Implementing Critical Thinking Strategies to Enhance Reading Comprehension in Eleventh Grade ESL Students

Implementando Estrategias de Pensamiento Crítico para Mejorar la Comprensión de Lectura en Estudiantes de Inglés como Segunda Lengua de Undécimo Grado

Adriana González Hernández

Estefanny Chate Montero

Julieth Katherine González Agudelo

María Alexandra Mahecha Beltrán

Universidad El Bosque

School of Education

Undergraduate Program in Bilingual Education

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Abstract

This research explores the impact of implementing Critical Thinking strategies on an ESL-based curriculum as a means of enhancing students' reading comprehension of academic texts, as well as reducing the main issue regarding students' apathy when reading this type of texts. The project focuses on a group of eleventh-grade students of a bilingual school in Bogotá, and the purpose of this study is to explore the different effects that the implementation of Critical Thinking strategies may have on the students' reading comprehension process. As we followed a qualitative research approach and the design of action research, the instruments used in this study are based on focus group interviews, questionnaires, and field notes. The findings illustrate that the use of Critical Thinking strategies generated a positive impact on how students read and understand academic texts, this was evidenced in their performances by the end of the investigation as well as in their attitudes.

Keywords: Critical Thinking strategies, reading comprehension, academic texts, qualitative approach, action research.

Resumen

Esta investigación explora el impacto de la implementación de estrategias de Pensamiento Crítico en un plan de estudios basado en el inglés como medio para mejorar la comprensión lectora de textos académicos, así como disminuir la incidencia del problema relacionado con la apatía por la lectura por parte de los estudiantes. El proyecto se centra en un grupo de estudiantes de undécimo grado de un colegio bilingüe de Bogotá, y el propósito de este estudio es explorar los

diferentes efectos que la implementación de estrategias de pensamiento crítico puede tener en el proceso de comprensión lectora de los estudiantes. Al seguir un enfoque de investigación cualitativa y el diseño de la investigación-acción, los instrumentos utilizados en este estudio se basan en entrevistas a grupos focales, cuestionarios y notas de campo. Los resultados ilustran que el uso de estrategias de pensamiento crítico generó un impacto positivo en la forma en que los estudiantes leen y comprenden los textos académicos, esto se evidenció en sus desempeños hacia el final de la investigación, así como en sus actitudes.

Palabras clave: Estrategias de pensamiento crítico, comprensión lectora, textos académicos, enfoque cualitativo, investigación-acción.

Chapter One: Introduction

Students' apathy for reading has been a challenge for ESL school teachers to overcome within their daily practices. Teachers face a complex process since any subject is necessarily linked to a book (Guthrie, 2008). Language classes usually go around the analysis of different types of texts, but at the same time the students' context, necessities and interests play an important role in this process. Evidently, these factors may have a direct incidence in the students' motivation for reading a text and therefore an impact on their reading comprehension process. As suggested by Guthrie and Wigfield (2000) in their engagement model of reading comprehension, this process is successful when students are engaged.

Indeed, teachers must consider the students' contexts, necessities and motivations while arising their interest in reading (Guthrie, Mason-Singh & Coddington, 2012). In the ESL classroom, it is very important to create connections between what must be read and what the students already know, without leaving aside their interests. Furthermore, recent studies have demonstrated how reading interests are a key component to trigger students' success. About this Khairuddin (2013) assures the more appealing readings are for these students, the more accurate interactions they will have with texts and reading comprehension activities. Indeed, reluctance towards reading among ESL students is an obstacle to overcome, for this reason, it is necessary to develop Critical Thinking strategies to address the problem and foster reading comprehension.

Critical Thinking, from now on referred to as CT, is an ability through which a reader can acquire real comprehension of a text, gaining understanding beyond literal information. According to Shihab (2011), “Texts are full of indeterminacies which require the reader's active interpretation. We must draw not only on our knowledge of language, but also on our knowledge of the world” (p.209-210). As a result of this, the relevance of changing the reading practices in the ESL classroom arises. Nowadays students need to have a more positive approach to reading and consider the benefits this brings. Of course, achieving this in high school students, who are in their senior year is not an easy task, especially when analyzing texts for English class, since dedication to reading should be combined with interest. In this sense, dedication will emerge through classroom experiences, but if these experiences are not engaging, the results will translate into apathy for reading. Therefore, this document explores how CT strategies can be incorporated into the ESL classroom following the TBL approach to structure the lesson plans designed for this investigation, in order to promote students’ reading understanding process, as well as students’ interest for academic texts. To do so, this paper will present how reluctance towards reading was evidenced in a group of senior students of a bilingual school in Bogotá. To begin with, we state the problem and how this was identified. The next stage consists of the literature review in which we refer to the constructs for this research. Thirdly, we present the research design in which we develop the methodology of the study. Then we explore data analysis and findings regarding the investigation. Next, we focus on the pedagogical dimensions and implications of the project. Finally, we refer to the conclusions and implications for further research.

Statement of the Problem

Reluctance towards reading has become a growing phenomenon among ESL high school students. At these levels, they are asked to analyze information and apply knowledge retrieved from texts critically, this means they have to be able not just to read, but to interact with texts analytically. However, apathy appears as the main obstacle; these students feel apathetic towards reading due to different factors. Referring to this, Guthrie (2008) explains how students tend to avoid reading since the task itself is not motivating nor rewarding. For this reason, the purpose of this section is to discover the factors associated with this phenomenon in a group of ESL high school students. Firstly, we refer to the issue of apathy for reading, secondly, we allude to the instruments used to identify this problem and finally we discuss some studies which explored the mentioned problem

This research explores the disinterest some ESL high school students demonstrate when performing reading tasks. The participants of this study were a group of 18 senior students who had revealed indifference to reading, even though much of the information they use for academic input comes from texts. The teachers face a double challenge, to teach the students how to read critically, while at the same time it is necessary to fight against their lack of interest. Students tend to react apathetically when they have to face academic texts to complete a class assignment. Reluctance towards reading arises when there is no connection between the purpose and the process within the task. Regarding this, Kappler (as cited in Basaran & Tilfarlioglu, 2007, p.136) defines tasks as the set of activities that should address learners' needs while they can

accomplish a real outcome, such as solving a real-life problem. Thus, teachers have to keep in mind that there is no real understanding when the students cannot create links between the text and the tasks they are asked to develop. Teachers have to use a variety of strategies to enhance students' reading skills, all together; reading comprehension tasks demand the students' concern and involvement.

In this particular research, the problem of reading apathy was identified through the application of two instruments. We decided to carry out the observation process in eleventh-grade classes while keeping fieldnotes and then conducting some interviews. The results were clearly evident, students' text recalling level was poor, at the same time, they had difficulty identifying and understanding the purpose of reading those texts. Later, through the analysis of field notes, it was evident how disconnected they were from the reading comprehension activities. According to Knapp & Schwanenflugel (2016), students struggle to reach a deep understanding of texts, because to do the reading apprehension, the process requires the reader to construct definitions by creating a representation of the meaning.

Different investigations have been carried out to address the matter regarding the indifference students experience when reading. About this, Santi & Reed (2015), explain how reaching a reading level that integrates text-based information and readers' interest, is a key element to guarantee a new and expanded understanding of any text. Moreover, these investigators assure that ESL students' understanding of texts depends on their teachers being effective in guiding high reading comprehension strategies. Finally, they suggest not just

a change in the way reading tasks are conducted, but they highlight the necessity to change pre- and post-reading activities, instructional strategies, assessment, and instruction in general. Additionally, Simister (2007), talks about the importance of fostering individual and independent thinking as a necessary tool to enhance the experience of the students and ensure reading comprehension. Lastly, Mehdinezhad (2011) defines the importance of the concept of *student engagement* in these activities and how they should add to the learning process, promoting tasks different from the ones directly suggested by the texts. To sum up, different researches have demonstrated how reluctance towards reading may be connected to reading comprehension tasks, which are neither significant nor engaging.

In brief, reluctance towards reading has become a major issue for the participants of this study; as a result, apathy will continue to grow unless the students find real applicability of their reading skills. To target this issue, CT is proposed as a means to promote reading comprehension, as Aloqaili (2012) explains, the relationship between these two factors implies a reflective activity in which the student does not only have to put into practice analytical skills but also to have the disposition to use different perspectives. Hence reading comprehension becomes a process beyond literal apprehension of concepts and requires the students' discernment capacity.

As per the need to enhance reading experiences in the classrooms, the research question we address in this paper is: What are the effects of implementing CT strategies in reading comprehension in a group of English learners in the ESL curriculum?

In this regard, this study aims to analyze the effects of implementing CT strategies in reading comprehension in a group of English learners in the ESL curriculum.

Rationale

The prime basis of this proposal is for teachers and students to implement CT strategies that serve as tools to promote reading comprehension. The reason to do so is that as pre-service teachers, we analyzed that the participants of this research have difficulties in reading comprehension as part of their second language learning process. Consequently, bearing in mind our students' needs and the pedagogical model of the school, we contemplated different theories related to how improving the reading comprehension of these students, as well as their engagement; such theories are related to Behaviorism, Constructivism and Cognitivism, but they mostly focus on guiding the students to learn reading in L2. However, we needed a theory that helped these students, who were already bilingual, to improve their reading comprehension process and motivate them to do so. This is why we as researchers became interested in CT strategies and we seized this as the most appropriate approach to enhance students' reading comprehension experiences in the ESL classroom. According to Juniardi (2018), students' CT reflects on their reading comprehension. This means that when students can develop these skills, they are also able to interact with different types of texts, at a very complex level. Therefore, the purpose of this section is to discuss the different contributions of our study; first, for us as ESL teachers; second, for our students; and finally, for the Colombian educational context.

The development of this study has many benefits regarding teachers, learners, and the ESL teacher-learner community. As teachers, we can take advantage of CT strategies to involve the students in different activities and to boost their reading comprehension skills. Therefore, as stated by Simister (2007), it is very important to boost the quality, complexity, and creativity of children's thinking, instead of teaching them just to add to others. Following this, the teacher can adapt academic topics to make them more engaging and more meaningful within the ESL learning process. Thus, the benefits of these factors might be reflected in the improvement of students' reading skills.

Therefore, the implementation of CT strategies in the development of reading comprehension skills may bring several benefits for ESL students. According to Gamboa (2017), learners can improve their text reflectional process through different educational materials in an innovative way. Interaction with texts allow students to increase their vocabulary and understanding of new contexts. Likewise, students acquire the ability to compare and contrast texts with real-life situations from different perspectives. In short, the development of reading comprehension can be encouraged through the implementation of CT strategies.

Additionally, the application of CT strategies to foster reading comprehension represents great opportunities for Colombian society. To begin, promoting CT allows students to develop decision-making for the resolution of social, political, and cultural problems. Moreover, through CT, students manage to analyze and classify social problems in their context. Likewise, students acquire the ability to question their surroundings to improve the quality of life.

(Almashikhi & Thakur, 2019). In this sense, the enrichment of CT through reading comprehension gives students many tools to mature in their social and contextual environment.

Overall, the development of this study contributes to the educational field in significant ways, particularly to reading practices in the classroom. The implementation of CT strategies serves as a favorable way for teachers to engage students actively in the reading tasks, promoting a deeper understanding and more conscious use of the texts proposed. In the same way, such strategies allow students to reflect upon the meaning of the texts and their perceptible interconnection with real-life contexts, as well as social, political, and cultural matters in their country, which enables students to gain new perceptions and ways to see the world. Briefly, this project may represent a significant way to promote effective and engaging reading comprehension practices in the ESL classroom**.**

Chapter Two: Literature Review

ESL eleventh graders are the base of this study due to the fact they demonstrate some difficulties regarding reading comprehension as a consequence of the apathy they present when facing academic texts. One of the most common difficulties that appear during the development of their reading comprehension process is the students' feelings related to disinterest and indifference. In this regard, some academic studies have been carried out in order to establish the importance of strategies to foster reading comprehension and motivation for reading. As León & Escudero (2017) state, reading comprehension only happens when there is a construction of

knowledge through the learning process; such representations should come from texts taking into account understanding strategies. Thereby, this study refers to reading comprehension as the basis to understand the applicability of CT strategies. In regard to the previous information, Grabe and Stoller (2019) affirm that:

> Some views emphasize the lower-level processes as critical for reading; others emphasize the higher-level processes for reading, although no general model would be complete without some combination of both perspectives. These generalized perspectives are only metaphoric and do not explain what readers do as they try to understand a text [...] It involves, in essence, a combination of strategies for guessing where important information might be located in the text and then using basic reading comprehension skills on those text segments until a general idea is formed (p.10-29).

On the whole, reading comprehension is analyzed in the way teachers engage and motivate ESL students within reading practices and how they implement CT strategies to enhance their reading comprehension process. The purpose of this literature review is to enrich readers' knowledge by showing how the implementation of CT strategies may improve ESL eleventh graders' reading comprehension. Therefore, this literature review will analyze some relevant research concerning reading comprehension, CT strategies, and student engagement, establishing a reference to our study to consider the impact of implementing CT strategies to promote reading comprehension in a group of ESL students.

Fundamental considerations for the development of reading comprehension skills

Reaching reading comprehension skills successfully appears to be one of the most essential, but at the same time, difficult goals to achieve in the educational context. According to Vongkrachang & Chinwonno (2015), reading comprehension can be defined as “abilities to recognize words rapidly and efficiently, develop and use a large amount of vocabulary, process sentences in order to build comprehension, and engage a range of strategic processes and underlying cognitive skills" (p.70). Therefore, reading comprehension issues often occur when students’ abilities to understand and perceive the intended meaning of a text are limited. In this sense, this section explores different authors’ insights and previous theoretical studies regarding reading comprehension experiences in education. It starts by providing some relevant processes to achieve learning meaningfully through reading comprehension; then, we mention a series of factors that influence comprehension practices; and finally, we present some important teaching principles to consider in the development of these skills.

Reading comprehension involves different deep processes required to obtain meaningful learning and knowledge. As Leon & Escudero (2017) state, “Comprehension involves building a mental representation of the text, in which features from the text and knowledge retrieved from long-term memory are integrated” (p.30). This means that students’ prior knowledge, integration of information, process monitoring, and memory play an important role in the way they comprehend texts. Moreover, Leon & Escudero (2017) suggest that knowledge must come from activities that promote general comprehension,

reasoning, problem-solving, and learning. Thus, reading practices that go beyond decoding basic and isolated words or sentences, foster the abilities to construct meaning from texts. Finally, as explained by Leon & Escudero (2017), comprehension strategies help students to overcome knowledge deficits. This happens when students can make connections between what they are learning and what they already know. In this way, teachers can guide the process, enhance the instruction, scaffold reading, and promote comprehension. In brief, processes such as integrating elements from knowledge and texts to create a mental representation of the reading, employing activities that require constructing meaning from content, and using comprehension strategies, may be considered crucial determinants to achieve learning through reading comprehension.

In the same way, Wharton-McDonald & Swiger (2014) present some essential factors that influence students' reading comprehension, among which word recognition and fluency, vocabulary, and prior knowledge stand out. Regarding word recognition and fluency, the authors suggest that "if the reader is focused on sounding out individual letters and combinations of letters, and thinking about how to blend them together, there will be little attentional capacity remaining for comprehension" (p.512). This means that readers can read words quickly, automatically, and properly, creating a correlation among words to build a whole meaning of the text. Likewise, the study indicates that vocabulary is another factor influencing students' ability to comprehend texts. For instance, students with "weak vocabularies are not able to take advantage of richer texts, and because they spend less time engaged with richer texts, they learn less about the world and fewer new words" (Wharton-McDonald & Swiger, 2014,

p.513). In this sense, developing vocabulary and knowledge of words is a meaningful way to improve and support students' reading comprehension practices. Moreover, prior knowledge about a particular topic and being familiar with it significantly affects students' comprehension. According to the authors, "comprehension is a matter of activating or creating schemata that relate to the text and lead the reader to a meaningful interpretation. Readers' access to schemata allows them to make connections, predictions, and interpretations of what they are reading" (p.513). Such schemata, according to Rumelhart (as cited in Wharton-McDonald & Swiger, 2014) "constitute our knowledge about objects, situations, events, sequences of events, actions, and sequences of actions" (p.513). This is how students' background knowledge and understanding about something represent an important factor that influences reading comprehension abilities. At last, word recognition and fluency, vocabulary, and prior knowledge constitute a set of factors that impact students' reading comprehension process.

Furthermore, McLaughlin (2012) proposes some principles to teach students how to achieve reading comprehension. Being an influential teacher is one of the principles exposed, this refers to the importance of the teacher's role by creating reading experiences and environments that engage students actively in this process. This leads to another principle, which is motivation and engagement. Students who are engaged and motivated use their cognitive skills to understand and interact with texts, achieving reading comprehension abilities. The last principle is to teach reading comprehension strategies such as self-questioning, making connections, visualizing, monitoring, summarizing, and evaluating. Briefly, taking into account principles such as being an influential

teacher, motivating students, and teaching reading comprehension strategies, generate comprehension of texts in students.

Conclusively, the literature suggests that reading comprehension is a challenge for most students, as well as for teachers. As stated by Duke & Pearson (2002), “comprehension is a consuming, continuous, and complex activity, but one that, for good readers, is both satisfying and productive” (p.107). Since our investigation aims to promote reading comprehension abilities in young students, the various information, insights, and positions we have obtained from this research have provided us with knowledge and a clearer understanding of what we should do to find possible solutions for this research issue. In brief, reading comprehension is a complex process that requires constant and pertinent teacher-student involvement.

How critical thinking strategies influence the improvement of reading comprehension in ESL students.

To improve students’ reading comprehension process, it is necessary to promote and implement CT strategies that students can use as intellectual tools. According to Kovic (2016), “CT is a metacognitive skill applicable to the evaluation of truth claims. CT consists of three components: Minimization of logical failures, minimization of cognitive biases, and a probabilistic epistemology.” (p.16). Thus, guiding students in classrooms to develop reading comprehension through CT strategies is not an easy task. In this way, this paper explores some CT strategies that promote ESL students’ reading comprehension, as well as students’ motivation for reading. First, we examine how CT strategies influence the development of reading comprehension.

Second, we explain in detail the main CT strategies that promote this process. Finally, we present a reflection to encourage the implementation of CT strategies in schools.

Accordingly, there is a positive relationship between the implementation of CT strategies and reading comprehension skills in ESL students. According to the study conducted by Aloqaili (2012):

> Critical thinking provides a means of explaining the ability to work out ambiguous text by generating alternative interpretations, considering them in light of experience and world knowledge, suspending decision until further information is available, and accepting alternative explanations. […] critical thinking is the process which the reader uses to comprehend. (p.38)

In this sense, it is pertinent to say that CT is a factor to promote reading comprehension skills in ESL students since it allows students to understand and interpret the contents of texts. Likewise, Kamali & Fahim (2011) confirm that:

> There is a significant relationship between critical thinking ability [...] and reading comprehension suggesting that good internal resources such as high levels of critical thinking ability [...] can affect academic performance, i.e, competence in reading, and may be considered as protective factors among L2 readers. (p.7)

In other words, CT ability is a tool needed to develop students' reading comprehension in educational settings. In short, it is necessary to mention that there is a positive relationship between the implementation of CT strategies to improve L2 students' reading comprehension skills in educational contexts.

On the other hand, there are three main CT strategies that seek to promote L2 students' reading comprehension in classrooms. First, Diyanni (as cited in Talebi & Talebi, 2015, p. 1182), states that one of the most important CT strategies is *annotating*, which is “actively reading the text while reading and marking, circling, or writing some key words, and the meaning of unknown words (synonym and antonym) and the definitions in the margin." In this way, this strategy aims to encourage students to fill gaps that arise from reading through notes. The second strategy of CT according to Laufer (as is cited in Talebi & Talebi, 2015, p.1182), is *inferencing*, which occurs after guessing. In this process, a learner who has acquired this skill would not automatically produce correct guesses while reading. This is how the process takes place according to the authors:

> Clues availability, familiarity with the clue words, and misleading clues presence will affect guessing. Whereby, the reader is actively engaged in building meaning through interacting with the text. And the meaning inferred by the reader is affected by the context, the reader's intention for reading and the situation in which the reading occurs. (p.1182)

In this sense, we can deduce that factors such as clues, familiar words, contexts, and intentions can affect the level of reading comprehension of ESL students. The last CT strategy suggested by Talebi & Talebi (2015) is *summarizing*, "which helps the learners to self-correct through re-reading the text, checking the topic sentences, determining the main ideas, and relating passages to one another." (p.1182). This strategy explores different reading comprehension skills of the students through writings that capture the main

ideas of the texts. In conclusion, annotation, inference, and summary are CT strategies that promote reading comprehension skills in L2 students.

To sum up, according to some studies, CT strategies have a positive relationship with the improvement in reading comprehension of students of a second language. In the same way, three main strategies of CT are highlighted, such as annotation, inference, and summary, since these are a key part to promote the reading comprehension skills of students in academic contexts. Therefore, we can suggest changes in educational programs' approaches to allow students to be more prepared for real situations in the outside world. As Acosta & Ferri (2010) explain, it is pertinent to "determine which strategies students find useful and give students opportunities to use the strategies to develop the skills of comprehension and application" (p.15). In this sense, CT strategies should represent great utility in the reading comprehension process of ESL students.

The role of engagement in ESL reading comprehension

We can define student engagement as a set of complex and multifaceted constructs. From the behavioral perspective, it consists of how committed the student feels when facing a task (Kahu, 2013). On the other hand, the cognitive perspective referred by Greene & Miller (as cited in Newby & Richardson, 2010, p. 25) involves how much a student can engage in the class activities, bearing in mind the learning goals. Therefore, in this section first, we will make reference to how some students' attitudes may determine the incidence of their affective responses in the ESL reading comprehension process; then we will explore the prevalence of the relationship between teacher's practice and

students' needs to understand the influence of student engagement in their cognitive development. In short, the purpose of this section is to explain how emotional and cognitive engagement play a crucial part in the process of ESL reading comprehension and motivation for reading to reduce the apathy issue they present.

We can observe emotional engagement in the classroom in the attitudes the students demonstrate when performing class tasks. Likewise, when a student does not feel any connection with content, materials, or class activities, their capacity to retain information for later application; will be impaired. Bender (2017) refers to it as a process of emotional investment. It is essential to understand it as a holistic unit, which involves more than concept acquisition. Furthermore, this process is crucial to learning, and as Harris (2008) explains, we can observe it in students' attitudes and reactions towards the institution, the teachers, and the classroom itself. Indeed, its importance lies in the fact that students must feel committed to any academic task to achieve a purposeful process. All in all, students' emotional engagement has a direct incidence in the development of class activities.

Similarly, attitudes towards reading may determine the ESL levels of reading comprehension and vice versa. For this reason, it is important to determine purposeful reading goals, integrated with students' interest as well as with their ESL capacities. Regarding this, Kremer (as cited in Kirmizi, 2011, p. 290) explains how reading comprehension is a decisional process in which the student has to make choices when having understanding difficulties. Up to this point, students may decide to have a positive attitude and deal with their

struggle or disconnect from the task. About this, Schooten and Gloopper (as cited in Kirmizi, 2011, p. 291) point at the relevance of students' attitude and its effect on the comprehension process, which we can observe in any task outcome. In brief, we can determine how much an ESL student understands when reading by his disposition concerning the task.

In the same way, cognitive engagement in ESL occurs when there is a clear connection between the teacher's instruction and students' needs. Regarding this, Abbot (as cited in Inggris, 2016, p. 49) explains how teachers should aim for the creation of tasks which target students' interest while encouraging their desire to learn. According to Solís (2008), the challenge in this process is that we have to address content considering the development of the second language; for this reason, it is a strategic process in which the students should be encouraged to learn the language while developing cognitive skills. Hence, teachers' instructions become a component in this process since the direction is not just addressing how to perform an activity but also the student's capability to understand it in a second language (Zhang, 2008). In summary, we should consider students' needs in the instructional process in the ESL classroom.

Evidently, different studies demonstrate the relevance of student engagement in the ESL reading comprehension process. These researches focus on the importance of considering students' attitudes and aptitudes, when creating tasks since the aim is not just for them to develop comprehension activities in the second language but to develop the second language at the same time. As stated by Solís (2008), we have to build teaching-learning

outcomes considering the learner's need to acquire a second language while developing content.

Finally, we can conclude that reading comprehension, CT strategies, and student engagement play an essential role in ESL students' learning process. Firstly, the implementation of CT strategies helps students improve their reading comprehension. Hence, these strategies should combine annotation, inference, and summary (Talebi & Talebi, 2015), as the abilities that teachers have to foster in the students to reach reading comprehension skills. Secondly, reasoning and problem-solving foster the capacities to develop reading comprehension, taking into account word recognition and fluency, vocabulary, and prior knowledge as factors that influence this process. Thirdly, cognitive and emotional engagement are crucial in the ESL students' language acquisition process, as well as in the development of reading skills (Solís, 2008). All in all, this literature review contributed to analyzing how the mentioned constructs may provide strategies to promote reading comprehension in ESL students.

Chapter Three: Research Design

Qualitative research in action design is a situated task that locates the observer in the world. It consists of a set of material practices transforming the way to sight the context described through social needs, considering a series of conversations, photographs, recordings, field notes, questionnaires, and interviews. As Denzin and Lincoln (2011) state " at this level, qualitative research involves an interpretive, naturalistic approach to the world. It means that qualitative researchers study things in their natural settings, attempting to

make sense of or interpret phenomena in terms of the meanings people bring to them". (p. 3)

That is why qualitative research involves an interpretive approach, addressing the meaning of a social problem in individuals or groups. When collecting data in a natural setting, the use of theoretical frameworks establishes a connection between the researcher, the voice of the participants, and the interpretation of the problem (Creswell & Poth, 2016). The characteristics of qualitative research helped us to develop the research question since this study focused on a group of 18 senior eleventh graders from a private school, whose main problem was apathy for reading. This chapter aims to set out the procedures used to collect information, data analysis, and the results of this process. Consequently, this research defines the type of study regarding the method and the approach, the context, and the population. In addition, the ethical considerations taking into account the laws for the development of this project, data collection instruments, data analysis procedures, and instructional design.

Type of study

The type of study we conducted for this research is descriptive qualitative embedded in action research. In the first place, we seized the necessity to collect qualitative data since we were looking for a complete understanding of our research problem. The objective of this study is to examine how CT strategies may benefit the reading comprehension of a group of ESL students, for this reason, we established three main goals by using the qualitative method. As stated by Creswell (2014), first to gain a more detailed

understanding of the data we collected, second to implement the use of instruments that work best in the application, and finally to consider the social implications of this research. To apply this method, we took into account the following approaches according to Creswell (2014), initially our position as researchers, then the context or settings of the participants, next, the validation of the accuracy of findings, and finally the interpretation of data.

Additionally, this study is framed in action research due to the fact we wanted to analyze the proposed research question to improve the reading comprehension process of the population we selected. For this reason, we decided to follow the next cycle proposed by Indriyanty & Prasetyo (2018).

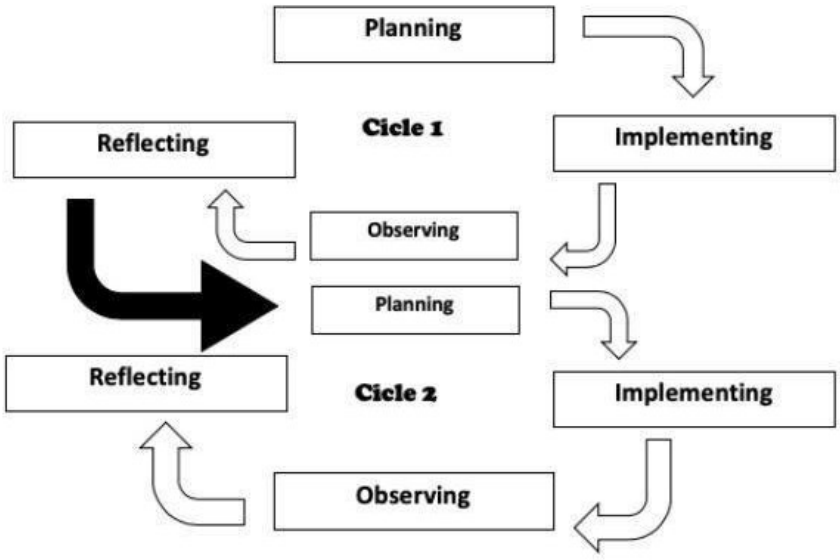


Figure 1. Classroom Action Research Cycles consisting of planning, implementing, observing, and evaluating or reflecting.

Overall, action research provided us with a systematic process in which we followed the classroom cycles suggested by Indriyanty & Prasetyo (2017). In the first one, we planned for the tools and instruments to use in the research, then we collected data, next we observed the steps of the action

implementation, finally, we conducted a reflection. Consequently, the results found at the end of cycle one served as the base to start cycle two. All in all, the type of study and research cycles we selected provided us with the tools to study and understand the research problem.

Context and population

The target population of our research was a group of high school students from a private bilingual school located in the North of Bogotá. There were 18 students in this group, 10 boys, 8 girls, and they were in eleventh grade. Their ages were from 16 to 18 years old, and they belong to a middle-high socioeconomic class. The reason why we chose this population is that we considered this was a suitable group to develop our research due to the features they shared, which were related to the purpose of our study, in this case, analyzing their apathy for reading. Regarding this, we agree with Ritchie, Lewis, Nicholls & Ormston (2014) when they claim that “(...) it is usually helpful for there to be some commonality between people in their relationship to the research topic or in the socio-demographic characteristics which are most relevant to it” (p.57). Another reason to have chosen this population is the amount of people in the group, since as Ritchie et al. (2014) state:

> small groups [...] provide a good balance between the group and the individual context. They provide more scope for individual depth of focus, as well as the opportunity to see how ideas develop. They also allow participants to reflect on, and draw comparisons with, what they hear from others, but they are a more private research context in which each participant has more time to talk. (p.57)

In other words, it is important to highlight that small groups are a proper population to develop a more focused and private research where all participants will take part by sharing their ideas and experiences with the others.

Ethical Considerations

Taking into account our research nature, we contemplated some ethical considerations as components in our project. According to Creswell (2014), in this part of the research "it is important to engage in ethical practices and to anticipate the ethical issues prior to the study that will likely arise" (p.114). In other words, in our investigation, we intended to reduce risks that could have harmed or endangered the integrity of the participants. Therefore, all the private information we collected during the study was handled appropriately only to fulfill the purposes of the research. In this sense, we examined some laws to protect the information of our participants during and after the investigation.

Therefore, we decided to consider the following laws in this study. To begin with, the 1581 Habeas Data Law, which was issued in 2012 according to the Colombian Republic, establishes data protection as:

> Regime for the protection of personal data of all individuals. That is according to article 1 from the Political Constitution of Colombia, which aims to develop a constitutional right that guarantees the protection of personal information that allows people to know, update and rectify the data collected in different databases or files. (p.1)

In this way, taking into account this law, the intention of our project was to protect the privacy of the participants through the appropriate handling of the data in the investigation.

On the other hand, in the Colombian Childhood and Adolescence Code in law 1098 issued in 2006. Article 7. Integral Protection intends to guarantee and enforce the rights against any threat or violation that endangers safety. In other words, this law prevents the violation of children or adolescents' safety rights by external agents that threaten their integrity. Whereby, we decided to integrate this law into our project since it seeks to prioritize the individual well-being of each of the participants.

As a result, we aimed to implement two consent letters addressed to the participants of the study and to the school. The first consent letter **(see appendix A)** was addressed to the research participants to publicize the risks of the study, they could decide whether they wanted to be part of it or not, taking into account that it was not mandatory. We addressed the second consent letter **(see appendix B)** to the institution where we carried out the study to request permission to develop our project. Through this, we intended to protect the participants' information, seeking the appropriate management and use of their data.

Data Collection Instruments and techniques

The instruments we decided to implement in our study to collect data were focus group interviews, field notes, and questionnaires. Since we aimed to conduct a qualitative descriptive study, we considered these were the most

appropriate instruments for this type of research. As Zohrabi (2013) states, “the qualitative methods mostly make use of interviews, diaries, journals, classroom observations and open-ended questionnaires to obtain, analyze and interpret the data” (p.254). This means that to explore the problem and to have a clearer understanding of it, it is necessary to use different instruments that complement each other and that enable us to obtain different perspectives of the issue and the data collected from it. In other words, focus group interviews, field notes, and questionnaires were the most suitable instruments to apply in our research.

Therefore, as we already mentioned, we aimed to collect data for our study through focus group interviews **(see Appendix C)**. The interview is defined as a way of gathering information through conversation in which interaction between the researcher and the interviewer takes place to produce knowledge (Kvale, 2008). In this sense, we decided to implement focus group interviews so our population would directly participate and express their insights about their reading comprehension process and some other aspects related to it. We considered this was a useful and appropriate tool to do so, since as stated by Saldaña (2011), this type of data collection “is an effective way of soliciting and documenting, in their own words, an individual’s or group’s perspectives, feelings, opinions, values, attitudes, and beliefs about their personal experiences and social world, in addition to factual information about their lives" (p.32). In short, interviews were one of the instruments in our study and we used them to have a better understanding of the problem.

Additionally, we also aimed to apply questionnaires in our research to collect data. According to Brown (as cited in Dörnyei & Taguchi, 2009, p.3-4) “Questionnaires are any written instruments that present respondents with a

series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers". In this regard, we intended to implement questionnaires that included both closed-ended and open-ended questions that enabled us to efficiently obtain descriptive and numerical data regarding different relevant factors and elements of the issue we addressed in our study. The focus of the questions we established in the questionnaires was on *behavioral* data; as explained by Dörnyei and Taguchi (2009), "behavioral questions are used to find out what the respondents are doing or have done in the past. They typically ask about people's actions, lifestyles, habits, and personal history" (p.5). Regarding this, we attempted to use questionnaires to discover students' previous experiences regarding their language learning and reading comprehension process. Briefly, the implementation of questionnaires in our study provided us with descriptive and statistical data to better explore the problem **(see appendix D).**

Finally, the other instrument to implement in this study was field notes **(see appendix E)**. Phillippi & Lauderdale (2017) define field notes as "means of documenting needed contextual information [...] It provides non-textual or auditory information about interviews and focus groups, useful in understanding participant meaning" (p.381). Taking this into account, we intended to use field notes to collect data in our study to document the different events, situations, and interactions we observed in the classroom. Given this, Saldaña (2011) claims that this is a proper instrument when conducting qualitative research, since "the goal is to capture people's naturalistic actions, reactions, and interactions, and to infer their ways of thinking and feeling" (p.46). Shortly, we attempted to apply field notes in our project to collect contextual information.

Data analysis procedures

In regard to our study, we determined to work with triangulation as our procedure because it allowed us to tackle the phenomenon through more than one instrument. To illustrate, “triangulation” has been one of the most common research procedures that researchers use when analyzing a problem. According to Creswell & Clark (as cited by Almeida, 2018):

> Triangulation design – it is the most common and well-known approach. It has the purpose to obtain different but complementary data on the same topic. The interpretation is based on Quantitative (QUAN) and Qualitative (QUAL) results, it can be used, such as different conceptual frameworks, different methods of data collection, different interviews, different times or different locations and contexts. (p.4)

As the authors stated, it is a triangle that uses more than one method to collect data on the same topic to confirm the research. However, triangulation can capture different dimensions of the same topic without having to cross-confirm data. As Honorene (2017) says ‘‘the process of the triangulation of data, strengthens your paper by increasing the overall validity and credibility of the data sets and information you use. This method of combining different aspects of research from multiple places, theories or methods is easily undertaken for any type of research you conduct’’ (p.5). For that reason, we addressed the problem through focus group interviews, field- notes, and questionnaires. We also took into account the function of each instrument inside the analysis.

Triangulation in our project deeply contributed into qualitative action research because we needed more than one instrument to present data collection and its analysis respectively. In addition, it establishes an

interconnection among the instruments, offering different perspectives from the same problem. In this case, lack of reading comprehension. Each instrument had a different function for the study, but the three of them contemplated the goal to analyze the phenomenon inside the classroom. To sum up, the relation that triangulation established taking into account the three instruments inside the research process contributed to our data analysis.

On the other hand, coding in our project was a procedure that aimed to consolidate and classify information. As stated by Saldaña (2011):

> A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and / or evocative attribute for a portion of language-based or visual data. The data can consist of interview transcripts, participant observation field notes, journals, documents, literature, artifacts, photographs, video, websites, e-mail correspondence, and so on. (p. 4)

That is to say, coding is a method that allows data which share similar characteristics to be classified in groups. In summary, we used the coding process to regroup the data we collected according to its features.

Therefore, we encoded the data we collected in three main ways to classify it. Regarding this encoding process and according to Auerbach & Silverstein (2003), the first step was finding relevant text. This is one of the most appropriate ways to encode information, cutting out what is not directly related to the research concern. After that, we followed with what the authors call *repeating ideas;* this meant finding similar words and phrases that the participants expressed. In other words, the aim was to classify data that shared

similarities. Then, we consolidated the information into *themes,* which is "an implicit topic that organizes a group of repeating ideas"(p. 38). At this point, we classified common ideas into subjects and divided them into different groups. To sum up, the different ways of encoding information aimed to group data with similar features in topics directly related to the research concern.

Concerning the qualitative nature of our study, which also considers some numeric data, we applied an *explanatory sequential* design. First, we established a set of quantitative results, and then we used the qualitative data to help us understand those results. An explanatory sequential design, according to Creswell (2009), consists of ‘‘collecting quantitative data and then collecting qualitative data to help explain or elaborate on the quantitative results” (p.211). To do this, we used a convergent parallel design, as Creswell (2009) explains, the convergent parallel design unites the quantitative and qualitative data. Initially, the analysis happened separately, but then we compared the results to come up with an interpretation that allowed us to identify if the results supported or contradicted each other. In short, the explanatory sequential design allowed us to analyze the qualitative and quantitative results to corroborate our concerns regarding apathy for reading.

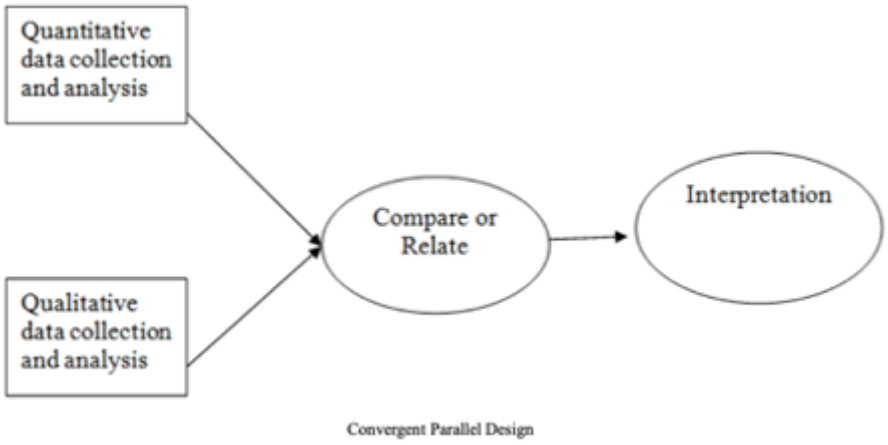


Figure 2. Convergent parallel design consisting of the comparison of the quantitative and qualitative independently collected data.

Additionally, we applied Thematic Analysis as the method to examine the data we collected through the different instruments. This approach of qualitative research helped us to identify themes emerging from data. As referred by Castleberry & Nolen (2018), “Thematic Analysis offers open-ended responses from surveys or transcribed interviews and can explore the context of teaching and learning at a level of depth that quantitative analysis lacks while allowing flexibility and interpretation when analyzing the data” (p. 808). All in all, Thematic Analysis came as a perfect method of analysis considering the nature of the data we found. It offered a holistic view that allowed us to recognize variables to determine our categorical themes.

Instructional design

To conduct this study, we applied complex learning, following the pedagogical approach of the school, and TBL for the pedagogical method. Given this, it is important to comprehend what complex learning is; according to Merriënboer & Kirschner (2018) “Complex learning involves integrating

knowledge, skills and attitudes; coordinating qualitatively different constituent skills; and often transferring what is learned in school or training settings to daily life" (p.1). For this reason, this approach offered us the possibility to explore how the implementation of CT strategies impacted the reading comprehension process of the students. As referred by Gambrell & Dromsky (2000), reading comprehension is a set of skills to be analyzed as a socio-cognitive activity in which learners can combine complex thinking and comprehension. All in all, the complex learning approach and TBL method, provided us with the tools to analyze the incidence of CT strategies in the reading comprehension process.

Additionally, we decided to use TBL (Task-Based Learning) as the pedagogical method to apply in the study. Considering that the issue of this study is the fact that students show apathy for reading, which impairs their reading comprehension capacity, TBL as a method offered the possibility to explore ways in which we could lead the students to see the relevance of what they were learning while being actively involved in the learning process (Costa, 2016). According to Büyükkarci (2009), "students may learn more effectively when their minds are focused on the task, rather than on the language they are using" (p. 314). For this reason, we decided to apply the following principles of TBL to our study: First, the use of natural language; second, student-centered lessons; third, a primordial focus on communication, and finally pre and post tasks to assess the process (Büyükkarci,2009).

We considered the following stages present in TBL as described by Büyükkarci (2009) to implement this approach and method in our project lessons. First, in the *pre-task*, we provided the students with a model including a

description of what we expected from them, so they knew how to conduct themselves in the task. Secondly, in *the task*, the students developed the proposed activities while we monitored their work and offered guidance when necessary. Finally, in the post-task, the students reported their findings while we analyzed their performance.

Since we based our project on the implementation of CT strategies to enhance reading comprehension, we decided to apply these in the *task stage*. For this reason, it is relevant to understand that these strategies are related to the development of CT, as defined by Cheung & Li (2015). First of all, these focus on the ability to find analogies and relationships within information, secondly on the capacity to determine the relevance and validity of the information to solve problems, and finally on the capacity to find solutions and alternative ways to treat problems.

Topics

According to our research question and objective, and considering the proposed Action Research cycle **(see Figure 1)**, we decided to create the project lessons following the next topics and having in mind the learning objectives. On the other hand, it is very important to explain that this program is based on the readings this group of students had to follow to prepare for TOEFL Ibt exam, which means all academic texts they interacted with, came from: *Oxford Preparation Course For The TOEFL iBT Exam by* Bates, 2011.

In conclusion, we conducted qualitative research since we needed to gain a deeper understanding of our research problem. We required insight

into why these students demonstrated apathy for reading, and of course we wanted to design instruments that allowed us to collect enough data to analyze information and possibly find solutions. Regarding this, action research offered us the tools to examine the problem from different perspectives, while using complex learning as the pedagogical approach and TBL for the method. For this reason, the qualitative nature of our research motivated us to develop different ideas to suggest some CT strategies, to address the issue from a pedagogical perspective. All in all, we developed our research design considering the most relevant elements of qualitative research.

Table 1

Lesson Plan Design

Week	**Topic**	**Learning objective**	**Teaching objective**	**TBL**
1	Diagnostic test.	To seize the initial state of students reading comprehension skills.	To understand how the students interact with the information offered in an academic text.	**Pre task:** introduction to the test. **Task:** test. **Post task:** round table.

2	Skimming in reading.	To understand how to apply *skimming* when approaching a text for the first time.	To guide the students into the use of skimming to gain main ideas from a text.	**Pre task:** summarizing sentences about text. **Task:** reading a text. **Post task:** writing an acrostic.
3	Scanning in text analysis.	To understand how to use *scanning* in order to gain main ideas from a text.	To guide the students into the use of *scanning* in order to get more specific ideas about a text.	**Pre task:** playing with flashcards. **Task:** sharing key concepts from the text. **Post task:** writing a paragraph about a previous text.

4	Summaries in text analysis.	To differentiate what is relevant from what is not when summarizing information from a text.	To foster students' ability to use summaries for them to categorize text information as relevant.	**Pre task:** Telling an experience in a summarized and non-summarized way. **Task:** Individual reading and taking notes about key ideas **Post task:** Using graphic organizers

5	Paraphrasing in text analysis.	To read information and write it using own words, picking out the relevant parts of a text.	To foster students' capacity to validate information, so they can use it later to solve a problem.	**Pre task:** Paraphrasing my partner's ideas **Task:** Individual reading and identifying key ideas and words. **Post task:** Paraphrasing the previous text (pair and whole group exercise)

6	Perspectives when analyzing a text.	To explore the author's purpose when analyzing a text.	To guide students into the importance of validating author's perspectives to better understand a text.	**Pre task:** Brainstorming. **Task:** Reading and highlight main ideas. **Post task:** Writing a paragraph.
7	Comprehending context clues in text analysis.	To define context clues in order to identify unknown information in a text.	To guide the students into the use of context clues to solve problems based on a text.	**Pre task:** Debating. **Task:** Reading and taking notes. **Post task:** A comparative chart.

8	Drawing inferences.	To recognize the components of inferring.	To guide the students into the use of inferences to interact with a text in a more meaningful way.	**Pre task:** Picture describing. **Task:** Reading and comparing. **Post task:** Sharing and contrasting.
9	Making Predictions	To practice making predictions and supporting thinking with evidence drawn from a text.	To foster students' capacity to make predictions, using context clues and logic.	**Pre task:** Identifying and defining. **Task:** Reading and comparing. **Post task:** Sharing and contrasting.

10	Diagnostic test	To seize the final state of students reading comprehension skills.	To make a comparative analysis between the first diagnostic test and this one to analyze students' performance and the incidence of the Critical Thinking strategies applied alongside the course.	**Pre task:** Test introduction and explanations. **Task:** Test. application **Post task:** Programmed reflections.

Note: Lesson plan organization per topics, including learning and teaching objectives.

Lesson plans

Table 2

Lesson plan N° 1

Pre-service Teachers' names	Katherine González Estefanny Chate Alexandra Mahecha Adriana González
Date	
Lesson Number	1
Class time	60 Minutes
Theme	Diagnostic Test
Learning objective	To analyze the initial state of student's reading comprehension skills.

Teaching objective	To understand how the students interact with the information offered in an academic text.
Materials and resources	Diagnostic test.

Task-Based Lesson		
TBL Tasks	**Pre-Task**	*Estimated time: 10 minutes* The teacher explains to the students they are going to develop a test that will serve to assess their reading comprehension capacity. This considering the project intends to help them to improve their reading comprehension by using CT strategies.
	Task	*Estimated time: 30 minutes* Students apply for the diagnostic test while the teacher monitors their work.

	Post task	*Estimated time: 15 minutes* The teacher asks students to form groups for them to share and compare their answers.

Note: Lesson plan designed to analyze the initial state of student's reading comprehension skills.

Table 3

Lesson plan N° 2

Pre-service Teachers' names	Katherine González Estefanny Chate Alexandra Mahecha Adriana González
Date	
Lesson Number	2
Class time	60 Minutes

Theme	Skimming in Reading.
Learning objective	To understand how to apply skimming when approaching a text for the first time.
Teaching objective	To guide the students into the use of skimming as a strategy to gain main ideas from a text.
Materials and resources	TOEFL text: Andy Goldsworthy's Environmental Art. Piece of paper, acrostic, notebook, pencil and colors.

Task-Based Lesson

TBL Tasks	Pre-Task	*Estimated time: 15 minutes* The teacher explains the students they are going to work with a reference text named " Andy Goldsworthy's Environmental Art". The teacher divides the students in five (5) pairs and a group of three (3). The teacher gives each group two sentences taken from the text. The aim is for them to read and connect the last sentence of the text with the first sentence of each paragraph, which will give a general (not deep) idea of what the task text is about. Finally, when they read those sentences, they can summarize what they have already read, and they can draw conclusions related to the sentences.
	Task	*Estimated time: 30 minutes* **Annex 1: TOEFL text "Andy Goldsworthy's Environmental Art".** The teacher asks students to read the text mentioned before: Andy Goldsworthy's Environmental Art. The teacher tells them that they have to keep in mind key words, main ideas and concepts highlighted on the text.

	Post task	*Estimated time: 15 minutes* The teacher asks students to do an acrostic about the text they previously read. So, students choose some keywords and concepts to create it.

Note: Lesson plan designed to understand how to apply skimming when approaching a text for the first time.

Annex 1: Andy Goldsworthy's Environmental Art text

Andy Goldsworthy's Environmental Art

1 Andy Goldsworthy is a highly regarded **environmental** sculptor. The British artist works with **elements** of nature such as flowers, branches, leaves, stones, ice, and snow. In so doing, he creates inspirational works of art that reflect the processes of nature. His **temporary** masterpieces, sometimes lasting for only a few hours, mirror the life cycles of growth, decay, and renewal. The sculptor's **underlying** purpose is to go beyond the material form to discover what lies beneath. For this reason, many of his works include a hole, which serves as a looking glass into the mystery of life.

2 With a sense of childlike wonder, Goldsworthy **approaches** each creation without any pre-conceived **notions**. For instance, the originator of **contemporary** rock balancing may feel **inclined** to cover the entire surface of a rock with brightly colored flower petals so that it takes on a surreal appearance. Alternatively, he may fuse icicles together into a magnificent star-like sculpture with spikes radiating out from a central point. As each artwork takes shape in its own unique outdoor environment, the artist awaits the moment when the work is at its peak—before natural elements such as wind, sun, or rain may impact upon the **design** and instigate its **inevitable** decay. At this point, Goldsworthy captures its essence in a photograph, portraying the piece at the instant he feels it is most alive. To date, he has more than 50,000 catalogued photos, which he displays in prominent galleries and publishes in best-selling books.

3 Because he works with the **theme** of transience, the 50-something Goldsworthy feels his own mortality all the more strongly. While he admits that his physical abilities will change with time, he suggests that any challenges he may experience will open up new avenues for artistic expression. In this regard, he identifies with Matisse, the French painter, whose later works became infused with energy because of the difficulties he experienced in executing them.

Table 4

Lesson plan N° 3

Pre-service Teachers' names	Katherine González Estefanny Chate Alexandra Mahecha Adriana González
Date	

Lesson Number	3
Class time	60 Minutes
Theme	Scanning in text analysis.
Learning objective	To understand how to use scanning to gain main ideas from a text.
Teaching objective	To guide the students into the use of scanning to get more specific ideas about a text.
Materials and resources	TOEFL text: “Ben & Jerry's Eco-biz”. Flashcards, board, notebook and pen.

Task-Based Lesson

TBL Tasks		*Estimated time: 15 minutes*
	Pre-Task	Before reading the text, the teacher asks students to observe the title of the reading and share what they think the text is going to be about. After that, the teacher shows some flashcards, but students cannot see the word on each flashcard; the idea is that students play *"fix fax",* this means they choose a flashcard and from the drawing appearing on the front side, they guess what the word is. Finally, the teacher reveals the words and asks the students what the meaning of each word is. The teacher helps them to clarify the meanings to contextualize the reading " Benz and Jerry's Eco-biz".

	Task	*Estimated time: 30 minutes* **Annex 1: TOEFL text: Benz and Jerry's Eco-biz".** The teacher divides the students in two (2) pairs and three (3) groups of three (3) people. The teacher gives each group a specific paragraph of the principal text. The aim is that they read the paragraph and find 3 key concepts. Finally, the teacher will ask them to use these 3 concepts in an explanation about the text. **NOTE:** *The three (3) concepts they chose cannot be the same from the vocabulary of the pre-task* **Pair 1:** Paragraph Number 1 **Pair 2:** Paragraph Number 2 **Group 1:** Paragraph Number 3 **Group 2**: Paragraph Number 4 **Group 3:** Paragraph Number 5
	Post task	*Estimated time: 15 minutes* The teacher asks the students to read the whole individually and as fast as they can. After that, they create a paragraph summarizing the text in

		3 lines. During the task teacher monitors students.

Note: Lesson plan designed to understand how to use scanning to gain main ideas from a text.

Annex 1: TOEFL text: Benz and Jerry's Eco- biz".

Ben & Jerry's Eco-biz

1 Ben & Jerry's Ice Cream, eventually sold to the Unilever **Corporation** for $326 million, was **founded** by two ex-hippies who prepared for their careers by taking a $5 correspondence course before opening their first ice-cream shop in an abandoned garage. Ben Cohen and Jerry Greenfield were life-long friends who believed in promoting social causes and respecting the environment. Their business vision included exotic ice-cream flavors mixed with community involvement, unique advertising **schemes**, social activism, and green business practices.

2 The **team** served up the finest-quality all-natural ice cream with whimsical names such as "Chocolate Therapy" and "Peace of Cake." They entertained customers with free movies projected on the outside walls of the renovated garage, hosted music and craft festivals, gave out free ice cream in cross-country marketing drives, and developed new flavors for special purposes. For instance, they created "Economic Crunch" after a stock market crash and delivered it free to Wall Street executives.

3 Most notably, they supported various social and environmental **initiatives**. For example, they donated 7.5 percent of their annual pre-tax **revenues** to community-based non-profit organizations and started the One Percent for Peace Foundation aimed at re-directing 1 percent of the national defense budget to peace-oriented programs. They fought against the **exploitation** of workers both nationally and internationally. What's more, they supported them by purchasing their products and paying them premiums in times of economic crisis.

4 Ben and Jerry's concern for the environment went far beyond mere lip service for a popular cause. Their **commitment** to change led to recyclable packaging in their products, waste reduction in their offices, and fewer toxic emissions in their production plants. The pair even supported green community **initiatives** like sustainable agriculture and solar power. They also launched campaigns against numerous environmental transgressions, including bovine-growth-hormone supplementation in cows, as well as dealing with global issues such as nuclear weapons, to cite just a few examples.

5 The timing of the company's appearance in the marketplace couldn't have been better for business leaders with a conscience. Ben and Jerry struck a chord with a global market who had had their fill of the corporate profit motive and were increasingly supportive of companies that gave back to the community and cared about the environment. As a result, their net sales soared to a **volume** of $2.37 billion just before the **acquisition** by Unilever. Their business had expanded from its early beginnings in a refurbished gas station to a multinational corporation with global reach.

Table 5

Lesson plan N° 4

Pre-service Teachers' names	Katherine González Estefanny Chate Alexandra Mahecha Adriana González
Date	

Lesson Number	4
Class time	60 Minutes
Theme	Summaries in text analysis.
Learning objective	To differentiate what is relevant from what is not when summarizing information from a text.
Teaching objective	To foster students' ability to use summaries for them to categorize text information as relevant.
Materials and resources	TOEFL text: Epigenetics.

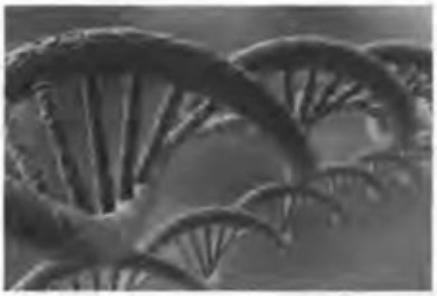
Task- **Based** **Lesson**

TBL Tasks	**Pre-Task**	*Estimated time: 15 minutes* The teacher asks the students to be in pairs and share a recent experience in two particular ways: one using only relevant facts and the other telling the same story but in a more detailed way. Then, students discuss which story was more entertaining, which was easier to understand, and which was more likely to be a summary.
	Task	*Estimated time: 20 minutes* **Annex 1: TOEFL Text ''Epigenetics''** The teacher asks the students to read the text *Epigenetics* and take notes about the main ideas of each paragraph using key words and sentences.
	Post task	*Estimated time: 20 minutes* The teacher asks the students to create a graphic organizer with the main ideas and information they gathered from the text. Then, in the same pairs from the pre task, they share and compare their graphic organizers.

Note: Lesson plan designed to differentiate what is relevant from what is not when summarizing information from a text.

Annex 1: TOEFL Text ''Epigenetics''

Epigenetics



1 Epigenetics is a life science that explores how individuals can change their gene expression. Such change takes place through nutrients and toxins they consume and even positive and negative emotional states they may experience. In other words, this **emerging** field counters the claim that DNA is destiny and instead proves that gene expression is largely a product of the environment. For instance, positive influences such as maternal nurturing in the early stages of life can silence genes in offspring, thus allowing them to respond more calmly in stressful situations. Alternatively, inappropriate lifestyle choices such as smoking, drinking, and overeating can activate the genes for various diseases, which can then be passed on to future generations without ever **altering** the DNA **sequence**. In this regard, epigenetics places a certain amount of responsibility on individuals for maintaining the **integrity** of their epigenome.

2 The epigenome acts like a control center that switches genes on and off. It is the reason why a skin cell and a brain cell perform different functions even though they possess exactly the same DNA. This control center activates or silences specific genetic **components** of cells so that they may take on different forms and fulfill different tasks. While the epigenome governs the activity of every cell in the human body, it is a **dynamic** system that is highly sensitive to its surroundings. Signals from the environment trigger a variety of epigenetic processes. In DNA methylation, for example, a chemical tag consisting of hydrogen and carbon called a methyl group **attaches** itself directly to a gene and shuts it off. In histone patterning, a second chemical tag affixes itself to proteins called histones inside the DNA coil and tightens or loosens it, thereby preventing or promoting gene expression.

3 The impact of epigenetics becomes clear through studies of **identical** twins. While both possess the same permanent DNA, their epigenomes become increasingly individualized as they age, especially for those who live apart and have different habits. Because of **varying** environmental influences, specific genes are either turned on or off. This explains why one twin may develop a disease, whereas the other does not.

4 Researchers are particularly interested in finding the epigenetic mechanisms that drive diseases such as cancer. To date, they have discovered 25 separate genes that prevent tumor growth. Armed with this knowledge, scientists are working on epigenetically based drug therapies that can activate these genes. Even subtle changes in environmental **factors** such as diet are being proposed to bring about epigenetic cures. For instance, a diet **supplemented** with grains, green vegetables, legumes, and oranges has been effective in maintaining normal DNA methylation patterns. In addition, green tea and soy have been found to activate various cancer-fighting genes.

Tabla 6

Lesson plan N° 5

Pre-service Teachers' names	Katherine González Estefanny Chate Alexandra Mahecha Adriana González
Date	
Lesson Number	5
Class time	60 Minutes
Theme	Paraphrasing in text analysis.
Learning objective	To read information and write it using original words, picking out the important parts of a text.

Teaching objective	To foster students' capacity to validate information, so they can use it to solve a problem.
Materials and resources	TOEFL text: "The Big Bang and Parallel Universes".

Task-Based Lesson

TBL Tasks	**Pre-Task**	*Estimated time: 15 minutes* The teacher asks the students to get in pairs. One student will have to say something to his/her partner.The other student will have to say the same idea but in his/her own words. The students will repeat the exercise, but this time, in a written way.

	Task	*Estimated time: 20 minutes* **Annexe 1 : TOEFL Text: Big Bang and Parallel Universes** Students read the text *The Big Bang and Parallel Universes* individually. While reading, they identify what key words or ideas should stay in the same way, and the ones they can change using other words.
	Post task	*Estimated time: 20 minutes* In groups, students have to paraphrase the text in the following way: Group #1 paraphrases the first paragraph of the reading. Group #2 paraphrases the second paragraph of the reading Group #3 paraphrases the third paragraph of the reading Group #4 paraphrases the fourth paragraph of the reading.

		Then, the whole group shares the activity to reconstruct the reading in a paraphrased way.

Note: Lesson plan designed to read information and write it using original words, picking out the important parts of a text.

Annex 1: Text about The Big Bang and Parallel Universes

The Big Bang and Parallel Universes

1 Cosmologists and physicists have developed a number of models to explain the origin of the universe. Many of these propose the concept of multiple or **parallel** universes as part of their theories.

2 According to Cosmic Inflation Theory, the universe arose from a quantum **fluctuation** in the vacuum of space. Quantum fluctuations involve the spontaneous appearance of matter and energy out of nothingness and are described in quantum field theory, a field of physics outlining how matter functions at the atomic scale. Apparently, some 14 billion years ago, our universe began with the sudden appearance of matter and energy. As part of this quantum fluctuation, the **intensely** hot and super-compressed matter and energy began a rapid **expansion** and cooling. This rapid expansion, more commonly

known as the Big Bang, is supported by sound observational evidence. What's more, it is considered the standard explanation for the origin of our universe. Interestingly, those who support Cosmic Inflation Theory submit that if there was one quantum fluctuation, there surely must have been others, and this gives credence to the idea of multiple universes.

3 A secondary support for the concept of multiple universes stems from inferences regarding quantum mechanics in Hugh Everett's Many-Worlds Interpretation, which is a mathematically based theory. Everett proposes that whenever different possibilities exist at the quantum level, all outcomes are **accommodated** by the creation of parallel universes. This would mean that there are an infinite number of parallel universes, each one containing a different **version** of the world. Close to 60 percent of today's leading cosmologists, including the esteemed Stephen Hawking, believe this theory to be true.

4 Most recently physicists have been **formulating** a description of the **fundamental** building blocks of the universe, and as an extension of Einstein's dream to develop a Theory of Everything, have tried to tie this to a model associated with the observable evidence supporting the Big Bang **scenario**. M (membrane) Theory proposes that the basic components of matter are sub-atomic particles, similar to vibrating strings, that are interconnected in a vast membrane in the eleventh **dimension**. Apparently, the membranes float like sheets of paper in space and sometimes two of them collide. When this occurs, the impact sets off a series of events that corresponds to what happened both during and after the Big Bang. For this reason, physicists believe that M Theory may indeed be a Theory of Everything. What's more, it also suggests that our universe was created through a **random** collision between two pre-existing parallel universes.

Table 7

Lesson plan N° 6

Pre-service Teachers' names	Katherine González Estefanny Chate Alexandra Mahecha Adriana González
Date	

Lesson Number	6
Class time	60 Minutes
Theme	Perspectives when analyzing a text.
Learning objective	To explore the author's purpose when analyzing a text.
Teaching objective	To guide students into the importance of validating author’s perspectives to better understand a text.
Materials and resources	TOEFL text: Darwin and Evolution.

Task- **Based** **Lesson**

	Pre- **Task**	*Estimated time: 20 minutes* The teacher shows a list of words (Darwin, evolution, survival, adaptation, process,

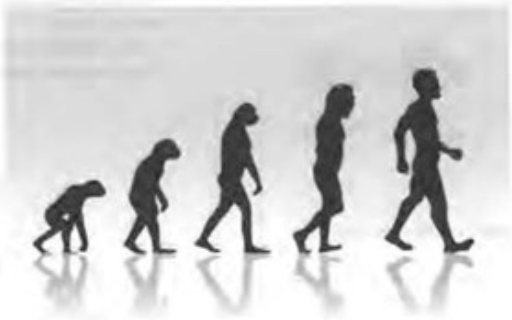
TBL Tasks		generation, resource, diversity) and asks students about their meaning and the possible relationship that the words have with each other.
	Task	*Estimated time: 15 minutes* **Annex 1: TOEFL Text: ‘’Darwin and Evolution”** The teacher asks the students to carefully read the text: *Darwin and Evolution, they* read in pairs and during the process, the students highlight the main ideas of the text, especially those where the author presents his/her perspective.
	Post task	*Estimated time: 15 minutes* The teacher asks the students to write a paragraph that shows the development of the main idea, three supporting ideas and finally, the conclusion of the topic. Based on the author's ideas they highlighted in the text. Main idea _____ Supporting idea 1 _____ Supporting idea 2 _____ Supporting idea 3 _____

		Conclusion _____

Note: Lesson plan designed to explore the author's purpose when analyzing a text.

Annex 1: Text about ‘’Darwin and Evolution ‘’

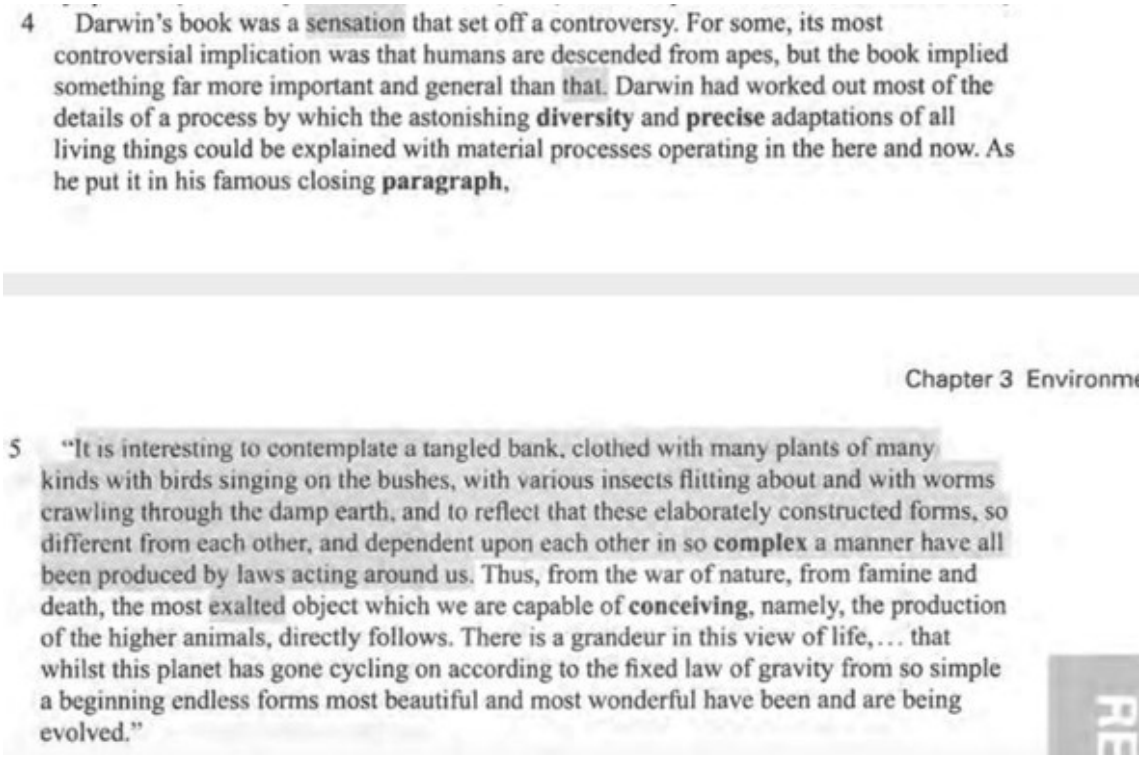
Darwin and Evolution



1 By the time Charles Darwin went on his voyage of exploration on the *Beagle* (1831–36), taking Charles Lyell's recently **published** *Principles of Geology* with him, he knew that the Earth was probably very old. Furthermore, he understood that fossils represented extinct species and that living organisms were related in groups, probably because they had shared common ancestors. He was an ambitious young naturalist, and it was clear that whoever solved the problem of how new species originated would become famous. On the voyage, he saw fossilized giant armadillos* in Argentina buried a few feet below living modern armadillos. He also saw vast geological **sections** in the Andes that argued for a very dynamic history of the Earth, as did the uplift* he viewed in the harbor at Valparaiso in Chile shortly after a large earthquake. In the Galapagos Islands, he saw different species of closely related birds and lizards on the different islands. He experienced evidence that strongly suggested that species can change and that time is deep. That is to say, the **evolution** of humans from the first animal species of the Cambrian explosion took place over a period of roughly 300 million years.

2 After his return to London, he read Thomas Malthus, who argued that population growth would rapidly bring individuals into competition for scarce **resources**. What's more, he began a **journal** to record his thoughts as he **assembled** his materials for publication. In that journal, in 1838, he first described natural selection. According to Darwin, it is a **process** whereby traits that enhance **survival** become progressively more common in **successive generations**. This is because animals possessing such traits tend to be stronger and thus reproduce more often. Darwin soon saw that this process could explain the origin of **adaptations**, and when he combined it with geographical separation he could explain the origin of species. But he knew the idea would be **controversial**, for the consequences were **enormous**. Therefore, he refrained from publishing for 20 years while continuing to gather evidence. Then in 1858, a bombshell arrived in London: a letter from Alfred Russel Wallace, a naturalist then working in Indonesia. In a malaria-induced period of bed rest, Wallace had also had the idea of natural selection.

3 Darwin's initial reaction was despair, for he thought that the honorable course was to let Wallace publish alone. However, prominent friends who knew what he had in his journals encouraged him to arrange a joint publication. Thus in 1858, Darwin and Wallace published back-to-back papers on natural selection in the *Journal of the Linnean Society of London*. Working rapidly, Darwin then rushed to press with a book **summarizing** part of the evidence he had collected and some of the **interpretations** he had worked out: *The Origin of Species by Means of Natural Selection* (1859). The first print run sold out on the first day.



4 Darwin's book was a sensation that set off a controversy. For some, its most controversial implication was that humans are descended from apes, but the book implied something far more important and general than that. Darwin had worked out most of the details of a process by which the astonishing **diversity** and **precise** adaptations of all living things could be explained with material processes operating in the here and now. As he put it in his famous closing **paragraph**,

Chapter 3 Environme

5 "It is interesting to contemplate a tangled bank, clothed with many plants of many kinds with birds singing on the bushes, with various insects flitting about and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent upon each other in so **complex** a manner have all been produced by laws acting around us. Thus, from the war of nature, from famine and death, the most exalted object which we are capable of **conceiving**, namely, the production of the higher animals, directly follows. There is a grandeur in this view of life,... that whilst this planet has gone cycling on according to the fixed law of gravity from so simple a beginning endless forms most beautiful and most wonderful have been and are being evolved."

Tabla 8

Lesson plan N° 7

Pre-service Teachers' names	Katherine González Estefanny Chate Alexandra Mahecha Adriana González
Date	
Lesson Number	7

Class time	60 Minutes
Theme	Comprehending context clues in text analysis.
Learning objective	To define context clues to identify unknown information in a text.
Teaching objective	To guide the students into the use of context clues to solve problems based on a text.
Materials and resources	TOEFL text: “Nanotechnology and Enhancing Human Intelligence”.

Task-Based Lesson

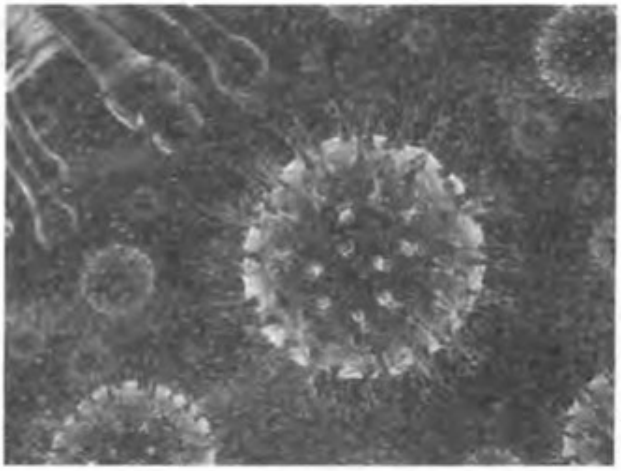
	Pre-Task	*Estimated time: 20 minutes* The teacher carries out a debate among the students about nanotechnology and human intelligence to contextualize the text.

TBL Tasks	**Task**	*Estimated time: 15 minutes* **Annex 1: TOEFL text: "Nanotechnology and Enhancing Human Intelligence ''** In groups, students carefully read the text *Nanotechnology and Enhancing Human Intelligence*. Then, the teacher asks the students to take notes of the most relevant aspects of nanotechnology and human intelligence that appear in the reading.
	Post task	*Estimated time: 15 minutes* The teacher asks the groups to make a comparative chart, in which they can show the main characteristics, advantages or disadvantages of nanotechnology and human intelligence. Finally, the groups share their ideas with the rest of the class to complement what they understand. Nanotechnology Human intelligence *characteristics *characteristics *advantages *advantages *disadvantages *disadvantages

Note: Lesson designed to define context clues to identify unknown information in a text.

Annex 1: TOEFL Text: ‘’ Nanotechnology and Enhancing Human Intelligence”

Nanotechnology and Enhancing Human Intelligence



1 Nanotechnology is the science of constructing matter atom by atom. Medical applications include nanobots or tiny robots that travel through the bloodstream to fulfill a variety of tasks within the human body. For example, they can be programmed to repair DNA and cellular damage, **eliminate** pathogens, and remove toxins. In this way, we may be able to extend our life spans, cure disease, and delay or even **reverse** the aging process.

2 By far the most significant advance this new science will likely deliver, however, is the enhancement of human intelligence. At present, the cap on human cognitive ability is 10^{16} **computations** per second: our brains can only work so hard and so fast. Moreover, this biological fact is not going to change **appreciably** given the sluggish pace of evolution. **Computer** speed, on the other hand, has been increasing at an exponential rate. In fact, experts predict that by mid-century, computers will be able to function at speeds billions of times faster than the human brain.

3 Accordingly, the initial phase of intellectual enhancement would involve the boosting of our relatively slow neuronal connections with high-speed nanobot communication. This, in

turn, would allow us to **radically** improve all forms of cognitive ability including memory, learning, and creativity. Furthermore, through wireless technology within each nanobot, we would be able to transfer **data** from brain to brain and interact with computer systems to upload information to our brains.

4 Once nanobots begin to upgrade our current level of intelligence, scientists believe there will be a surge of **innovative** ideas and technologies that will continue to increase at an **unprecedented** rate. Enhanced minds will find the means to create even more advanced intelligence. This will result in a positive feedback effect* and **ongoing** improvements in our cognitive abilities. Futurists refer to this event as the Singularity, the impact of which is impossible to fathom.

Table 9

Lesson plan N° 8

Pre-service Teachers' names	Katherine González Estefanny Chate Alexandra Mahecha Adriana González
Date	
Lesson Number	8
Class time	60 Minutes
Theme	Drawing inferences.
Learning objective	To recognize the components of inferring. Practice inferring using a text.
Teaching objective	To guide the students into the use of inferences to interact with a text in a meaningful way.

Materials and resources	TOEFL text: Cultural Intelligence and the Global Manager.

Task-Based Lesson

TBL Tasks	**Pre-Task**	*Estimated time: 20 minutes* Prior the reading of the text, the teacher shows students a series of pictures related to the text main topic, cultural intelligence. She asks the students to work in pairs in order to describe what is happening in each picture.
	Task	*Estimated time: 15 minutes* **Annex 1: TOEFL Text: "Cultural Intelligence and the Global Manager".** The teacher asks the students to read the text: Cultural Intelligence and the Global Manager. The teacher asks the students to keep in mind the pictures and answers they analyzed in the pre task.

		The teacher asks students to choose the picture they think best matches the principal idea of the text.
	Post task	*Estimated time: 15 minutes* Teacher asks students to group up with the classmates who selected the same picture they did. Then the teacher asks them to debate in their groups the reason why they decided that particular picture portrayed the text's main idea and to come up with a conclusion, to be shared with the whole group.

Note: Lesson designed to recognize the components of inferring.

Annex 1: TOEFL Text: “Cultural Intelligence and the Global Manager”.

Cultural Intelligence and the Global Manager

1 Recent trends including high-tech communication, convenient **overseas** travel, free trade, and a dramatic rise in **immigration** have created new challenges for global managers. There is now a dynamic interchange among **cultures** on the international business scene. Effective leaders must expand their knowledge base in dealing with this change for two important reasons. Any failure to understand the nuances of another culture can result in damaged business relationships and reduced profits. Accordingly, cultural intelligence has become an essential skill for today's global manager.

2 According to authorities, cultural intelligence is the ability to adapt to new cultural situations. It involves three components: knowledge, mindfulness, and behavioral skills. Knowledge of what **constitutes** culture and how cultures vary leads to an understanding of how these variations affect behavior. Mindfulness is the practice of **objective** observation. In the case of intercultural business relationships, managers need to be **aware** of their own cultural programming and the effect this has on their attitudes, values, and beliefs—the essence of culture. What's more, a mindful approach demands attention to the subtle cues from colleagues and clients who may possess different cultural values. It necessitates letting go of who is right or wrong and simply understanding how culture influences attitudes and behavior. Once managers are clear about these effects, they can adjust their own actions to better meet the needs of the specific cross-cultural interaction.

3 Key to becoming culturally intelligent is an awareness of the conflicting values across cultures. Probably the most widespread is the individual versus the group distinction. Individualist countries like the US and Canada generally place an emphasis on independence. They **prioritize** initiative and personal decision-making. In contrast, nations like China and Mexico commonly view people as loyal members of groups. They value teamwork and cooperation. Weight is given as to how individual actions impact the group, and decision-making takes place through **consultation** and consensus. Conflicts can easily arise when people have different world views. For instance, a US company could lose a deal with a Chinese firm by failing to carry out the proper consultation in a decision-making process.

4 A second cultural difference is equality versus **hierarchy** or the perceived power distance between high- and low-status individuals such as managers and their **subordinates**. Yet another is the direct versus indirect distinction. This refers to a **straightforward** style as opposed to one that values diplomacy and avoids conflict.

Then there is task versus relationship. This difference entails the decision to get straight to business or to begin by building positive relationships. Finally, we have risk versus caution. This scale involves being open to change instead of relying on proven strategies. For the global manager, a familiarity with these five basic cultural differences in addition to a mindful approach will translate into the behavioral skills required to ensure smooth and effective cross-cultural relationships.

Table 10

Lesson plan N° 9

Pre-service Teachers' names	Katherine González Estefanny Chate Alexandra Mahecha Adriana González
Date	
Lesson Number	9
Class time	60 Minutes
Theme	Making Predictions
Learning objective	To practice making predictions and supporting thinking with evidence drawn from a text.
Teaching objective	To foster students' capacity to make predictions, using context clues and logic.

Materials and resources	TOEFL text: “Multiple Intelligence Theories “.

Task-Based Lesson

TBL Tasks	**Pre-Task**	*Estimated time: 20 minutes* Before reading the text, the teacher asks the students to observe the title of the reading and share what they think the text is going to be about. Then teacher shows a series of concepts (within the reading), for the students to write their own definitions for every term. The terms are: 1. IQ: _____ 2. Labeling: _____ 3. Intelligence: _____ 4. Knowledge: _____ 5. Adapt: _____ 6. Achievement: _____

	Task	*Estimated time: 15 minutes* **Annex 1: Text about Multiple Intelligences Theories** The teacher asks the students to read the text and find if the definitions they gave to the terms in the Pre-Task match the ones given by the reading.
	Post task	*Estimated time: 15 minutes* The teacher asks the students to choose one of the terms given in the pre-task and explain in their own words if they were right or wrong, and how they came to that conclusion.

Note: Lesson designed to practice making predictions and supporting thinking with evidence drawn from a text.

Annex 1: TOEFL Text: “Multiple Intelligences Theories”.

Multiple-intelligence Theories

1 Multiple-intelligence (MI) theories have emerged for two reasons. First, many psychologists **reject** the notion that IQ tests accurately **assess** general intelligence or measure a person's full intellectual **capacity**. Second, the common belief that IQ predicts success in both academic and **professional spheres** has led researchers to suspect that there may be even better predictors. For these reasons, US psychologists Howard Gardner and Robert Sternberg have proposed two different theories based on the idea of multiple intelligences.

2 Gardner argues that IQ testing is too limited with its focus on verbal and **logical** skills. He claims that this narrow view of intelligence leads to the **labeling** of truly gifted people as underachievers. Moreover, he points out that these "underachievers" do not benefit from the advantages a high IQ score may provide. Such benefits include positive evaluations by school teachers and employment in firms where IQ screening is part of the application process. In addition, IQ-equivalent entrance exams such as the Scholastic Achievement Test (SAT) effectively qualify students for college and university programs in the US.

3 Gardner's MI theory is based on brain research. Through an extensive study of brain-damaged individuals, he mapped nine **regions** of the brain and found that each governed specific **areas** of intellectual behavior. Accordingly, he related each brain region to one of his nine proposed intelligences. These include verbal, logical-mathematical, musical, visual, bodily-kinesthetic, interpersonal, intrapersonal, naturalistic, and existential intelligence. The esteemed psychologist explains that individuals possess the aptitude for all nine but that each person has a specific intelligence profile. That is, most people are strong in about three areas.

4 These strengths also reflect preferred working **styles** and career direction for individuals. For instance, people with verbal intelligence are more naturally suited to professions such as journalism or language **instruction**. On the other hand, those with mathematical or logical intelligence may find satisfaction in fields like engineering or science. Individuals who **display** musical intelligence make skilled composers or conductors; those with bodily intelligence excel as dancers or athletes; and those with spatial intelligence shine in artistic fields. People who have interpersonal intelligence gravitate toward positions requiring people skills, whereas those with self-awareness perform well as counselors or entrepreneurs. Darwin, famous for his theory of evolution, was an example of a person with ample naturalistic intelligence. Likewise, Aristotle, the well-known philosopher, possessed existential intelligence in good measure.

5 Based upon social and environmental—rather than neurological—factors, Sternberg's *Theory of Successful Intelligence* includes three sub-intelligences: analytic, creative, and practical. Analytic intelligence involves skill in analyzing and evaluating various **options**. It refers to the ability to perform academic problem-solving tasks that have one correct answer, much like those found on standard IQ tests. People with analytic intelligence often do well in school and are thus considered "book smart." In contrast, those with creative intelligence have the means to generate unique but **appropriate** solutions to novel problems. An individual

with creative intelligence can often resolve one issue in a variety of acceptable **formats**. These people are "idea smart." Art, music, and even inventive business solutions are all products of creative intelligence. Finally, people with practical intelligence or "street smarts" have the ability to successfully deal with everyday problems. They learn what they need to know in order to **adapt** to their environments. One study **cites** Brazilian children who used practical

4 Intelligence

intelligence in learning all of the math needed to operate their street business. Interestingly, they failed their school math exams and would likely receive low scores on a typical IQ test.

6 Sternberg describes successful intelligence as the power to achieve a personal definition of success within a specific social and cultural milieu. [A] He explains that analytic intelligence or IQ does a good job at measuring academic achievement but that the ability to generate ideas and plain common sense play a much more significant role in the real world. [B] In his view, success begins with an assessment of personal strengths and weaknesses. [C] Afterwards, a person needs to use this knowledge to make the most of their strengths and overcome limitations in order to create optimal life **circumstances** within a particular environment. [D]

Table 11

Lesson plan N° 10

Pre-service Teachers' names	Katherine González Estefanny Chate Alexandra Mahecha Adriana González
Date	
Lesson Number	10

Class time	60 Minutes
Theme	Diagnostic exit test.
Learning objective	To seize the final state of students reading comprehension skills.
Teaching objective	*To make a comparative analysis between the first diagnostic test and this one to analyze students' performance and the incidence of the CT strategies applied alongside the course.*
Materials and resources	Diagnostic Exit test.

Task- **Based** **Lesson**

		Estimated time: 5 minutes The teacher explains to the students there will be an exit test to assess how their reading

TBL Tasks	**Pre-Task**	comprehension has changed, considering the process they have been undergoing throughout the project.
	Task	*Estimated time: 25 minutes* Students apply for the diagnostic exit test, while the teacher monitors.
	Post task	*Estimated time: 20 minutes* The teacher asks the students to share how they feel after finishing this test and if they noticed an improvement in their text analysis process.

Note: Lesson plan designed to seize the final state of students reading comprehension skills.

Chapter Four: Data Analysis and Findings

The objective of this research was to explore the role of CT strategies in the reading comprehension process of a group of 11th-grade students. For conducting this research, it was necessary to gather data within a series of 10 classes. Considering that the nature of this investigation is qualitative, we applied three instruments to gather the data: questionnaires, field- notes, and focus group interviews. This led us to uncover some categories to identify the role of CT strategies and student engagement in their reading comprehension process.

Additionally, regarding the qualitative nature of our study, which also considered some numeric data, we applied the model of the explanatory sequential design depicted by Creswell (2009) following our research design. The purpose was to complement qualitative and quantitative data sets for more comprehensive results. We used Creswell's convergent parallel design (2009). In this way, we managed to combine quantitative and qualitative approaches to data analysis. Initially, we did a separate analysis, then we compared the results and came to an interpretation that finally allowed us to devise the coherence of the results (researcher triangulation).

Regarding the method to examine the data, as we already mentioned in Chapter 3 Data Analysis Procedures, we decided to apply Thematic Analysis. As referred by MacQueen, Namey, and Guest (2012) we wanted to describe what was implicit and explicit in the obtained data. First, we compared data (qualitative and quantitative), then we identified common elements coming from this analysis, and finally, we analyzed the relationships among data to establish our categorical themes.

For the analysis of data, we conducted data triangulation which allowed us to grapple with the phenomenon presented through the three instruments mentioned above. Thus, this triangulation process allowed us to understand the nature of the phenomenon we studied and to have a more comprehensive approach to the results, to identify the categories embedded in the data. In this sense, the analysis evidenced that when we implemented CT strategies, these fostered and enhanced the students' reading comprehension. Accordingly, we organized this section into three categorical themes. The first category

addresses the struggles that students encountered with the implementation of CT strategies. The second category discusses the feelings students had when grappling with academic texts. Finally, the third category explains the feelings the students experienced connected to the text style.

Students struggle with critical thinking strategies implementation.

Teaching the students how to think critically may involve several challenges, especially when applying this skill into the reading comprehension process. As referred by Lucas (2019), when students face the implementation of CT strategies, they may experience a struggle not directly related to CT but other processes of comprehension. Nevertheless, as we conducted this project and implemented CT strategies into the lesson plans designed for this research, we realized that the strategies we applied; developed the students' abilities to interact with academic texts well beyond the literal interpretation of information. In this category, you will find how the implementation of CT strategies contributed to the comprehension process of the students. As we have already mentioned, the objective of this research was to analyze the impact of implementing CT strategies in the reading comprehension process of a group of eleventh graders. As referred to by Barjesteh & Vaseghi (2012), we used CT strategies to guide the students to learn how to get main ideas, summarize, paraphrase, infer information, and interpret facts.

First, students demonstrated they were capable of analyzing texts in more complex ways when using CT strategies. To begin with, when asked to apply strategies such as skimming, scanning, and summarizing to interact with academic texts, there were some struggles. During the second, third, and fourth lesson designed for this research (skimming in reading, scanning in text

analysis, and summaries in text analysis) following the lesson plans we displayed, students demonstrated difficulty differentiating main ideas from relevant details in some readings. As explained by Ness (2011) the students need to receive explicit instruction when undergoing a reading comprehension process, so they can monitor and build their understanding, which finally is the foundation of CT for reading analysis. Taking this into consideration, in these initial lessons, we guided the students in the process. We gave them specific instructions on how to develop skimming and scanning techniques when reading a text to analyze and categorize its information. Following Abdelrahman and Bsharah's (2014) techniques, we asked the students to read the first sentence of each paragraph, then we asked them to read the last sentence, and then they had to identify keywords in between. Consequently, considering Thamrin's (2014) techniques, we asked the students to keep in mind only the particular information linked to the task, then we asked them to choose which clues would support their findings. Accordingly, during the task development of lesson 4, in which students had to take notes of the main ideas of each paragraph from the text using keywords and sentences, they showed a better understanding of the text structure, which was then evidenced in the post-task when they applied graphic organizers to differentiate main ideas from complementary arguments, as you can see in the following excerpts:

Excerpt 1. Physical reactions description, Field notes lesson 4.

> While we revised the graphic organizers that made part of the last activity within the class, some students made faces that communicated assertiveness regarding the results (nodding heads as if saying yes, moving their hands as if

pointing at something), especially when the teacher asked them to clarify which were the main ideas and details from the text.

Excerpt 2. Verbal reactions description, Field notes lesson 4.

When we presented their graphic organizers, some students communicated that it was now easier for them to identify the main ideas *(teacher we did it following the structure of each paragraph. It also helped we had studied this in biology class.*)

When we analyzed the information from these excerpts coming from the field notes, we noticed that students felt comfortable when applying graphic organizers. We can conclude this from the physical reactions during the task, for example, when they were nodding their heads or moving their hands. In the same way, this tool served its purpose since students could differentiate and categorize the information coming from the text. They said the task was simpler now that they had understood how to follow the structure of a text, this also taking into account the text topic was familiar to them. Briefly, when students received specific instructions about CT strategies, they reflected a noticeable improvement in the way they understood the structure of texts.

Second, students progressively overcome difficulties when summarizing or paraphrasing as soon as they applied CT strategies. In this regard, their initial conception was that to paraphrase, they just had to rearrange the order of words in a sentence, so when asked to apply this strategy, they repeated words. As referred to by Lee and Chee (2012), paraphrasing is a key skill that allows the ESL student not just to show his understanding, but it is a practice that enhances his comprehension abilities. Consequently, students received

instructions on what paraphrasing is and how to do it. To do this, we followed the instructions of Bates (2011). According to this author, the clues for paraphrasing are to use synonyms to replace keywords, not to add extra information, and to vary the structure of sentences without varying the text sense (coherence). Following this criterion, students developed cohesive and coherent paraphrasing exercises. Seemingly, when following the post-task of lesson 3, students showed that when applying the same strategies suggested for paraphrasing, they could show comprehension of ideas without repeating the same terms. In this sense, we noticed that once the students started to develop paraphrasing and summarizing strategies, their language range improved as their capacity to structure more complex sentences, as you can evidence in the following transcript from lesson 3.

Excerpt 3. Class transcript. Application of *paraphrasing* as a critical thinking strategy.

> **Text to be paraphrased**: The Scottish cold seems to wake up, the winter is coming, thus the water flows through the river, looking for the salty water; its only purpose is to make it there. The rocks try to interfere with its track, like the obstacles we humans have to face every day, opposingly as we do, the mighty river reaches its goal, it always does.
>
> The rocks prevent the fallen dark elm leaf get to the misty river, yet it does its best to encounter its final destination, being torned in its magnificent strive, attempting to arrive at a mysterious current of water. Its fate is unknown, sometimes we are also a leaf, we go through a river, which may be full of rocks in our way; with moss that doesn't allow us to continue through the path of life, we may tear apart in the process, but we will attain the end of our journey, no matter what.

> **Paraphrased text**: To be awaken appears the freezing Scottish, the coldest season is approaching; therefore, along the creek the water goes, it searches for the briny water, as its unique goal is to build it on that place. The stones struggle with the flow, like the bumps humans have to deal with in their daily basis, in contradiction, as we normally execute, the indomitable stream approaches its objective, repeatedly accomplishes. The tree is in danger of falling into the puzzling waterway, but the graving makes the function of preventing it, doing a great effort to accomplish their main objective, although the water stream may not be so clear. There is no knowledge about its destiny, we as humans, resemble a pad, we submerge into the water current, and this current may have different patches and obstacles, moss that can interrupt us on the way of existence, but at the end, we arrive at the latest part of the road.

As you observed in the excerpt above, the paraphrased version accounts for varied use of structures and vocabulary without altering the essence of the original text. For instance, when transforming the initial sentence *“The Scottish cold seems to wake up”* into *“To be awaken appears the freezing Scottish, the coldest season is approaching”*, the students showed their ability to paraphrase a difficult sentence using metaphors to convey the meaning of the original message. On the other hand, it also reflects the students' capacity to recreate complex sentences in a coherent way. For example, when transforming the original sentence *“The rocks prevent the fallen dark elm leaf get to the misty river,*” into *“The tree is in danger of falling into the puzzling waterway, but the graving makes the function of preventing it”* the students showed their capacity to duplicate complex sentences composition using different vocabulary without

varying the meaning. All in all, students' hardship to summarize and paraphrase improved when they used CT strategies.

Third, regarding their capability to infer information and interpret facts, students showed abilities to do so after applying CT strategies. Within the lessons in which we asked them to infer and interpret facts, they applied the strategies that suggest identifying keywords, scan paragraphs to look for those keywords, read the sentences where the words are, and analyze the surrounding context (Bates,2011). Given this, they evidenced comprehension, beyond the literal information from the text. Moreover, they comprehended complex ideas embedded in the texts, by performing deep analysis of the context, as you can see in the following excerpts:

Excerpt 4. Answers to the question: What evidence does the author offer to support his claim? interviews focus groups.

- In part of the reading, it describes one piece of art, it describes how the piece is arranged, and it says how his pieces are unexpected. Maybe these descriptions tell us about the purpose of the author.
- The author gives as numbers (quantities) they use these numbers to emphasize the main idea. For example, the number of photos (50.000 photos).
- Some words in the text. For example, when he says "prominent" "peak" ... those words give more importance to the article.

Excerpt 5. Answers to the question: What is the writer's attitude and tone? How do you know this? interviews focus groups.

> Admiration, proudness, reverence… for example in the first paragraph they say that he is a highly regarded environmental sculptor, I think they use the word "highly" to emphasize the impact Godlsworthy had. He emphasizes in the description using adjectives.

In the previous excerpts, it is noticeable the ability the students had to establish contextual clues to analyze what the text did not say. For example, when considering the claim of the author, students inferred from the descriptions the author used, how these suggested the purpose of the text. In the same way, students identified the semantic value of the words, embedded in the tone and attitude of the author. They established this relationship by considering the use of adjectives and how from them, the reader could tell how the author felt. This means they inferred and interpreted information to draw plausible conclusions. At the end, CT strategies fostered their inferential and interpretive skills.

To sum up, students demonstrated they have the skills to comprehend what is implicit in a text when applying CT strategies. Moreover, this may show their apathy for reading was not connected to comprehension issues, but it was related to their interest for certain types of texts. All in all, their grappling with the implementation of CT strategies, showed to have a positive impact on their comprehension process.

Students' feelings regarding the text genre.

When students start the process of acquiring a second language, they may face negative feelings regarding their text preferences to comprehend the

readings. One of these feelings is apathy, which is reflected in their reading comprehension process. Indeed, Sani & Zain (2011) highlight that:

> Mathewson's (1994) model, which is based on a tripartite view of attitude, suggests that attitude toward reading encompasses evaluative beliefs about reading, feelings about reading, and readiness to read. These three components in Mathewson's model are expected to influence intention to read or continued reading, as well as further affect aspects of reading behavior such as attention, strategy use, and reading comprehension. (p.244)

This model postulates that the normative beliefs like attitude, disposition, and the aptitude that students may have when reading are influencing feelings on this process. Likewise, the feelings resulting from the reading process could fall within the categories of boring and frustrating, affecting the students' reading comprehension because the text genres are not of their preference. Consequently, the feelings students have when they read a text they prefer, are an important factor in their reading comprehension process. Furthermore, the connection students have with the text context is relevant since they may be apathetic regarding a non-preferred reading. Kintsch (as cited in Soto, Gutierrez de Blume, Poblete, Asún, Figueroa & Serrano, 2019) states ‘‘the reader's goal is to construct a meaningful representation that establishes local and global coherence among clauses expressed in the text and link it to their knowledge of the world, producing a representation of a text that will be encoded into memory’’ (p.3). In other words, what this author means is that context can influence students' preferences and contribute to shaping their reading attitudes and preferences. The analysis of this section led us to find that through the use

of CT strategies, students expressed both positive and negative attitudes. The following information contributed to a deep analysis of the different feelings that emerged during the study regarding students' text preferences.

To begin, some students showed feelings such as boredom, curiosity, frustration or inspiration depending on the type of text genre. In this sense, the following figure elucidates the different emotions that academic texts evoked in students.

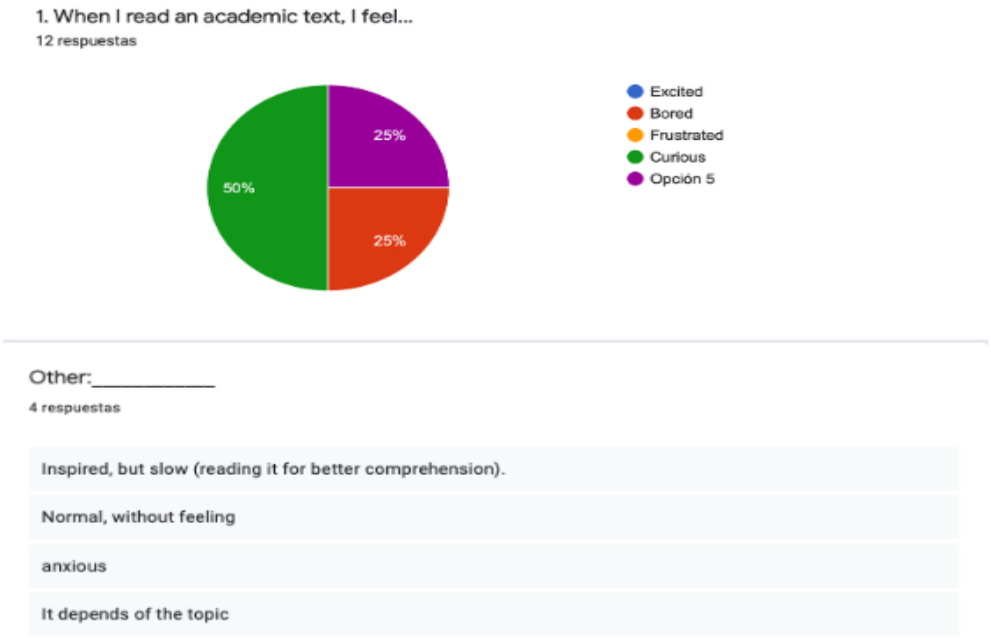


Figure 3. Feelings. This figure illustrates the feelings that academic texts evoked in students.

As we can observe, it was difficult for students to comprehend a text they did not feel was engaging. According to the figure, 50% of the students felt curious when they read an academic text, but 25% of them felt bored because this kind of text was not of their preference. Likewise, the other 25% of students

answered that it depends on the topic because it is hard for them to feel engaged with an academic text. Levordashka (2006) states that:

> The quality of the data acquired through self-report is highly contingent upon the respondents' capacity and willingness to provide reliable answers. When respondents are interested and focused, they will be more likely to think carefully about the questions and state their true opinions. When respondents are unmotivated, bored, or fatigued, on the other hand, they will be more likely to give meaningless or even random responses, which, in turn, add noise to the data. (p.1)

This means that through the data we collected, we noticed that when students had to read an academic text, they showed feelings related to indifference. To add, synthesized questions help us to analyze the students' responses and to recognize their text preferences.

In the same way, we observed students' self-distrust about their capacities to interact with a text when demonstrated to be bored and frustrated while reading. In this regard, the following figure demonstrates that students experienced negative feelings when reading an academic text.

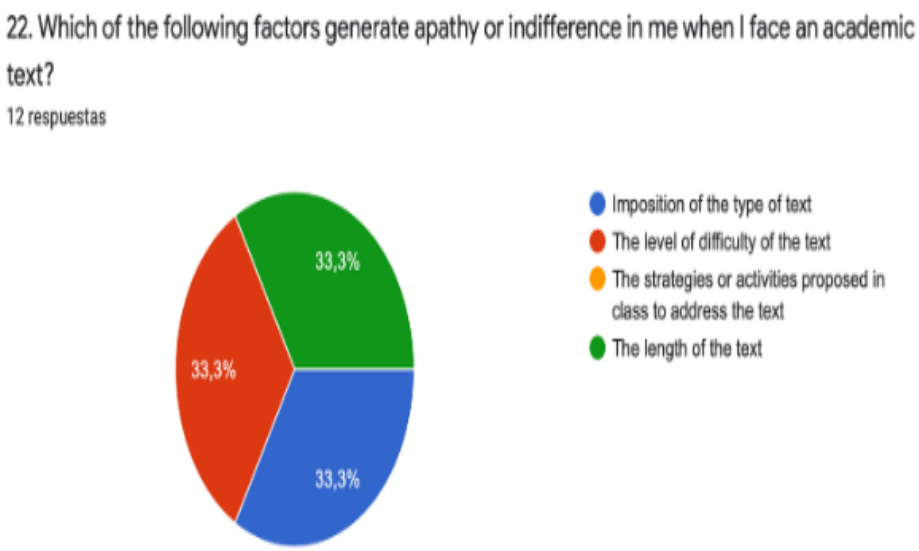


Figure 4. Factors that generate apathy for reading. This figure demonstrates the negative aspects the students face when reading an academic text.

It means that 33% of students showed apathy when the text had a long length because the topic seemed to be boring for them. Also, the other 33% of them showed negative feelings because of the difficulty of the text. Furthermore, the other 33% of students did not like the same types of text. That is why we evidenced apathy in the imposition of an academic text. That means some students had apathy for reading because of their preference about the type of text. Happy, Antitza, Abhijit, Radia, Philippe and Francois. (2019) claim that:

> We analyze facial movements and use them as the observation due of conversation attributed to validate the reduced emotional response of apathetic subjects, the spontaneous expressions were elicited by asking all subjects to briefly narrate past positive and negative experiences. (p.1)

Likewise, we confirmed students manifest their interest and disinterest depending on the type of texts they have to read. In short, it is crucial to highlight that it is complicated to have students engaged when they have different preferences about text genres.

Similarly, we confirmed negative and positive students' feelings when we asked them to use CT in their answers after reading a text. The following excerpts show some physical responses students had in one lesson.

Excerpt 6. Feelings and attitudes. Description of physical responses observed in the focus group interview.

> Throughout the focus group interview, there were different kinds of physical reactions visible in the participants. Most of them seemed apathetic when initially being asked the questions. However, as the discussion advanced more seemed interested in the conversation. While the exercise was happening, especially within the questions that could be complex, some students' faces could be interpreted as confusing. Correspondingly, some students' attitudes visibly changed, showing assertion when some of their classmates demonstrated their points. Even though some faces could be interpreted as not involved, enthusiastic or even boring; at the end the physical reactions told for a more comfortable position.

According to the excerpt above, when we asked students some critical questions about an academic text, some seemed frustrated because they showed boring and confused faces while the teacher asked them about their point of view. Besides, some physical responses, such as movements of uncertainty and skepticism, were observed; for example, they looked at the ceiling, looked at the desk instead of participating in the discussion. However,

while some of them showed their points, their attitudes shifted, and they demonstrated to be more comfortable, displaying assertiveness with the topic. Morgan, Farkas and Qiong (2011) claim that ‘‘readers have been reported to feel less competent in reading, consider it to be difficult, be less motivated to read, and hold generally more negative attitudes towards learning to read’’ (p 1). Considering this, it is important to highlight that we analyzed the way students felt when answering the questions through their gestures, movements and speech. In this respect, the previous and following excerpts showed that some students were not engaged with the lesson because of their genre preferences.

Excerpt 7. Feelings and attitudes. Description of verbal responses observed in the focus group interview.

Question 3: What evidence does the author offer to support his claim?

Participant 1: In part of the reading, it describes one piece of art, it describes how the piece is arranged, and it says how his pieces are unexpected. Maybe these descriptions tell us about the purpose of the author.

Participant 2: The author gives us numbers (quantities) they use these numbers to emphasize the main idea. For example, the number of photos (50.000 photos).

Participant 3: Some words in the text. For example, when he says “prominent” “peak” ... those words give more importance to the article.

Question 4: What is the writer's attitude and tone? How do you know this?

> **Participant 1**: Admiration, proudness, reverence… for example in the first paragraph they say that he is a highly regarded environmental sculptor, I think they use the word “highly” to emphasize the impact Godlsworthy had. He emphasizes in the description using adjectives.

As could be seen in excerpt 7, students showed comprehension of academic texts, on question 3 we noticed three participants answered according to their perception, demonstrating their point of view. On the other hand, in question 4 we could confirm that some of them were not engaged with the lesson. All in all, some students showed disinterest about the topic while others seemed to be engaged in the lesson. Briefly, we confirmed which were the factors that generated apathy in the students' reading comprehension process.

To sum up, we could analyze the students’ negative and positive feelings when reading an academic text. It means that we noticed students' apathy for reading was connected to their text preferences and not to their capacity to comprehend an academic text. We considered the students’ positive and negative feelings and how these affected their reading comprehension.

Students’ feelings regarding text style.

Reading comprehension is constantly influenced by diverse factors that may affect students’ feelings and attitudes when they face texts. One of these factors is the properties of the texts, in this case, the academic ones. We can integrate such properties within the concept of readability, which is a determining aspect in students’ reading comprehension process. Taking this into consideration, Yulianto (2019) states:

> The purpose of readability itself is to find out the right fit between students' reading ability, determine the success of learners to get a good comprehension in reading and it also determines the students' ability to understand and obtain meaning from the textbooks. (p.84)

That is, through readability, students measure their reading comprehension skills since this aspect allows finding successful results in the levels of understanding of a text. Therefore, we explored how different readability factors regarding the text style affected students' feelings and understanding of texts. In this sense, in this section, we will expose the main text properties regarding readability in light of the findings we gathered from the instruments we applied. In the first place, we describe a property regarding the *design* of the text, which includes the length of the text, and visual aids such as images or illustrations; then we explain the feature of *text style* which refers to the language, vocabulary, and content complexity, and finally, we present the final thoughts and conclusions.

The data demonstrated that the *design* of a text is a crucial factor that determines students' feelings and attitudes towards a text. Accordingly, based on the data we collected through the questionnaire, focus group, and field notes, we identified that students' feelings are not positive regarding the length of the texts used for our study. Srisunakrua and Chumworatayee (2019) state that "texts consisting of longer words and lengthy sentences tend to require more time to process, making them more challenging to understand " (p.258). In this respect, the following figure illustrates some of the reasons why students' feelings are negatively affected, which are reflected mainly in disinterest, apathy, and indifference.

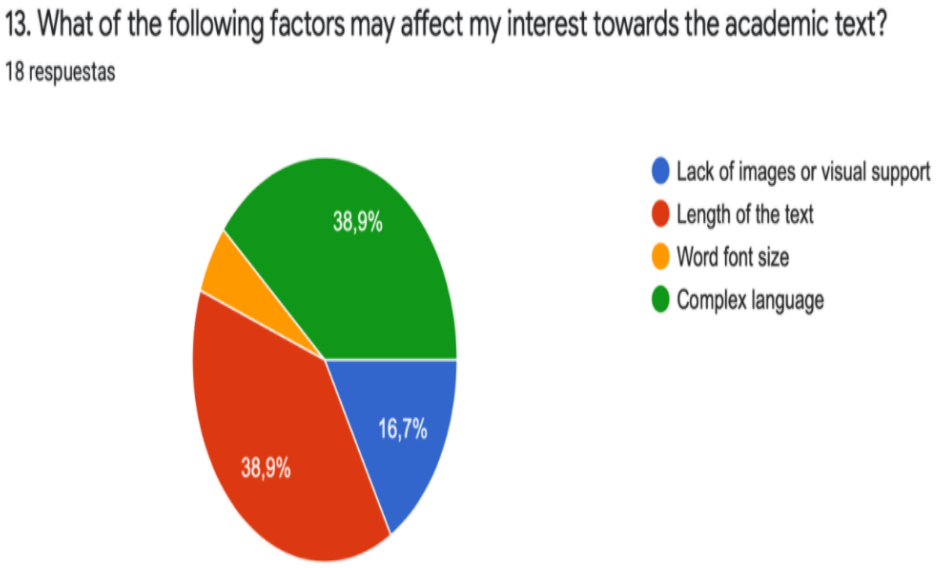


Figure 5. The figure illustrates the factors that affect students' interest towards an academic text.

As we can observe, two of the main factors that affect students' interest when facing academic texts are complex language and the length of the text, both with about 39% of answers. In this part, we wanted to focus on the length of the text and word font size, although few students chose the latter, it is relevant to consider it as a factor that affects their interest as it is related to how long the reading is. In the same way, we analyzed other factors that affect students' interest towards academic texts, generating feelings such as apathy and indifference.

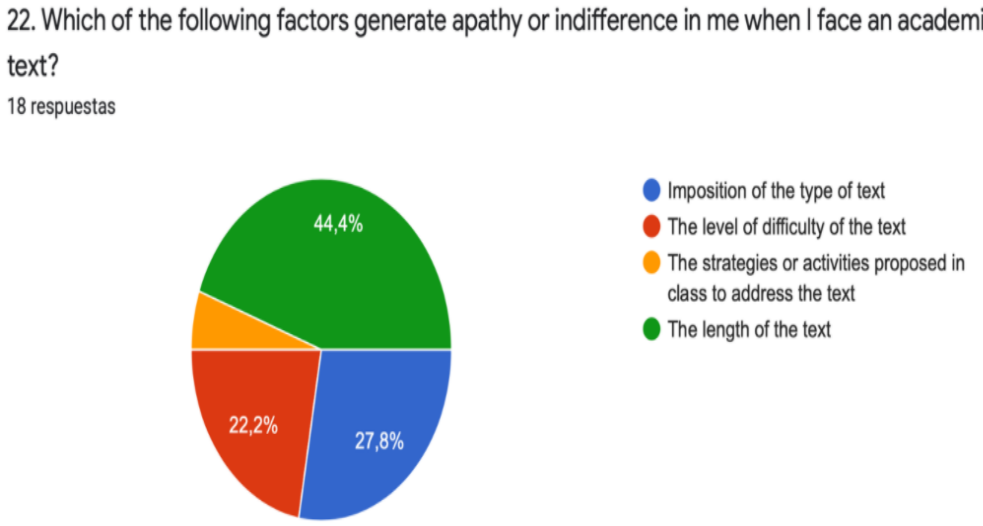


Figure 6. The figure above elucidates some factors regarding apathy in reading.

The results of these questions show that the length of the text has about 44,5% of impact regarding negative students' feelings when reading academic texts. As we stated before, this particular property of the text affects the way students feel and their comprehension because it is more challenging and demanding for them.

Properties of the design of a text such as illustrations and format may also generate an impact on students' reading comprehension. As Yulianto (2019) claims "in design including typography, format, and illustrations of a text, they are very determining the readability of a textbook" (p.84). In this sense, referring to illustrations in the texts and considering the results, we can infer that this type of readability properties supports in some extent the understanding and comprehension of the readings as the following figure illustrates:

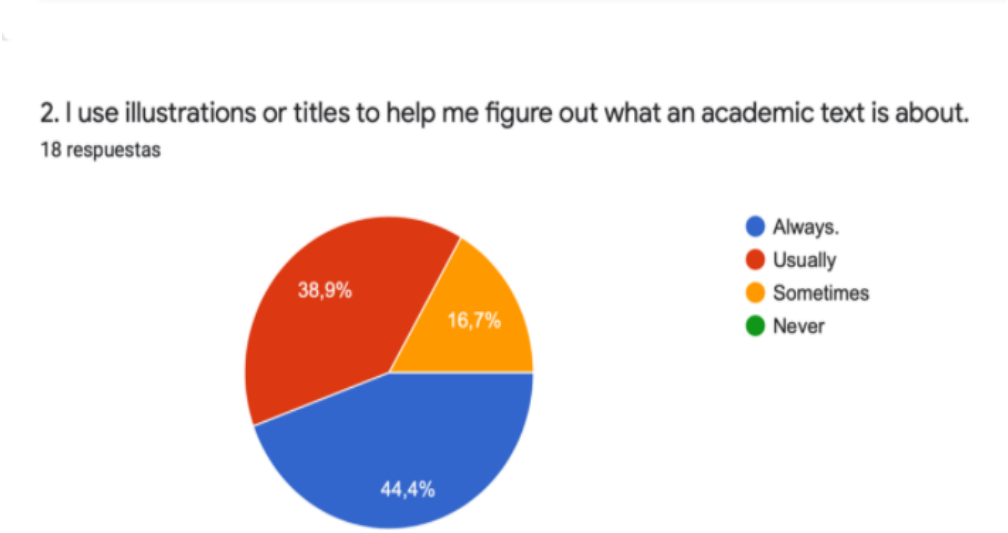


Figure 7. This figure evidences how frequent students look at illustrations in academic texts.

In this particular question, students expressed how frequently they use illustrations to have a clearer idea of what the text is about. 44,4% of students indicated that they always use illustrations or titles as a supporting factor that enhances comprehension. In the same way, figure 7 disclose the results of looking at illustrations when reading academic texts.

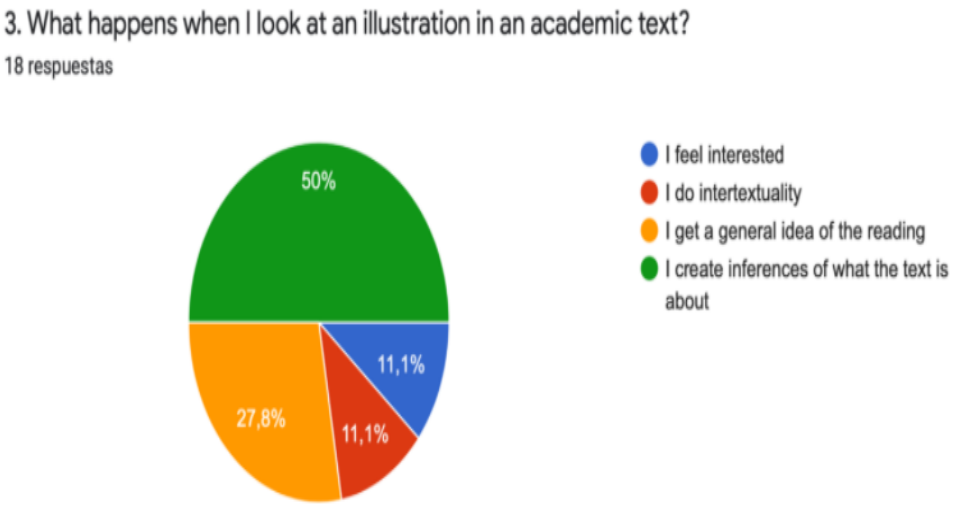


Figure 8. The figure above illustrates the results of looking at illustrations when reading academic texts.

In this regard, 50% of the students, being this the highest percentage, use such illustrations to create inferences of what the text is about, and 27,8% of the students obtain a general idea of the reading when looking at illustrations. Considering this, we may infer that the use of properties of a text as illustrations have different effects on students' comprehension process and the role of such characteristics that determine the text style, act as a supporting and helping guide to obtain meaning and understanding of the texts. As we mentioned before, the different readability factors and properties found in the design of a text may influence positively and negatively students' feelings and reading comprehension process.

Likewise, we found that the text style is another crucial readability factor that affects the feelings and reading comprehension of the students since it involves vocabulary and content complexity. In this sense, when we applied the

questionnaire and the field notes, we analyzed that some students tend to have issues with the semantic content, which refers to the vocabulary of the text, as mentioned by Stahl (2003) “the relationship between vocabulary knowledge and text readability is a robust one. Vocabulary knowledge has consistently been found to be the foremost predictor of a text's difficulty” (p.1). In other words, vocabulary is an essential readability factor that affects reading comprehension and students' feelings towards it, as you can see in the following excerpt:

Excerpt 8. Vocabulary. Concern regarding the complexity of the text.

> Initially when the students received the text *Epigenetics,* they showed a concern because the text seemed a bit complex regarding the vocabulary sauce. This concern was evident in some faces and gestures that could be read as of discomfort. Some of the gestures include faces that could be interpreted as in disbelief of their capacities to interact with a text. While reading, some of the students frowned as they were trying to go deeper into the reading, some others rolled their eyes up, bit their lips, and looked up. They also had some repetitive movements as if they were trying to understand the text and dealing with the vocabulary (moving head from one side to the other as saying no).

When we came to the analysis of this excerpt using the field notes, we noticed that students had some struggles with the vocabulary content of the text. In this lesson, we could observe some physical responses such as gestures related to confusion and doubtfulness; for instance, the line describing the specific responses “while reading, some of the students frowned as they were trying to go deeper into the reading” indicated to us that students might have faced some

difficulties to understand the text due to new vocabulary or to the complex language in the reading. In the same way, the repetitive movements they had (moving their head from one side to the other as saying no) made us infer that they were trying to deal with some parts of the text that were difficult for them to understand, which is mainly associated with the vocabulary content of the text they did not know. Similarly, the following figures show how students manage to deal with complex vocabulary or content in order to comprehend academic texts.

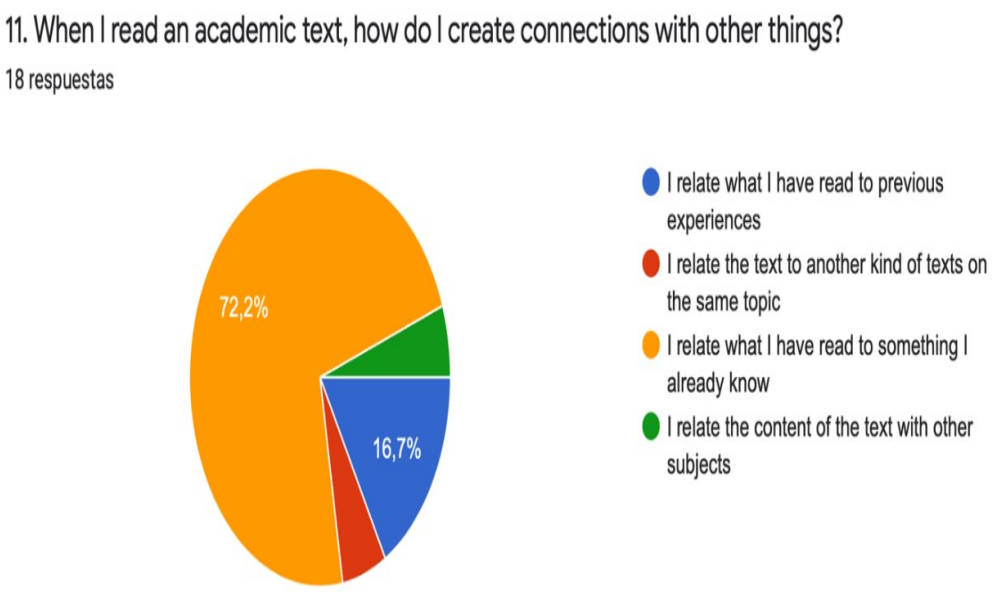


Figure 9. This figure illustrates some of the strategies that students use to create connections with other things.

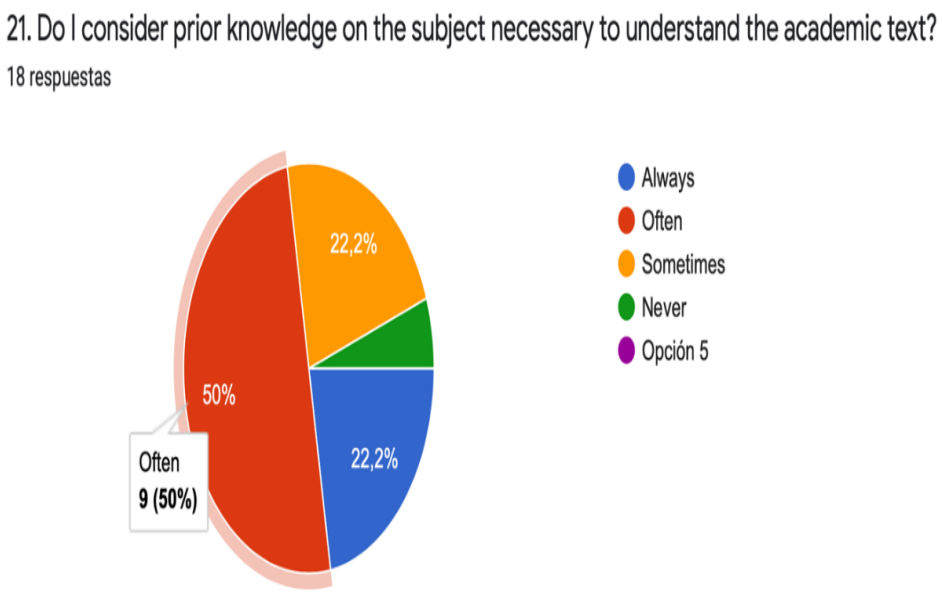


Figure 10. This image demonstrates that students use their prior knowledge to understand an academic text.

In figure 9, we could observe that 72.2% of students usually establish relationships with what they read and what they already know to connect topics. In the same way, in figure 10 we detected that 50% of the students often use their previous knowledge to understand a text. In general, we can declare that vocabulary is a relevant aspect that can limit the development of reading comprehension, and in some cases, it increases the negative feelings students have towards academic texts.

As mentioned above, the content complexity is a readability factor that we need to consider, as well as the students' negative or positive feelings towards the texts. Thus, it is important to understand that the complexity of the content determines the understanding of the subject as stated by Yulianto (2019):

> In content, there are some aspects that should be considered. They are propositions, organization, and coherence. A good content should have a good proposition, organization and coherence in a text to make a reader easier to understand the meaning of a text. (p.2)

To put it another way, the content of the text is an important feature that can facilitate or hinder students' reading comprehension process depending on the organization, the length of the sentences, the complexity of the language used, and the coherence of the text. In this regard, the following excerpt and figures show the data we collected through the questionnaire, which is related to the complexity of the content students find in academic texts.

Excerpt 9. Text complexity. Questions about vocabulary and meaning of words.

> Some students interrupted the reading to ask questions to the teacher regarding vocabulary and the meaning of some words. Some students asked for clarification about how to get the meaning of a word without using a dictionary.

When analyzing the verbal responses, we described in the excerpt above, we concluded that students showed difficulties understanding the text because of some specific words that they did not find familiar. In this sense, we may assume that the vocabulary of a text is a key factor that affects students' reading comprehension. This data is similar to the evidence that the following figure exposes.

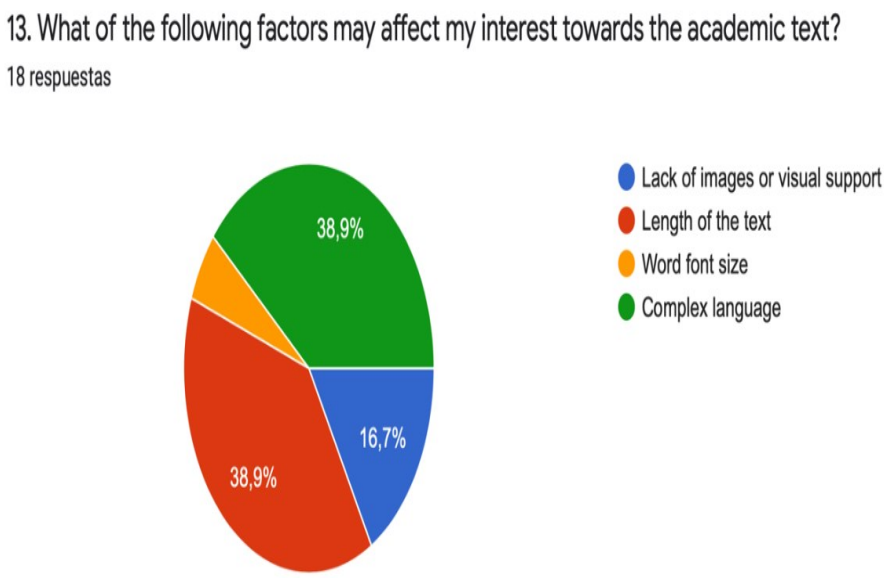


Figure 11. This figure elucidates complex language as a factor that affects students' interest towards academic texts.

As we can see in figure 11, the comprehension of an academic text can vary depending on the complexity of the language used according to 38.9% of the students. On the other hand, we observed that the length of the text is another aspect that impacts the understanding of academic texts in the same way, as we already exposed. We found different aspects such as the organization, the length of the texts, and the language complexity, that make the reading comprehension process difficult.

To summarize, we noted that the readability of a text is an essential factor in reading comprehension and in the feelings students have. First, we analyzed the design of the text, which includes both the length of the text and the illustrations presented in it, since they were aspects that we analyzed from the collected data. Second, we observed the style of the text focused on vocabulary and language complexity, as properties that usually affect the

academic processes of students. In this way, we detected that the reliability properties of academic texts affect the understanding and increase students' negative feelings towards this type of text before reading the content.

All things considered, we may conclude that students' reading comprehension of academic texts improved and strengthened through the implementation of CT strategies. Following the research proposal based on Creswell's parallel design and after applying thematic analysis on our data, we found that first, students' grapple with these strategies showed they interacted with texts beyond the literal interpretation of information. Second, we perceived their apathy for reading, demonstrated in their attitudes, was connected to their text preferences and not to their capacity to analyze academic texts. Third, we evidenced students' apathy into two main readability factors: text *design* which includes the length of the text and illustrations, and *text style* including content complexity, vocabulary, and language. Thus, CT techniques application showed an improvement in the students' reading comprehension process when interacting with academic content.

Chapter Five: Conclusions

This research about the effects of implementing CT strategies in the reading process of a group of eleventh graders in an ESL Curriculum guided us into the realization of the many factors that may influence the students' motivation for reading. Correspondingly, it allowed us to analyze the outcome of applying these strategies in the interactions the students had with academic texts. Throughout this investigation, we determined which were the factors that had a direct incidence in the students' reading comprehension process, thus we

reflected upon them using three categorical variables. This chapter aims to display the conclusions we obtained through the research, regarding the effects of implementing CT strategies in the students' reading comprehension process. We organized this chapter to consider the most relevant conclusions from this process. First, we reflected upon the research question given the three categorical themes we determined to analyze our data, and we assessed how each of them responded to the question. Second, we reflected upon the influence of the University's *Bio-Psycho-social and cultural* approach in our project. Third, we estimated the different challenges we faced during the investigation process, and finally, we contemplated possible considerations to bear in mind for further investigations in this field.

Identifying the effects of implementing CT strategies in the reading comprehension process of the students was the primary task within our first category. Indeed, we pretended to analyze the struggle the students had to face through the application. Thus, we recognized the responses this caused in their apprehension development. First, we established how this particular group of students benefited from the structures when analyzing texts. This helped them to understand the relevance of categorizing information to improve the way they approached a text. Second, the difficulties they initially showed regarding strategies such as paraphrasing or summarizing evidenced that the implementation had to go beyond mere explanations and required us to guide them. Once the students comprehended the dynamics of each practice, they produced more specialized texts in response to the proposed tasks. Third, we evidenced an effect of the strategies in the students' inferential and interpretive

skills applied during the last lessons of the project. They demonstrated they could depict text evidence in order to deduce logical relations among facts. All in all, we proved the above-mentioned effects to be positive in the students' comprehension process as a result of the implementation of the CT strategies.

To continue, this conclusion reflects upon the second category regarding students' feelings towards the text genre, the students expressed both positive and negative attitudes when reading academic texts. On the first hand, we identified the previous information along with the sessions in which the students expressed different attitudes when reading academic texts, showing positive and negative feelings. Regarding this, we demonstrated that genre-related preferences influenced the students' reading comprehension; we could observe this in their expressions, movements, and speech. On the other hand, it was evident that some learners were bored and frustrated while reading they were in disbelief of their capacities to interact with a text. Hence, as researchers, we confirmed that students had to deal with negative and positive feelings in their reading comprehension process.

Similarly, referring to the text properties and factors that generated students' indifference and apathy towards academic texts, we established the most suitable CT to help them. By exploring the influence of these factors in the students' reading process, we identified that students' motivation and interest when reading was affected when the texts included very small font size and when they were too long; in addition to this, we determined that titles, headings, and illustrations were properties that enhanced students' comprehension of texts. This led us to consider skimming and scanning as proper strategies to

implement for students not to feel frustrated when facing long texts, but rather to identify main ideas and specific information, being aware of how to use certain properties presented in the text. In the second place, we determined that even though students had some difficulties regarding the semantic content or vocabulary of the text, they assumed certain concepts and had a broad idea of the text due to their general and previous knowledge on the topic. In this sense, we decided to guide students by developing strategies such as comprehending context clues and drawing inferences; thus, they managed to interact with the texts, interpret and understand them considering the context, despite the fact they struggled with some particular ideas or concepts. In other words, thanks to the analysis we did to identify the factors that affected students' reading comprehension and interest, it was possible to conclude that the implementation of CT strategies generated positive effects and results which enhanced this reading process.

Considering the Bio-Psycho-social and cultural approach the University has, we can affirm that this investigation reflects these different views that aim to acknowledge a student most holistically. In the first place, taking into account the biological aspects of the approach, we may conclude that in this investigation, we examined some biological components involved in the learning process. As researchers, it was decisive to recognize the influence of the different learning styles of the participants in the process. About the psychological aspect, we examined the different reasons that motivated the students' apathy for reading. In this sense, we uncovered the importance of their interests and needs when facing different types of texts. This

demonstrated that their psychological state also influenced how they interacted with the reading tasks. Regarding the social dimension of this approach, we consider this was a crucial factor that took part in our study in the sense students' roles, and participation was highly significant and active throughout our investigation, this allowed us to explore some social aspects such as their emotions, feelings, perceptions and interactions in different moments of the study, and how these influenced students' motivation when reading; of course, without leaving aside their social reality and needs. Finally, we consider that the cultural dimension of this approach was part of developing CT and reading abilities in the students, not only in favor of their academic necessities but also of the social and personal ones. Additionally, we motivated students to think and read critically. Regarding the cultural dimension, this enhanced their process, since they obtained the potential to analyze, interpret and comprehend their surroundings and realities in a deep way. To sum up, we evidenced the University's approach in the different stages of this research.

In this sense, it is pertinent to mention some of the challenges we faced through the implementation of CT strategies during the research. First of all, we observed that some of the difficulties arose when selecting the academic content or material, so we adapted it to the needs of the students. In the same way, we noted that the dynamics of the classes we planned in the research had to change due to the pandemic of Covid 19, In the same way, we noted that the dynamics of the classes we planned in the research had to change due to the pandemic of Covid 19, for which we had to adapt to virtuality to carry them out. On the other hand, the triangulation of the data was a challenge that led us to investigate both quantitative and qualitative analysis methods, for which we met

Creswell's parallel design since the nature of our research had both types of data. To summarize, we faced different challenges related to the content, class dynamics, and data triangulation. However, we achieved the objective of the research.

As a final instance in our investigation, we would like to consider our research limitations as a starting point to address some suggestions for future research in this field. Even though we realized the implementation of CT strategies worked for the students' reading comprehension process, we also devised some flaws within our investigation. Taking into account some of the limitations we encountered in our research, for further investigations, we suggest conducting longer periods of observation and to have more structured-in time research in order to test the progress that students gain throughout the study, this considering that CT abilities are developed progressively, and this requires a lot of time and practice. In the same way, we also suggest the application of other different CT strategies, as well as varying the population and applying them to a different type of students to complement, compare or analyze new emerging results from the investigation. To close our research, we invite future investigators to explore and analyze this type of study to increase the results and enhance teacher and students' reading practices.

References

Abdelrahman, S., & Bsharah, M. (2014). The effect of speed-reading strategies on developing reading comprehension among the 2nd secondary students in English language. English Language Teaching, 7(6), 168-174. Retrieved from https://files.eric.ed.gov/fulltext/EJ1075772.pdf

Almeida, F. (2018). *Strategies to perform a mixed methods study*. European Journal of Education Studies, 5(1), 139. Retrieved from https://www.researchgate.net/publication/329402482_STRATEGIES_TO_PERFORM_A_MIXED_METHODS_STUDY

Acosta, L., & Ferri, M. (2010). *Reading Strategies to Develop Higher Thinking Skills for Reading Comprehension.* Profile: Issues in Teachers' Professional Development, 12(1),107. Retrieved from https://www.researchgate.net/publication/262441241_Reading_Strategies_to_Develop_Higher_Thinking_Skills_for_Reading_Comprehension

Almashikhi, K., & Thakur, V. S. (2019). *Promoting Critical Thinking as a Social Practice: Shaping Students' Voice, Agency and Inter-Subjectivity in a Cohesive Framework*. Arab World English Journal, 10(2), 409. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3418570

Aloqaili, A (2012). *The relationship between reading comprehension and critical thinking: A theoretical study*. Journal of King Saud University Languages and Translation. 24, 35-41. Retrieved from https://reader.elsevier.com/reader/sd/pii/S2210831911000373?token=1888FF23A3C6B2A9E6F3F973B1FAAFAEA7C2D61D93952D34F42A3C584447F9206CE0944E96F12A7D5ADBADF936372484

Auerbach, C., & Silverstein, B. (2003). *Qualitative Data: An Introduction to Coding and Analysis*. NYU Press. Retrieved from https://web-a-ebscohostcom.ezproxy.unbosque.edu.co/ehost/ebookviewer/ebook/bmxlYmtfXzEyNDkwNV9fQU41?sid=7e360234-7aa7-4c02-8037-f6f55aa7f85a@sdc-v-sessmgr01&vid=1&format=EB&rid=1

Barjesteh, H., & Vaseghi, R. (2012). *Critical Thinking: A Reading Strategy in Developing English Reading Comprehension Performance*. Journal of Foreign Language Teaching and Translation Studies, Vol. 1 No. 2, August 2012, ISSN: 2645-3592 Retrieved from http://efl.shbu.ac.ir/article_79173_7e4a30bad728dc7f0c6c668bf7a1cf7a.pdf

Bates, S. (2011). Oxford Preparation Course For The TOEFL iBT Exam: A Skills-Based Communicative Approach. Oxford University Press.

Basaran, S., & Tilfarlioglu, F. (2007). *Enhancing Reading Comprehension Through Task-Based Writing Activities: an Experimental Study*. The Reading Matrix,7(3),136. Retrieved from https://www.researchgate.net/publication/228353213_Enhancing_reading_comprehension_through_Task-Based_writing_activities_an_experimental_study

Bender, W. (2017). *20 Strategies for Increasing Student Engagement*. Learning Sciences International. Retrieved from https://web-b-ebscohost-com.ezproxy.unbosque.edu.co/ehost/detail/detail?vid=4&sid=54ed0171-6119-4700-9879-a2659d50f063%40pdc-v-sessmgr03&bdata=Jmxhbmc9ZXMmc2l0ZT1laG9zdC1saXZl#AN=1627316&db=nlebk

Büyükkarci, K. (2009). *A Critical Analysis of Task Based Learning*. Kastamonu Education Journal, 17(1), 314. Retrieved from https://www.researchgate.net/publication/285744934_A_critical_analysis_of_task-based_learning

Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*. 10(6), 807–815. Retrieved from https://www-sciencedirect-com.ezproxy.unbosque.edu.co/science/article/pii/S1877129717300606?via%3Dihub

Chee, C., & Lee, M. (2012). *Effects of Teaching Paraphrasing Skills to Students Learning Summary Writing in ESL*. Journal of Teaching and Learning, 2012, Vol. 8, No 2. Retrieved from https://jtl.uwindsor.ca/index.php/jtl/article/view/3145/pdf

Cheung, C. & Li, H (2015). *Focus interventions effects in Mandarin multiple wh-questions*. Journal of Asian Linguistics, 2015. Retrieved from http://link.springer.com/article/10.1007/s10831-015-9134-1

Creswell, J. (2009) *Research Design: Qualitative, quantitative and mixed method approaches*. London: Sage Publications. Retrieved from http://www.ceil-conicet.gov.ar/wp-content/uploads/2015/10/Creswell-Cap-10.pdf

Creswell, J (2014). *Research design: qualitative, quantitative, and mixed methods approaches*. (4th ed.). Los Angeles: Sage. Guerrero, A. L. (2011). Retrieved from https://otru.pw/part-research-design-qualitative.pdf

Creswell, J., & Poth, C. (2016*). Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. Los Angeles: Sage. Retrieved from https://books.google.com.co/books?id=gX1ZDwAAQBAJ&dq=creswell+qualitative+inquiry+and+research+design&hl=es&lr=

Costa, A. (2016). *Task-Based learning (TBL) and Cognition*. An e-journal of Teacher Education and applied Language Studies, 7(1), 111. Retrieved from https://www.researchgate.net/publication/320847073_Task-Based_Learning_TBL_and_Cognition

Denzin, N., & Lincoln. Y. (2011). *The SAGE Handbook of Qualitative Research.* Thousand Oaks, CA: Sage. Retrieved from https://books.google.com.co/books/about/The_SAGE_Handbook_of_Qualitative_Researc.html?id=qEiC-_ELYgIC&redir_esc=y

Dörnyei, Z., & Taguchi, T. (2009). *Questionnaires in second language research: Construction, administration, and processing.* Routledge. Retrieved from https://books.google.es/books?hl=es&lr=&id=YVKOAgAAQBAJ&oi=fnd&pg=PR11&dq=the+role+of+questionnaires+in+research&ots=61zuk0_yC4&sig=ntuOcObBW818gq3H1VJWbfZN2cA#v=onepage&q=the%20role%20of%20questionnaires%20in%20research&f=false

Duke, N., & Pearson, D. (2002). *Effective Practices for Developing Reading Comprehension*. Journal of Education, 189(1–2), 107–122. Retrieved from https://www.researchgate.net/publication/254282574_Effective_Practices_for_Developing_Reading_Comprehension

Gambrell, L., & Dromsky, A. (2000). Beginning reading and writing. *Fostering Reading Comprehension.* (pp. 143- 151). Teachers College Press, New York. Retrieved from https://books.google.com.co/books?hl=es&lr=&id=RBjR7Yh8YpQC&oi=fnd&pg=PA143&dq=complex+thinking+and+reading+comprehension&ots=

1afoXsRhnn&sig=Zl0PtoNGBgyUQsmRraRD4yBpyv4#v=onepage&q=complex%20thinking%20and%20reading%20comprehension&f=false

Gamboa, A. (2017). *Reading Comprehension in an English as a Foreign Language Setting: Teaching Strategies for Sixth Graders Based on the Interactive Model of Reading*. Folios, 45, 159–175. Retrieved from http://www.scielo.org.co/scielo.php?script=sci_abstract&pid=S0123-48702017000100012

Guthrie, J. T., & Wigfield, A. (2000). Handbook of Reading Research. In M. L. Kamil, B., Mosenthal, D., Pearson, & R. Barr (Eds.). *Engagement and motivation in reading*. (Vol. III, pp. 403–424). Mahwah, NJ: Erlbaum. Retrieved from https://books.google.com.co/books?hl=es&lr=&id=2vhQAwAAQBAJ&oi=fnd&pg=PA403&dq=Engagement+and+motivation+in+reading&ots=lXd9Auje7O&sig=owUXk0AEKJdEQFUyh-YwoEQATRk#v=onepage&q=Engagement%20and%20motivation%20in%20reading&f=false

Guthrie, J. T. (2008). Reading motivation and engagement in middle and high school: Appraisal and intervention. In J. T. Guthrie (Ed.), *Engaging adolescents in reading.* Thousand Oaks, CA: Corwin. Retrieved from https://psycnet.apa.org/record/2007-19701-001

Guthrie, J., Mason-Singh, A. & Coddington, C. (2012). *Instructional effects of Concept- Oriented Reading Instruction on motivation for reading information text in middle school*. In J. T. Guthrie, A. Wigfield, & S. L. Klauda (Eds.), Adolescents' engagement in academic literacy. Retrieved

from https://pennykittle.net/uploads/images/PDFs/Reports/motivation-and-reading.pdf#page=162

Grabe, W., & Stoller, F. (2019). *Teaching and Researching Reading*. (3rd Ed). New York: Routledge. Retrieved from https://www.taylorfrancis.com/books/9781315726274

Happy, L., Antitza, D., Abhijit, D., Radia, Z., & Philippe, R., (2019). *Characterizing the State of Apathy with Facial Expression and Motion Analysis*. Retrieved from https://www.researchgate.net/publication/332242231_Characterizing_the_State_of_Apathy_with_Facial_Expression_and_Motion_Analysis

Harris, L. (2008) *A Phenomenological Investigation of Teacher Conceptions of Student Engagement in Learning*. Educational Researcher, (35)1, 58. Retrieved from https://link.springer.com/article/10.1007/BF03216875

Honorene, J. (2017). *Understanding the role of triangulation in research.* Vol. 4/31 pp 1-5. Research Scholar, Azam College of Education. Retrieved from http://www.srjis.com/pages/pdfFiles/149544238718.%20HONORENO%20JOHNSON.pdf

Indriyanty, R., & Prasetyo, Z. (2018). *Improving the experiment Report Writing Skills of Fifth Graders Through the Discovery Learning Method*. Journal Prima Edukasia, 6(1), 104-110. Retrieved from https://www.researchgate.net/publication/324082429_Improving_the_experiment_report_writing_skills_of_fifth_graders_through_the_discovery_learning_method/figures?lo=1

Inggris, P. (2016). *Student's Cognitive Engagement in Learning Process*. Journal Polingua, (5)2, 49. Retrieved from https://www.researchgate.net/publication/334891109_Student%27s_Cognitive_Engagement_in_Learning_Process

Juniardi, Y. (2018). *Student's critical thinking and their reading comprehension ability*. *Paper presented at the Student's critical thinking and their reading comprehension ability conference*, Indonesia. Retrieved from https://www.researchgate.net/publication/323596199_STUDENTS'_CRITICAL_THINKING_AND_THEIR_READING_COMPREHENSION_ABILITY

Kahu, R. (2013) *Framing Student Engagement in Higher Education*, Studies in Higher Education, 38:5, 758-773. Retrieved from https://www.tandfonline.com/doi/abs/10.1080/03075079.2011.598505

Kamali, Z., & Fahim, M. (2011). *The Relationship between Critical Thinking Ability of Iranian EFL Learners and Their Resilience Level Facing Unfamiliar Vocabulary Items in Reading*. Journal of Language Teaching & Research, 2(1). Retrieved from https://www.researchgate.net/publication/228649762_The_Relationship_between_Critical_Thinking_Ability_of_Iranian_EFL_Learners_and_Their_Resilience_Level_Facing_Unfamiliar_Vocabulary_Items_in_Reading

Knapp, N., & Schwanenflugel, P. (2016) *The psychology of Reading, Theory and Applications.* The Guilford Press. Retrieved from https://books.google.com.co/books?id=aK1ECgAAQBAJ&pg=PA166&lpg=PA166&dq=reader+construct+definitions+by+creating+a+representation+of+the+meaning&source=bl&ots=HemN2wymnd&sig=ACfU3U36YpEkE

cnVzvu6EjJIpXkaitwIxQ&hl=es&sa=X&ved=2ahUKEwiWhoCPlubnAhWpnuAKHetaC1AQ6AEwCXoECAcQAQ#v=onepage&q=reader%20construct%20definitions%20by%20creating%20a%20representation%20of%20the%20meaning&f=false

Khairuddin, Z. (2013*). A Study of Students' Reading Interests in a second Language*. International Education Studies, 6(11), 161-162. Retrieved from https://files.eric.ed.gov/fulltext/EJ1068695.pdf

Kirmizi, F. (2011) *The Relationship Between Reading Comprehension Strategies and reading Attitudes.* 3–13, 39:3, 289-303. Retrieved from https://www.tandfonline.com/doi/abs/10.1080/03004270903514320

Kovic, M. (2016). *A generalized definition of critical thinking*. Swiss Skeptics Discussion Paper Series, 1(1), 1–31. Retrieved from https://www.skeptiker.ch/a-generalized-definition-of-critical-thinking/

Kvale, S. (2008). *Doing interviews*. Sage. Retrieved from https://books.google.com.co/books?hl=es&lr=&id=gkBdBAAAQBAJ&oi=fnd&pg=PR5&dq=what+are+interviews&ots=bfEgCPeD6Z&sig=iw_TM7714ztvnG6pS73xb4ebFus#v=onepage&q=what%20are%20interviews&f=false

Law N°1098. Diario Oficial de la República de Colombia. Bogotá Colombia. 08 de noviembre de 2006. Retrieved from https://www.oas.org/dil/esp/Codigo_de_la_Infancia_y_la_Adolescencia_Colombia.pdf

Law N°1377. Diario Oficial de la República de Colombia. Bogotá, Colombia. 27 de junio de 2013. Retrieved from https://www.mintic.gov.co/portal/604/articles-4274_documento.pdf

Levordashka, A. (2006). *Effects of Questionnaire Design on Respondent Experience and Data Quality*. VU University Amsterdam. Retrieved from https://osf.io/xy2zv/download

Lucas, K. (2019) *Chinese Graduate Student Understandings and Struggles with Critical Thinking: A Narrative-Case Study.* Purdue University. International Journal for the Scholarship of Teaching and Learning, v13 n1 Article 5. Retrieved from https://files.eric.ed.gov/fulltext/EJ1203788.pdf

León, A., & Escudero, I. (2017). Reading Comprehension in Educational Settings. Amsterdam: John Benjamins Publishing Company. Retrieved from https://benjamins.com/catalog/swll.16

McLaughlin, M. (2012). READING COMPREHENSION: What Every Teacher Needs to Know. *The Reading Teacher*, 65(7), 432-440. Retrieved from https://www.jstor.org/stable/41853051?Search=yes&resultItemClick=true&searchText=READING%20COMPREHENSION%20What%20Every%20Teacher%20Needs%20to%20Know&searchUri=%2Faction%2FdoBasicSearch%3FQuery%3DREADING%2BCOMPREHENSION%253A%2BWhat%2BEvery%2BTeacher%2BNeeds%2Bto%2BKnow%26acc%3Doff%26wc%3Don%26fc%3Doff%26group%3Dnone%26refreqid%3Dsearch%253A4e46aef30413f8a57494488c932b7f27&ab_segments=0%2FSYC-5882%2Fcontrol&refreqid=fastly-default%3Aa75c1e7ecfc42faed2245804cd409267

MacQueen, K., Namey, E., & Guest, K. (2012*). Applied Thematic Analysis*, SAGE Publications. Retrieved from https://books.google.com.co/books?id=VuWrexznC7sC&printsec=frontco

ver&dq=how+to+do+thematic+analysis&hl=es-419&sa=X&ved=2ahUKEwiWroulx63sAhUrqlkKHVyeB3IQ6wEwAHoECAAQAQ#v=onepage&q=how%20to%20do%20thematic%20analysis&f=false

Mehdinezhad, V. (2011). *First Year Students' Engagement at the University*. International Online Journal of Educational Sciences, 3(1), 47-66. Retrieved from https://www.researchgate.net/publication/228404305_First_Year_Students'_Engagement_at_the_University

Merriënboer, J & Kirschner, P. (2018). Ten Steps to Complex Learning. *A Systematic Approach to Four-Component Instructional Design*. Routledge. Retrieved from https://books.google.com.co/books?hl=es&lr=&id=929QDwAAQBAJ&oi=fnd&pg=PP1&dq=complex+thought+approach+article&ots=dOFbBzlPWs&sig=bj3MxZhg_McbSv4KuPScsUP4qg0#v=onepage&q=complex%20thought%20approach%20article&f=false

Morgan, P., Farkas, G., & Qiong. W. (2011). *Do Poor Readers Feel Angry, Sad, and Unpopular?* Scientific studies of reading: the official journal of the Society for the Scientific Study of Reading vol. 16,4 (2012): 360-381. doi:10.1080/10888438.2011.570397. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4500191/

Newby, T. & Richardson, J. (2010) *The Role of Students' Cognitive Engagement in Online Learning*. American Journal of Distance Education, 20:1, 23-37. Retrieved from https://www.tandfonline.com/doi/abs/10.1207/s15389286ajde2001_3

Ness, M. (2011): *Explicit Reading Comprehension Instruction in Elementary Classrooms: Teacher Use of Reading Comprehension Strategies*, Journal of Research in Childhood Education, 25:1, 98-117 Retrieved from http://lchc.ucsd.edu/MCA/Mail/xmcamail.2013_09.dir/pdfXrptHTp61Y.pdf

Phillippi, J., & Lauderdale, J. (2017). *A Guide to Field Notes for Qualitative Research: Context and Conversation. Qualitative Health Research*, 28(3), 381. Retrieved from https://journals-sagepub-com.ezproxy.unbosque.edu.co/doi/pdf/10.1177/1049732317697102

Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2014*). Qualitative research practice: A guide for social science students and researchers.* Sage. Retrieved from https://books.google.com.co/books?hl=es&lr=&id=EQSIAwAAQBAJ&oi=fnd&pg=PP1&dq=Ritchie,+Lewis,+Nicholls,+and+Ormston+(2013)&ots=l-QVetTw4Q&sig=8_oxL4K1d70ZJhuMh47zcDLCqkk#v=onepage&q=Ritchie%2C%20Lewis%2C%20Nicholls%2C%20and%20Ormston%20(2013)&f=false

Sani. A., & Zain. Z. (2011). *Relating Adolescents' Second Language Reading Attitudes, Self Efficacy for Reading, and Reading Ability in a Non-Supportive ESL Setting*. Reading Matrix. 11. Retrieved from https://www.researchgate.net/publication/275585014_Relating_Adolescents'_Second_Language_Reading_Attitudes_Self_Efficacy_for_Reading_and_Reading_Ability_in_a_Non-Supportive_ESL_Setting

Saldaña, J. (2011). *Fundamentals of Qualitative Research*. Oxford University Press. Retrieved from https://eds-b-ebscohost-

com.ezproxy.unbosque.edu.co/eds/ebookviewer/ebook?sid=4fa95de1-7422-4d28-9c20-74be463ff6c7%40pdc-v-sessmgr06&vid=0&format=EB

Santi, K., & Reed, D. (2015). *Improve Reading Comprehensions of Middle and High School Students. Springer*. New York. Retrieved from https://link.springer.com/book/10.1007/978-3-319-14735-2

Shihab, I. (2011). *Reading as Critical Thinking*. Asian Social Science, (7)8, 209-2010. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.837.7726&rep=rep1&type=pdf

Simister, C. (2007). *How to Teach Thinking and Learning Skills: A Practical Programme for the Whole School*. Los Angeles, L.A.: Sage. Retrieved from https://www.amazon.com/How-Teach-Thinking-Learning-Skills/dp/1412934222

Soto, C., Gutierrez de Blume, A., Poblete, M., Asún, R., Figueroa, M., & Serrano, M. (2019). *Impact of Bridging Strategy and Feeling of Knowing Judgments on Reading Comprehension Using COMPRENDE: an Educational Technology*. TechTrends. Retrieved from https://www.researchgate.net/publication/331533578_Impact_of_Bridging_Strategy_and_Feeling_of_Knowing_Judgments_on_Reading_Comprehension_Using_COMPRENDE_an_Educational_Technology

Srisunakrua,T., & Chumworatayee,T. (2019). *Readability of Reading Passages in English Textbooks and the Thai National Education English Test: A Comparative Study* (July 11, 2019). Arab World English Journal (AWEJ) Volume 10. Number 2. June 2019. DOI: http://dx.doi.org/10.2139/ssrn.3418124

Stahl, S. (2003). *Vocabulary and readability: How knowing word meanings affects comprehension. Topics in language disorders*, 23(3), 241-247. Retrieved from https://journals.lww.com/topicsinlanguagedisorders/Abstract/2003/07000/Vocabulary_and_Readability__How_Knowing_Word.9.aspx

Solís, A. (2008). *Teaching for Cognitive Engagement-Materializing the Promise of Sheltered Instruction*. IDRA. Retrieved from https://www.idra.org/resource-center/teaching-for-cognitive-engagement/

Swiger,S., & Wharton-McDonald, R. (2014). *Developing Higher Order Comprehension in the Middle grades*. In Duffy, G, & Israel, S (Eds.), Handbook of Research on Reading Comprehension (pp. 510-530). Routledge. Retrieved from https://www.academia.edu/37378134/Handbook_of_Research_on_Reading_Comprehension._Duffy_and_Israel._Taylor-Francis._2014.pdf

Talebi, M., & Talebi, M. (2015). *The Effect of Teaching Critical Reading Strategies on Making Advanced Iranian EFL Learners the Critical Readers.* Cumhuriyet. Üniversitesi Fen-Edebiyat Fakültesi Fen Bilimleri Dergisi, 36(3), 1179-1189. Retrieved from https://dergipark.org.tr/tr/download/article-file/713836

Thamrin, S. (2014). *Scanning technique in developing students' reading comprehension*. Kreatif, 15(1), 31-35. retrieved from http://jurnal.untad.ac.id/jurnal/index.php/Kreatif/article/view/3117

Vongkrachang, S., & Chinwonno, A. (2015). *CORI: Explicit Reading Instruction to Enhance Informational Text Comprehension and Reading*

Engagement for Thai EFL Students. PASAA, 49, 1–38. Retrieved from https://files.eric.ed.gov/fulltext/EJ1077913.pdf

Yulianto,Y. (2019). *An Analysis on Readability of English Reading Texts with Automated Computer Tool*. J-SHMIC: Journal of English for Academic, 6(1), 81-91. DOI: https://doi.org/10.25299/jshmic.2019.vol6(1).2675

Zhang, J. (2008) *Constructivist pedagogy in strategic reading instruction: exploring pathways to learner development in the English as a second language (ESL) classroom*. Instructional Science 36: 89. Retrieved from https://link.springer.com/article/10.1007/s11251-007-9025-6?shared-article-renderer

Zohrabi, M. (2013). *Mixed method research: Instruments, validity, reliability and reporting findings.* Theory and Practice in Language Studies, 3(2), 254-262. Retrieved from http://ezproxy.unbosque.edu.co:2048/login?url=https://search-proquest-com.ezproxy.unbosque.edu.co/docview/1330861295?accountid=41311

Appendix A. Consent Letter to Institution

Bogotá D.C, 11 de septiembre, 2020

Asunto: Petición para el desarrollo de investigación docente

Respetada Rector (a)

Somos estudiantes de la Licenciatura en Educación Bilingüe con Énfasis en la Enseñanza del Inglés de la Universidad El Bosque. Actualmente nos

encontramos en la etapa de implementación y análisis de nuestro Proyecto de Grado.

Nuestro estudio se basa en analizar los efectos de implementar estrategias de **Pensamiento Crítico** en el proceso de comprensión de lectura, centrado en un currículo de la enseñanza del inglés como segunda lengua. Las actividades correspondientes a nuestro ejercicio serán dirigidas por la profesora titular **Adriana González** los días lunes en la clase inglés, desde el 14 de septiembre hasta el 08 de noviembre del 2020, en las cuales se procederá a recolectar datos contando con la participación de los alumnos del curso undécimo (11 CB), a través de instrumentos pedagógicos tales como dos exámenes diagnósticos, un cuestionario y notas de campo. Cabe destacar que todas estas actividades hacen parte de nuestra práctica educativa.

Así mismo, informamos que para dicho programa tendremos en cuenta todo lo referente a procedimientos éticos y de confidencialidad de datos personales para la recolección y uso de información personal de toda la población vinculada a este
ejercicio de investigación. Por tal motivo, nos dirigimos a usted con el propósito de solicitar formalmente permiso para llevar a cabo nuestro proyecto de investigación.

De antemano agradecemos su colaboración,

Cordialmente

Julieth Gonzáles

Adriana González

Alexandra Mahecha

Estefanny Chate

Appendix B. Consent Letter to Parents and Students

Bogotá, 14 de septiembre, 2020

Asunto: Petición para el desarrollo de investigación docente

Estimados padres de familia del grado de 11CB

Somos estudiantes de la Facultad de Educación de la Universidad el Bosque y estamos en etapa de implementación y análisis de nuestro Proyecto de Grado. Nuestro estudio se basa en analizar los efectos de implementar estrategias de **Pensamiento Crítico** para mejorar la comprensión lectora de los estudiantes. Las actividades correspondientes a nuestro ejercicio serán dirigidas por la profesora titular **Adriana González**, en las cuales se procederá a recolectar datos contando con la participación de los alumnos del curso undécimo (11 CB), a través de instrumentos pedagógicos tales como dos exámenes diagnósticos, un cuestionario y notas de campo. Cabe destacar que todas estas actividades hacen parte de nuestra práctica educativa.

Así mismo, le informamos que para dicho programa tendremos en cuenta todo lo referente a procedimientos éticos y de confidencialidad de datos personales para la recolección y uso de información personal de toda la población vinculada a este ejercicio de investigación. Por tal motivo, nos dirigimos a ustedes con el propósito de solicitar formalmente permiso para llevar a cabo nuestro proyecto de investigación.

De antemano agradecemos su colaboración,

Por favor Diligenciar la siguiente información y devolverla el día martes.

Yo _____ identificado(a) con cédula de ciudadanía N°

_____ autorizo a mi hijo(a) _____ a ser partícipe de las

la actividad relacionada con lectura y pensamiento crítico.

Cordialmente

Julieth Gonzáles

Adriana González

Alexandra Mahecha

Estefanny Chate

Appendix C. Focus Group Interview Questions

Read the following text, then discuss the questions in a focus group, remember there are no right or wrong answers.

Andy Goldsworthy's Environmental Art

Bates, S. (2011). *Oxford Preparation Course For The TOEFL iBT Exam: A Skills-Based Communicative Approach*. Epigenetics. Oxford University Press. pp. 137-138

Andy Goldsworthy is a highly regarded environmental sculptor. The British artist works with elements of nature such as flowers, branches, leaves, stones, ice, and snow.

In so doing, he creates inspirational works of art that reflect the processes of nature. His temporary masterpieces, sometimes lasting for only a few hours, mirror the life cycles of growth, decay, and renewal. The sculptor's underlying purpose is to go beyond the material form to discover what lies beneath. For this reason, many of his works include a hole, which serves as a looking glass into the mystery of life.

With a sense of childlike wonder, Goldsworthy approaches each creation without any preconceived notions. For instance, the originator of contemporary rock balancing may feel inclined to cover the entire surface of a rock with brightly colored flower petals so that it takes on a surreal appearance. Alternatively, he may fuse icicles together into

a magnificent star-like sculpture with spikes radiating out from a central point. As each artwork takes shape in its own unique outdoor environment, the artist awaits the moment when the work is at its peak-before natural elements such as wind, sun, or rain may impact upon the design and instigate its inevitable decay. At this point, Goldsworthy captures its essence in a photograph, portraying the piece at the instant he feels it is most alive. To date, he has more

than 50,000 catalogued photos, which he displays in prominent galleries and publishes in best-selling books.

Because he works with the theme of transience, the 50-something Goldsworthy feels his own mortality all the more strongly. While he admits that his physical abilities will change with time, he suggests that any challenges he may experience will open up new avenues for artistic expression. In this regard, he identifies with Matisse, the French painter, whose later works became infused with energy because of the difficulties he experienced in executing them.

Questions

1. What is the main information provided by the text?
2. What is the author’s claim?
3. What evidence does the author offer to support his claim?
4. What is the writer's attitude and tone? How do you know this?
5. Do you perceive any bias? How do you know there is a bias?
6. What do you see about the form the author presents information in the text? What characteristics do you recognize?

Appendix D. Reading Comprehension Questionaries

Answer the following questions about your reading comprehension process. This questionnaire is anonymous, it means no one will know who you are.The reason for this is to encourage you to be honest. Please answer all the questions truthfully. There are no right or wrong answers. This will help your

teachers to assess and analyse your perceptions about your reading comprehension process.

1. **When I read an academic text, I feel...**

    - Excited
    - Bored
    - Frustrated
    - Curious
    - Other: _____

2. I use illustrations or titles to help me figure out what an academic text is about.

    - Always.
    - Usually
    - Sometimes
    - Never
    - Other:_____

3. What happens when I look at an illustration in an academic text?

- I feel interested
- I do intertextuality
- I get a general idea of the reading
- I create inferences of what the text is about
- Other:_____

4. When I read an academic text provided by the teacher in class, I understand:

- Everything
- The main idea
- Not enough
- Nothing
- Other:_____

5. When I don't understand a word, I use the information I have already read to guess its meaning.

- Always
- Usually
- Sometimes
- Never

- Other:_____

6. What do I do when I finish reading the text?

- Summarize information using graphic organizers
- Make judgments
- I reflect on what I read
- I make connections between the texts and texts that I have read before
- Other: _____

7. What of the following do I use in order to understand an academic text? (Choose the one I use the most)

- I read more about the topic
- I look for meanings of the words when I don't understand
- I revise titles and headings to have a general idea
- I do scanning to get general idea
- Other:_____

8. What kind of text do I like the most?

- Narrative text.
- Academic text.

- Informative text
- Literary text
- Other: _____

9. What is critical thinking for me?

- Uncoding
- Identifying
- Making connections
- Questioning
- Other:_____

10. When I read an academic text, I expect to achieve:

- Understanding the whole text
- Understanding the main idea
- Understanding keywords
- Understanding some words
- Other: _____

11. When I read an academic text, how do I create connections with other things?

- I relate what I have read to previous experiences

- I relate the text to another kind of texts on the same topic
- I relate what I have read to something I already know
- I relate the content of the text with other subjects
- Other:_____

12. What kind of activities do I think may help me to understand the texts better?

- Summaries
- Group workshops
- Graphic organizers
- Debates or group discussions
- Others:_____

13. What of the following factors may affect my interest towards the academic text?

- Lack of images or visual support
- Length of the text
- Word font size
- Complex language
- Other:_____

14. How do I motivate myself to achieve the purpose of the reading task proposed by the teacher?

- o I use the strategies proposed by the teacher
- o I use the strategy I consider that best works for me
- o I participate in all the activities proposed by the teacher
- o I participate only in the activity in which I feel more confident about
- o Other:_____

15. When I read an academic text, I can...

- o Identify the author's claim
- o Identify the tone
- o Identify the mood
- o All of the above
- o Other:_____

16. When I read an academic text, can I identify the relevant concepts?

- o Always
- o Often
- o Sometimes
- o Never

- Other:_____

17. What strategies do I use to synthesize an academic text within key ideas?

- Taking notes
- Summarizing
- Highlighting main ideas
- Graphic organizers
- Other: _____

18. After reading an academic text, can I express what I read in my own words?

- Always
- Often
- Sometimes
- Never
- Other:_____

19. Are the academic texts proposed by the institution of collective interest?

- Many times
- Sometimes
- Few times
- Hardly ever

- Other:_____

20. I consider my reading comprehension process in the last 2 years has been:

- Excellent
- Good
- Regular
- Deficient
- Other:_____

21. Do I consider prior knowledge on the subject necessary to understand the academic text?

- Always
- Often
- Sometimes
- Never
- Other: _____

22. Which of the following factors generate apathy or indifference in me when I face an academic text?

- Imposition of the type of text
- The level of difficulty of the text
- The strategies or activities proposed in class to address the text

- The length of the text
- Other:_____

23. How can I identify the author's intention in an academic text? Select the options that you consider correct.

- Defending and expressing an idea
- Expressing emotions
- Reporting details
- Using arguments
- Other: _____

24. What do I gain after reading an academic text?

- Reflection upon meaning
- Interconnection with real-life contexts
- Gaining new perceptions to see the world
- Gaining knowledge about the topic
- Other:_____

25. I complete the reading tasks proposed by the teacher because:

- It is important and meaningful to me
- It helps me improve my reading comprehension and learning process
- The teacher asks me to do it
- If I do it, I will get a reward (grades)
- Other:_____

Appendix E. Field Notes Template

TEMPLATE FOR TAKING FIELD NOTES	
Date: _____ Site: **_____** **Participants: _____ Description of Activity:** **_____** _____	
Students reactions and responses	
Physical	**Verbal**
Write the reactions that students have when interacting with the texts (gestures, movements, attitude)	*Write the reactions that students have when interacting with the texts. (comments, interventions, questions)*

Emerging Questions/Reflections: *Write the questions or reflections that arise during the observation*
Reflective summary: *Write one paragraph summary or abstract of the day's events. Include analytical and detailed description, such as today was a good example of code-switching.*
Narrative: *Write a general narrative of what you observed.*

Appendix F. Summaries in text analysis- Field Notes

FIELD NOTES

Date: October the 1st / 2020 **Site: students' Classroom**

Participants: 18 students from eleventh grade

Description of Activity: Summaries in text analysis (lesson plan 4).

Learning objective: To differentiate what is relevant from what is not when summarizing information from a text.

Teaching objective: To foster students' ability to use summaries in order for them to categorize text information as relevant

Pre task

Teacher asks students to be in pairs and to share a recent experience in two particular ways: one using only relevant facts, and the other, telling the same story but in a more detailed way. Then, students discuss which story was more entertaining, which was easier to understand, and which was more likely to be a summary.

Task

Teacher asks students to read the text *Epigenetics* individually and take notes about the main ideas of each paragraph using key words and sentences.

Post task

<table>
<tr><td colspan="2">Teacher asks students to create a graphic organizer with the main ideas and information they gathered from the text.

Then, in the same pairs created for the pre task, they share and compare the graphic organizer.</td></tr>
<tr><td colspan="2">Students reactions and responses</td></tr>
<tr><td>Physical</td><td>Verbal</td></tr>
<tr><td>Initially when the students received the text Epigenetics they showed a concern because the text seemed a bit complex regarding the vocabulary sauce. This concern was evident in some faces and gestures that could be read as of discomfort

Some of the gestures include faces that could be interpreted as in disbelief of their capacities to interact with a text. While reading, some of the students frowned as they were trying to go deeper into the reading, some others rolled their eyes up, bit their lips, and looked up. They also</td><td>While students were reading, some of them made comments regarding the fact that some topics within the text had been previously studied in the biology classes (we saw this with Andres- Biology Teacher) . Other students asked their classmates when those clases had happened (when? was it last year?).

Some students interrupted the reading to ask questions to the teacher, regarding vocabulary and the meaning of some words (teacher what is epigenome? what is trigger?, what is legumes?) Teacher reminds</td></tr>
</table>

had some repetitive movements as if they were trying to understand a text and dealing with the vocabulary (moving head from one side to the other as saying no). Others seemed very concentrated within the reading time (nodding heads, moving their hands as if carrying a tune), however others seemed very disconnected and distracted by external elements (looking to their places in the room, not focussing their eyes on the task). However, at the same time others showed enthusiasm (smiles, focus sight, looking at the task) because the topic seemed to be interesting for them, especially those students who like scientific topics. While revising the graphic organizers that made part of the last activity within the class, some students made faces that communicated assertiveness regarding the results (nodding heads as if saying yes,	the students to check for the context to understand the sense of the unknown words. Some students asked for clarification about how to get the meaning of a word without using a dictionary (*teacher but how do I get the meaning,?*). Teacher reminds them to care for the sentences before and after the unknown term, to at least make a logical possible meaning. While performing the graphic organizers activity at the end of the class, some students asked why some of their ideas were not considered as main ideas and which was the way to differentiate main ideas from details winning the text, (t*eacher but why offspring DNA is not a main idea?, why DNA methylation is a secondary idea?*) Teacher reminded them that main ideas were always expressed in the fors sentences of each paragraph.

moving their hands as if pointing at something), especially when the teacher asked them to clarify which were the main ideas and details from the text.	When presenting their graphic organizers, some students communicated that it was now easier for them to identify the main ideas (*teacher we did it following the structure of each paragraph. It also helped we had studied this in biology*)

Emerging Questions/Reflections:

1. May the fact students seem to know about the text topic have a positive impact in their reading comprehension process?
2. Why do the students prefer to ask the teacher when they do not understand a word, rather than inferring the meaning using the text context?
3. Why do some students show reluctance towards using graphic organizers to identify relevant information from a text?

Reflective summary*:*

The class started at a normal rhythm, the students received the instruction regarding the pre-task and then started to work in pairs to exchange stories, within this part they seemed very enthusiastic, though while visiting the couples, some of them seemed more engaged than others. When the

students were asked to share their stories some of them looked hooked on the activity while others seemed to act indifferent.

Once reading activity started and as soon as they received instruction, some of them asked if they had to answer a test after reading. In this instruction students were asked to read the first sentence of each paragraph, then read the last sentence of each paragraph and then they had to read key words in between.

While the students were reading, the teacher was monitoring the process, trying to notice if there was any kind of reaction towards reading. Within this time teacher realized some of them were or at least looked concentrated while reading, while others seemed very distracted by external situations.

Some students started to ask questions regarding the vocabulary in the text, the teacher reminded them to use the context and guided them to try to understand first the general idea of the other text and then concentrate on the words or phrases before and after the unknown word to try to establish its meaning. When this intervention happened, some students responded affirmatively remembering that they had done this before, when not understanding a word; others asked for clarification trying to remember how to do it.

Once the reading was done, the teacher asked the students to perform the next activity explaining the importance of working with graphic organizers to get main ideas and details from the text. Once again, some students seem

very enthusiastic about using this tool while others seem kind of bored regarding the petition to perform this activity. While revising the graphical organizers the students created, the teacher noticed most of the students had no difficulty to differentiate main ideas from details within the text.
Narrative: Teacher was able to observe that some students knew how to apply critical thinking strategies in order to understand an academic text. However, some of these strategies needed to be tuned in for them to get a successful interaction with the text. For example it was important to remind them of the relevance of keeping in mind the information they needed to find (main ideas and supportive arguments). Eventually, the teacher noticed students understood how to use graphic organizers to categorize the ideas of a text properly. Nevertheless, it seems some of them still needed instruction to understand how to differentiate main ideas from significant details within a text.

Appendix G. Skimming in Reading Comprehension - Field Notes

FIELD NOTES

Date: October 15th /2020-2 Site: Students' Classroom

Participants: 18 students from eleventh grade

Description of Activity: Skimming in Reading Comprehension

Learning objective: To differentiate what is relevant from what is not when analyzing information from a text.

Teaching objective: To foster students' ability to use analysis in order for them to categorize text information as relevant

Pre task

The teacher asks students to review individually the text they have read in a previous class "Andy *Goldsworthy's Reading on Environmental Art"* and take into account the main ideas of each paragraph regarding the author's intention, tone, etc.

Task The teacher asks them some questions about text in order to analyze how critical they could be when reading. The teacher and students discuss about these questions complementing each other's opinions

Post task

Students and the teacher come to conclusion regarding the main ideas discussed through the questions.

Students reactions and responses

Physical	Verbal
. Correspondly, some students' attitudes visibly changed, showing assertion when some of their classmates demonstrated their points. Even Though, some faces could be interpreted as not involved, enthusiastic or even boring; at the end the physical reactions told for a more comfortable position.	Initially when discussing some complex questions some students asked for clarification of terms. In other parts of the discussion some students decided to complement each other's opinion. Usually when teachers asked for more points of view, some of them expressed hesitation (eh,mmm, aa). Also, when understanding certain topics, some students showed their comprehension by using expressions such as: aha, yes,yeah,etc. Finally, when asked to complement their perceptions some of them use expressions as: nope, it is clear, it is ok, I got it.

Emerging Questions/Reflections:

1. Are the questions may be too complicated for students to reflect upon the text?
2. May the fact students seem to know about the text topic have a positive or

   negative impact in their answers?

1. Why some students seem to be reluctant towards the exercise, could be

this connected to the fact they are not understanding the dynamics/objective?

1. Why do some students seem to be eager to participate, while others seem apathetic?

Reflective summary:

The exercise started by inviting the students to reflect upon the importance of critically analyzing an academic text. The teacher emphasized on the relevance of interacting in more analytical ways with academic texts because this is something, they have to face now they are finishing their senior year (toefl, prueba saber 11º, university application processes, etc.) At the beginning, some students were more enthusiastic while others demonstrated not to be so involved. In the middle of the discussion the answers of the students showed to be more refined and more analytical regarding the questions that were being asked. At the end of the conversation the environment seemed much more reflective towards the objective of the exercise. We considered that the conclusions proved this reflection to be successful.

Narrative:

We observed a group of youngsters that had a good attitude towards the dynamic of the exercise and who developed an empathetic relationship with the questions as the conversation was advancing. Even though some of them showed lack of interest, no one had a negative or aversive reaction that we can tell. We also observed these students really know about the topic, since their answers were structured and well though. Actually, up to some moments of the conversation we felt surprised by the quality of their answers.