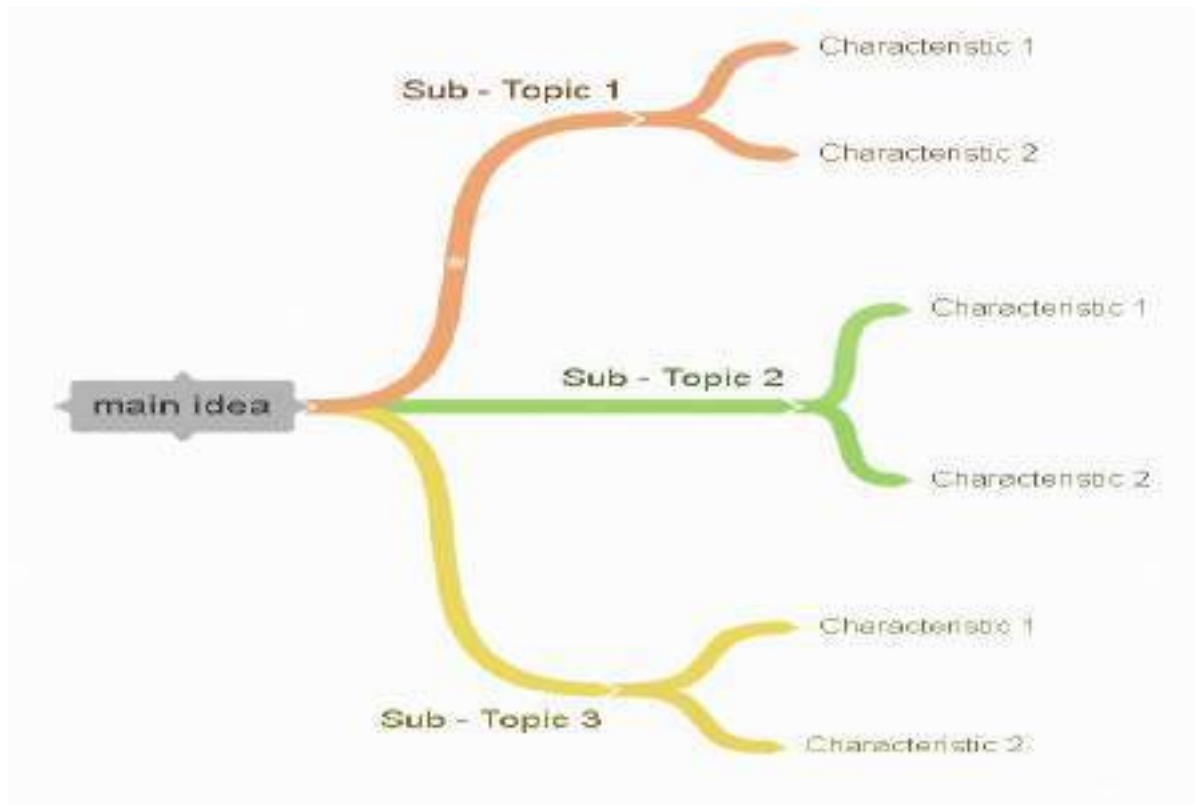
Topic IV

Reading: Tim's addiction

Mind map 4: Brace Map

Objective: to help students break down a central idea or concept into its component parts, facilitating deeper comprehension and analysis through visual organization

Mind map suggested: Brace map



Note: Elaborated by Jonathan Alava and Jayro Segovia

Description:

This mind map aid for breaking down a main idea into its individual elements or characteristics, making it easier to understand by its division in an organized manner.



| When is it applied? | How is it developed? |
|----------------------------|--|
| Pre reading | Prior reading, Students will work on vocabulary related to the text by joining with a line the definition. They will use these concepts for the mind map completion |
| While reading | Students will write the words that they do not understand next to the reading and then compare their answers with their partner. They will teach unfamiliar words among themselves with the support of the teacher. |
| Post reading | This mind map will help students to identify the main idea and secondary ideas of a text. Then write down its supporting idea next to the sub topics. By completing the chart, students will be provided with a visual representation of the reading organization, enhancing their understanding of its structure. |

Practice

| | | | | | | | | | |
|-----------------------|---|--------------|---------|------|-----------|-----------|-------------------|-----------|------------|
| Before reading | Complete the following vocabulary activity. Join with a line For example: <table><tr><td>Social Media</td><td>Village</td></tr><tr><td>Town</td><td>Addiction</td></tr><tr><td>Obsession</td><td>Digital Platforms</td></tr><tr><td>Allowance</td><td>Permission</td></tr></table> | Social Media | Village | Town | Addiction | Obsession | Digital Platforms | Allowance | Permission |
| Social Media | Village | | | | | | | | |
| Town | Addiction | | | | | | | | |
| Obsession | Digital Platforms | | | | | | | | |
| Allowance | Permission | | | | | | | | |
| While reading | Write down four words which you don't know from the text. Then compare with your partner For example: <ul style="list-style-type: none">• Entertainment | | | | | | | | |



- Schedule
- Significance
- Management

Reading: Tims Addiction

Read the text

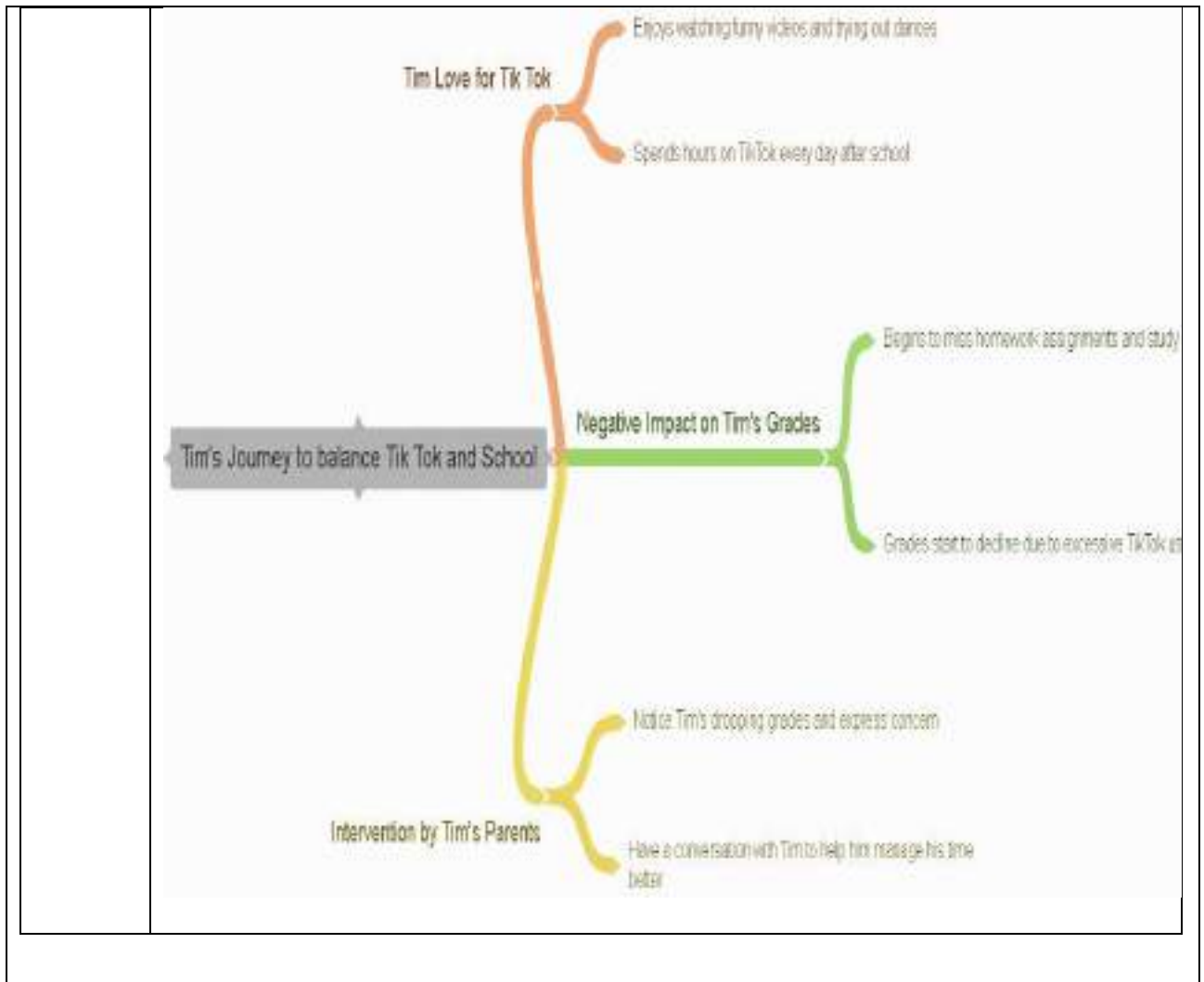
Tim Addiction

In a quaint town there lived a boy named Tim who attended Greenfield High School. Tim had a fondness, for his phone for watching entertaining videos. Each day after school he would lose track of time immersed in the world of TikTok enjoying the humour and trying out dance moves. Regrettably this newfound obsession took a toll on his performance as he began neglecting his homework and study sessions resulting in declining grades. Concerned by this shift Tims parents initiated a conversation with him to discuss time management strategies and finding a balance between TikTok entertainment and school responsibilities. Realizing the need for change Tim committed to creating a schedule that prioritized his schoolwork while allowing him time for TikTok indulgence. Through perseverance and dedication Tim was able to enhance his performance and appreciate the significance of maintaining equilibrium, between interests and obligations.



Note: taken and adapted from (Fiares, 2022)

| | |
|----------------|---|
| Post | Organize the information of the text by completing the following mind map |
| Reading | |



Elaborated by: Alava & Segovia (2025)

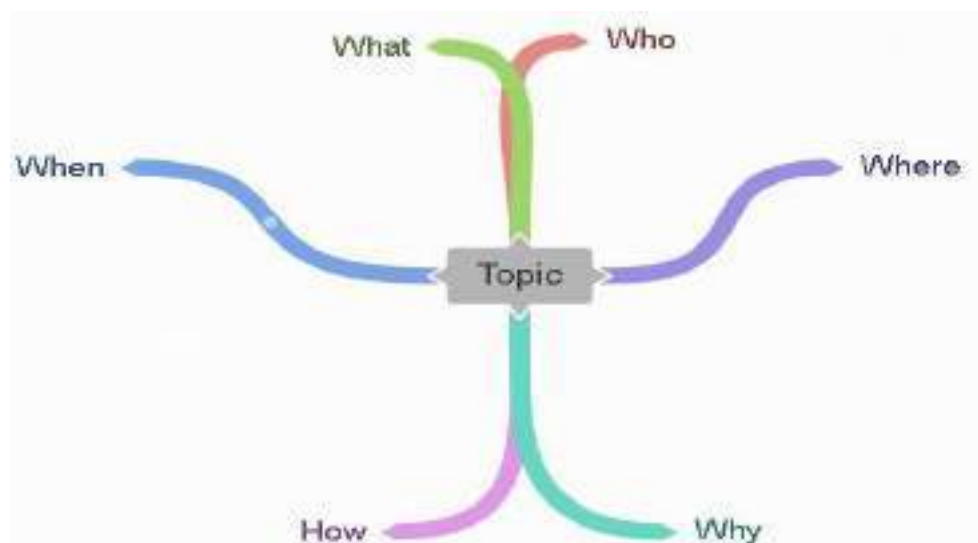
Topic V

Reading: Meet Paddy the teen coach

Mind map 5: Questioning cluster

Objective: to promote exploration and gain a comprehension of a subject by creating a range of questions that probe various aspects, perspectives, and viewpoints related to it.

Mind map suggested: Questioning cluster




Note: Elaborated by Jonathan Alava and Jayro Segovia

Description:

A questioning cluster mind map visually organizes a variety of probing questions around a central topic, stimulating critical thinking and facilitating exploration of different facets and perspectives related to the subject

| When is it applied? | How is it developed? |
|----------------------|--|
| Pre reading | Students will play categories with the teacher. They will play a game to make them think about the general theme of the lesson |
| While reading | Students will read the text and mark true or false in the worksheet provided by the teacher |

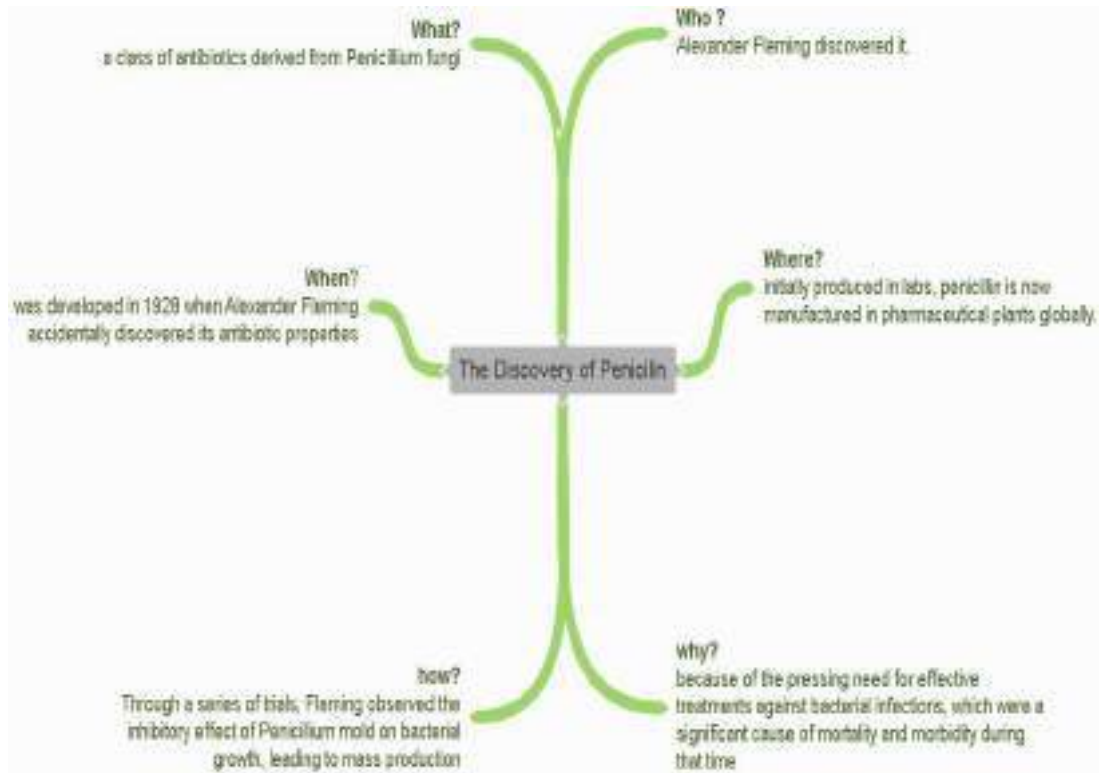


| <p>Post reading</p> | <p>Students will fill in the gap the planned mind map by using the WH questions (WHEN, WHERE, HOW, WHAT, WHY, WHO), facilitating a better comprehension of the text.</p> | | | | | | |
|-----------------------------|--|--------------------|------------------|------------------|--|--|--|
| <p>Pre reading</p> | <p>At the back of the Worksheet, write down as many ideas related to the categories</p> <table border="1" data-bbox="395 629 1493 689"> <thead> <tr> <th data-bbox="395 629 727 689">Famous discoveries</th> <th data-bbox="727 629 1115 689">Name of medicine</th> <th data-bbox="1115 629 1493 689">Names of illness</th> </tr> </thead> <tbody> <tr> <td data-bbox="395 689 727 880"></td> <td data-bbox="727 689 1115 880"></td> <td data-bbox="1115 689 1493 880"></td> </tr> </tbody> </table> | Famous discoveries | Name of medicine | Names of illness | | | |
| Famous discoveries | Name of medicine | Names of illness | | | | | |
| | | | | | | | |
| <p>While reading</p> | <p>Mark true or false on the following statements</p> <p>For example:</p> <ul style="list-style-type: none"> a) Mark Flemming discovered the Penicillin b) The penicillin was the product of an accident c) Labs are still using Penicillin for treating deadly diseases <p>The discovery of Penicillin</p> <p>In the field of microbiology, the finding of penicillin marks a moment. Alexander Fleming was the one who accidentally came across this groundbreaking antibiotic in 1928. Penicillin, a class of antibiotics sourced from <i>Penicillium</i> fungi transformed healthcare by fighting infections. Discovered through a series of trials Fleming noticed how <i>Penicillium</i> mold hindered growth laying the groundwork, for mass producing penicillin. This antibiotic disrupts cell wall formation, causing their demise. Initially produced in labs today penicillin is made on a scale in pharmaceutical plants globally. The widespread use of penicillin has significantly lowered death rates linked to infections. It is now used in hospitals, clinics and households alike as a defense against bacterial illnesses. This extraordinary find forever changed the landscape by making once deadly infections treatable, with a simple dose of penicillin.</p>  <p><i>Note: taken and adapted from (Fiares, 2022)</i></p> | | | | | | |



**Post
reading**

Complete the following mind map by asking the WH questions on the following mind map. **Mind map questioning cluster completed**



Elaborated by: Alava & Segovia (2025)

Annex 23. Research plan

“Plan De Investigación Para La Propuesta, Que Deberá Ser Revisado Y Aprobado Por La Comisión De Titulación De Cada Programa Al Concluir El Taller I”

Title of the proposal: **The effectiveness of Mind Mapping Techniques on Improving Literal Reading Comprehension skills of B1 level learners.**

Authors (2): Jonathan David Alava Varas, Jean Jayro Segovia Muñoz

Introduction

Research background and contextualization

These days English has become the spoken language globally. Mastering English is essential, for individuals who want to remain competitive in the job market pursuing education abroad and improving their communication skills for information access and forming connections. Moreover, English serves as a language for travelers, across countries.

In Ecuador, English is a pivotal tool that has been used throughout the past years in many different branches of society. In the pedagogical field, many educational centers are focusing on teaching literacy skills in a foreign language because reading is paramount for language acquisition. (Razali, 2019) states that through the process of literal reading in the ELT setting, learners are able to be active members within the text of the writer through prediction, analysis, summaries, and various other strategies and techniques. (Shaaban, 2022) acknowledged that literal reading plays a role in the development of language comprehension skills among students. It exposes them to a variety of sentence structures and idiomatic expressions. By engaging with texts, students gain an understanding of the subtleties within the language, which is vital for effective Another study by Gaith (2019) mentioned that reading texts word for word exposes English as a Foreign Language (EFL) students to a variety of vocabulary at the beginner level. When students come across words within a context, it helps them slowly broaden their vocabulary. This is a milestone in becoming proficient in a language. Teachers of English as a foreign language in both



private and public schools do not have proper training in the impartation of language skills, especially when it comes to reading lessons. From this perspective, students strive to achieve the next level of language proficiency due to the teacher's lack of training in guiding students to master the subject knowledge. In developed nations, numerous educators may not have the appropriate training in teaching English as a language (EFL), particularly if they do not specialize in English. Consequently, they might lack familiarity with the strategies and techniques for successful reading instruction in an EFL setting (McCall, 2021).

In the Unidad Educativa Jose Benito Benitez San Andres, the students of the second- year B.T.E has been performing with low scores in reading assessment during international examinations. Thus, this project will introduce innovative activities to enhance literal reading comprehension within the implementation of mind mapping techniques, a tool that will be beneficial for students who would like to get high marks in English international exams or in both formative or summative assessment.

Annex 24. Photo and location of Educativa Jose Benito Benitez San Andres

Figure 1

Photo of Educativa Jose Benito Benitez San Andres



Note: Elaborated by Jonathan Alava



According to (Alam, 2023), mind mapping techniques offer a depiction of a written content, which simplifies the comprehension of information and connections, among ideas. This visual tool assists readers in gaining an understanding of the material. Another benefit of it is that it allows students to get the meaning of key vocabulary in a text. In addition, (Zibeniene, 2021) argued that mind maps permit students to establish connections, between related concepts and ideas allowing students to perceive their interrelationships. This can result in a comprehension of the topic at hand.

The objective of these techniques is to elaborate ideas through mind maps and graphic organizers and notice the cause-and-effect connection between student performance during reading lessons. Before and after the application of these techniques, pre- and post-tests will be administered to gather essential information.

Location of Educativa Jose Benito Benitez San Andres

Unidad Educativa Jose Benito Benitez San Andres location



Note: Adapted from Google maps, 2024 (<https://www.google.com/maps/@-2.1157145,-79.9002519,109m/data=!3m1!1e3?hl=en-US&entry=ttu>)

STATEMENT OF THE PROBLEM:

The problem of this research is to determine the relationship between mind mapping techniques and literal reading comprehensions skills among B1- Level students.

JUSTIFICATION OF THE RESEARCH:

In our current times, teachers do not perform well in the development of reading competence in pupils. Teachers are looking for new ways to allow students to have a better understanding of unfamiliar text. It is positive to apply this project to the Unidad Educativa Jose Benito Benitez San Andres since it will allow learners to overcome the many adversities, they face in understanding the reading material.

This research is directed to support both teachers and students in discovering the best techniques that will enhance the development of reading skills such as comprehension and inference in the target language. In addition, this project is essential since the mind mapping techniques can greatly increase student intrinsic motivation, which will allow them to grasp ideas, understand complex vocabulary, and identify specific information in any type of text.

This project aims to explore the benefits of mind mapping for second-year English BTE (A1) students. we, as educators, will present a curated set of mind mapping strategies aimed at boosting their performance in various aspects of language learning. These techniques will then be evaluated for their effectiveness in enhancing student engagement and reading comprehension. Research suggests that providing pre-designed graphic organizers can significantly improve reading outcomes, further supporting the potential of mind mapping in language acquisition. As Alam (2023) highlights, successful language learning encompasses vocabulary, grammar, pronunciation, and cultural understanding. Mind mapping offers a valuable tool for integrating these elements into a cohesive and engaging learning experience.

One useful tool that can aid in organizing and structuring this wealth of information is mind mapping. They provide a way to break down and manage the components of language learning, making it easier to navigate through the intricacies of acquiring a new linguistic skill. This means that teachers can carry out these techniques in the classroom by applying the correct materials to achieve the aim of the project, where a pre- and post-test will be used.

DESCRIPTION OF THE RELATIONSHIP BETWEEN THE PROPOSAL AND THE RESEARCH LINES OF THE UNIVERSITY:

Title: The effectiveness of Mind Mapping Techniques on Improving Literal Reading Comprehension skills of B1 level learners.

General research line: Teaching-learning strategies.

Specific research line: Implementation of a practical handbook on effective mind mapping techniques for improved English language comprehension.

PRECISION OF THE RESEARCH TOPIC

The topic “The effectiveness of Mind Mapping Techniques is wrapped with the study lines of didactics, education, and administration on pedagogy based on language teaching to improve literal reading comprehension skills in B1-level students, as well as with the study topics of the project, assessment, and implementation of educational models and didactic innovations. Both were set by the Universidad Bolivariana del Ecuador. It strengthens the educational and pedagogical comprehension of language through the development of language teaching and discovers the implementation of a particular educational technique, mind mapping activities, in the context of enhancing comprehension skills in reading lessons.

DESCRIPTION OF THE RESEARCH OBJECT:

The object of the research involves mind mapping techniques and their influence on the improvement of literal reading comprehension skills in English students. By discovering this research object, the research aims to provide current information in the field and contribute pivotal perspectives for language teachers, curriculum designers, and

investigators eager to promote effective teaching techniques and enhance reading comprehension skills and performance for B1-level learners.

RESEARCH AIM :

- To determine the impact of mind mapping techniques on the development of literal reading comprehension skills

SPECIFIC RESEARCH OBJECTIVES :

- To analyze the current literal reading comprehension level of Unidad Educativa Jose Benito Benitez San students
- To design and implement mind mapping techniques in order to improve literal reading comprehension of the students
- To evaluate the efficacy of the mind mapping techniques in improving literal reading comprehension of the students from Unidad Educativa Jose Benito Benitez San

DESCRIPTION OF THE CONCEPTUAL AND OPERATIONAL CATEGORIES

INDEPENDENT VARIABLE: MIND MAPPING TECHNIQUES

In the conceptual category, Mind mapping is a method that visually organizes and presents information or ideas in a diagrammatic format. It usually revolves around a theme. Concept, employing a hierarchical approach (Shi, 2022). Mind mapping highlights the importance of including branches or subtopics that extend from a point connecting keywords, phrases or visual elements to these branches.

This helps create an easily understandable representation of ideas, which assists in brainstorming, planning and understanding different subjects or projects (Mubarok, 2021). The operational categories within mind mapping contributes practical guidance for application and assessment of the technique. Some important writers like Tony Buzan and Paul Foreman have participated to the comprehension of these activities are technique design, technique sequencing, technique instructional strategies and evaluation of task performance

DEPENDENT VARIABLE: LITERAL READING

Comprehension skills:

It refers to the ability to understand and interpret what the author of a text tries to convey. To accomplish this, a series of strategies are involved, such as skimming or getting the main idea of a text, scanning or looking for specific words or ideas, and inference or trying to predict outcomes or results in any reading material. (Protsenko, 2021) emphasizes that skimming is a technique for handling large amounts of reading material and getting a sense of what to expect, which is important in many educational and professional situations. Operational categories within the dependent variable of literal reading skills involve specific strategies used to measure comprehension development in reading.

They are skimming, which refers to how a reader interprets the core idea of a novel, article, or newspaper (Ghaith, 2019); and scanning, which plays a role in understanding text by allowing us to quickly and accurately find information. This technique does not only save time but it also helps us stay focused, making it invaluable for activities like research problem-solving and goal-oriented reading in academic and professional contexts. It greatly assists in retrieving relevant information (Pritania V. V. Moku, 2020), and inference, which relates to the understanding of the meaning behind written texts, is crucial as it helps readers uncover hidden messages, improve their ability to think critically and fill in any missing information. It allows for a comprehension of the context (Ahmed Y., 2019).

DESCRIPTION OF THE RESEARCH APPROACHES AND METHODOLOGIES TO BE USED:

The research will use a combination of techniques to verify the efficacy of mind mapping activities in improving reading comprehension skills of B1-level students. The mix of quantitative and qualitative methods will determine an understanding of the research topic.

The quantitative stage will include gathering numerical data to assess the influence of mind-mapping techniques on literal reading comprehension. This will involve pre- and post-tests to calculate the students' understanding of the text before and after the application. The data will be measured using statistical methods such as descriptive statistics to verify the impact of any changes in reading comprehension.

The qualitative stage will include gathering qualitative data to obtain valuable information about the learners' perspective and perception of mind-mapping techniques. This involves classroom observations and medium-group discussions with the learners to discover their feelings toward the techniques and their influence on their literal reading comprehension of the text.

The information will be interpreted using thematic analysis to verify regular themes related to perception. The study will be carried out in a classroom environment, where learners at the B1 level will experience a reading lesson that involves mind-mapping instruction over a particular period. The information collection will involve measuring scores during the activities, administering surveys to gather their attitudes, and conducting medium-group discussions to gain qualitative insights.

DESCRIPTION OF THE RESEARCH INSTRUMENTS:

The study instruments for this research will include both quantitative and qualitative information-gathering tools to collect comprehensive data on the efficacy of the mind-mapping technique in improving B1-level students' literal reading comprehension skills.

QUANTITATIVE INSTRUMENTS

The pre- and post-tests evaluate students' literal reading comprehension skill levels before and after the application. A placement reading test will be administered. This test will involve reading questions to measure comprehension, inference, and looking for details in a text. An elaborated survey will also be applied to collect quantitative data on students' experiences and self-efficiency when it comes to mind mapping techniques and their influence on literal reading comprehension skills. The survey may involve multiple-choice questions.

QUALITATIVE INSTRUMENTS

Classroom observations will be carried out to see students' attitudes and eagerness toward the implementation of graphic organizer techniques. These observations will demonstrate qualitative insights into learners' perceptions. A one-on-one survey will be applied to measure all learners' performance in reading tests. The members will receive a handout with elaborate questions to check their understanding of the test. Medium-group discussion will be applied with learners to facilitate insightful perception with mind-mapping learning. This discussion will discover the advantages and disadvantages of the techniques.

The research instruments will be created based on current proven tools and designed for particular settings and study objectives. Using both quantitative and qualitative methods will provide a comprehensive analysis of research data, showcasing an understanding of how mind-mapping techniques impact literal reading comprehension skills at the B1 level.

DESCRIPTION OF THE BENEFICIARIES OF THE PROPOSAL

The proposed study on the effectiveness of mind mapping techniques in improving the literal reading comprehension skills of 22 B1-level teenagers from Unidad Educativa Jose Benito Benitez San Andres aims to benefit the students, teachers, and the high school itself. Through the application of mind mapping techniques, teenagers at the B1 level will have the opportunity to enhance their literal reading comprehension of text in a meaningful manner. This can increase their confidence and their ability in many contexts, such as interpreting difficult reading materials. The study results will also benefit teachers at the high school by demonstrating meaningful insight and proof-based evidence practices to improve their impartation techniques. By involving these effective instructional techniques, teachers' lessons can positively facilitate reading comprehension development in teenagers. In addition, the beneficial results of the study can support the standards of the high school as a quality educational institution, catch the attention of parents from other parts of the city, and strengthen the success of learners.

DESCRIPTION OF THE RESEARCH CONTEXT:

This study will be carried out at Unidad Educativa Jose Benito Benitez San Andres, a high school located in Guayaquil, Ecuador. The institution opens in the morning. There are an estimated of 520 learners who are enrolled in this institution. 22 are in the B1 level and they are going to be the sample of this research proposal, with classes starting at 7:30 a.m. From Monday to Friday.

In this high school, English is not mandatory for all learners. On the other hand, it is required that learners achieve the B2 English level before they graduate. The classroom will help to provide the research context, where mind-mapping techniques will be applied to improve literal reading comprehension skills. The learners come from many backgrounds. English instructors will facilitate the process and gathering of information. The study context promotes a helpful, meaningful learning setting, motivating participation during the activities.

DESCRIPTION OF THE PRACTICAL CONTRIBUTIONS OF THE PROPOSAL, ITS IMPORTANCE, AND ITS SOCIAL NEED:

From a professional point of view, it is important since it aims to enhance the level of Unidad Educativa Jose Benito Benitez San Andres students with the application of mind mapping techniques. In addition, this investigation gives an overview to other English instructors to implement this activities in other high schools encountering related situations. For this reason, it can help to the professional performance by showing them pedagogical techniques.

In the same way, this research is beneficial for other investigators since it applies blended method research which allow them to facilitate an understanding of the efficacy of mind mapping techniques in a precise and clear way. In addition, the data compilation techniques like the pre- test and post- test, surveys and observational check list provide strong information for analysis.

From a general overview, this proposal targets to provide a solution in getting good scores in the PTE general exam which is an international certification proficiency exam and is taken every school year.

Finally, this research target to incorporate mind mapping techniques through scenarios that are of the interest, proficiency and age of the students by using

resources in the school. Furthermore, to give precise instructions and guidelines during the lessons to the students for a clear comprehension of the activities. In addition, to simplify feedback for engaging students and enhancing literal reading skills by incorporating graphic organizers techniques

Annex 25. Need analysis in my Research context

Need analysis in my Research context

By Jean Jayro Segovia Muñoz & Jonathan David Alava Varas

Abstract (100 words)

The purpose of this assignment is to do a thorough needs analysis that aims to assess the effectiveness of techniques in mind mapping on improving literal reading comprehension skills among B1 level learners. In order to find out the specific improvement areas and challenges facing both teachers and students, this study undertakes a deep dive into student's current reading competencies at Unidad Educativa Jose Benito Benitez San Andres in Ecuador. The research also uses questionnaires as well as interviews with teachers and students with an aim of understanding more about where these gaps are present within the learning environment. Moreover, it is further hoped that the study will come up with viable solutions for these problems by focusing mainly on how mind mapping activities can be implemented. Therefore, through delving into finer details of reading instruction/interpretation, this study hopes to influence pedagogical practices towards improving academic performance of B1 level learners in general terms.

Keywords: literacy skills, mind mapping techniques, B1 level learners

Introduction (Describe the model, the author, the theory)

Needs analysis is a crucial aspect in language teaching and learning, which has been defined differently by various scholars. It has been identified as a methodical approach of discovering the language needs of students in particular settings (Brown, 2004). The process is known as Needs Analysis where information on the learner's linguistic, communicative and cultural requirements is collected to enable development of appropriate instructional materials and programs. This entails an effort to create harmony between the proficiency levels of the learners at any given time and what they have set as their goals of language acquisition.

In this regard, Long (2005) complements this view by highlighting the sociocultural context of language learning in needs analysis. Needs analysis is seen as a fluid process by Long since it takes into consideration social, cultural plus situational dimensions. He posits that linguistic necessities are molded by the sociocultural environment within which communication happens and efficient needs analysis should thus encompass considerations for the learners' culture, their communicative gaps and how they use language socially.

In line with this perspective, Hutchinson and Waters (1987) offer a practical orientation to needs analysis that highlights its learner-centeredness. They define it as a systematic examination of learners' language needs, likes and learning styles. The authors argue that it is important to identify specific language tasks for the student to perform in given contexts such as an academic or professional settings so as to instruct the language accordingly. Hutchinson and Waters add that this process should be carried out by including students in order for the teaching to make sense to them.

This can be done by combining these viewpoints. Needs analysis is a multi-faceted process and takes into account various aspects such as language, communicative, cultural and situational factors for the identification of learners' language needs and to inform instructional designs. By knowing more about individual learners' needs, preferences, and socio-cultural backgrounds; instructors may derive personalized curricula that best meet the learners' language objectives resulting in a meaningful journey of language learning.

Context of the research

In different countries, as in Ecuador, English occupies a very important place in the key sectors of the economy such as education. Educational success and employment opportunities are increasingly dependent on one's proficiency in English. Nonetheless, despite efforts to improve ELL, students at Unidad Educativa Jose Benito Benitez San Andres suffer from reading problems that hinder them from attaining full proficiency. Teachers' surveys indicated that children often find it difficult to identify main ideas of passages they have read, organize supporting details and make inferences from texts. One respondent for example said how the learners failed to follow the storyline or grasp cause-effect relationships when handling expository materials.

Moreover, the teacher interviews brought to light lack of training in innovative pedagogical methods for dealing with these challenges. Some teachers however were also using traditional techniques like repeated readings and rote learning of vocabulary that can be boring and may not attract students' attention. This often leads to low reading scores in standardized test results as shown by [insert data on reading scores, if available]. In this respect, there is an urgent necessity for innovative strategies such as mind mapping techniques to improve literacy skills and change the educational process at B1 level.

Description of the beneficiaries

This research project will benefit the second-year BTE students at Unidad Educativa Jose Benito Benitez San Andres. The students are mainly at the B1 level as per the CEFR (Common European Framework of Reference for Languages). They cannot get meaning from written English texts, resulting into poor reading-standards performance. It should be noted that there is a diversity in learning styles among the

students. For instance, some of them require graphical illustrations to comprehend issues fully since they are visual learners while others such as kinesthetic learners use practical means to understand concepts. Mind mapping serves both these groups. Visual learners can benefit from mind mapping because it involves making visual maps with central themes, branches and keywords. On top of this, when constructing a mind map, students physically engage with the text which is an advantage for kinesthetic learners.

To develop good literal reading comprehension skills through employing mind mapping techniques that shall enhance their academic performance and language competence while practicing teaching activities aimed at improving their writing ability by narrowing down to specific areas of weakness in sentence structure; all in an attempt to help my students become better writers and succeed academically as well as learn more about their own writing processes that have always fascinated me (Anderman & Al-Harbi 2014). This process would also enable them gain confidence as individuals who can actively participate in discussions outside the class like those involved in group-work or work related situations including presentation or job interviews where correct written English is needed for one to communicate effectively.

The linguistic level of the beneficiaries according to the CEFR

The beneficiaries of this project, who are second year students at Unidad Educativa Jose Benito Benitez San Andres, have a linguistic level that can be said to be B1 in accordance with the CEFR (Common European Framework of Reference for Languages). The Common European Framework for Language Learning (CEFR) divides language proficiency into six levels ranging A1 through C2; B1 refers to an intermediate level. At this stage of learning English students are expected to have basic understanding and capability to deal with easy communication in familiar situations. They can produce simple sentences and understand main points of clear standard input on familiar matters regularly encountered in work, school, leisure etc. However, they may still struggle with more complex language structures and nuanced understanding, particularly in unfamiliar contexts or with specialized language. For those involved in this project who aim to increase their literal reading comprehension skills, being at a B1 level means they might already possess some familiarity with English vocabulary and grammar but could have difficulties understanding more difficult texts. Thus the mind-

mapping method will bridge this gap by providing them techniques which shall help improve their comprehension abilities and reinforce L2 use according to their levels

Target needs

Necessities

According to the needs analysis, B1 level learners need systems that are organized for their literal reading understanding to improve. One key thing identified is that students need strategies which will assist them in identifying major ideas and key points in a text. This can be achieved through mind mapping techniques that use central themes, branches and keywords as visual representation tools for texts. This arrangement helps the student to organize ideas hierarchically, connect related concepts and have a better understanding of the overall structure of a passage. In addition, vocabulary development can also be improved by sketching vocabulary maps whereby students brainstorm words they encounter while reading and make pictures or diagrams out of them. For those who learn visually, this is way of mentally juxtaposing new words with what they stand for on paper.

Lacks

The students are not guided well in order to develop good reading and understanding skills. The survey states that the teachers frequently depend on modus operandi of rote learning instead of getting absorbed with what they read. This may include reading passages repeatedly, memorizing lists of vocabulary or answering comprehension questions with barely any consideration for concepts (Vygotsky, 1978). This method can be boring and fail to catch the attention of learners hence interfering with their progress until when it leads to withdrawal. Moreover, no training existed according to interviews conducted by teachers regarding language teaching methods especially on advanced pedagogic theories.

Many teachers have expressed an urgent need for their teaching methods to be more innovative and exciting in view of the dynamic nature of education. II. This is what some of the educators are saying; that is, transforming methodologies which go beyond traditional paradigms and make classrooms alive with energy and excitement.

III. This hunger for change in education means that there is an appreciation that conventional ways are not working well as they are based on rote learning rather than content participation or active engagement (Dewey, 1916).

IV. The demand revolves around providing authentic educational experiences with educators grappling over delivery methods creating a curiosity driven intellectual atmosphere (Howard Gardner, 1983).

Wants

The proposed mind mapping techniques, when put into practice, are believed to bring about a drastic change in the way students approach reading and writing. It tries to move beyond mere understanding of the text and empower students with abilities to dissect written materials correctly by helping them easily locate the main ideas within a swamp of information. Mind-mapping gives learners an opportunity for active involvement, enabling them shift from passive recipients of facts into alert interpreters. This is also tied up with a bigger objective of shaping learners so that they can learn how to make sense out of complex data, identify salient points and explore texts more deeply.

In addition, the motivation to develop adequate summative literary skills is a crucial part of schooling in general as explained by McKeown, Beck & Kucan (2002). As a cognitive exercise, summarization involves breaking down complex information into shorter and coherent forms. This entails merging many ideas and concepts into one story while highlighting some key points at the expense of others. Through sharpening their skills of summarizing, students can not only extract important information from texts but also cultivate critical thought and analysis necessary for success in school and life after it.

Learning needs

The learning needs is seen as being a crucial aspect in the improvement of literal

reading comprehension abilities for B1 level learners by Mind Mapping Techniques. These students, being at the B1 level; struggle with understanding written information and especially its literal meaning or get any relevant details from it. However, there is an answer to this problem coming from mind mapping techniques that deliver to learners specific strategies capable of breaking down written material into bite-sized portions.

B1 level learners with the intention of improving their literary reading comprehension skills, incorporate mind mapping techniques into their learning repertoire. They aid students in seeing and structuring information from texts by use of which they become able to grasp better the main ideas, supporting details as well as the general structure of written materials. Using visual maps that encapsulate central themes, relationships and key words, learners can read intricate text more easily and accurately.

At the same time, it is important to note that when used in teaching languages to B1 level students, mind mapping techniques have a direct link with improving proficiency. Through the use of these techniques, individuals increase their capability to understand written texts and become more analytical thinkers by developing critical thinking skills while at the same time enhancing metacognitive awareness. By creating a mind map actively, learners increase their involvement in learning thus getting a better grip on materials and more meaningful contact with the text. Hence, the point of including the Mind Mapping Techniques as a need for learning is to show that students want to improve their reading comprehension skills and fluency in English. By targeting instruction and practice at this need, teachers can enable B1 level learners to read with ease and competence while unlocking their full potential.

Description of the possible solution to these needs

Independent variable

Psychologist Tony Buzan (2008) underscores the effectiveness of mind mapping skills in improving reading comprehension. Mind maps, according to Buzan, are a visually presented and organized method of information arrangement that makes it

possible for learners to grasp intricate ideas and relationships in a text. Mind maps provide learners with an all-inclusive framework for easy understanding and retention of information by representing key issues, relationship between issues as well as hierarchy in a diagrammatic manner. Buzan's work underlines the importance of incorporating such practices into education to enhance students' deeper learning and comprehension. In this research design, the independent variable is "Mind Mapping Techniques." Mind mapping involves the visual representation of concepts, ideas, or data in a hierarchical and connected form. It helps organize thoughts logically thereby enabling one to understand, analyze and synthesize complex material. Generally mind mapping techniques begin with a central idea or topic from which there are branches that contain subtopics or related ideas. The use of colors, images, and symbols enhances memory retention and engagement in most cases in visual aspects. These are intended to encourage students into being creative thinkers while at the same time stimulating critical thinking hence promoting active learning among them since they have to go beyond what is obviously written down on paper

Dependent variable

Literal Interpretation. In her research, Isabel L. Beck's has shown the importance of vocabulary acquisition in literacy development. According to Beck (2002), comprehension levels increase and students understand complicated texts better when they have wide vocabularies than those who do not. Beck suggests that structured vocabulary instruction should enable learners master words through rich contexts therefore leading to profound comprehension and retention of words. By incorporating literacy instruction on this basis, reading teachers can control the independent variable of vocabulary development thus establishing a solid basis for improving reading comprehension among children.

Problem

What is the the relationship between mind mapping techniques and literal reading comprehensions skills among B1- Level students?

Proposal

The effectiveness of mind mapping techniques in improving literal reading comprehension skills among B1 level learners

Description of the diagnostic test

According to education practitioners, a diagnostic test is an exhaustive evaluation tool used in finding out the strengths and weaknesses of students academically with reference to particular subject matter. In other words, it helps learners understand their particular learning needs by giving them insight into their capabilities and areas of improvement (Brown 2004).

As Hughes (2003) explains, such assessments are administered at the beginning of a course or instructional program to ascertain learners' previous knowledge and preparedness for the syllabus thereby enabling tutors to give lessons that are suited specifically for the class. Diagnostic tests are therefore designed as systematic ways of evaluating students' misunderstandings, misconceptions, false belief systems, lacunas, faulty constructions and problems with techniques in any given field. On account of this, teachers can make adjustments on how they teach so as to meet individual requirement of each learner thereby making them attain maximum results from their studies.