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Topic:

**THE USE OF E-BOOKS TO ENHANCE READING COMPREHENSION SKILLS IN
A2 LEVEL YOUNG LEARNERS**

**Research project prior to obtaining the title of Magister in Pedagogy of
English as a Foreign Language**

Line of research:

INNOVATIVE PEDAGOGIES TO ENGLISH LANGUAGE

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DEDICATION

It is crucial to have a strong support system when taking on challenges and striving for personal growth. This achievement is attributed to my beloved family, who have been my unwavering support and inspiration throughout.

ACKNOWLEDGMENT

I would like to express my gratitude to the management, teaching, and administrative staff of *Pontificia Universidad Católica, Ambato* for their support in my professional training. I am also grateful to my tutor for their time and valuable guidance. Additionally, I extend my thanks to the educational community of *Unidad Educativa San Pío X* for their excellent collaboration in the development of this research.

SUMMARY

Esta investigación tiene como objetivo evaluar el impacto del uso de e-books, un ejemplo de tecnología de información y comunicación (TIC), en las habilidades de comprensión lectora en estudiantes del nivel A2 de inglés como lengua extranjera. Participaron en el estudio 49 estudiantes de entre 13 y 14 años de edad del Colegio San Pío X, de la ciudad de Ambato-Ecuador.

La metodología aplicada fue cuasi-experimental e incluyó un diseño de los aspectos primarios y secundarios de la investigación. Se aplicó un enfoque cualitativo-cuantitativo en los niveles descriptivo y explicativo. El estudio comprendió una modalidad socioeducativa. Se aplicó un pre-test y un post-test como instrumentos de recogida de datos. Los resultados sugieren que los e-books ofrecen características interesantes que contribuyen a mejorar la comprensión lectora en las aulas de EFL.

Palabras claves: e-books, comprensión lectora, tic, EFL.

ABSTRACT

This research aims to evaluate the impact of the use of e-books, an example of information and communication technology (ICT), on reading comprehension skills in students of the A2 level of English as a foreign language. 49 students between 13 and 14 years of age from the San Pío X School, in the city of Ambato, Ecuador, participated in the study.

The methodology applied was quasi-experimental and it included a design of the primary and secondary research aspects. The qualitative-quantitative approach was applied at descriptive and explanatory levels. The study comprised a socio-educational modality. A pre-test and a post-test were applied as instruments to collect data. The outcome suggests that e-books offer interesting features that contribute to enhance reading comprehension in EFL classrooms.

Keywords: *e-books, reading comprehension skills, tic, EFL.*

INDEX

STATEMENT OF AUTHENTICITY AND RESPONSIBILITY	ii
APPROVAL SHEET	iii
DEDICATION	iv
ACKNOWLEDGMENT	v
SUMMARY	vi
ABSTRACT	vii
INTRODUCTION	1
CHAPTER I. STATE OF ART AND PRACTICE	6
1.1. Extensive reading	6
1.2. Reading comprehension skills and technology	9
1.3. E-books and teaching-learning process	19
1.4. Advantages of using e-books	22
CHAPTER II. METHODOLOGICAL DESIGN	27
2.1. Research methodology	27
2.2. Characterization of the institution	38
2.3. Methodological proposal	40
CHAPTER III. ANALYSIS OF THE RESULTS OF THE INVESTIGATION	48
3.1. Pre - and post-test results analysis	48
3.2. Analysis of descriptive results	51
3.3. Hypothesis verification	54
CONCLUSIONS	57
RECOMMENDATIONS	58
BIBLIOGRAPHY	59
ANNEXES	65

INTRODUCTION

In recent years, the rise of technology has revolutionized the way we read and consume information, and as a result, electronic books, or e-books, have become increasingly popular as a reading medium for people of all ages thanks to their convenience, portability, and accessibility. According to Ingram (2020), e-books have provided a new route for young learners to develop their reading comprehension skills. For young learners at A2 level, who are typically between 10 and 12 years old and have a basic knowledge of English, e-books can be particularly effective to enhance their reading comprehension skills. In fact, e-books offer several interactive features and multimedia content that can engage learners easily.

The transition from analog to digital, and the fact that people are much more hooked on new technologies, means that all people's activities pay full attention to what happens on the screen of their electronic device, generally a cell phone. The current times require that the first thing done in the day is to check the inbox email or WhatsApp, read the news on different Internet portals, and carry out academic activities, among other daily activities. Therefore, technology has become part of our daily lives and the educational community should take advantage of the different tools that technology offers, such as e-books, to boost reading skills.

The reality that the world has experienced during the pandemic stage has brought about changes in several areas, among which the use of digital material for all activities stands out. Thus, in the post-pandemic, the world, and particularly Ecuador, shows a special boost in the sales of e-books or digital books. According to the annual Digital Book report, prepared by Librandia, this market generated \$136.01 million in Spain and Latin America; of that total amount, \$1.9 million is related to sales made to Ecuadorian consumers. This represents a growth of 135%. A similar situation has been experienced in other countries such as Uruguay and Guatemala.

The acquisition of an e-book is associated with the need to use other technological resources to read books. In this sense, it is essential to recognize that the

dissemination of e-books is limited to those who have all the resources to use them. In fact, in the educational system, it is crucial to popularize the use of these types of resources due to their versatility and the possibility of accessing different topics briefly and dynamically. It is important to consider that, concomitant with the increase in e-book users, there is a close relationship between what is read and how it is read. That is, it is essential to establish whether reading comprehension is achieved as the culmination of a set of skills that enable the acquisition of meaningful learning through access to information.

Day & Bamford (1998) consider reading should be included in English classes as it contributes significantly to the development of language skills. In addition, a study developed by Chen (2013) shows strong support for the postulation that using e-books enhances reading comprehension skills and facilitates vocabulary consolidation since e-books include audio or video and appealing images. These features help to infer the meaning of unknown words; thus, students can learn, process, and internalize them easily. Therefore, students produce English language using a great range of vocabulary. However, Breiseth (2016) suggests that, in English language classes, reading is considered as one of the most difficult skills to master, so reading requires practice and good strategies to comprehend what is conveyed by the authors.

According to a study carried out by Bee Choo & Zainuddin (2018), e-books are great tools to enhance reading comprehension skills and interest in reading. In their study, they found out that kids showed improvement in their reading comprehension, they applied a pre and posttest and students' scores increased significantly after using e-books. Also, the participants reacted positively towards reading e-books, and their students were interested in every reading book assigned. Therefore, e-books are an excellent alternative to be used in classes in order to boost reading skills and raise motivation towards reading habits which is essential to the learning process.

Al-Homoud & Schmitt (2009) state that reading offers divers positive effects on language acquisition, vocabulary consolidation, reasoning development and optimization of reading abilities. Moreover, reading improves students' learning

process significantly. Despite the benefits that reading offers for improving and developing English language skills, Lopez (2019) found out that students in various South American countries, such as Mexico, Colombia and Ecuador do not practice the good habit of reading. Most teenagers see reading as a tedious and boring activity, and they do not consider reading as a great contribution to their learning process. As a result, students develop poor reading comprehension skills.

At San Pio X high school, a parallel pattern is persisting. Students do not dominate reading comprehension skills. Lack of reading comprehension skills creates difficulties in the English language teaching-learning process. Effective reading comprehension promotes problem solving skills in everyday situations. In addition, students can discriminate information and apply it critically and efficiently. If reading comprehension skills are not developed, it is possible that all these processes will be affected. Material for reading may be available at home or at school, but if there are no skills to understand what is read, there will be a delay in learning, confusion in accessing information, and students will not be able to build efficient and meaningful knowledge.

The causes can be detected in the internal environment of the Institution, where there is no emphasis on comprehensive reading processes. However, the main cause lies in the lack of a reading habit outside the classroom. At home is where the reading habit, which leads to potential reading comprehension, should be strengthened. Thus, meaningful learning will not be guaranteed.

One of the reasons might be the use of unsuitable reading material. Then a question arouses the interest of this research. **How can reading comprehension skills be fostered to boost English skills?** In line to the aforementioned conditions, the hypothesis for the current investigation is: **there is a great relationship between the use of e-books and the development of reading comprehension skills in San Pio high school young learners.**

In this sense, the general objective of this research is to evaluate the impact of e-books on reading comprehension skills. The specific objectives that have been set to achieve the proposed goal are as follows:

- To analyze the approaches, methodologies and strategies in regard to fostering reading comprehension skills through the use of e-books;
- to prepare a proposal for the use of e-books to foster reading comprehension on A2 level young learners of San Pío X School.
- to analyze students' level of reading comprehension after using e-books; and,
- to diffuse the results obtained from the research project with the educational community .

The methodology applied is quasi-experimental and includes a design of primary and secondary research aspects. The qualitative-quantitative approach was applied at descriptive and explanatory levels. The study comprises a socio-educational modality. A pre-test and a post-test were used as instruments to collect data. The results obtained in the research led to clear foundations on how to enhance young learners' reading comprehension skills through the use of e-books. The study assumes a methodology oriented towards the systematic search for information, through bibliographic documentary modality, but it also assumes field research, in which information from the students involved in the study is gathered.

It is crucial and relevant to research about e-books and the development of reading skills since they are two essential elements for the teaching-learning process. On one hand, the use of digital tools, which allow access to all kinds of information, is essential for students' learning. On the other hand, the development of skills that enable understanding of what is read allows access to information from all areas of knowledge. The interest in conducting this research work lies in the fact that in teaching practice, it is necessary for students to contribute with their ideas resulting from research and good reading practices.

This research project can be easily conducted since it does not involve any ethical or financial complications. The project was conducted at San Pio X High School in Ambato, Tungurahua. The beneficiaries of this program are tenth-grade A2 level students and teachers from the institution. The program aims to enhance students' reading skills by introducing new technological strategies. e-books are an excellent tool to foster reading for pleasure, improve reading comprehension skills, and enhance English language skills in general.

CHAPTER I. STATE OF ART AND PRACTICE

1.1. Extensive reading

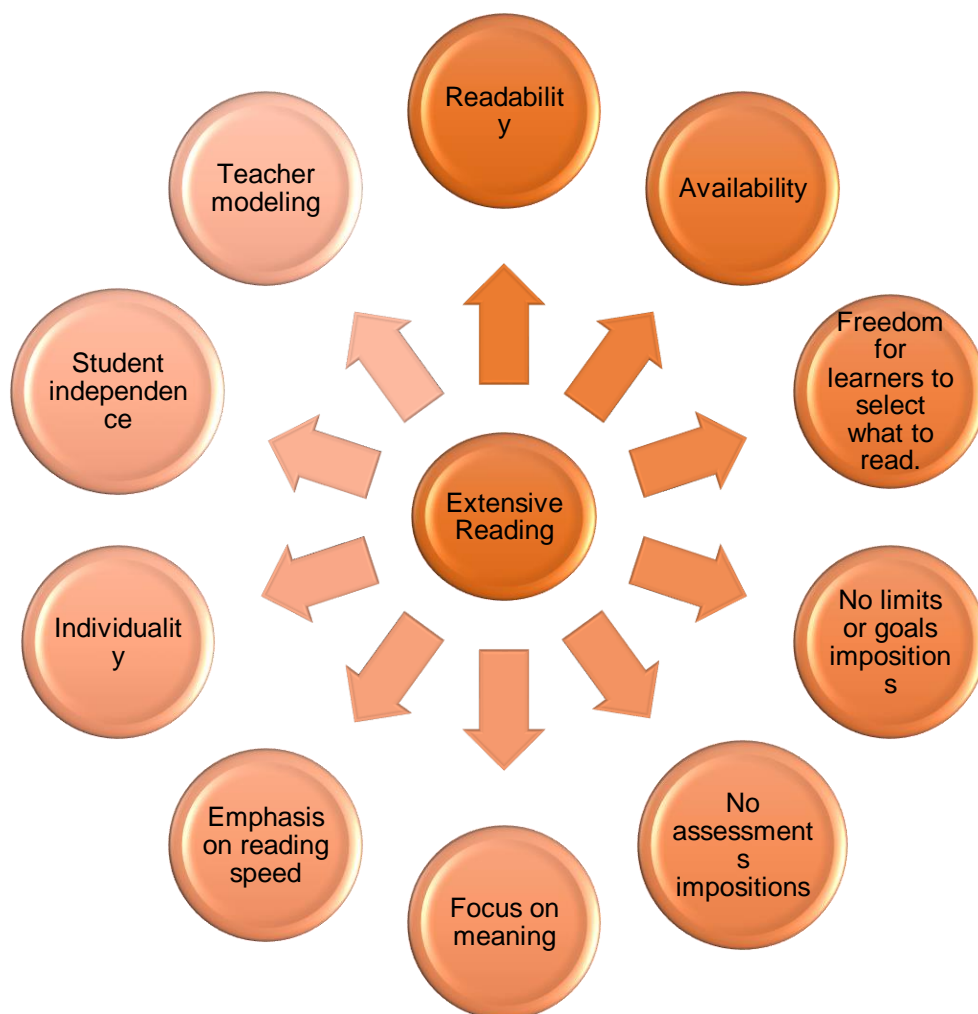
Extensive reading is often defined as the approach to teaching and learning reading in a second language or foreign language, in which students read a great quantity of texts in the target language that are within their linguistic competences (Nieves and Mayorga, 2019). Likewise, Estrada and Parrado (2020) emphasize that it is an approach in which students are encouraged to read many books in the target language without the pressure of being evaluated at the end of reading. Moreover, the author highlights the fact that students should choose what they are going to read according to their own interests and preferences, thus reading texts are not imposed by the teacher according to curricular criteria.

Extensive reading (ER) proposes that EFL learners (or any other language learners) read a great number of texts, with a wide variety of topics that students find interesting and/or entertaining. In addition, learners should read for meaning and general comprehension without closed questions assignment about the text or grammatical structures exposed in the reading texts. Teachers do not give a lecture on reading, but rather teachers must read to the students or read silently with them, while providing help and guidance to the students when they read, or to help them select what interests them. This approach contrasts with the so-called intensive reading (IR), which is currently the predominant approach. (Pernia, 2022).

In contrast, intensive reading is reading in depth, paying attention to the details of the text, understanding what the words mean, then understanding the context. It is usually compulsory and it is carried out with short texts. Brown (1988) mentions that intensive reading is an activity that is carried out in the classroom and whose objective is to study the different grammatical structures and discourse markers with the purpose of analyzing the different aspects of language. It can be concluded that this type of reading seeks to understand, point by point, the different grammatical and textual aspects from a text.

According to Maturrano (2021), extensive reading is best defined by the following fundamental principles.

Image 1
Extensive reading principles



Source: Author, based on Maturrano (2021)

- Readability implies that material should be easy to read and within the learner's language abilities.
- Availability of a wide variety of reading material (variety of genres, topics, and sources).
- Freedom for learners to select what to read.
- No limits or goals impositions (each learner will read as much as they can).

- Focus on meaning (learners read for pleasure, information, and/or general comprehension).
- No activities or assessments impositions
- Emphasis on reading speed (students are encouraged to read quickly, preferably only once, for general comprehension and not to reread the same text in detail multiple times).
- Individuality (each student reads their own material individually and silently)
- Student independence (teacher guides and support students rather than "dictating" a lecture on reading).
- Teacher modeling (teacher should be a reader and read during classes with their students).

Although many authors emphasize that students should not be subjected to the pressure of having to answer questions or undergo evaluations while reading (principle 6 above), this does not imply that students do not do any other activity than reading. Some authors like Pernia (2022) suggest that students should do different activities every time they read, but they all agree that these tasks should not be closed comprehension questions like those used in tests. The tasks must be non-intrusive, it means that they are consistent with the orientation towards general comprehension of the texts that prevails in extensive reading.

Extensive reading is a long run-approach whose effects are not immediate. It could be time consuming; however, it has various positive outcomes which are worth considering, since extensive reading offers comprehensible input. Krashen (1985) has stated that reading for pleasure without any pressure enhances learner's reading comprehension and vocabulary acquisition easily. Due to the interest that students show and the repetitiveness, which is crucial to learn new words and more than that when all these new words are shown in context, comprehension and learning become meaningful and enjoyable. Definitely, extensive reading is one of the most beneficial approaches that teachers and learners apply.

Extensive reading consolidates vocabulary building and strengthening since it promotes encounters with new words in context, which facilitates their deduction of

meaning. ER also allows multiple encounters with words that have been learnt or seen before, so it makes it possible to firm up the knowledge of these words. Consolidating vocabulary obviously helps to boost language skills development. Extensive reading has significant impact on vocabulary development and oral and written expression. Manner. Gomez (2019) emphasizes that, through reading, students are exposed to a wide range of words and linguistic structures, which enriches their vocabulary. Students also improve their ability to organize and express their ideas in a coherent and cohesive manner; thus, they communicate more effectively.

Nuttall (2000) emphasizes the impact of extensive reading in foreign language learning claiming that one of the greatest ways to develop foreign language skills is to practice extensive reading. Extensive reading enhances general knowledge of the world since it offers connection with different places and cultures without traveling or moving around. It also promotes motivation and learner autonomy since it allows learners to follow their preferences in reading as they can select the topics they are interested in. In addition, learners can read at the speed they decide. Therefore, responsibility, autonomy and motivation to learn increase significantly.

According to Estrada y Parrado (2020), extensive reading has several important benefits, such as positive attitude towards reading and motivation, vocabulary building and consolidation. In addition, extensive reading practice allows progress and development of language and literacy skills, conceptual knowledge and reasoning. This study shows the positive impact that extensive reading has on the development of language skills. Furthermore, this study highlights the importance of integrating extensive reading in the EFL classrooms to enhance reading comprehension skills and language abilities in general.

1.2. Reading comprehension skills and technology

Reading comprehension is a key skill in education that allows people to understand, interpret and extract meaning from written texts. Manriquez (2019) states that reading comprehension is the process by which a reader interacts with a text using

linguistic and cognitive strategies to construct meaning and understand the message that the author transmitted. This, goes beyond simply decoding written words and includes the ability to comprehend and analyze the ideas presented in a text, relate them to previous knowledge, make inferences, identify the structure of the text, recognize main and secondary ideas, and critically evaluate the information provided.

Reading comprehension is fundamental to the educational process because it is the basis for acquiring new knowledge in all curricular areas. Students with good reading comprehension skills are more successful academically because they can understand and assimilate the information found in textbooks, study materials, and assessments. Leon et al., (2020) further mention that reading comprehension is important not only in academics, but also in everyday life. In our society, we are always exposed to written texts, such as instructions, forms, emails, news, and online content. When we can comprehend these texts effectively, we can make informed decisions, engage in discussions, solve problems, and gain information on a variety of topics

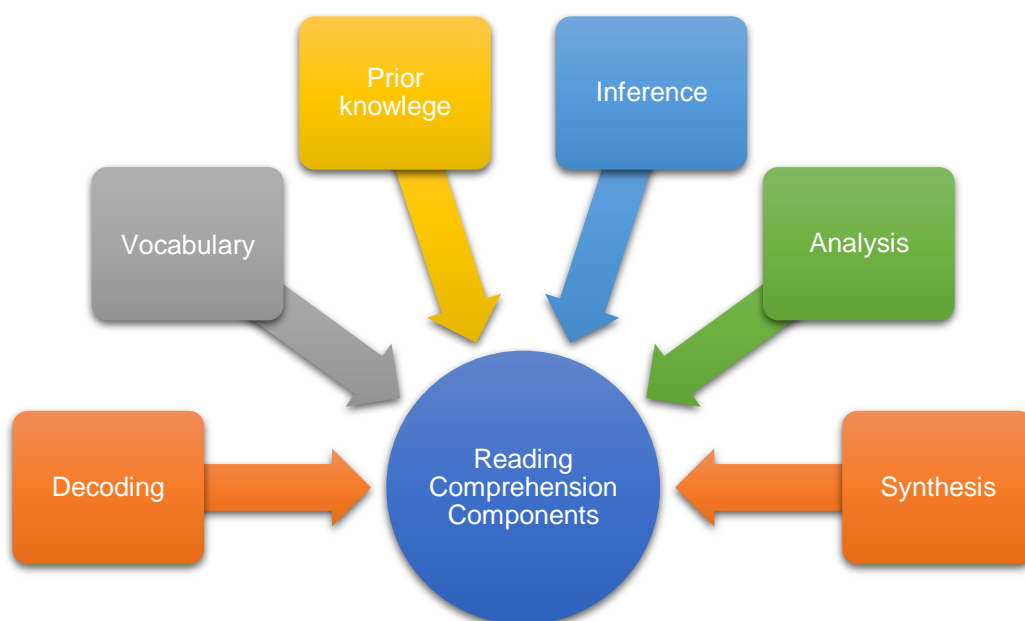
Reading comprehension is not limited to reading literary books or fiction, but it encompasses a wide range of texts, including newspaper articles, instructions, scientific texts, technical documents, and informational texts, among others. Reading comprehension is essential in fields such as history, literature, and social sciences to understand historical events, literary characters, cultures, and societies. Students must be able to read and comprehend literary, historical, and social texts to critically analyze them, extract relevant information, identify different points of view, and evaluate the validity of sources (Gonzalez, 2019). Likewise, reading comprehension enhances learning in all areas by fostering research skills, analyzing multiple sources, and constructing sound arguments.

To gain a thorough understanding of the subject matter and develop an informed perspective, students must be able to read and interpret a variety of information sources, including books, scholarly articles, online sites, and scientific papers. Each type of text requires a different approach and strategy for comprehension which

need to be encouraged. Manriquez (2019) states that anticipation, formulation of questions, synthesis of information, critical evaluation, and self-reflection of the reading process are essential strategies to understand and comprehend reading properly. Moreover, Hudson (2019) emphasizes some main components of reading comprehension (see Image 2 below).

Image 2

Reading comprehension components



Source: *Author, based on Hudson (2019)*

- **Decoding:** Decoding is the process of recognizing and understanding written words and symbols. It involves the ability to match the sounds of spoken language with the appropriate letters and words.
- **Vocabulary:** Knowledge and understanding of words is essential for readers to comprehend. A large vocabulary enables the reader to accurately grasp the ideas conveyed and understand the meaning of words in the context of the text.
- **Prior knowledge:** The reader's prior knowledge and experiences are essential to comprehension. The reader can make connections and extract meaning

from the text by connecting new information with what he or she already knows.

- *Inference*: The ability to draw conclusions or make assumptions based on the information provided in the text and the reader's prior knowledge is known as inference. It is necessary to read between the lines to understand the implied meaning.
- *Analysis*: Analysis involves breaking down and examining the elements and structures of the text. This includes finding main and secondary ideas, understanding the structure of the text (such as paragraphs and sections) and finding cause-effect relationships or comparisons.
- *Synthesis*: Synthesis involves bringing together various ideas and components of the text to create a comprehensive understanding. It is the ability to integrate information and generate a complete and organized view of the content of the text.

Reading comprehension is a crucial component of the educational process because it directly affects students' learning and development. All areas of study require the ability to comprehend and extract meaning from written texts since most educational material is presented in the form of texts, whether in textbooks, articles, essays, mathematical problems, or scientific papers (González, 2019). Good reading comprehension involves not only decoding written words, but also understanding and analyzing content, making connections to prior knowledge, inferring implicit information, identifying main and secondary ideas, and critically evaluating the information presented.

Reading comprehension is not limited to information acquisition; it fosters critical thinking and analytical skills since it requires constant interaction between the reader and the text. Cardenas & Guevara (2019) state that the reader must pay attention to details, understand the overall meaning of the text, and understand the connections among the ideas presented in the text. As people read, they make hypotheses, make connections, and reflect on the content presented. This enables readers to develop problem solving skills, make intelligent decisions, and actively participate in the world around them.

In all curricular areas, reading comprehension affects problem-solving and critical thinking skills. Students must analyze, synthesize, and evaluate information by interacting with written texts, identifying cause-effect relationships, posing meaningful questions, and developing new ideas. These cognitive skills are essential for solving complex problems in a variety of disciplines (Recio & León 2019). Reading comprehension also promotes a love of reading and constant learning. Students develop the habit of reading and autonomous exploration by being able to enjoy and comprehend texts, which broadens their horizons and enriches their knowledge in diverse areas.

Vidal and Manriquez (2019) indicate that it is important to highlight that reading comprehension is not only a responsibility of the subject of language or literature; it is a transversal skill that should be taught and practiced systematically in all curricular areas. Educators are essential in developing reading techniques, encouraging discussion and reflection on texts, and creating opportunities to apply and practice reading comprehension skills in appropriate contexts. Therefore, teachers need to seek engaging and useful tools to boost reading comprehension and technology offers several options to be used classes.

According to León et al. (2020), there are many internal and external factors that can affect reading comprehension. These elements can have an impact on students' ability to comprehend and extract meaning from written texts. Internal factors include motivation which is essential to understand a text. When a student is motivated to read, he or she is more likely to actively participate in the reading process and devote time and effort to comprehend the text. Interest in the topic, perceived relevance of the text, personal goals, or social valuation of reading are some of the factors that may affect motivation. Teachers play an important role in fostering motivation, selecting appropriate materials, tools and interactive activities, to promote deep comprehension.

External factors like the environment in which reading takes place can significantly affect readers' comprehension. A calm and quiet environment helps to maintain attention and concentration, which facilitates comprehension of the text. In addition,

access to a variety of reading materials in the environment can encourage reading practice and improve comprehension. In addition, support and access to a wide range of reading resources, including high-quality books, improve reading comprehension. Access to digital media and technology can also affect reader's comprehension. Digital resources, such as e-books, interactive apps, and online learning platforms, provide more opportunities to practice and improve reading comprehension.

Whereas access to computers was once considered a luxury, it is now seen as a crucial component of everyday life and education. The use of tablets in education is growing rapidly, and educators are exploring their potential benefits. Various authors propose that electronic books (e-books) are a useful way to integrate technology into preschool and elementary classrooms although there is no consensus on the extent to which e-books improve reading skills, such as "comprehension and decoding" (Ingram, 2020). Thus, e-books can be considered as useful tools to integrate technology in the teaching-learning process.

In relation to the development of reading comprehension skills, although it would be expected that practicing reading in digital environments would favor its acquisition and improvement, the results of the year 2012 PISA (Programme for International Student Assessment) from OECD (Organization for Economic Cooperation and Development) indicate that students who use computers frequently in school (more than 'once or twice a week') show poorer digital reading competence than those who do not use digital tools or use them moderately.

This same negative pattern has been found in the results of the PISA 2012 tests (OECD, 2015, chapter 6) in relation to mathematical and scientific competencies, defined as specific knowledge and skills to apply the contents of these areas to everyday life problems and situations (OECD, 2009). Specifically, students who frequently use computers and other digital tools in class tend to score lower on mathematical and scientific competence tests than those who either do not use them or use them infrequently.

From the data presented, it can be concluded that it is not only necessary to have digital devices to ensure effectiveness in accessing information and reading. Therefore, it is essential to analyze how they are used and what kind of online resources are students using rather than how many students have access to these types of devices. Furthermore, it can also be interpreted that academic performance does not improve solely by having digital means. It is paramount to provide students with proper guidance of how to use digital devices and resources so that they can serve as tools that benefit student performance in the learning process.

It is very important to consider that the results of an international survey, conducted on a representative sample of teachers and students in courses equivalent to the second year of secondary school in 21 countries, indicate that information and communication technologies are mainly used for the completion of simple tasks, both by students (writing papers and class presentations) and by teachers (supporting their explanations and reinforcing through repetition of examples) (Irrazabal, 2020). This information suggests that English teachers have to take advantage of the technological tools to apply them in the classroom with proper guidance to achieve teaching goals.

Even though English has acquired a global status as a language for science, technology, and international relations and many countries around the world have included the teaching of this language as part of their educational programs at various levels, it is notable that a high number of students at the end of General Media Education do not achieve this objective. In the particular case of Ecuador, English has been a mandatory subject and it is part of the curriculum for many university programs (Irrazabal, 2020). The main cause is the lack of English language exposure. Teachers and students should use proper tools to receive enough input so that learners produce the language easily.

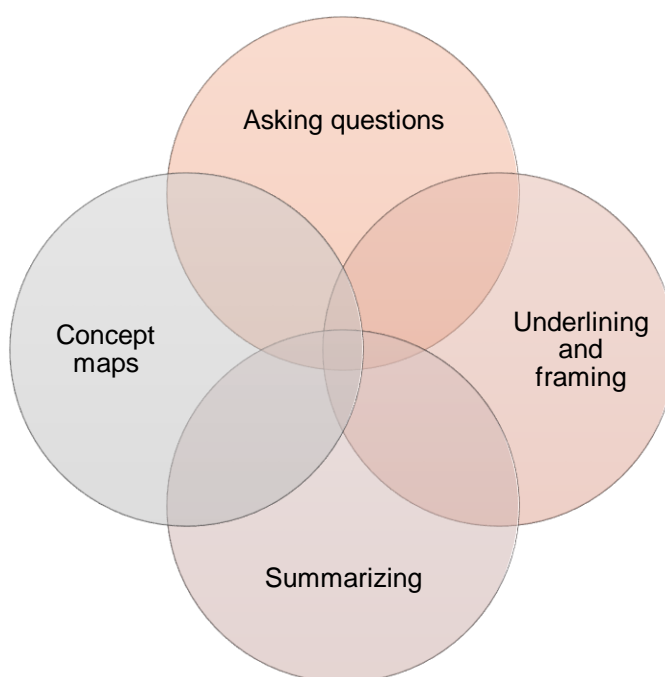
Ingram (2020) conducted a comprehensive qualitative study titled "The use of e-books, computers, and tablets to develop reading skills" to analyze the impact of these technological tools on students' reading proficiency. The study findings indicated that educators held the belief that technology has the potential to enhance

student motivation towards reading, leading to increased reading engagement. Furthermore, teachers reported utilizing a range of technological tools and resources in conjunction with conventional reading strategies to support and supplement the reading process. As a result, they enhanced reading skills on students as well as their motivation towards reading.

Along with the use of technological resources, it is essential that teachers and students apply techniques to enhance their reading comprehension. These techniques allow them to interact with the text in a more active and reflective way, which makes it easier for them to comprehend and retain information (Vidal & Manriquez, 2016).

Image 3

Reading comprehension techniques



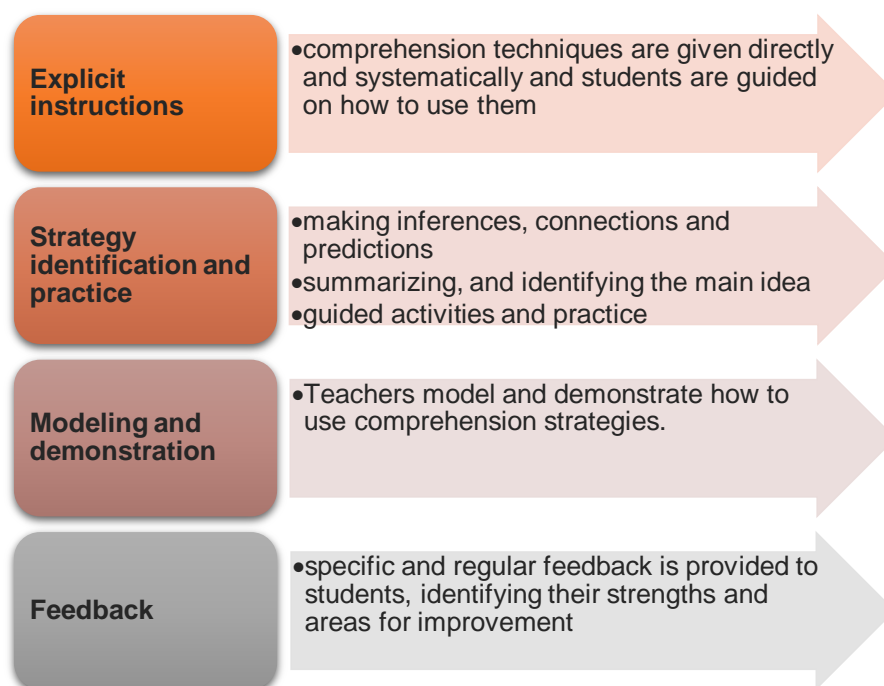
Source: *Author*

- **Asking questions:** Asking questions while reading helps people to participate more and focus more actively on the text. Students can ask questions before reading to establish reading objectives, clarify doubts or

summarize important information during reading, and reflect on the content after reading.

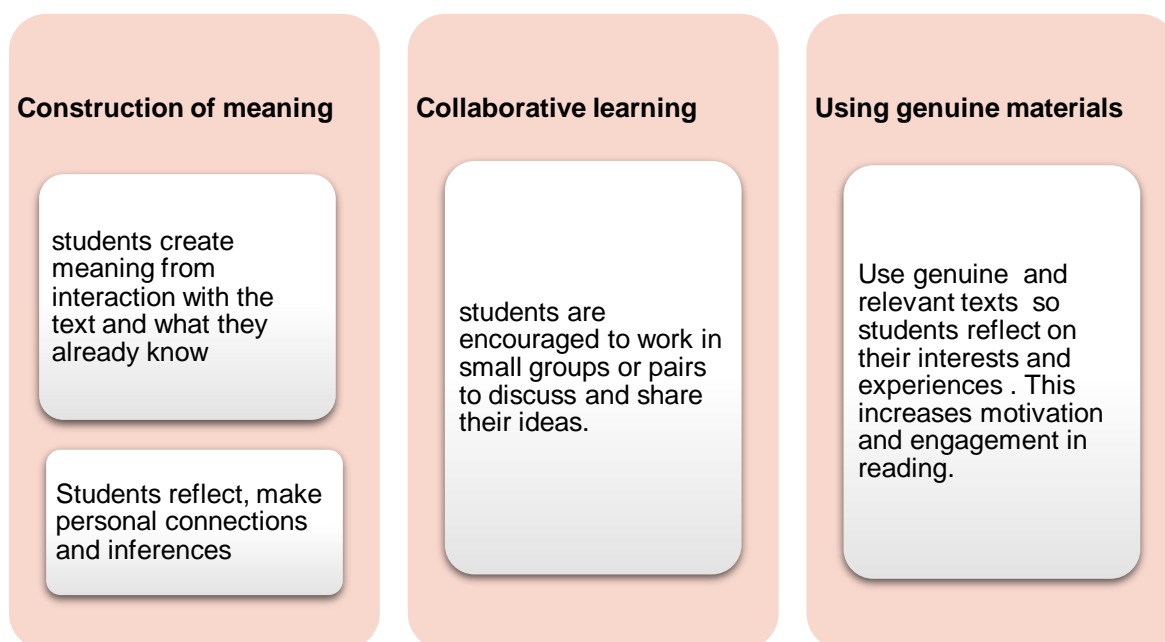
- **Underlining and framing:** The use of underlining and highlighting techniques helps to identify and highlight important content in the text. Students can underline key words, important phrases or main ideas, which helps them understand the structure and hierarchy of the text. To maintain their reading concentration, these techniques should be used selectively.
- **Summarizing:** students can summarize after reading a text to synthesize the important things. This involves identifying the main and secondary concepts and then expressing them concisely.
- **Concept maps:** Students can identify key words and logical links, visualize text structure and connections, and summarize information more clearly and more coherently using concept maps.
- **Reading aloud in small groups:** Reading aloud in small groups encourages people to discuss and share ideas. Students can raise questions, discuss the content of the text, and share interpretations. This enhances comprehension by having different points of view and it improves analysis of the material.

Teachers can apply the direct approach in their classes to help students improve their reading comprehension skills. The direct approach focuses explicitly on teaching reading comprehension techniques. The direct approach is based on the idea that explicit and systematic teaching strategies can improve students' reading comprehension, helping to develop stronger comprehension skills (Cárdenas & Guevara, 2019). This method aims to provide students with the tools and techniques to comprehend and process text correctly.

Image 4*The direct approach*

Source: Author

Constructivist approach focuses on how students actively contribute to the construction of meaning by interacting with the text. Constructivist learning theory is the basis of this approach, which holds that students construct their own knowledge from experiences, prior knowledge and interactions with their environment (Hudson, 2019). The constructivist approach recognizes the importance constructing meaning and encourages students to actively participate in the reading comprehension process. Students are expected to be the protagonists of their own learning, teachers provide tools, strategies and techniques to guide students but they are in charge of building knowledge. The following are some of the main characteristics of the constructivist approach:

Image 5*Characteristics of the constructivist approach*

Source: *Author*

It is important to note that these pedagogical approaches are not mutually exclusive, and in teaching reading comprehension, elements of both approaches can often be combined. Furthermore, García (2018) mentions that it is crucial to adapt the approaches to the characteristics and needs of students, as well as to their interests, developmental levels, different intelligences and learning styles. Therefore, the development of reading comprehension skills depends on the quality of teaching methods, techniques strategies, engaging materials and proper resources applied in classrooms.

1.3. E-books and teaching-learning process

Due to the emergence of the Internet, many publishers have invested in the development of websites and e-book platforms in order to have an online footprint and greater visibility. Initially, websites were seen by publishers primarily as online catalogs. However, the Internet has evolved and it has become a proactive tool for researching and understanding the book market. This issue becomes especially

relevant now that the latest developments in electronic publishing, especially with regard to portable reading devices such as e-book readers, have become a real thing. This opens up market opportunities for publishers that were nonexistent until recently. The use of E-books for recreational reading is becoming popular. E-books are competing with the conventional printed book, something that was not initially thought.

In the contemporary digital age, access to information and educational resources has been revolutionized by the spread of e-books. These electronic books, in digital format, have transformed the way students access and consume educational content. The adoption of e-books in the educational environment has a range of benefits of considerable relevance. First, the portability and accessibility they offer are paradigmatic attributes. Students can carry an entire library with them on a portable device, eliminating the need to carry physical books and allowing instant access to a wide range of resources anytime, anywhere. This freedom of mobility empowers the learner, providing autonomy over their learning process (Al Ali & Alnebari, 2022).

Park and Lee (2021) suggest that an e-book is defined as an electronic representation of a book, which can be created using a variety of software platforms. A book is not limited to a physical form, and it can be communicated in several ways, including electronic-visual and audio formats. Therefore, books can be hand-crafted, printed, viewed electronically, or listened to via audio. In addition, some books can be created with only visual elements and no written text. However, it is important to maintain the original book format; many times, some changes are made to catch the reader's attention and interest.

Electronic books, known as e-books, are publications that do not use paper as a medium, but are stored as computer files. It is important to distinguish between the reader (an electronic device with the capacity to store numerous e-books) and the E-book itself, which is simply a computer file in a specific format, such as PDF, MOBI, EPUB, among others. To protect copyright and publisher's rights, e-books cannot be printed or copied unless permission is obtained from the publisher or

owner (Korat, 2010). From a pedagogical perspective, the e-book is an instrument that can add significant value to the teaching-learning process, in addition to being a tool to promote new ways of approaching reading. Its acceptance is simple, since it opens up more attractive, visual, interactive and engaging training opportunities that are in line with the condition of digital natives.

New approaches to reading, literacy and types of readers seek to transform reading habits. Today, young people are familiar with hypertextual reading. In addition, updating content is considerably streamlined in digital format. Authors and editors can make modifications and additions quickly and efficiently, ensuring that the material is always up to date and reflects advances in the field of study. This is particularly relevant in disciplines subject to frequent change, such as technology or health sciences, where constant updating of knowledge is essential.

The impact of e-books use on academic performance has been the subject of numerous studies and research. It has been observed that the availability of digital resources can have a positive effect on engagement and retention of information. Students tend to be more motivated and engaged when they have access to multimedia materials, and interactive elements like videos, links and graphics that complement the text and provide a more dynamic and engaging learning environment. (López 2021). This interactivity encourages active participation and student engagement with the content, leading to deeper assimilation and more effective information retention, therefore it can be translated into better performance on assessments and assignments

The use of e-books in the learning process is a powerful tool with the potential to revolutionize education. Their portability, interactivity and updated content make e-books valuable resources for students and educators alike. However, it is crucial to address challenges such as the digital divide and ethical considerations in their implementation. Continued study of e-books' impact on academic performance and adaptation to the changing needs of students are crucial areas of research for the future. The potential of e-books in the educational revolution of the 21st century is

undeniable and their role will continue to evolve in line with technological advances and the demands of tomorrow's education (Al Ali & Alnebari, 2022).

According to a study carried out by Bee Choo & Zainuddin (2018) e-books are great tools to enhance reading comprehension skills. In their study, they found out that kids showed improvement in their reading comprehension. They applied a pre and posttest and students' scores increased significantly after using e-books. Also, the participants reacted positively towards reading e-books, their students were interested in every reading book assigned. E-books provide students with more practicality and even optimize time during study hours, as access to materials is almost instantaneous after purchase or acquisition.

1.4. Advantages of using e-books

In the current context of education, the integration of digital technologies has become a fundamental tool to enhance the teaching-learning process. In particular, the use of e-books has proven to be an effective strategy to improve reading comprehension in A2 level students in learning English as a second language (Rincón, 2017). One of the main advantages of incorporating e-books in the classroom is the portability and accessibility they offer. Students have the ability to access reading materials at any time and from a variety of devices, thus, eliminating the temporal and spatial limitations associated with printed books. This flexibility promotes student autonomy and encourages constant reading practice.

Interactivity and multimedia are another crucial aspect that distinguishes e-books.

These technological features enrich the reading experience by providing engaging and educational elements. The visual resources, audios, videos and animations embedded in digital books are perfect for young learners since they provide enriched contexts that facilitate the understanding of key vocabulary and concepts.

Also, e-books include external links or hyperlinks for further information and other references. This interactivity does not only increase students' interest, but also allows them to explore the content in a more dynamic and interactive way.

E-books provide children an engaging, appealing, and enjoyable reading experience that prepares them for learning. When children read interactive e-books, they become interested in technology and can interact with the book by using gestures and responding to noises. This involvement can help them improve their reading strategies, such as highlighting text or ideas, looking up information about the content, and keeping track of what they have learned. Interactive e-book learning systems (IELS) are already being used in elementary schools to enhance learning experiences and help students keep up with the information learned.

E-books are equipped with supporting tools that facilitate reading comprehension. Unfamiliar words may be read aloud to them, and many of the words will be highlighted when students click on them. The highlighted text provides students with word pronunciation and illustrations to infer their meaning. Moreover, many e-books include features that explain word definitions when students click on unfamiliar ones. Having this tool available during independent reading stimulates vocabulary acquisition. Integrated dictionaries, automatic translation, and voice-over pronunciation allow learners to solve vocabulary doubts and improve their pronunciation immediately. These tools provide valuable support during the reading process, helping students overcome potential obstacles and gain confidence.

E-books offer resources that are not available in printed books. For example, elements such as narration, word pronunciation, animations, and sound effects that complement the text can facilitate the task of decoding individual words and help students focus on understanding the text. Children understand e-books in a similar way to how they understand books that are read aloud to them by an adult. Korat (2010) highlights that engagement and motivation are essential elements of early literacy development and enhanced e-books can be appreciated for their ability to encourage less motivated young readers to read. Thus, for many students, the

resources provided by e-books can encourage engagement by sparking a motivational interest in digital reading.

E-books are often more affordable and accessible than traditional printed books. These features make e-books an attractive option for schools and educators. A wide range of portable devices (e.g., iPads, Amazon Kindles, Sony's digital books, and some cell phones) offer instant access to thousands of books and are easily portable, although some may require wireless capabilities. These digitized multimedia features also provide students with opportunities to reread texts independently. In addition, e-books can be easily shared, and readers can access them from a great variety of devices, which contributes to encourage reading inside and outside the classroom.

E-books can be an effective tool for promoting literacy and engaging students in the reading process. However, it is important to model the correct use of the interactive features and ensure that children are not distracted from the main content of the story. Teachers' instruction, monitoring, feedback and support are necessary to take full advantage of e-books in the classroom as well as at home. Children should also be provided with culturally adapted reading material in the classroom library, thus, readers' comprehension and interest in reading can improve significantly.

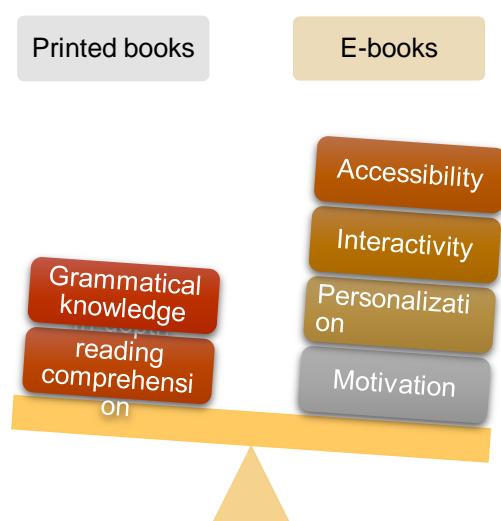
E-books are easily accessible when traveling. Users can carry hundreds of books with them wherever they go (Park & Lee, 2021). E-books are also stored in the reader's personal online account. E-books have a "search function", which allows people to instantly search for any information instead of wasting time turning page after page. In addition, most e-books are cloud-based, in that way, writers or authors can quickly change links online. As a result, users can access up-to-date books online which is another outstanding advantage of e-books. Unlike printed books, digital materials can be more easily updated and adapted to reflect educational trends and emergences in knowledge. This ability to keep content relevant and up-to-date ensures that students have access to accurate and current information (Al Ali & Alnebari, 2022).

Park and Lee (2021), in their article *Effects of e-books and printed books on EFL learners' reading comprehension and grammatical knowledge*, provide a comprehensive review of several studies comparing the effects of reading e-books on tablets and reading printed books on reading comprehension and grammatical knowledge of primary school students learning English as a foreign language. The results consistently show that while tablet reading improves literal reading comprehension, printed books are better for in-depth reading comprehension and grammatical knowledge. The studies suggest that teachers should encourage younger students to read extensively using tablets to develop basic reading comprehension, but also encourage them to read print books to improve in-depth reading comprehension and grammatical knowledge.

Today's young generation is growing up in a world of digital media, and children are exposed to multiple forms of technology. Electronic books (e-books) are a predominant tool that children have access to because it results in an increase in a child's language and reinforces their literacy development. E-Books have multiple features that can help decrease the learning achievement gap, promote learning and literacy development, especially for children from low socioeconomic families. Teachers must be able to meet the needs of all types of learners, and e-books can be an effective tool for understanding the content of a story.

Image 6

Printed books vs, e-books



Source: Author

Teachers are able to observe their students to determine whether e-books or traditional print books are better suited to their reading preferences. However, many research projects show that there is a need to use multimedia sources, such as e-books, as learning tools in the classroom. E-books can be more flexible than traditional paper texts, and can improve literacy for young children, especially beginner readers. To maximize the impact of e-books on learning, educators should use them in conjunction with traditional reading strategies and provide greater exposure to e-books in school.

CHAPTER II. METHODOLOGICAL DESIGN

2.1. Research methodology

According to Martinez and Salazar (2019), the research approach is the perspective from which the topic is addressed. This definition implies that the research approach is crucial for the proper development of the entire research study. It is important to define the research approach at the beginning of the study because it determines the type of data that is collected and the method that is used to analyze it. The initial basis determines the procedural and systematic route that leads to the fulfillment of objectives and other elements of the research process.

The research is framed within a mixed approach that systematically and coherently combines qualitative and quantitative aspects. The qualitative approach is related to the characteristics and description of e-books and reading comprehension skills. Its purpose is to achieve a general understanding of the context based on previous research and publications in order to analyze a specific environment where the research is carried out, i.e., the educational institution. The quantitative approach refers to numerical data obtained through statistical information gathered from research participants, namely teachers and students.

For this research, it is crucial to determine the most appropriate design to evaluate the causal effect of electronic books on reading. The design allows a systematic, progressive, and coherent study that fulfills the objectives of the research. The study employs a mixed-methods approach by utilizing statistical analysis for data presentation, analysis, and interpretation, thus, complementing the theoretical development of the qualitative component. The data collected are analyzed in accordance with the research objectives, leading to the development of the proposal and the establishment of the conclusions upon the research work.

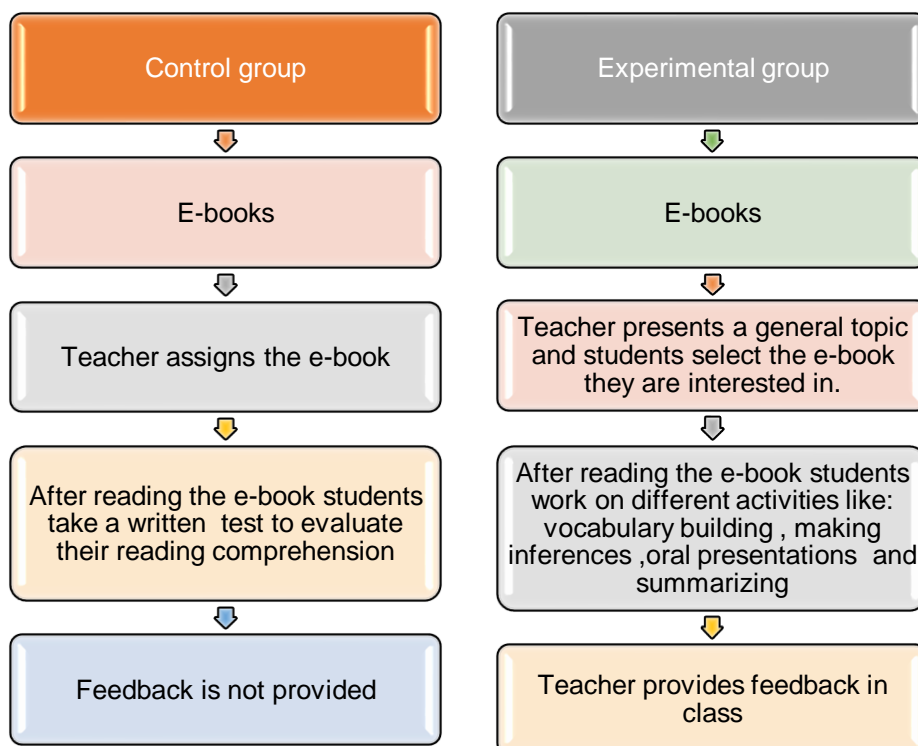
The research study employs a descriptive and experimental approach. Firstly, it provides a theoretical description of e-books and comprehensive reading elements to aid comprehension in the context of the work. Secondly, it analyzes two moments:

one before the use of e-books and the other after the use of e-books in the EFL classes. This information is used to compare, contrast, and verify the hypothesis through theoretical and practical support. The study focuses on A2 level students from the tenth year of basic education at the San Pio X High School without any exclusion criteria. The instruments used were systematically designed and authorized by the relevant parties to ensure accurate results.

For this study, the sample consists of 49 tenth-grade students from the San Pio X Educational Unit. Working with the entire population eliminates the need to calculate the sample size and ensures greater result reliability. The study divided the population into two groups: an experimental group and a control group. The study used a descriptive or correlational cross-sectional design. The study also employed an inter-subject quasi-experimental design, with 25 participants in the control group and 24 participants in the experimental group.

Image 7

Control group vs experimental book



Source: Author

To participate in the research, individuals must correspond to the tenth year, Level A2. This criterion was chosen specifically for the research, rather than for statistical generalization. The goal is to find results that either support or test the hypothesis based on the use of e-books and comprehensive reading. The language used in the text is clear, concise, and objective, with a formal register and precise word choice. The text adheres to conventional structure and formatting, with consistent citation and footnote style. The sentences and paragraphs create a logical flow of information with causal connections between statements. The text is free from grammatical errors, spelling mistakes, and punctuation errors.

To achieve the research objectives, information must be collected using the survey technique. This technique utilizes a structured questionnaire as an instrument based on the study's variables. The questionnaire includes a rating scale based on the Likert scale, which is used to measure attitudes and opinions of individuals involved in the study. In this case, the questionnaire includes questions about the use of e-books, the frequency of their use in the interlearning process, and other aspects related to comprehensive reading.

A test is administered to both the control and experimental groups before and after the application of comprehensive reading techniques. This allows for a comparison of performance between the two groups and at the two time points, determining the impact of using e-books on the application of comprehensive reading. The language used is clear, concise, and objective, avoiding biased or ornamental language. The sentence structure is simple and the technical terms are explained when first used. The text adheres to conventional academic structure and formatting. No new content has been added beyond what was provided in the original text. Both the survey and the test have been validated by professional experts in the field of education and research.

Table 1

Pre-test outcomes

STUDENTS	ANALYSIS QUESTIONS										INFERENCE QUESTIONS					VOCABULARY QUESTIONS				
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5
Student 1	✓	X	X	X	X	X	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	X	X	✓	✓
Student 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	✓	✓	✓	✓
Student 3	✓	X	X	X	X	X	✓	✓	X	✓	✓	✓	X	X	✓	X	X	✓	✓	
Student 4	✓	X	X	✓	X	X	X	✓	X	✓	✓	✓	✓	✓	✓	✓	X	X	✓	✓
Student 5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	X	X	✓	✓	✓	✓	✓
Student 6	✓	X	X	✓	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	✓	✓
Student 7	✓	X	X	✓	X	X	✓	✓	✓	✓	✓	X	✓	X	✓	✓	X	✓	X	✓
Student 8	X	✓	X	✓	X	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	X	✓	X	✓
Student 9	✓	X	X	X	X	X	✓	✓	✓	✓	✓	✓	X	X	✓	✓	X	X	X	✓
Student 10	✓	X	X	✓	X	X	✓	✓	✓	✓	X	✓	X	✓	✓	✓	X	X	X	✓
Student 11	✓	X	X	✓	X	X	✓	✓	✓	✓	✓	X	✓	✓	X	X	✓	X	X	X
Student 12	✓	X	X	✓	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	X	✓
Student 13	✓	✓	✓	✓	✓	✓	X	X	✓	X	✓	X	X	X	✓	X	✓	X	X	✓
Student 14	✓	X	X	✓	X	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	X	✓
Student 15	✓	✓	X	✓	✓	X	✓	✓	✓	✓	X	✓	X	X	✓	✓	✓	✓	✓	✓
Student 16	✓	X	X	✓	X	X	✓	✓	✓	✓	✓	X	✓	✓	✓	X	✓	X	X	✓
Student 17	✓	X	X	✓	X	X	✓	✓	✓	✓	X	✓	✓	X	X	X	✓	X	X	✓
Student 18	✓	X	✓	X	✓	✓	✓	✓	✓	✓	✓	X	X	X	✓	X	✓	X	X	✓
Student 19	✓	X	X	✓	X	X	✓	✓	✓	✓	X	✓	X	X	✓	X	✓	X	X	✓
Student 20	✓	X	X	✓	X	X	✓	X	✓	✓	✓	X	X	X	✓	✓	✓	✓	✓	✓

Student 21	✓	X	X	✓	X	X	✓	✓	✓	✓	✓	X	X	X	✓	X	✓	X	X	X
Student 22	X	X	X	✓	X	X	✓	✓	✓	✓	✓	✓	X	✓	✓	X	✓	X	X	✓
Student 23	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	✓	✓	✓	✓	✓	✓
Student 24	✓	X	X	✓	X	X	✓	X	✓	✓	✓	X	X	X	✓	✓	X	X	X	✓
Student 25	✓	X	X	✓	X	X	X	✓	✓	✓	✓	X	X	X	✓	X	✓	X	X	X
Student 26	✓	X	X	✓	X	X	✓	✓	✓	✓	✓	✓	✓	X	✓	X	✓	X	X	✓
Student 27	✓	X	X	✓	X	X	✓	✓	✓	✓	✓	X	X	X	✓	✓	✓	✓	✓	✓
Student 28	✓	X	X	X	✓	X	✓	✓	✓	✓	X	X	X	X	✓	X	✓	X	X	X
Student 29	X	X	X	✓	X	X	✓	x	x	✓	✓	X	✓	X	X	X	✓	X	X	X
Student 30	✓	✓	X	✓	X	✓	✓	X	✓	✓	✓	X	X	✓	X	X	✓	X	X	X
Student 31	✓	X	X	✓	X	X	X	✓	X	✓	X	✓	X	X	✓	X	✓	X	X	✓
Student 32	✓	X	X	✓	X	X	✓	X	X	✓	X	✓	X	X	✓	✓	✓	✓	✓	✓
Student 33	✓	X	X	✓	X	X	✓	✓	✓	✓	X	X	X	X	✓	X	✓	X	X	✓
Student 34	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	X	✓	X	X	X
Student 35	X	X	X	X	X	X	✓	X	✓	X	X	✓	X	X	X	X	✓	✓	X	✓
Student 36	✓	X	X	✓	X	X	X	✓	X	✓	X	✓	X	X	✓	✓	X	X	X	✓
Student 37	✓	X	X	✓	X	X	X	✓	X	✓	X	X	X	✓	X	X	X	X	X	X
Student 38	✓	X	X	✓	X	X	✓	X	X	X	X	✓	X	X	X	✓	X	✓	X	✓
Student 39	X	✓	X	X	X	X	✓	X	✓	✓	✓	X	X	X	✓	X	✓	X	X	✓
Student 40	✓	X	X	X	X	X	X	X	✓	✓	✓	X	X	✓	✓	X	✓	X	X	✓
Student 41	X	✓	X	X	X	X	✓	X	✓	X	✓	X	X	X	✓	X	X	✓	X	✓
Student 42	✓	X	X	X	X	X	✓	X	✓	✓	✓	X	✓	X	✓	X	✓	X	X	X
Student 43	X	X	✓	X	✓	X	✓	X	✓	✓	✓	X	X	X	✓	✓	✓	X	X	✓
Student 44	✓	X	X	X	X	X	✓	X	✓	✓	✓	X	X	X	✓	X	X	✓	X	✓
Student 45	✓	X	X	X	X	X	✓	X	✓	✓	✓	X	X	X	✓	X	✓	X	X	✓

Student 46	✓	X	X	X	X	X	✓	X	X	✓	X	✓	X	X	X	X	✓	X	X	✓
Student 47	✓	X	X	✓	X	X	X	X	✓	✓	✓	X	✓	X	✓	X	X	✓	X	✓
Student 48	✓	X	✓	X	X	X	✓	X	✓	✓	X	X	X	X	✓	X	✓	X	X	✓
Student 49	✓	X	X	✓	X	X	✓	X	✓	✓	✓	X	X	X	X	X	✓	X	X	✓

Source: *Author*

Table 2

Post – test control group

STUDENTS	ANALYSIS QUESTIONS										INFERENCE QUESTIONS					VOCABULARY QUESTIONS				
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5
Student 1	✓	X	✓	X	X	X	✓	✓	X	✓	✓	X	✓	✓	✓	✓	✓	X	✓	✓
Student 2	✓	X	✓	✓	✓	X	✓	✓	✓	✓	✓	X	X	✓	✓	✓	✓	✓	✓	✓
Student 3	✓	X	X	✓	X	X	✓	✓	X	✓	✓	✓	X	X	X	✓	X	X	✓	✓
Student 4	✓	X	✓	✓	X	X	X	✓	X	✓	✓	✓	✓	✓	✓	✓	X	X	✓	✓
Student 5	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	X	✓	X	X	✓	✓	✓	✓	✓
Student 6	✓	X	X	✓	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓
Student 7	✓	X	X	✓	X	X	✓	✓	✓	✓	X	X	✓	X	✓	✓	X	✓	X	✓
Student 8	X	✓	X	✓	X	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	X	✓	X	✓
Student 9	✓	X	✓	X	X	✓	✓	✓	✓	✓	✓	✓	X	X	✓	✓	X	X	X	✓
Student 10	✓	X	✓	✓	X	X	✓	✓	✓	✓	X	✓	X	✓	✓	✓	✓	X	X	✓
Student 11	✓	X	✓	✓	X	X	✓	✓	✓	✓	✓	X	✓	✓	X	X	✓	X	X	X
Student 12	✓	X	X	✓	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	X	✓
Student 13	✓	✓	✓	✓	✓	✓	X	X	✓	X	✓	X	X	X	✓	✓	✓	X	X	✓
Student 14	✓	X	✓	✓	X	X	✓	X	✓	X	✓	X	✓	X	✓	X	✓	X	X	✓
Student 15	✓	✓	X	✓	✓	X	✓	✓	✓	✓	X	✓	X	X	✓	✓	✓	✓	✓	✓

Student 16	✓	X	✓	✓	X	X	✓	✓	✓	✓	✓	X	✓	✓	✓	X	✓	X	X	✓
Student 17	✓	X	X	✓	✓	X	✓	✓	✓	✓	X	✓	✓	X	X	✓	✓	X	X	✓
Student 18	✓	X	✓	X	✓	✓	✓	✓	✓	✓	X	X	X	✓	X	✓	X	X	✓	
Student 19	✓	X	X	✓	X	X	✓	✓	✓	✓	X	✓	X	X	✓	X	✓	X	X	✓
Student 20	✓	X	X	✓	X	✓	✓	X	✓	✓	✓	X	X	X	✓	✓	✓	✓	✓	✓
Student 21	✓	X	X	✓	X	X	✓	✓	✓	✓	✓	X	X	X	✓	X	✓	X	X	X
Student 22	X	X	X	✓	X	X	✓	✓	✓	✓	✓	✓	X	✓	✓	X	✓	X	X	✓
Student 23	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	✓	✓	✓	✓	✓	✓
Student 24	✓	X	X	✓	X	X	✓	✓	✓	✓	✓	X	X	X	✓	✓	X	X	X	✓
Student 25	✓	X	X	✓	X	X	X	✓	✓	✓	✓	X	✓	X	✓	X	X	X	X	X

Source: *Author*

Student 15	✓	✓	✓	✓	X	✓	X	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Student 16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	✓
Student 17	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	✓
Student 18	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Student 19	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	✓
Student 20	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Student 21	✓	✓	X	✓	X	✓	X	X	X	X	✓	X	X	✓	✓	X	X	✓	X	✓
Student 22	✓	✓	✓	X	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Student 23	✓	✓	X	✓	✓	✓	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Student 24	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Source: *Author*

The collected information is quantitatively analyzed by contrasting the data through the calculation of the Mann-Whitney U, a non-parametric statistical test with a significance level of 95%. IBM SPSS Static is used as computer support for data processing and analysis. It is important to note that the Mann-Whitney U is a non-parametric statistical test that compares two independent samples. No changes were made to the content of the text.

The dependent variable has an ordinal level and the Mann-Whitney test uses a method of approximation to a 'normal' range to determine the p-value.

The formula applied is:

$$Z = \frac{w - \frac{n(n + m + 1)}{2}}{\sqrt{\frac{nm(n + m + 1)}{2}}}$$

Where:

W= Mann Whitney U statistics.

N= Data from sample 1

M= Data from sample 2

η_1 = Median of sample 1

η_2 = Median of sample 2

Data obtained in the research is used to replace the formula elements.

$$Z = \frac{0,001 - \frac{49(24 + 25 + 1)}{2}}{\sqrt{\frac{24.25(49 + 25 + 1)}{2}}}$$

A descriptive and inferential process is carried out to process the information. After data collection, an analysis of written sources (bibliographic research) is conducted to obtain valid information from different authors regarding the variables under investigation. After reaching a deep understanding of the problem, viable solution

alternatives are proposed. In terms of statistics, the p-value has been used to indicate the degree of abnormality or uniqueness of the results of the population being studied, specifically in relation to the control and experimental groups.

2.2. Characterization of the institution

The San Pio X high school, located in the city of Ambato, is a privately-supported Catholic institution. It currently has two campuses: the traditional and emblematic Atocha campus, and the innovative and recently inaugurated Quillan Loma Campus during the 2019-2020 academic year. The institution prioritizes the best interests of children and adolescents as one of its fundamental practices. The focus is on continuously and progressively improving the teaching, learning, and inter-learning processes while considering the needs and interests of the learners. Empathetic attitudes are developed to ensure that children and adolescents feel that their needs are being met.

The approach to rights and duties involves strengthening knowledge and fulfillment of individual rights and responsibilities. The goal is to ensure that everyone can exercise their freedom effectively, freely, and efficiently, and create channels of communication that allow for the dissemination of rights and duties, leading to the integral development of individuals' personalities and their ability to formulate personal projects. This should be done while assuming responsibility for the opportunities available for their future.

San Pio X high school encourages a culture of conciliation and non-aggression among all members of the high school. The school promotes the internal regulatory procedures of the campus through participatory, equitable, and inclusive processes, while avoiding old and obsolete schemes linked to power struggles, the culture of machismo, intolerance, and apathy towards acting in favor of others. Additionally, San Pio X high school fosters the principle of harmonious coexistence. Encouraging the establishment of close professional relationships among all members of the educational community and empowering them to adopt attitudes of acceptance, trust, and respect. It also promotes personal growth in values that emphasize

respect for individual differences, fostering attitudes of solidarity, and eliminating any form of exclusion.

In Quillan campus, where the seventh year under study is located, the following services are offered:

- 41 classrooms.
- All classrooms have projectors and computers for the teaching and learning process, and all are equipped with Internet access.
- Two snack bars for breaks.
- A school cafeteria for those students who wish to serve themselves the snack offered by the Institution.
- Two computer labs.
- Two English laboratories.
- Two robotic laboratories
- Two auditoriums.
- Theater.
- Departments of the Rectorate, Vice Rectorate, Inspections, DECE, Secretaries, Finance, Procurement.
- Library.
- Sports courts.
- Spaces for table tennis.
- Departments for each of the study areas.
- Two medical departments.
- Toilets for men and women.
- Storage rooms.
- Chapel for Liturgical Religious Celebrations.
- Room of attention to students' parents.
- Green areas

The Institution welcomes students from diverse socio-economic backgrounds and provides individualized attention. The educational processes follow the national

curriculum but also prioritize the formation of values based on the Catholic religion. The goal is to develop well-rounded individuals who understand that scientific knowledge should be used to help others. Recreational activities are also offered, and the promotion of values is emphasized for personal and social development.

2.3. Methodological proposal

The research conducted helps us comprehend the effect of using e-books and comprehensive reading on students' learning acquisition. The absence of either of these two elements results in disadvantages, such as:

- a) Limited access to written sources and limited cultural and scientific background.
- b) Lack of use of technological resources.
- c) Inaccessibility to the comprehension of what is read and delay in learning.
- d) A limited ability to assimilate data, theories, and other relevant information necessary for academic training.

These inconveniences result in limited access to the necessary information for acquiring skills with performance criteria in tenth grade. This leads to suboptimal academic performance that does not align with the learning objectives of the national curriculum and institutional curricular project. Therefore, curricular planning must include auxiliary elements, like e-books which are technological tools that facilitate the complete acquisition of skills and improve individual and collective student performance. It is necessary to point out some specific ways in which e-books can be used in education:

- As textbooks: E-books can be used as full textbooks or as supplements to traditional textbooks. In the case of full textbooks, they can offer significant advantages in terms of accessibility, personalization, and interactivity.

- For research: E-books can be used to access research information quickly and easily. This can be especially useful for students who are working on research projects or who need to conduct frequent research.
- For self-directed learning: e-books can be used for self-directed learning, allowing students to access content at their own pace and in their own environment.

E-books are a useful tool for enhancing students' education. They offer several advantages, including accessibility, personalization, interactivity, and up-to-date information. In order to provide evidence for these claims and design a solution proposal, surveys and tests were conducted on tenth-year students in both the control and experimental groups. The results showed the existence of difficulties. Additionally, complementary studies related to this topic were investigated to analyze the objectives, methodology, results and conclusions reached as a contribution to this work.

Based on this background, the proposal below is designed to use e-books to improve reading comprehension in tenth-grade students, with a focus on the English subject. The following activities are proposed to achieve this goal.

Activity 1. Enrich your lexical knowledge

Objective

- To improve students' knowledge of vocabulary items by working on new lexical terms.

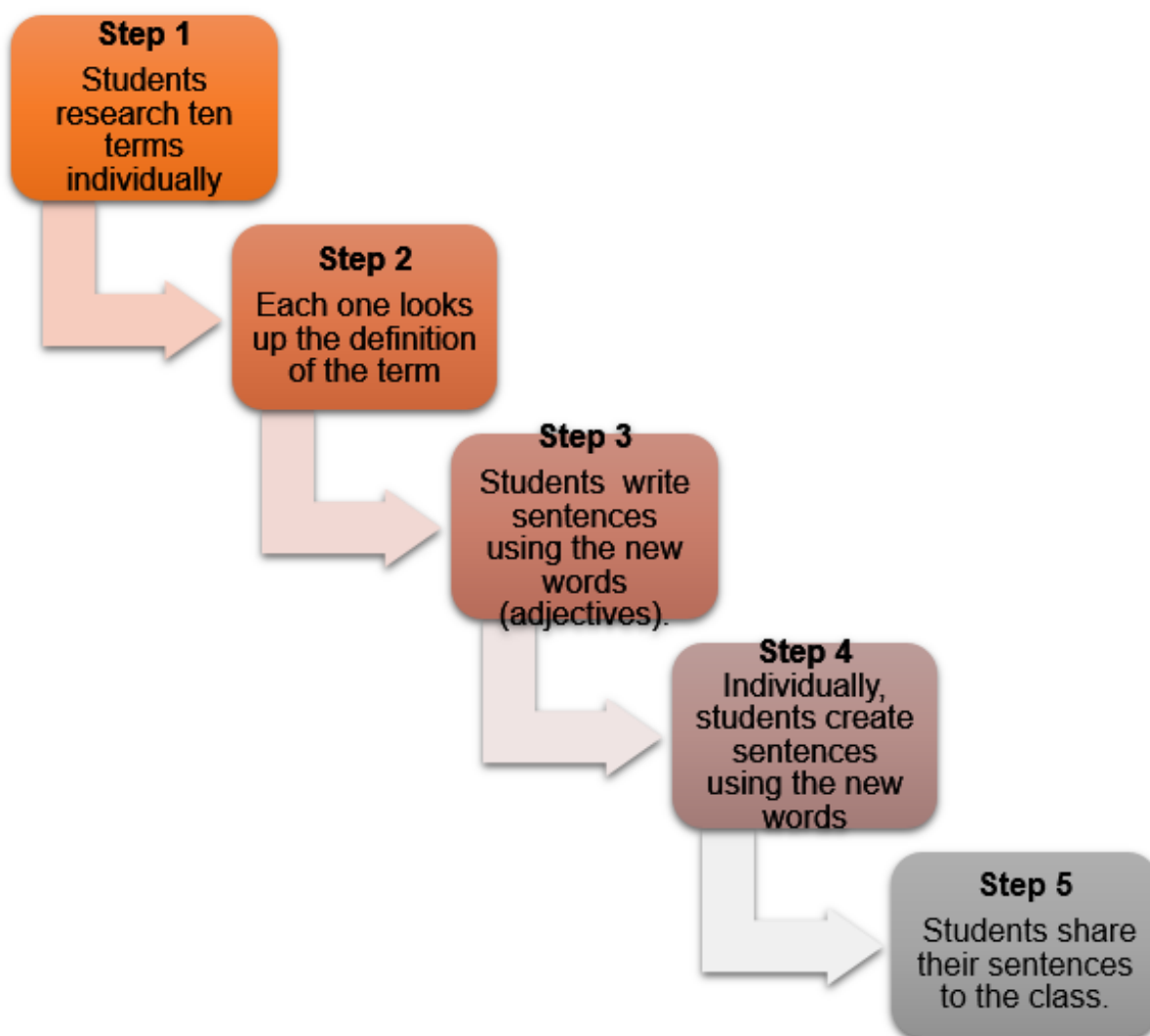
Duration: 6 class periods

Focus on: adjectives

Process

Image 8

Activity 1



Source: *Author*

Activity 2. Language in context

Objective

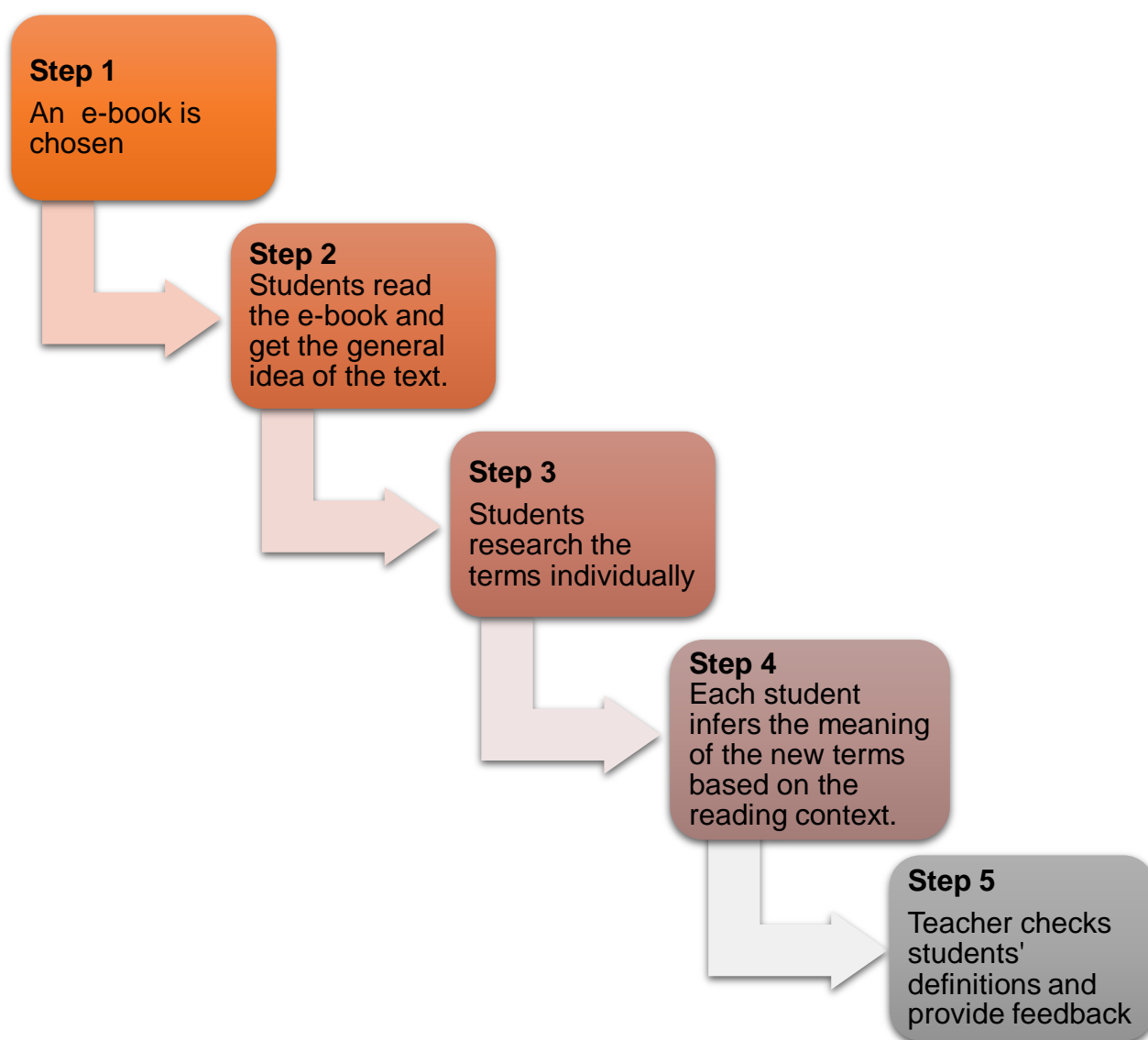
- To deduce the implicit meaning of unknown words based on context.

Duration: 6 class periods

Process

Image 9

Activity 2



Source: *Author*

Activity 3. Science enrichment

Objective

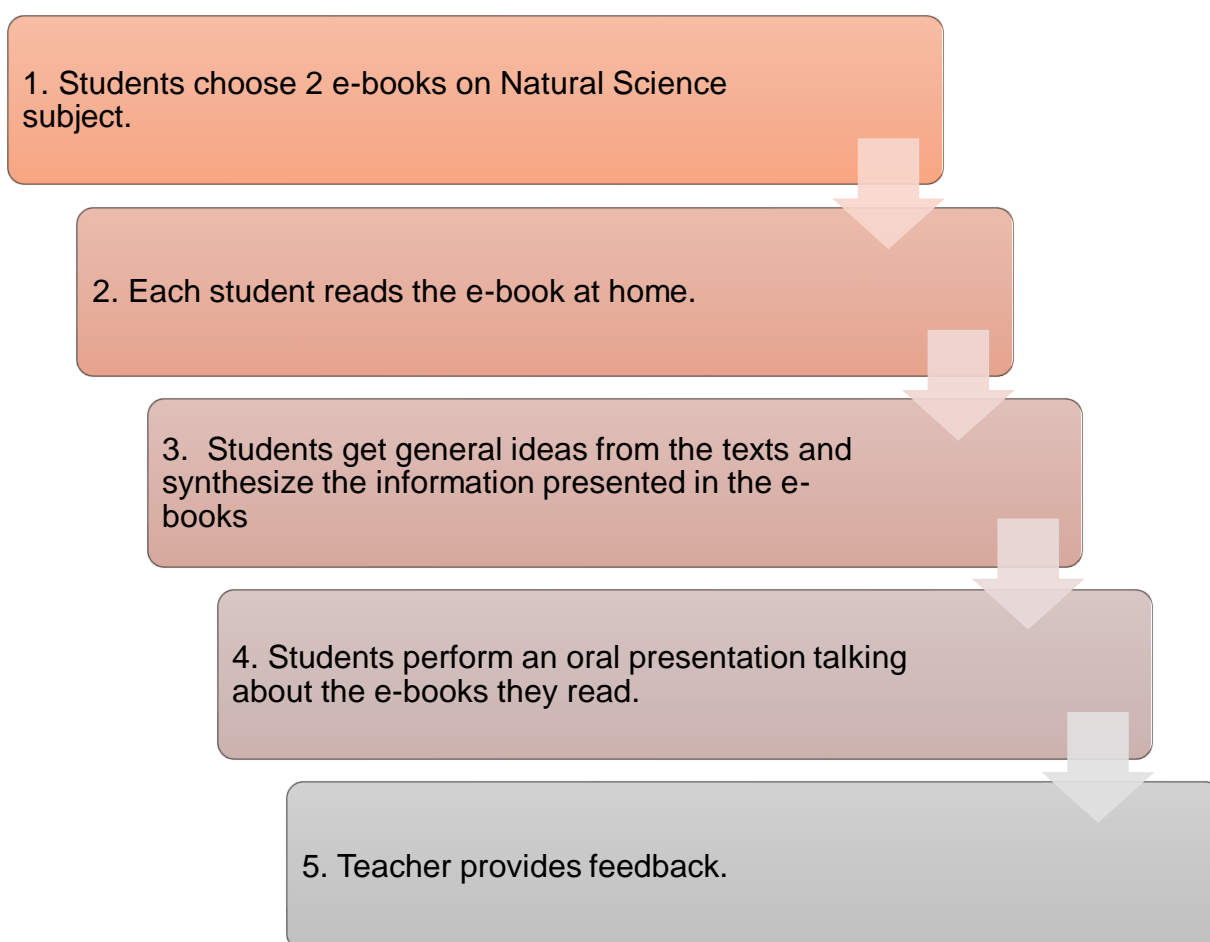
- To perform the synthesis process of a Natural science content through the application of comprehensive reading strategies.

Duration: 6 class periods

Process

Image 10

Activity 3



Source: *Author*

Activity 4. Talking about myths and legends

Objective

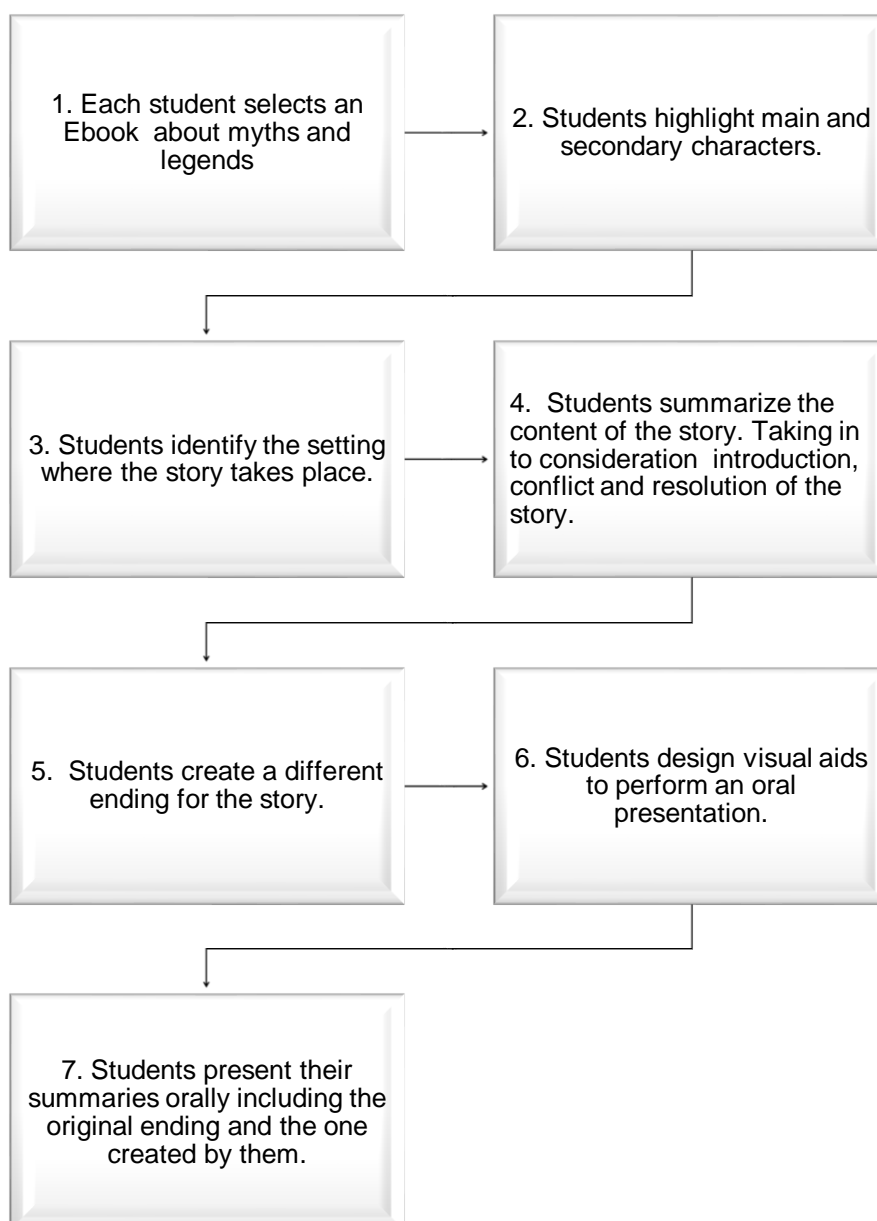
- To analyze myths and legends in eBook and create a different ending

Duration: 4 class periods

Process

Image 11

Activity 4



Source: Author

Activity 5. Let's discuss!

Objective

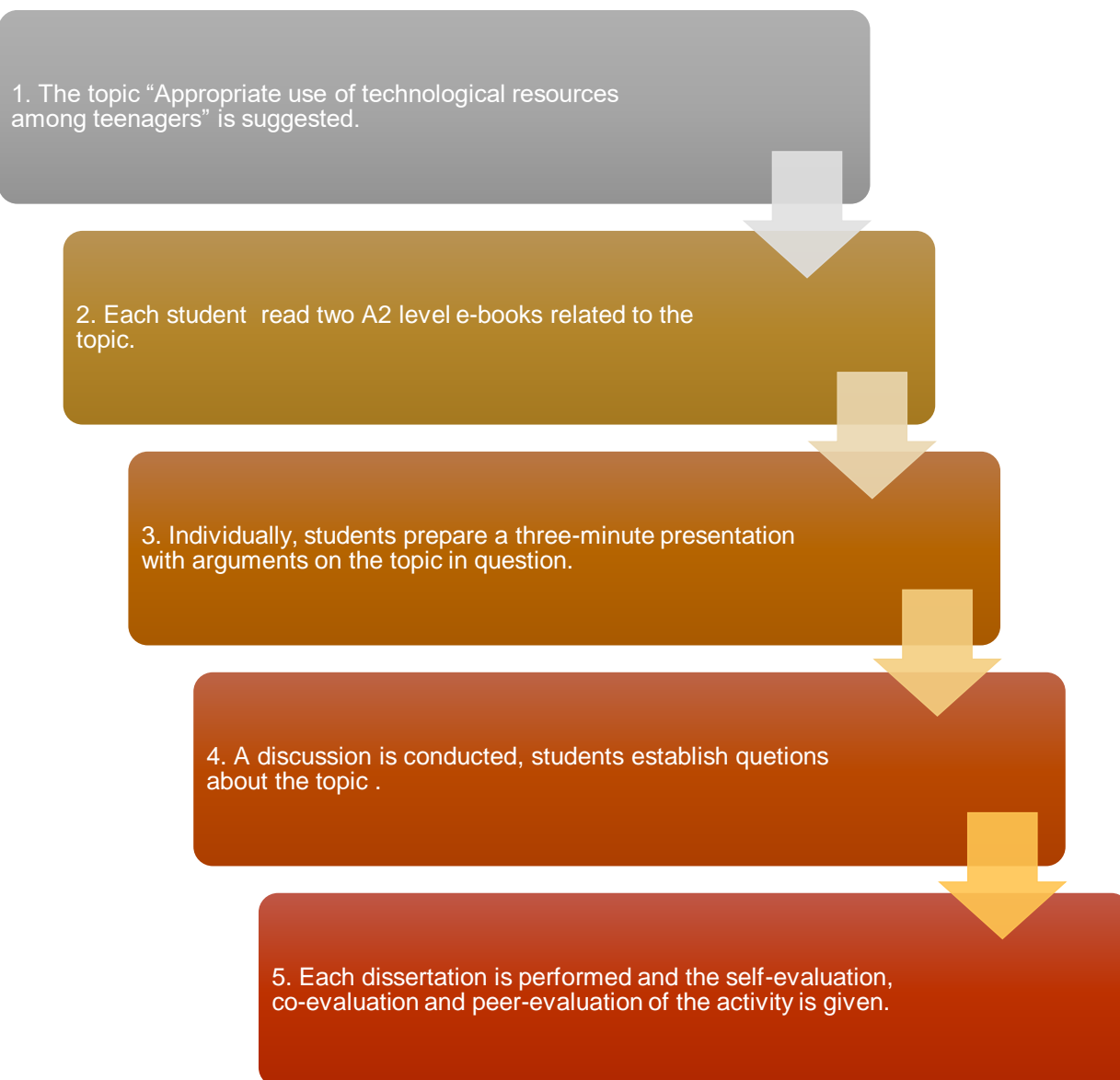
- To promote discussions in classes based on reading texts.

Duration: 4 class periods

Process

Image 12.

Activity 5



Source: *Author*

The activities proposed above aim to solve the problem identified in the San Pio X High School. In addition to the classroom structure and procedures, parents and teachers can engage in complementary activities to enhance students' reading comprehension skills at the San Pío X high school.

- Reading with students is one of the best ways to help them learn. Parents and teachers can read with students every day, whether it's a story, news article, or educational piece.
- After reading, discussing the material can help children understand the meaning of the text and develop their vocabulary.
- It's important to offer students opportunities to read as well. Students should have opportunities to read. Parents and teachers can provide books, magazines, and other reading materials.
- Students experience difficulty reading, it is important for parents and teachers to seek help from a professional. Reading comprehension is a crucial skill for success in both school and life.
- Emphasizing the involvement of parents and teachers is crucial as they can assist students in developing their reading skills by providing reading opportunities, discussing the books they read, and offering help with any reading difficulties.

CHAPTER III. ANALYSIS OF THE RESULTS OF THE INVESTIGATION

3.1. Pre - and post-test results analysis

In the pre-test, students completed a comprehensive reading activity followed by a series of questions to assess their understanding. The results are presented in the following table.

Table 4

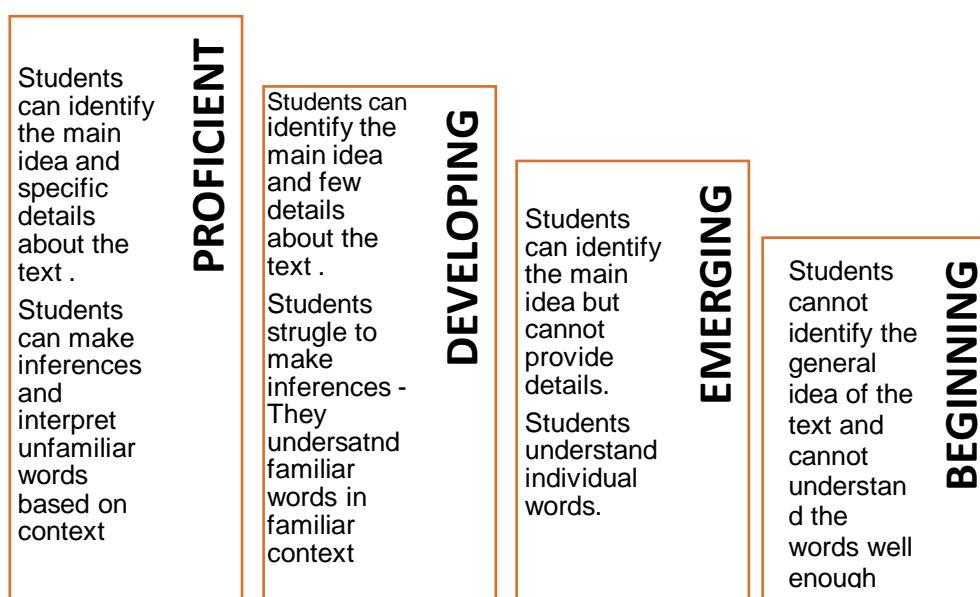
Pre-test results

PARAMETERS	SCORE			
	10 - 9	8,99 - 7	6,99 - 4	3,99 - 0
	PROFICIENT	DEVELOPING	EMERGING	BEGINNING
ANALYSIS	4	5	18	22
INFERENCE	8	11	21	9
VOCABULARY	7	12	20	10

Source: *Author*

Image 13

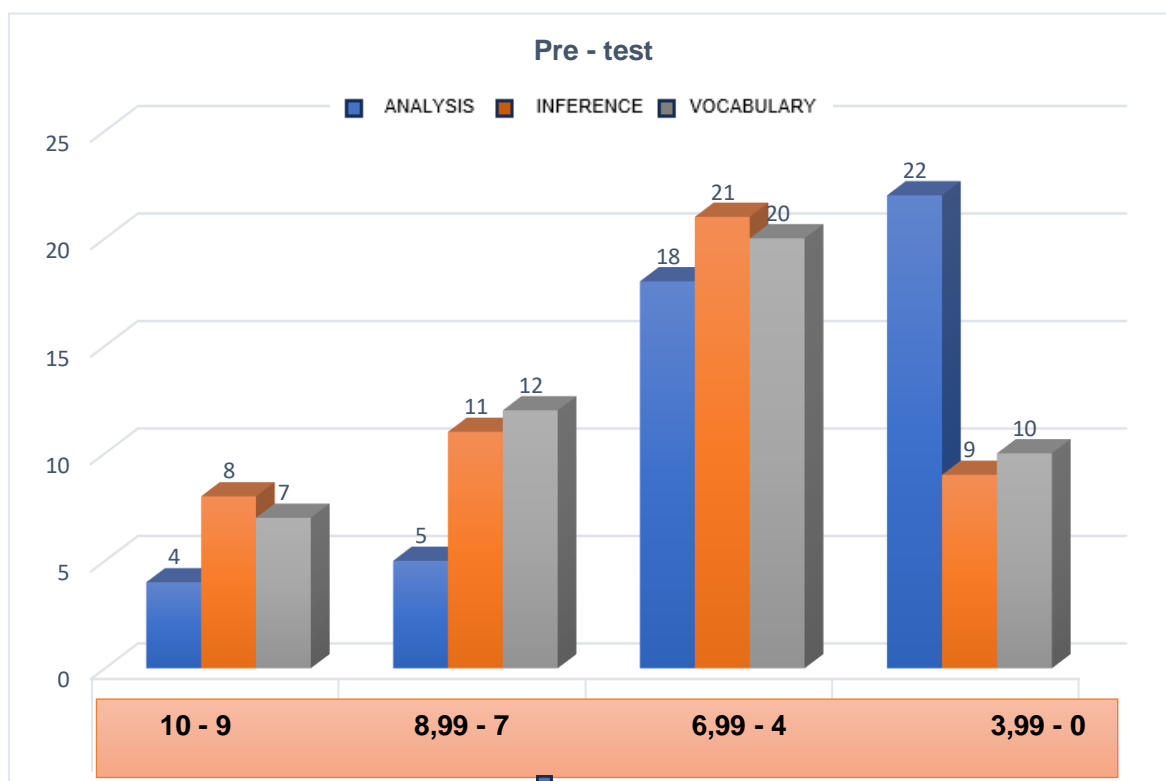
Evaluation parameters



Source: *Author*

In the pre-test, the students' scores are mostly in the Emerging and Beginning levels, with the smallest number of students in the Developing and or Proficient levels. This confirms the need to contribute with strategies and use of resources that serve to improve averages and learning.

Image 14
Pre - test results

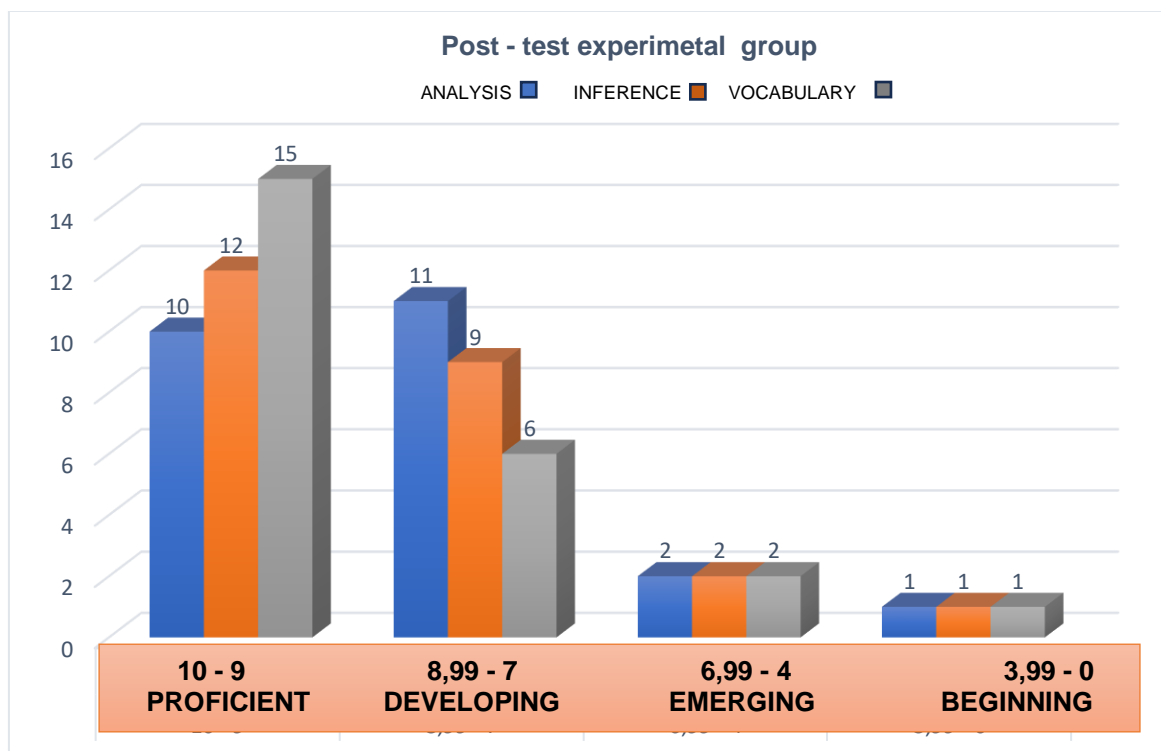


Source: *Author*

Subsequently, the experimental group read 10 e-books at home and in the EFL classroom, where students applied activities to develop their reading comprehension. These activities included vocabulary building, making inferences, summarizing, synthesizing, and discussing different topics presented in the e-books. The English teacher guided and monitored the activities in class and provided feedback. The control group of students read the same number of e-books but after reading, they took a test which consists of answering some questions. They did not receive any instruction on reading comprehension skills development.

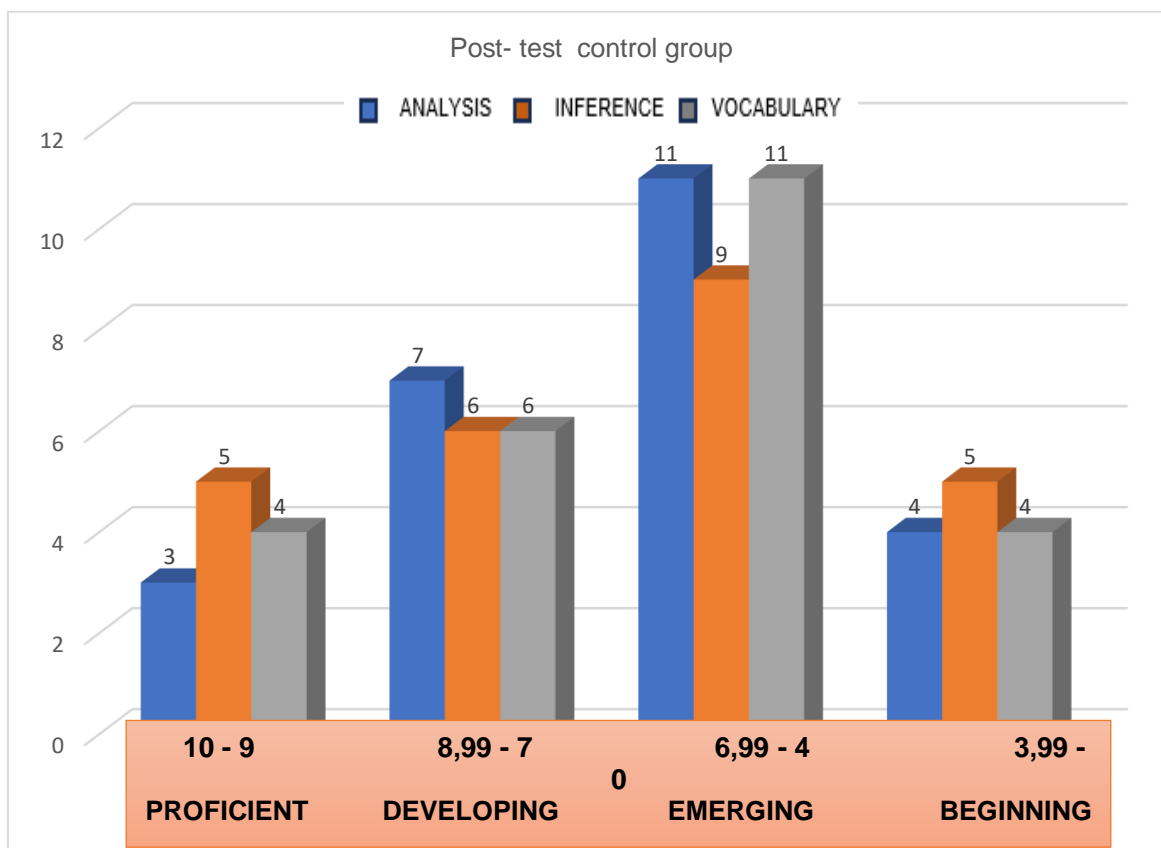
The use of e-books, as a resource, and the implementation of strategies to enhance reading comprehension in students leads to the acquisition of developing and proficient levels. Progress can be observed in the development of vocabulary and analytical skills.

Image 15
Post - test results



Source: Author

The control group, which follows the traditional strategy of reading and taking the test to evaluate their reading comprehension, shows similar percentages to those of the pre-test. These percentages are mostly below the required level of learning. Overall, the pre- and post-test results indicate a significant difference in the evaluated parameters related to the research variables. The percentages demonstrate that in the first case, the scores were classified as emerging or beginning, indicating a failure to achieve the required level of learning. However, this aspect was reversed in the post-test, with better results observed between the developing and proficient levels.

Image 16*Post - test results of control group*

Source: Author

3.2. Analysis of descriptive results

As shown in Table 4 below, 49 students participated in the study. 25 correspond to the control group and 24 to the experimental group. In the first group, there are 11 male and 14 female students; in the second group, there are 10 male and 14 female students.

Table 4
Data of the groups investigated

GROUP	CLASS		GENDER	
	A	B	MALE	FEMALE
Control	25	0	11	14
Experimental	0	24	10	14

Source: *Author*

Table 5 below shows the results of students' perception regarding the use e-books in their learning process; it can be seen that students tend to accept the usage of technological resources and tools as elements that favor reading comprehension in the English subject and in the other areas of knowledge. Therefore, they accept the use of e-books to enhance their learning process in general. Responses are according to the following scale:

1. Strongly agree
2. Agree
3. Neither agree nor disagree
4. Disagree
5. Strongly disagree

Table 5*Correlation between e-book and its benefit in reading comprehension*

GROUP	QUESTIONS	RESPONSES				
		1	2	3	4	5
Control	Does learning improve with the use of technological resources such as e-books?	14	5	3	2	1
Experimental		15	6	3	0	0
Control	Do you think it is feasible to own an e-book as a resource to enhance your learning?	12	7	2	3	1
Experimental		13	7	2	1	1
Control	Do you consider that teachers are trained to use e-books as a complementary tool in the classroom?	14	3	4	3	1
Experimental		16	3	3	2	0
Control	Do you consider e-books as an important tool for learning?	17	2	2	3	1
Experimental		14	4	5	1	0
Control	Does your reading comprehension improve using additional tools such as e-books?	10	6	5	3	1
Experimental		11	6	3	3	1
Control	Do teachers emphasize using tools to improve reading comprehension?	15	5	5	0	0
Experimental		12	6	5	1	0
Control	Do you think it is useful to boost your reading comprehension skills permanently?	12	6	4	2	1
Experimental		15	8	1	0	0
Control	Does the use of e-books promote the development of reading comprehension skills?	16	2	4	2	1
Experimental		17	2	3	1	1

Source: *Author*

Along with the results, the descriptive statistics are determined, from which the median of the results is calculated. As it can be noticed in table 6 below, the average in the experimental group has a median of 5.38 and in the control group it has a median of 4.92; these data show that the experimental group has a better

achievement than the control group. From this, it can be concluded that the use of e-books favors comprehensive reading in the subject of English among seventh grade students.

Table 6 provides data on the medians taken from the responses of the groups investigated.

Table 6: *Medians*

	Medians
Control	4,92
Experimental	5,38

Source: *Author*

3.3. Hypothesis verification

The research work is developed based on the following hypotheses:

H₀ The use of e-books does not improve reading comprehension skills in young A2 level students.

H₁ The use of e-books improves reading comprehension skills in young A2 level students.

The verification of the hypothesis is carried out on the basis of the results received in the two groups investigated, to whom an instrument is applied with five alternatives and the results are obtained on the basis of the non-parametric statistical test called Mann-Whitney U.

Table 7*Contrast statistics*

Calculations	Notes
Wilcoxon	267,000
Z	-5,123
Sig. asymptot. (bilateral)	,000
Grouping variable: groups	

Source: *Author*

Note: The result of the asymptotic significance (bilateral) is the one that is considered according to what is required for the verification of the hypothesis, it should be added that the level of reliability is given by 95% (value chosen by the researcher); this result is also defined as p value and depends on its figure for the determination of the verification; as in this case the value of "Sig. asymptotic (bilateral)" is 0.000 value lower than 0.05 it is decided that the null hypothesis is rejected and the alternative hypothesis is accepted.

The values given by the SPSS program based on Wilcoxon's W and Z are also considered in what are called contrast statistics:

Wilcoxon signed-rank test

Table 5*Contrast statistics*

Contrast statistics	
Wilcoxon	-3,217
Z	-5,123

Source: *Author*

With the Wilcoxon and Z test, it is observed that (in both cases) the p-value is less than 0.05; therefore, the decision to reject the null hypothesis and accept the alternative hypothesis is ratified:

H₁ The use of electronic books improves reading comprehension skills in young A2 level students.

CONCLUSIONS

- There is abundant research regarding e-books and reading comprehension. Most studies focus on the benefits that e-books offer since they provide various alternatives, such as dictionaries, interactive activities, audio, and images, which motivate students to read. However, it is essential to combine technological tools with appealing strategies to help students develop their reading comprehension skills.
- The proposal that was prepared, presented, and executed has yielded significant results. It includes teaching resources and activities that reinforce the knowledge acquired through reading the text. It is important to note that the use of e-books should involve meaningful strategies and activities to develop reading comprehension skills. Additionally, it is concluded that when used along with suitable reading comprehension strategies, e-books contribute to the cognitive development of language mastery.
- The use of e-books has significantly improved students' reading comprehension of the English language. Marked differences have been observed from the diagnostic assessment process to the final evaluation, in which students demonstrated systematic analysis, synthesis, and application of skills and competencies based on the texts they read and studied.
- It is also concluded that it is necessary to disseminate the results obtained from the research project with the educational community by means of a proposal that allows to diversify the use of the e-book resource as an advantageous element for the reading comprehension development that enables to access information in all areas of knowledge.

RECOMMENDATIONS

- It is recommended that the educational community of the San Pío X School assimilate the content of the proposal presented for an adequate application and verification of the results going through the teaching planning based on the meso-curricular proposed by the Institution.
- It is recommended that students and their families get involved in an effective and active way in the implementation of the proposal presented in this study so as to achieve an optimal use of the e-book resource. This will favor students' reading comprehension and their performance in all areas of knowledge.
- The teachers of the San Pío X School Unit are recommended to periodically evaluate the procedures carried out in order to detect situations that require improvement through research processes such as those developed in this study.
- It is advisable to disseminate the results obtained from the research project with the educational community by means of a proposal that allows to diversify the use of the e-book resource as an advantageous element for the reading comprehension development that enables to access information in all areas of knowledge.

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ANNEXES

Annex 1

Authorization was granted by the San Pio X high school to carry out the research project.



 **UNIDAD EDUCATIVA
"SAN PÍO X"** | "Educamos con amor, en la fe,
el conocimiento y la disciplina" 


Ambato, 12 de Marzo de 2022.


Lcda. Silvana E Mantilla B.





De mi consideración.

Luego de presentarle mi saludo cordial y respetuoso, tengo a bien comunicarle que, su solicitud para poder realizar el trabajo de Investigación (Titulación) con el tema: THE USE OF EBOOKS TO ENHANCE READING COMPREHENSION SKILLS IN A2 LEVEL YOUNG LEARNERS tiene la aprobación y el visto bueno correspondiente. Solicito coordinar con el Lic. Mike Núñez, Coordinador de Departamento de Inglés de la Institución, todos los procedimientos respectivos y pertinentes para el cumplimiento efectivo del mismo.

Con un atento saludo me despido.


Lic. Francisco Bazante G.
VICERECTOR.



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Facebook: Unidad Educativa San Pio X - Ambato  WhatsApp: 0991395015 - Matriz Ambato
Instagram: Unidad Educativa San Pio X  **CAMPUS BAÑOS DE AGUA SANTA:** Av. Amazonas, Km. 3 vía Baños
Puyo, Parroquia Ulba. Cel: 0991931945

Ambato - Ecuador

Annex 2

E-books students read

Tenth-grade students were assigned ten e-books over the course of a school year, and they were evaluated to determine the impact of e-books on their reading skills. San Pio High School offers the 'MyOn' platform, which provides access to thousands of e-books for both students and teachers.

The screenshot displays the Renaissance myON library interface. At the top, there is a navigation bar with 'Library' and 'Classroom' tabs, a 'View Demo Student' button, and the user's name 'Silvana Mantilla Barragan' from 'Unidad Educativa San Pio X'. Below the navigation bar are icons for 'Recommended', 'Browse', 'Favorites & Bundles', 'Search', and 'Standards'. The main content area is titled 'Browse' and features filters for 'Reading level' and 'Fiction / Non-fiction', both set to a minus sign, and a checked checkbox for 'Graphic novels only'. A grid of ten book category tiles is shown, each with an icon, a title, and a book count:

Category	Book Count
About Me	1,540 books
Animals	1,077 books
Genres	3,341 books
Hobbies & How To	312 books
Language Arts	244 books
Math Fun	
Scary & Gross	
Science	
Social Emotional Learning	
Social Studies	

The URL at the bottom left of the screenshot is <https://www.myon.com/library/browse.html>.

The screenshot shows the myON Renaissance Classroom interface. The top navigation bar includes 'Library', 'Classroom', 'View Demo Student', and the user's name 'Silvana Mantilla Barragan'. Below the navigation bar, there are tabs for 'Recommended', 'Browse', 'Favorites & Bundles', 'Search', and 'Standards'. The main content area is titled 'Recommended Reading' and features a filter for 'Books in your ZPD Reading Range' set to '4.6 - 9.0 (9th Grade)'. A grid of six book covers is displayed, each with a 'Read' and 'Share' button. The books are:

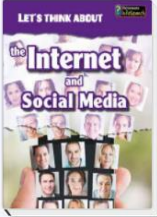
- Changing Roles, Changing Lives**: Stories of Women During the Industrial Revolution... (Reading level 6th Grade)
- Votes for Women!**: Stories of Women's Suffrage: Votes for... (Reading level 7th Grade)
- MUCH ADO ABOUT NOTHING**: by William Shakespeare (Reading level 9th Grade)
- A World After Fossil Fuels**: (Reading level 7th Grade)
- We Can Do It!**: Stories of Women in World War II: We Can Do It! (Reading level 6th Grade)
- THE TEMPEST**: by William Shakespeare (Reading level 9th Grade)

The eBook readings were assigned based on the topics covered in class. The objective was to reinforce the grammar and vocabulary studied in English classes, as well as to encourage the habit of reading.

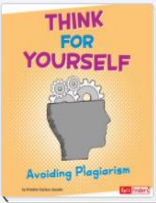
The screenshot shows the myON Renaissance Classroom interface in 'Project View' mode. The project is titled 'Reading English 10th D'. The project objective is visible, and the project status is shown as 'Not Started: 0', 'Started: 31', and 'Finished: 0'. The due date is 'Jun 17, 2022'. The 'Students Started' section lists five students, each with a toggle switch and a list of assigned reading tasks:

Students Started	Reading English 10th D
Aileen Maite Perdomo	<input checked="" type="checkbox"/> A Day inside the Human Body: Fantasy Science Field Trips
Camila Anahi Ricaurte	<input checked="" type="checkbox"/> Dangerous Diseases: Scary Illnesses that Frighten the World
Camila Aymar Salazar	<input checked="" type="checkbox"/> The Grimy, Gross Unusual History of the Toilet
Camila Jose Vaca	<input checked="" type="checkbox"/> Using Electricity
	<input checked="" type="checkbox"/> Giant Pandas in a Shrinking Forest: A Cause and Effect Investigation

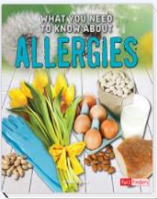
Bookmarks Servicios en Línea (12) WhatsApp Natural Disasters V... links importantes Videos Reverso Traductor... Important kinks Otros marcadores



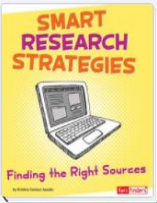
Let's Think About the Internet and Social Media
Reading level 6th Grade
[Read](#) [Share](#)
Add to Favorites



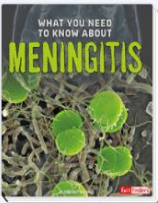
Think for Yourself: Avoiding Plagiarism
Reading level 6th Grade
[Read](#) [Share](#)
Add to Favorites




What You Need to Know about Allergies
Reading level 6th Grade
[Read](#) [Share](#)
Favorited



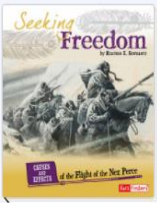
Smart Research Strategies: Finding the...
Reading level 6th Grade
[Read](#) [Share](#)
Add to Favorites



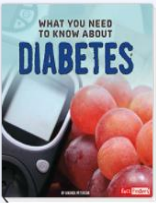
What You Need to Know about Meningitis
Reading level 6th Grade
[Read](#) [Share](#)
Add to Favorites



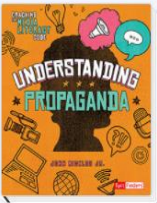
Descubre tus derechos legales (Understanding...
Reading level 6th Grade
[Read](#) [Share](#)
Add to Favorites



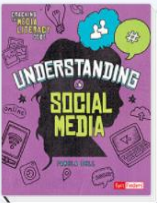
Seeking Freedom: Causes
Reading level 6th Grade
[Read](#) [Share](#)
Add to Favorites




What You Need to Know about Diabetes
Reading level 6th Grade
[Read](#) [Share](#)
Add to Favorites



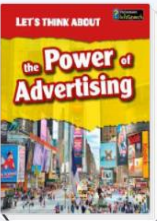
Understanding Propaganda
Reading level 6th Grade
[Read](#) [Share](#)
Add to Favorites



Understanding Social Media
Reading level 6th Grade
[Read](#) [Share](#)
Add to Favorites



Descubre tu papel en las elecciones
Reading level 6th Grade
[Read](#) [Share](#)
Add to Favorites



Let's Think About the Power of Advertising
Reading level 6th Grade
[Read](#) [Share](#)
Add to Favorites

RENAISSANCE myON Library Classroom View Demo Student Silvana Mantilla Barragan Unidad Educativa San Pio X

Activity Dashboard

My Roster

Books finished

This week ▲ 539

Last week 184

Groups

10mo D

Books finished

This week ▲ 171

Last week 34

10mo "B"

Books finished

This week ▲ 171

Books finished | Pages read | Time spent reading | Content read | Lexile | Quizzes | Assigned Projects

10mo D > Books finished Last week | This week ▼

Trend ▲	First	Last	Books finished		Change
			Previous	Current	
▲	Christopher Santiago	Sanchez	1	2	1
▲	Julian Ignacio	Villacis	2	4	2
▲	Camila Aymar	Salazar	0	2	2
▲	Telmo Enrique	Vaca	2	5	3
▲	Melanie Mercedes	Ramirez	1	4	3
▲	Naila Sarahi	Moretta	0	3	3
▲	Martina Rosario	Mera	2	5	3
▲	Justin Alexander	Vaca	2	6	4
▲	Ricardo Antonio	Burbano	1	5	4

Book title	ATOS	Lexile	Time	Opened	Last Accessed	Books finished
Endangered Rain Forests: Investigating Rain Forests in Crisis	5	830L	0:25:47	10:19 AM, 6/17/22	10:45 AM, 6/17/22	
Aerosmith: Living the Rock 'n' Roll Dream	5.2	820L	0:18:36	9:59 AM, 6/17/22	10:18 AM, 6/17/22	
Palm Reading	5.6	830L	0:42:25	12:07 PM, 6/16/22	12:50 PM, 6/16/22	
Immigrants from Somalia and Other African Countries	6.3	950L	0:36:21	8:58 AM, 6/14/22	9:36 AM, 6/14/22	
The World's Deadliest Animals	5.3	830L	0:28:08	8:28 AM, 6/14/22	8:56 AM, 6/14/22	
Dangerous Diseases: Scary Illnesses that Frighten the World	5.4	790L	0:27:01	9:08 AM, 6/13/22	9:35 AM, 6/13/22	
A Daredevil's Guide to Swimming with Sharks	6	920L	0:00:01	8:45 AM, 6/13/22	8:45 AM, 6/13/22	
A Daredevil's Guide to Swimming with Sharks	6	920L	0:47:27	9:57 AM, 6/10/22	10:44 AM, 6/10/22	
Huskies, Mastiffs, and Other Working Dogs	5.3	800L	0:00:01	9:54 AM, 6/10/22	9:55 AM, 6/10/22	
Huskies, Mastiffs, and Other Working Dogs	5.3	800L	0:40:33	11:52 AM, 6/9/22	12:33 PM, 6/9/22	
Using Electricity	4.5	770L	0:11:36	9:27 AM, 6/7/22	9:22 AM, 6/8/22	
Elephants Under Pressure: A Cause and Effect Investigation	5.2	820L	0:25:29	8:48 AM, 6/8/22	9:14 AM, 6/8/22	
The Great Wall of China	5.4	830L	0:27:24	4:00 PM, 5/31/22	4:27 PM, 5/31/22	

Audio settings

- Always on
 Always off
 Weekends only

Self-selected interests

Like



- Genres
- Science
- Math Fun
- Hobbies & How To
- About Me

No opinion

- Graphic Novels and Cartoons
- Language Arts
- Social Studies
- Animals
- Sports & Vehicles
- Scary & Gross

Annex 3.

MyOn platform

At San Pio X high school, English teachers utilize the MyOn Platform to assign e-books. This platform provides the opportunity to monitor students' reading progress. This research was conducted using the e-books available in this platform to get the results and draw conclusions about e-books and its influence on reading skills development.

Dashboard > Galo Nicolas Sanchez

480L Current Lexile 14 Books finished 379 Pages read 6 hr 05 min Time spent reading 2:02 PM, 6/17/22 Last login

Data totals for this user since 08/31/2021

Books read Groups Assessments Book quizzes Edit user

Books read

Book title	ATOS	Lexile	Time	Opened	Last Accessed	Books finished
Aerosmith: Living the Rock 'n' Roll Dream	5.2	820L	0:20:34	10:35 AM, 6/17/22	10:56 AM, 6/17/22	
Endangered Rain Forests: Investigating Rain Forests in Crisis	5	830L	0:28:23	10:02 AM, 6/17/22	10:32 AM, 6/17/22	
Palm Reading	5.6	830L	0:32:39	12:05 PM, 6/16/22	12:38 PM, 6/16/22	
Immigrants from Somalia and Other African Countries	6.3	950L	0:27:37	9:04 AM, 6/14/22	9:32 AM, 6/14/22	
The World's Deadliest Animals	5.3	830L	0:28:56	8:34 AM, 6/14/22	9:03 AM, 6/14/22	
Dangerous Diseases: Scary Illnesses that Frighten the World	5.4	790L	0:31:07	9:08 AM, 6/13/22	9:40 AM, 6/13/22	
					10:48 AM,	

Exempt From Benchmarks

Click to make this student exempt from benchmarks until 25 books have been read.

Audio settings

Always on

Always off

Weekends only

Self-selected interests

No opinion

Genres

Graphic Novels and Cartoons

Science

Language Arts

My Roster		10mo D > Books finished			
Books finished		Last week This week			
Trend	First	Last	Previous	Current	Change
↑	Julian Ignacio	Villacis	2	4	2
↑	Camila Aymar	Salazar	0	2	2
↑	Telmo Enrique	Vaca	2	5	3
↑	Melanie Mercedes	Ramirez	1	4	3
↑	Naila Sarahi	Moretta	0	3	3
↑	Martina Rosario	Mera	2	5	3
↑	Justin Alexander	Vaca	2	6	4
↑	Ricardo Antonio	Burbano	1	5	4
↑	Wimper Johard	Sanmartin	1	5	4
↑	Diego Alejandro	Rivera	1	6	5
↑	Victor Andres	Calderon	1	6	5
↑	Christopher Alejandro	Lalaleo	1	6	5
↑	Jorge	Rodriguez	1	6	5
↑	Leonardo Martin	Aguirre	1	6	5

My Roster

Books finished

This week ↑ 539

Last week 184

Groups

10mo D

Books finished

This week ↑ 171

Last week 34

10mo "B"

Books finished

This week ↑ 171

Last week 116

10th "C"

Books finished

Annex 4.

Test, analysis questions

READING TEST

Reading Comprehension, Part 1

Read the four texts. Then read the headlines a) – h). Decide which headline goes best with which text.

- a) Astronaut walks in space again
- B) Bill Clinton caught in snow in Austria
- C) Eleventh space trip for astronaut
- D) Footballer has accident while playing
- E) Footballer wants to help children
- F) Model and ex-president in bad weather
- G) Prince Charles gives money to school

1. The Prince of Wales, Prince Charles, visited a junior school in Buckinghamshire last week to help children with a project about the Royal Family. He told the children about his life as a member of Britain's most famous family and the duties which go with his title. He then let photos be taken of him with the children and the teachers for the project work. One of the questions the children asked was "How much pocket money do your sons get?"

2. Footballer Roman Gregory has started a UNICEF campaign to help children hurt in accidents with land mines, in countries at war and in peace. The footballer says he cannot imagine being without an arm or a leg and knows that many people do not even think about what the children who have had such injuries go through. "Many accidents with land mines happen when children are just playing happily in the fields", says Roman, who hopes to get £1 million in the campaign.

3. Former US President Bill Clinton met model Naomi Campbell on a snow-covered mountain in Austria. Naomi's flight arrived late because of the bad weather and she nearly fell down getting through the snow. Bill Clinton helped her through the snow and they chatted for a while about the weather. Naomi Campbell was doing a photo session at the same place where Clinton was at a conference.

4. NASA Astronaut Jerry Ross works on the so called “City in the sky” – the international space station – and has just done a ninth spacewalk as part of his 11 days on the space station. Ross is the first person to walk in space so many times and still loves the experience. He will be returning to Earth later this month.

Reading Comprehension, Part 2

Read the following texts and then do items 5-6

Text 1

You receive the following email:

Dear Colleagues,

This is to let you know that I will be on holiday in sunny Malta for two weeks between August 31st and September 14th. I will be back in the office on September 21st although you can reach me by email at this address between the 15th and the 21st. In Malta I am planning to be completely offline and enjoy my holiday! I am taking my digital camera so I will send you some photos when I get back. Have a good summer, everyone!

With best wishes,

Julia

Decide if the statements are true or false.

5. Julia will be away from the office for three weeks.

6. Julia cannot be reached by email in Malta.

Text 2

You are staying at the Hotel Eden and receive the following instructions:

Eden Hotel - Your hotel key card

To open the door of your room, put the card into the door with the key symbol facing you. When you hear the bell, remove the card and turn the handle.

You can use your key card to get into the hotel between 11 p.m. and 6 a.m. Put the card into the hotel main entrance door with the key facing away from you. The door will open automatically when the bell rings. You do not need to push the door.

We hope you enjoy your stay at the Eden Hotel.

Decide if each of the statements 7 and 8 are true or false.

7 The same key card can be used for your room and the main entrance to the hotel.

8 You must push the hotel entrance door when you hear the bell.

Inference questions

Reading Comprehension, Part 3

Read the three texts about sports experiences. For each question, choose the correct answer.

Jeanne

We did lots of team sports at school, like football, volleyball and hockey. But I'm not very fast or strong, so I couldn't hit or kick a ball hard. Often, members of my team laughed at me, and so I stopped playing sports as soon as I could because it upset me. But later I learned that you can get exercise without other people around. Now I sometimes go cycling, swimming and running, but always on my own. Then no-one can get mad at me when I'm slow!

Laura

I used to do every sport I could when I was at school. I loved the exercise, and I also liked being a member of a team. We had some great times together. We travelled to matches by bus, and had parties when we won. Then I was in a terrible car accident three years ago, and I hurt my leg. It still isn't better. It's made me really unhappy. The only sport I can do is fishing, and that's so boring! But a friend of mine has suggesting going sailing. It sounds fun, so I think I'll try that.

Thea

I don't mind team sports. I'm quite good at baseball and cricket, but I prefer doing sports when there aren't lots of other people making noise, laughing and telling jokes. That's why I like surfing. It's just me and the sea and a few other people who also like quiet, beautiful places. I think I would enjoy horse-riding and skiing too, for the same reason, but those sports are expensive. I already spend a lot travelling to different beaches with my board.

Who doesn't have enough money to try sports that she's interested in?

Thea

Who plans to try a new sport soon?

Jeanne

Who is unable to do the sports that she enjoyed in the past?

Who only enjoys sports she can do alone?

Who made a lot of friends by doing sports?

Who only enjoys playing sports with others if they aren't too loud?

Who had unhappy experiences when playing team sports?

Vocabulary questions

Reading Comprehension, Part 4

Read the article about a student. Click on the gaps, then choose the best word to fill the spaces.

My name's Hannah and I'm twenty years old. I've got a daughter Nicole. She's nearly three now.

I live in a small flat the city centre. It isn't a nice place to live. It's very noisy and dirty and

there is for Nicole to play. I want to move out of the city and live in the countryside. But it's

very expensive to live there. I will need to earn money to buy a house. There aren't

flats for sale in the small villages near here. That's why I study at college. I'm studying Business. While I

am at college, my mum looks Nicole. My mum really likes spending time with her.