

Effectiveness and Students' Perception of the Use of Pre-reading Strategies and Summaries: A Case Study of Adult EFL Students in a Reading Comprehension Course

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Abstract

This study is aimed at providing an answer to the questions of how the completion of pre-reading exercises and summaries can enhance learners' reading comprehension and what their perceptions of the usefulness of these tools to read texts in English are. Students completed different pre-reading exercises including the adapted version of the K-W-L organizer to establish a connection between their background knowledge and the texts. They also wrote summaries in order to check their understanding of the gist of the texts. The review of the literature makes reference to the benefits of using pre-reading strategies and summaries to better understand texts. The information gathered shows that learners were able to understand the main ideas of the texts, but some of them still had difficulties to analyze specific details in order to carry out the course-related tasks. The results also indicate that students had contrasting points of view about the usefulness of both strategies to read texts in English before and after the interventions.

Key words: pre-reading strategies, K-W-L organizer, schemata, post-reading, summaries, texts, reading comprehension

Resumen

Este estudio responde a las preguntas de cómo la realización de ejercicios de prelectura y resúmenes pueden mejorar la comprensión de lectura de los educandos y cuál es su percepción de la utilidad de estas herramientas para leer textos en inglés. Los estudiantes completaron diferentes ejercicios de prelectura, incluida la versión adaptada del diagrama K-W-L con el fin de establecer una conexión entre su conocimiento previo y los textos. Además, escribieron resúmenes para comprobar su comprensión de la idea central de los textos. El marco teórico hace referencia a los beneficios de usar estrategias de prelectura y resúmenes para una mejor comprensión. Los datos obtenidos muestran que los estudiantes fueron capaces de comprender la idea principal de los textos pero algunos de ellos tuvieron dificultad en analizar detalles específicos para llevar a cabo las asignaciones del curso. Los resultados también indican que los alumnos tuvieron puntos de vista contrastantes sobre la utilidad de ambas estrategias para leer textos en inglés antes y después de las intervenciones

Palabras claves: estrategias de prelectura, diagrama K-W-L, esquemas mentales, poslectura, resúmenes, textos, comprensión de lectura

Introduction

Mikulecky (2008) defines reading as “a conscious and unconscious thinking process [in which the] reader applies many strategies to reconstruct the meaning that the author is assumed to have intended” (p. 1). That is, the reader interacts with the text to assign it meaning, which may differ from the meaning that the author wanted to express (Aebersold & Field, 1997). In this interaction, the use of different strategies is necessary to tackle the challenges that the reader may face when reading a text written in a foreign or a second language. Without them, students will inevitably read passively.

Reading comprehension strategies are defined as “cognitive or behavioral action[s] that [are] enacted under particular contextual conditions, with the goal of improving some aspect of comprehension” (Graesser, 2007, p. 6).

They are “resources employed by readers in their attempts to understand a text and construct meaning” (Perry, 2013, p. 76) or “the means...to resolve a problem encountered while reading (p. 76). Thus, as Moreira (2016) suggests, the reading instructor has to know and teach different strategies to help college students to become effective readers (p. 276). This goal is not only achieved when suitable strategies are taught for each of the three phases of reading (pre-reading, while-reading, and post-reading), but it is also attained when teachers raise awareness of the importance of their constant use to acquire automaticity, fluency and accuracy while reading.

Despite the relevance of each of the reading stages, sometimes educators mainly focus on while-reading strategies, and many students complain that reading in a foreign language is difficult. In the course called “Strategies of Reading Comprehension in English II”

(LM-1032) from the Section of English for Other Majors (SIPOC) at the School of Modern Languages from the University of Costa Rica, this discontent is very common among low achievers. Due to the fact that the course schedule is very tight, emphasis is generally placed on the main reading strategies (analysis of rhetorical patterns and discourses) to cover the syllabus within the time frame. Even though the practice exercises that are given to the learners include sections of pre-reading and post-reading exercises, many students express that they cannot understand the texts because they lack vocabulary in English. Others say that they understand the main ideas of the texts, but they cannot succeed in the reading comprehension tasks because of the complexity of both the exercises as well as the language structures and the jargon of the readings. Nevertheless, there have been students whose proficiency in English is high, and they still struggle to effectively interact with texts.

To tackle the problems previously mentioned, teachers should give more emphasis to teaching suitable pre-reading strategies in order to help learners to gain confidence when reading texts in a foreign language and to improve their reading skills. Moreover, instructors should raise awareness about the importance of doing post-reading exercises such as summarizing texts in order to aid students consolidate information and self-evaluate what they understand from the readings. As Alfaki and Siddiek (2013) state, the purpose of the three stages is “to train the students to be efficient readers in the foreign language” (p. 45). Consequently, the reader comprehends the text

better and becomes an autonomous learner when she/he goes through the three reading phases (p. 45).

Review of the Literature

Pre-Reading

The importance of the pre-reading stage lies in the confidence and security given to the students with the preparation received to read a text (p. 46). In this stage, a purpose for reading is established (Bilokcuoğlu, 2011, p. 82) and learners are able to “draw on their current knowledge and develop schemata prior to reading a given text” (Al Salmi, 2011, p. 705). Without schematic knowledge, students may not successfully understand difficult texts (Al Sami, 2011). For this reason, “schema” (schemata in plural) constitutes a key concept that should be defined to have a better insight about its impact on readers.

Schema

Xiao-hui, Jun, and Wei-hua, (2007) define schema as “the prior knowledge gained through experiences stored in one’s mind. It is an abstract structure of knowledge” (p. 18). Additionally, schemata are assumptions used to fill gaps when there is missing information (Ajideh, 2003; Khanam, Zahid & Mondol, 2014). These assumptions “are shared by both the writer (encoder) and the reader (decoder)” (Khanam, Zahid & Mondol, 2014, p. 84). Awareness of the types of schemata that there are can help teachers to make decisions on the best approaches that should be employed to scaffold reading instruction. In fact, instructors cannot

expect their learners to understand the selected readings if they are not aware of the problems that a lack of schema may pose on their students (p. 91).

Types of schemata

Schema has been classified into three types: linguistic schema, content schema and formal schema. Linguistic schemata “refer to the reader’s existing language proficiency in vocabulary, grammar and idioms” (Al Salmi, 2011, p. 701; Xiao-hui, Jun, & Wei-hua, 2007, p. 18). According to Aebersold & Field (1997), they “include the decoding features we need to recognize words and see how they fit together in a sentence.” (p. 17). Content schemata “refer to the background knowledge of the content area of a text, or the topic a text talks about. They include topic familiarity, cultural knowledge and previous experience with a field” (Al Salmi, 2011, p. 702; Xiao-hui, Jun, & Wei-hua, 2007, p. 19). Formal schemata constitute “the organizational forms and rhetorical structures of written texts” (Carrell 1984a,b) as cited in Aebersold & Field, 1997, p. 17). A reader’s formal schema is specifically “the knowledge ...[brought] to a text about structure, vocabulary, grammar, and level of formality (or register)” (p. 17).

These types of schemata are essential for readers because a lack of them can hinder comprehension (Khanam, Zahid & Mondol, 2014; Moreillon, 2006). Indeed, background knowledge is useful for students because they can make connections between what they know and the text (Dymock & Nicholson, 2010, p. 167; Thomas & Reinhart, 2014, p. 269). It also gives readers the chance to make predictions about the

information that they will receive (Gillakjani, & Ahmadi, 2011; Hwang, 2008; Thomas & Reinhart, 2014). Furthermore, it helps learners to keep their attention on the text and “to take ownership of their own reading experiences” (Alfaki & Siddiek, 2013, p. 44) because of the opportunity that they are given to read with a particular goal in mind (p. 44). Activating background knowledge actually enhances students’ motivation and interest to read (Moreira, 2016). A suitable strategy to aid learners activate their schemata is the K-L-W organizer. Since this tool will be used in all of the interventions of this study, an analysis of its advantages and disadvantages will be presented in order to shed light on what different authors have argued about it.

K-L-W Organizer

K-W-L is an organizer used as “an introductory strategy that provides a structure for recalling what students know about a topic, noting what [they] want to know, and finally listing what has been learned and is yet to be learned” (Umaroh, 2015, p. 14). This tool can be helpful for different reasons. First, its format is easy to use (Wrinkle & Manivannan, 2009). Then, K-W-L charts may contribute to have a better understanding of texts through scaffolding (Hilden & Jones, 2011). Moreover, it encourages learners’ engagement in their own learning, and they can think critically (Wrinkle & Manivannan, 2009).

Even though this method has been considered advantageous, it has been criticized for the impact it may have on readers. First, Finders and Balcerzak (2013) state that learners may strongly

hold mistaken beliefs or hide their lack of clarity by completing the K (know) column. Hence, they suggest “ask[ing] students what they have heard or what others might say about the topic” (p. 460). This recommendation will be taken into account in this study as a way to prevent students from writing that they do not know anything about the topic. Another disadvantage pointed out by these authors is that “students are often unable to articulate what they ‘want’ to learn.... [Additionally], completing the final ‘learn’ column closes off further inquiry” (p. 460). However, teachers can request learners to do more research on the topic to expand their knowledge. Likewise, those students who are curious may take the initiative to look for more information out of class. Hilden and Jones (2011) also question the authenticity of the charts since adults do not use this type of strategy in real life. They suggest that the constant use of the same strategy can lead to boredom. Nevertheless, Wrinkle and Manivannan (2009) advise educators to use other techniques to work at least on the K column. This would add variety to the lesson and students can benefit from different activities that can help them activate their schema. In fact, strategies such as vocabulary preview, brainstorming, and schema activation through pictures and videos will serve to complement the use of the K-W-L chart. Since pre-reading strategies are also meant to make predictions about the content of the text, the K-W-L chart will be adapted and called K-P-W-L chart; that is, a column will be included so that students can purposefully read the text by making predictions about its content and checking if their guesses are correct or not.

In order to determine the effectiveness of pre-reading strategies to prepare the reader to interact with texts, the post-reading stage plays a pivotal role. As a matter of fact, since summaries have been considered an effective strategy to check understanding (Pakzadian, 2012; Tan-de Ramos, 2010, Westby, Culatta, Lawrence, Hall-Kenyon, 2010; Wormeli, 2004), this will be the tool used to assess students' overall text comprehension. For this reason, the relevance and characteristics of summaries will be addressed in the following section.

Post-reading and Summarization

The post-reading stage is the most demanding phase because students are required to show their understanding of the text (Tan-de Ramos, 2010; Tarshaei & Karbalaeei, 2015). As it was previously stated, one of the strategies that contributes to achieve this goal is summary writing. As McNamara, Ozuru, Best and O'Reilly (2007) point out, “summary writing helps readers organize text contents at the macro level and discern which information is important and which is not” (p. 490). This strategy aids learners establish a difference between main ideas and supporting details, and it “promotes learning that lasts because students must spend time reflecting and processing what they have read” (Westby, Culatta, Lawrence, & Hall-Kenyon, 2010, p. 276). Additionally, summaries could be an indicator of the effectiveness of the scaffolding provided in the pre-reading stage. As Westby et al. (2010) suggest, “if students have insufficient background knowledge, their comprehension falters and they exhibit

more difficulty in producing coherent, meaningful summaries” (p. 277). Thus, students are expected to excel in their summaries since they will participate in pre-reading activities that help them narrow content and linguistic gaps. Each summary should be “a shortened version of an original text, stating the main ideas and important details of the text” (Kissner, 2006, p. 8) by following a logical order and coherence.

In conclusion, both the pre-reading and the post-reading stages are necessary to aid learners to achieve success in reading. They are also helpful for teachers to have a better idea of students’ gaps before reading and performance after interacting with the text. The pre-reading stage is a preparation phase for the reading process. Without pre-reading activities, students may experience considerable difficulties to understand texts, and this aspect can negatively affect their perception of reading in a foreign language, and therefore, of the course that they are taking. Furthermore, the post-reading stage is necessary for learners to show comprehension. Writing summaries is advantageous for teachers and learners to check understanding and reading progress. For this reason, the primary objective of this study is to answer the following research questions: To what extent does the completion of pre-reading exercises and summaries enhance reading comprehension? and, what are the learners’ perceptions of the usefulness of these tools to read texts in English? Some sub-questions derive from this main question:

What factor(s), according to the students’ perception, hinder their comprehension of texts?

1. How can the pre-reading exercises help them cope with the difficulty/difficulties that they encounter to understand texts in English?
2. What are the students’ perceptions, before and after the interventions, of the usefulness of different pre-reading activities, including the K-P-W-L chart, to understand texts in English?
3. What are the students’ perceptions, before and after the interventions, of the usefulness of writing summaries to show their understanding of texts?
4. How well do students perform in the reading comprehension exercises and summaries for the diagnostic assessment, the interventions, and course assessments?
5. To what extent did students feel confident about their comprehension of texts in English before and after the interventions?

Methodology

Participants

The study was initially conducted with a group of 36 adult students taking the course LM-1032 in the Section of English for Other Majors (SIPOC) at the School of Modern Languages from the University of Costa Rica (Rodrigo Facio Campus). Most of them were undergraduates registered in different majors. For some of them, LM 1032 was the last requirement to graduate. Furthermore, there were two teachers taking the course to get a higher academic rank at the university. These participants attended classes twice a week, 3 hours per day during 15 weeks.

Before the administration of the midterm exam, three students dropped out of the course.

Procedures

Students were first given the pre-intervention questionnaire in order to get information about their perceived level of language proficiency to read texts in English, the frequency with which they can do different reading-related tasks, the frequency with which they use a variety of pre-reading strategies, their perception about pre-reading activities and summaries, and their perception about the factors that they think affect their understanding of texts written in English. Then, they were asked to do some reading comprehension exercises for homework based on a single text used as a review for the contents studied in the course that they had to take before LM-1032 (LM-1030 Strategies of Reading Comprehension in English I). The text was about the use of game theory to make forecasts in different fields. They were also requested to write a summary of the text in Spanish. Both the summary and the answers of the exercises had to be sent to the teacher's e-mail. This assignment was considered a diagnostic assessment for the researcher to have an idea of how well the learners understood the text without doing pre-reading activities.

After the students did the review exercises, the teacher started with the interventions. In order for students to do the midterm exam, the learners were taught the difference between explicit and implicit information, the three types of inferences that readers can make (real, false and not implied),

and four rhetorical patterns (generalization, description, definition and classification). Thus, the five interventions that were made were meant to practice each topic before students completed each of the three formal assessments (the two quizzes and the midterm exam). The study did not take into account the second part of the course (the contents assessed in the final exam) because of time constraints. It is also important to highlight the fact that even though students read texts in English, the course is taught in Spanish; consequently, most pre-reading exercises were done in Spanish and the summaries were also written in this language to prevent students from merely copying a shortened version of the original text. The use of their native language forced them to think about what they read to translate and even paraphrase the main ideas. This was considered a more reliable way to assess comprehension, especially in the case of students whose level of language proficiency was low.

Once the midterm exam was administered, students were given the post-intervention questionnaire in a further session in order to get information about their perception of what they were able to do during the course and their perception of the usefulness of the pre reading strategies and summaries.

Intervention 1. For this intervention, the teacher posted some words on the wall; these words were taken from the text and printed in separate sheets of paper so that students could write down their names in each term that they were able to define without using a dictionary. Then, they were given a copy of a vocabulary log, which included a chart for the learners to write

the words that they did not know with their corresponding part of speech and definition or Spanish translation. After they did this, the teacher checked the answers and showed them some pictures so that students discussed with other classmates what the topic of the text was. Then, the instructor gave them the K-P-W-L organizer. Once they completed it, they were given a handout with some reading comprehension exercises based on a text about Facebook and like-farming. They were asked to write a summary of the text. Once students finished, the teacher collected their worksheets.

Intervention 2. Students worked in groups to answer a question to activate content schema. Then, the teacher brainstormed their ideas on the board (students answered the question in Spanish and the teacher wrote the ideas in English). Then, students were given a list of words, and they were asked to discuss what they thought the possible topic of the text was. Then, they watched a video exemplifying one of the issues mentioned in the text. After all this, students had to complete the pre-reading chart. Since there was not enough time for them to do the reading comprehension exercises in class, they were assigned to do them at home and to send the answers, the summary of the text and a picture of the pre-reading chart by e-mail. The text was about the use of black humor amid the horror and suffering in Syria.

Intervention 3. The teacher posted some tear-off stripes of paper sheets on the wall; each sheet included a specific word from the text. Students were asked to tear off the words that they did not know. Then, they were given a copy of the vocabulary log for them

to look up their meaning and part of speech. After this, students watched a video in Spanish. Since there was not time to complete the K-P-W-L chart and to do the reading comprehension exercises in class, students were asked to do everything at home and to send the answers by e-mail. The text was about some discoveries made about the resting human brain.

Interventions 4 and 5. In the case of the fourth intervention, students were sent two links for them to complete an online survey about learning styles; one of the surveys was in Spanish and the other one in English for them to have input in both languages as well as to find out if their results were consistent or not. The text was the divergent views on the idea of teaching to students' learning styles. For the fifth intervention, they were sent a link for them to watch a video in Spanish from Youtube. After doing the required task for each intervention, they completed the K-P-W-L chart and did the reading comprehension exercises at home. They sent everything by e-mail. The text was about the different theories that have been held about the act of crying.

Assessments. After the first two interventions, the first quiz was administered; it was based on a text about the issues underlying the use of medical cannabis to break the painkiller epidemic. Students completed the second quiz after the third and fourth interventions were made. This text for this quiz was about Uber's ambitions and expectations to transform the future of transport by means of the use of self-driving cars. Then, they took the midterm exam after the fifth intervention. The text was about the issues

underlying the consumption of different types of food that are full of harmful chemicals used in plastic packaging and processing. Before completing the corresponding reading comprehension exercises for the three formal assessments, the learners had to complete the K-P-W-L chart based on the title of the text. Once they completed the assessments, they were asked to write a summary of the text. This exercise was not graded as part of the assessments because they were standardized and administered in another group; however, students were given up to 3 extra points in the quizzes and in the exam depending on their performance.

Instruments

To collect the data, eight instruments were designed: a pre-intervention questionnaire, a post-intervention questionnaire, a summary assessment rubric, a list in order to collect administrative data (e.g., the number of students who participated in each intervention, the grades that they obtained in both the reading comprehension exercises and the summaries), a handout for the first intervention, two quizzes and the midterm exam. For the other interventions, exercises taken from the course anthology were used, except for the fourth intervention in which a quiz that had been administered in a previous semester was used.

Results and Discussion for sub-questions 1 and 2

Students were asked in the pre-intervention questionnaire about the factors that hindered their comprehension of texts in English. Ninety four percent

of the 32 learners who completed the questionnaire mentioned that the main factor that affects them is their lack of vocabulary. Other aspects that were considered are the following: their lack of knowledge of the topic of the text (9%), their lack of interest in the topic of the text (9%), the length of the text (6%), their knowledge of the grammatical structures in English (6%), the time that they spent to read long texts (6%), the complexity or ambiguity of the text (3%), the lack of reading comprehension strategies (3%), the lack of images or illustrations in the text (3%).

In the post-intervention questionnaire, they were asked if they considered that the pre-reading exercises could help to overcome the language barrier, specifically in terms of vocabulary, to understand texts. Seventy four percent of the 31 students who filled out the questionnaire answered affirmatively. The most common explanation for this was that the pre-reading activities allow them to have a better idea of the topic and the context of the text and that this awareness improved their comprehension. This is in agreement with what Dymock and Nicholson (2010) as well as Thomas and Reinhart (2014) suggest about the impact of activating background knowledge. Another reason stated by one of the students is that the knowledge acquired of the topic of the text helps to make inferences about it, and that this aspect leads to better understanding. Additionally, others emphasized that these activities contribute to read fluently and to identify the main idea of the texts.

While some students were emphatic in the usefulness of activities to activate vocabulary, others had a different

point of view. Two students considered that defining some unknown terms did not guarantee full text comprehension. One of them justified this by saying that there might be other content words that are necessary to understand the message conveyed, but teachers should be selective when choosing the vocabulary to be activated in the pre-reading stage. In real-life, students will have to encounter texts without being introduced to the terms included in them, so these learners will have to resort to strategies such as guessing meaning from context and using the dictionary to grasp meaning. A learner considered that watching videos and participating in group discussions are more useful activities to understand texts. Hence, students' preferences might depend on their level of language proficiency in English; that is, those who

are proficient would prefer activating their content schema rather than the linguistic one. Another aspect to consider is their learning style. For this reason, there should be variety in the pre-reading exercises to benefit learners by providing them with different types of input that can later ease their reading process.

Results and Discussion for sub-question 3

In the pre and post intervention questionnaires, students were provided with a likert scale for them to choose how much pre-reading activities exerted an impact on three different aspects: understanding texts in English, getting interested in the text, and reading with a purpose in mind. Table 1 shows the results.

Table 1
Students' Perceptions about Pre-reading activities
Pre and Post Intervention Questionnaires, 2016

Students' perception	Pre-intervention (32 students)				Post-intervention (32 students)			
	A lot	To some extent	A little	Not at all	A lot	To some extent	A little	Not at all
1. The pre-reading activities are/were useful to understand text in English.	10	17	5	0	15	11	4	1
2. The pre-reading activities help/ed me to get more interested in the text.	6	21	5	0	6	17	7	1
3. The pre-reading activities help/ed me read with a purpose in mind.	11	16	5	0	16	11	4	0

As Table 1 shows, in the case of statements 1 and 3, the number of “a lot” responses in the post-intervention questionnaire increased. This shows a positive change in students’ perception about the usefulness of these activities. In the case of the second statement, the results did not change much. However, there was slight increase in the number of negative responses (a little and not at all). Thus, pre-reading activities do not necessarily enhance students’ interest to read as Moreira (2016) suggests, but they are helpful for them to understand texts and to read purposefully. A possible explanation for this is that students have to read the texts in order to meet the demands of the course; consequently, the strategies can lead to positive outcomes regardless of the learners’ perception of the text. The lack of information about students’ perception of the topics of the texts used in class before and after the interventions constitutes a limitation in this study. Further research can focus on this aspect to determine

the extent to which students’ interest in the topic of the text affects their comprehension performance.

In the pre and post intervention questionnaires, students were given examples of different pre-reading activities for them to indicate their degree of usefulness (see Table 2). Strategies 9, 10 and 11 in Table 2 were included in the pre-intervention survey. Nevertheless, since they were not used in the interventions, they were excluded from the post-intervention questionnaire. For this reason, Table 2 shows the results for these three strategies in the pre-intervention survey only. Moreover, strategies 12 and 13 in Table 2 were not included in the pre-intervention questionnaire because they were considered after the instrument was administered, but they were added in the post-intervention survey. This constitutes a limitation because there is not point of comparison between students’ perception of their usefulness before and after the interventions.

Table 2
Students’ Perceptions about the Usefulness of different Pre-reading Strategies
Pre and Post Intervention Questionnaires, 2016

Pre-reading strategies	Degree of Usefulness							
	Pre-intervention (32 students)				Post-intervention (31 students)			
	Very useful	Useful	A little useful	Not useful at all	Very useful	Useful	A little useful	Not useful at all
1. Making predictions about the possible content of the text.	1	21	10	0	3	21	7	0
2. Cheking if the predictions about the text are/ were true or not.	4	16	12	0	1	13	15	2

3. Brainstorming the possible topics addressed in the text.	3	13	16	0	5	17	9	0
4. Using pictures to make predictions about the possible content of the text.	10	15	5	2	14	12	5	0
5. Watching videos about the topic of the text to activate schema.	9	18	4	1	16	15	0	0
6. Analyzing the paratext to make predictions about the content and organization of the text.	5	21	5	1	4	18	9	0
7. Thinking about the possible vocabulary that could be encountered in the text	5	6	21	0	4	15	11	1
8. Talking with other classmates about what they know or have heard about the topic of the text.	10	11	9	2	7	19	5	0
9. Drawing a diagram about the possible topics addressed in the text.	1	12	17	2	-	-	-	-
10. Using skimming to identify main ideas.	11	10	10	1	-	-	-	-
11. Using scanning to identify key words in the text.	18	9	5	0	-	-	-	-
12. Thinking about what they would like to learn by reading the text.	-	-	-	-	2	12	16	1
13. Looking up the meaning of unknown words in English before the text.	-	-	-	-	17	12	2	0

As Table 2 shows, the strategy with the highest number of “very useful” responses in the pre-intervention questionnaire is using scanning to identify key words in the text (strategy 11) while the strategy with the highest number in “a little useful” responses

is thinking about the possible vocabulary that could be encountered in the text (strategy 7). Even though both the most useful and the least useful strategies are meant to activate linguistic schema, it seems that they prefer straightforward approaches to work

with vocabulary rather than thinking about words in isolation based on the topic of the text. It is hypothesized that the second option can lead them to think about vocabulary that may not be encountered in the text; hence, this might be considered useless for the comprehension of texts.

After the interventions, the strategy with the highest number of “very useful” responses is looking up the meaning of unknown words in English before reading the text (strategy 13). This shows students’ concern about filling possible gaps in terms of vocabulary to better understand the text. The strategy with the highest number

of “a little useful” responses is thinking about what they would like to learn by reading the text (strategy 12). The completion of the K-P-W-L chart might have exerted a negative influence on their perception of this strategy.

In general terms, the addition of “very useful” and “useful” responses shows that students mostly had a positive perception of the pre-reading strategies before and after the interventions. Table 3 shows this in detail; this table organizes the strategies listed in Table 2 (see the numbers) from the most useful to the least useful ones.

Table 3
Students’ Perceptions about the Usefulness of different Pre-reading Strategies
Pre and Post Intervention Questionnaires, 2016

Degree of Usefulness	Pre-intervention		Post-intervention	
	Pre-reading strategies from Table 2	Addition of most useful and useful responses (32 students)	Pre-reading strategies from Table 2	Addition of most useful and useful responses (31 students)
The most useful	11 & 5	27	5	31
	6	26	13	29
	4	25	4 & 8	26
	1	22	1	24
	10 & 8	21	3 & 6	22
	2	20	7	19
	3	16	2 & 12	14
	9	13		
The least useful	7	11		

Similar to the results in the pre-intervention questionnaire, the strategy with the highest number of “very useful” and “useful” responses is watching videos about the topic of the text

to activate schema (strategy 5). It seems that activating content schema by means of audio-visual input is very helpful for students. A possible explanation for this is the fact that watching

videos is usually considered appealing and engaging; therefore, students can easily retain information to establish further connections with the text. Moreover, many students prefer the use of technology to learn. For this reason, this strategy might be practical for them because they can employ it at any moment before reading a text in English if they have access to the Internet. Finally, the input received can be similar to the one provided in the text; this can help learners fill gaps to read fluently. As a matter of fact, if the videos are recorded in the learners' native language, this might ease their comprehension of texts in English because they activate their content schema. When the videos are in English, they can still make a mental image of the information acquired so that they can relate it to the text.

While there was not a significant change in terms of students' opinion about the usefulness of using pictures to make predictions about the possible content of the text (strategy 4) and of making predictions about the possible content of the text (strategy 1), there was improvement in their perception of strategies 8 (talking with other classmates about what they know or have heard about the topic of the text), 3 (brainstorming the possible topics addressed in the text) and 7 (thinking about the possible vocabulary that could be encountered in the text). During the interventions, it was observed that students who did not know much about the topic benefitted from the talks they had with their classmates since they were able to participate in group brainstorming activities and to complete the K column in the K-P-W-L chart. Indeed, strategies 8 and 3 can

help students to quickly generate a large quantity of ideas by sharing different viewpoints. In the case of strategy 7, the pre-reading exercises to activate vocabulary might have exerted a positive influence on their perception about the usefulness of anticipating the possible words that could be encountered in the text.

On the other hand, the number of students who considered that analyzing the paratext to make predictions about the content and organization of the text (strategy 6) decreased. This was an exercise done in the pre-reading section of each intervention and formal assessment. Seven students out of the 26 whose responses were "very useful" and "useful" in the pre-intervention questionnaire changed their perception to "a little useful" ones in the post-intervention questionnaire. Most of them answered correctly the exercises in the majority of interventions; thus, activating formal schema might not have been considered as useful as activating content and linguistic schema since their performance on the pre-reading exercises was generally the same. Moreover, compared to the interventions, they mostly chose one or two incorrect answers in the formal assessments. This factor might have contributed to their change of opinion.

The least useful strategies are checking if the predictions about the text were true or not (strategy 2) and thinking about what they would like to learn by reading the text (strategy 12). These were two tasks that students were required to do in the pre-reading stage; the former was related to the P column in the K-P-W-L chart while the latter was the task for the W column. Students were asked to use a

check mark or a minus symbol to indicate if their predictions were correct and if they actually found information in the text about what they wanted to learn; however, most students did not follow the instructions in almost all interventions as well as in the formal assessments. Table 4 shows the number of students who checked if their predictions

were correct or not by using symbols or by mentioning it in the L column. It also indicates the number of students who looked for the answers to their questions in the W column. While some students used the symbols indicated by the teacher, others answered the questions in the L column.

Table 4
Students Who Checked Their Predictions in the P Column and Who Looked for an Answer to Their Questions in the W Column

Interventions and assessments	Students who checked if their predictions were correct or not		Students who looked for the answers to their questions	
	With symbols in P column	Mentioned in L column	With symbols in W column	Answered questions in L column
Intervention 1 (32 students)	4	1	11	4
Intervention 2 (26 students)	0	2	1	2
Quiz 1 (36 students)	0	1	1	4
Intervention 3 (22 students)	0	0	1	1
Intervention 4 (24 students)	0	0	1	1
Quiz 2 (33 students)	0	0	1	1
Intervention 5 (17 students)	0	0	1	0
Midterm exam (33 students)	0	0	2	4

As Table 4 shows, more students followed the instructions in the first intervention than in the rest of interventions and in the assessments. Even though they were explained the importance of both exercises, they probably needed to be provided with clearer instructions and modeling to continue using the strategies after the first intervention. The problem was the lack of time to complete the whole reading cycle in class because emphasis was placed on explaining the subject matter of the course and doing some practice before the interventions. Therefore, there was only time left to do the pre-reading exercises in class while the reading and post-reading exercises were generally assigned for homework. Since checking predictions and looking for an answer to students' questions were tasks that had to be completed after reading the text, the teacher was not able to guide them so that they

followed these steps as it happened in the first intervention. Additionally, in the case of the assessments, students probably did not complete both tasks because the pre-reading chart was not graded, and they were focused on doing all graded exercises within the time allotted. In other words, those tasks might not have been students' priority, especially for those slow-working students who barely had time to complete the quiz and to write the summary.

Students were also asked in the post-intervention questionnaire to indicate how much the pre-reading activities for the interventions and assessments helped them improve their comprehension of the text. Table 5 shows the results of their perception. These learners were given the option "does not apply" for them to specify that they did not participate in or that they did not do the pre-reading exercises.

Table 5
Students' Perceptions about the Usefulness of the Pre-reading Exercises for the Interventions and Assessments
Post-Intervention Questionnaire, 2016

The pre-reading activities for...	Degree of usefulness					
	A lot	To some extent	A little	Not at all	Does not apply	Did not answer
Intervention 1	19	7	4	0	1	0
Intervention 3	18	9	3	0	1	0
Quiz 1	6	19	6	0	0	0
Intervention 3	8	13	6	0	0	0
Intervention 4	13	13	2	0	2	1
Quiz 2	11	13	5	0	2	0
Intervention 5	13	9	3	2	0	0
Midterm-exam	10	13	7	1	0	0

As it can be observed in Table 5, the most useful pre-reading strategies were the ones for interventions 1 and 2, in which the use of the K-P-W-L chart was complemented with other activities to activate content and linguistic schema. This variety of activities added dynamism into the class, and it was observed that most students were actively participating in all the activities. This engagement was very encouraging since students can get easily bored in reading comprehension classes that are not appealing for them.

Although the learners considered that watching videos about the topic of the text to activate schema was the most useful strategy, it might not always be helpful since the number of "a lot" responses in intervention 3 was lower compared to interventions 2 and 5. Additionally, even though the pre-reading exercise was the same for each of the assessments, it seems that the usefulness of the completion of the K-P-W-L chart depended on the topic of the texts because of the lower number of "a lot" responses in the first quiz compared to ones in the second quiz and the midterm exam.

Students were also asked to give their opinion about the K-P-W-L chart; the results reveal that there are contrasting views about it. While 84% of the comments were positive, 58% were negative. This is because 48% of the students who completed the post-intervention questionnaire mentioned both positive and negative aspects of the chart. In terms of the positive answers, the most salient ones refer to its usefulness to have a better understanding of the topic and the context of the text. Moreover, other advantages were stated. For example, the chart helps to read

with a purpose in mind. It is also good for making predictions about the topics addressed in the text. It helps them to become aware of their knowledge before reading as well as to check what is learned after reading. All these aspects are in agreement with what Hilden and Jones (2011) as well as Wrinkle and Manivannan (2009) argue about it. On the contrary, there were students who considered that completing the chart was either a waste of time or a difficult and even tedious task, especially when they did not know much about the topic of the text. This was a disadvantage suggested by Hilden and Jones (2011). In fact, there were a few students who specified in the K-P-W-L chart that they did not know anything about the topic or that they had not heard anything about it. Some students considered that some topics were too broad and that their predictions were not accurate; thus, the chart might divert the readers' attention away from the main topic of the text. A student suggested that brainstorming is better and faster. Another one pointed out that the use of videos and group discussions clarified the topic and arouse their interest to read. Hence, the K-P-W-L chart should not be overused since the learners might get bored completing it. Students can actually think about what they know or what they have heard about the topic by participating in more dynamic and meaningful activities as Wrinkle and Manivannan (2009) suggest. This also applies for the other columns (P-W-L).

Results and Discussion for sub-questions 4, 5 and 6

Students were asked in the pre and post intervention questionnaires how

useful the strategy of writing summaries was to show comprehension of texts in English. Table 6 shows the results of their perception.

Table 6
Students' Perception about the Usefulness of Writing Summaries to Show Comprehension of Texts in English
Pre and Post Intervention Questionnaires, 2016

	Degree of Usefulness			
	A lot	To some extent	A little	Not at all
Pre-intervention questionnaire (32 students)	15	9	7	1
Post-intervention questionnaire (31 students)	13	11	7	1

As it can be overserved, there was not a significant change in their perception after the interventions since the number of "a lot" responses dropped from 15 to 13. A possible explanation for this could be that students' perception of their comprehension of texts might depend on their performance in the practice exercises and formal assessments because they require deeper

analysis. Nevertheless, students were asked to specify the frequency with which they were able to write summaries of texts in English before and after the interventions, and the results in Table 7 show a significant change in the responses. This suggests that they perceived that their ability to write summaries improved.

Table 7
Students' Perception about the Frequency with which They Can Write Summaries
Pre and Post Intervention Questionnaires, 2016

	Frequency			
	Always	Usually	Seldom	Never
Pre-intervention questionnaire (32 students)	6	13	13	0
Post-intervention questionnaire (31 students)	15	15	1	0

Students were also asked to rate the frequency with which they were able to understand the main idea of a text in English as well as to establish the difference between the main ideas

and supporting details of a text in English. These are necessary aspects to consider when writing summaries. Table 8 shows this in detail.

Table 8
Students' Perception about their Abilities in Reading Comprehension
Pre and Post Intervention Questionnaires, 2016

Ability	Frequency of task performance							
	Before the interventions (32 students)				After the interventions (31 students)			
	Always	Often	Seldom	Never	Always	Often	Seldom	Never
Understand the main idea of a text in English	8	22	2	0	13	17	1	0
Establish the difference between main ideas and supporting details	3	24	5	0	4	27	0	0

As shown in Table 8, there was significant improvement in their perception of understanding main ideas. In the case of their perceived ability to differentiate main ideas from supporting details, the positive change is that there were no "seldom" responses after the interventions. Compared to the results of their performance in the summaries, there is consistency between their perception

and the outcomes. As Table 9 shows, most students wrote either "excellent" or "good" summaries in almost all the interventions and assessments as well as in the summary written for the diagnostic test. Even though the number of "excellent" summaries was higher for the diagnostic test than in the interventions and quizzes, there was significant improvement in the midterm exam.

Table 9
Students' Performance on Summaries

Interventions and assessments	Performance				Total of students out of 36
	Excellent	Good	Below average	Ineffective	
Diagnostic exercise	17	4	0	1	22

Intervention 1	9	22	0	2	33
Intervention 2	11	9	4	0	24
Quiz 1	15	15	4	0	24
Intervention 3	11	7	3	0	21
Intervention 4	7	15	4	0	26
Quiz 2	16	5	10	1	32
Intervention 5	10	5	3	0	18
Midterm Exam	28	4	1	0	33

Students who wrote “good” summaries did not mention ideas that were considered important to have a complete or “excellent” summary; however, the summaries showed overall comprehension of the text. In the case of “below average” summaries, the learners wrote some vague ideas and omitted a significant number of details that were necessary to show understanding. In some cases, they also mentioned ideas not supported by the text. In the case of the students whose summaries were “ineffective,” three major problems were found. One student wrote an unclear and incomplete idea. Another one wrote vague ideas and ideas not supported by the text. There was a student who wrote his opinion about the topic in two tasks.

In the pre-intervention questionnaire, students were asked to indicate what their perceived level of language proficiency in reading was. Fifteen learners considered themselves beginners, 14 intermediate, and 3 advanced. Ten out of 18 students who wrote “below average” summaries perceived

themselves as beginners. In the case of the “ineffective” summaries, two out of four students who obtained this result also considered themselves beginners. Thus, students’ level of English might be the cause of their performance on the summaries.

Some variables might help to explain the drop in numbers of excellent summaries in some of the interventions. The lack of time to activate linguistic and content schema in class constitutes a limitation that could have exerted an influence in the outcomes. It is also important to consider the time of the day when students did the assignments because some students sent their homework very late at night. Tiredness might be a factor associated to time since writing the summaries was the last exercise that students had to do. Then, not all learners are good at writing skills or they simply do not like it, and these factors might have affected the performance of those students who wrote “below average” and “ineffective” summaries. They probably did not mention some details because they did not think that they were relevant.

In the case of the first intervention, students had to finish doing the exercises and the summary in class; each lesson lasted two hours and a half, but in that particular session, some students took more time in order to complete both tasks. If they worked under pressure because they were anxious to leave, they probably omitted some details in the summary. In the case of intervention 4, the organization of the text might have affected their performance because the text presents different points of view about the impact of learning styles on students' performance in the classroom, and students focused on this idea; nevertheless, they did not mention the key factor that causes disagreement between experts. In the case of intervention 5, even though the number of learners

who did the exercise is low compared to the other interventions, the complexity of the text in terms of content and vocabulary might have exerted an influence on the outcomes.

Regarding students' performance on the other reading comprehension exercises, Table 10 displays the results by indicating the number of students whose grades were higher and lower than 67,5. This was considered a passing grade because of the grading system of the university; that is, grades between 67,5 and 69,9 have to be rounded up to 70 in the final grade of the course. Table 10 also includes the mean and the modes for each of the tasks that students carried out. For the modes, the corresponding number of times that they occurred (frequency) is also specified.

Table 10
Students' Performance on Reading Comprehension Exercises

Tasks	Performance		Total # of students out of 36	Mean	Modes (Frequency)
	Grades > 67,5	Grades < 67,5			
Diagnostic exercise	13	12	25	68.3	57, 65, 71, 84.5 (2)
Intervention 1	22	11	33	69.8	77 (6)
Intervention 2	17	9	26	66.8	70.5, 71.5, 72.5, 73.5, 82 (2)
Quiz 1	21	15	36	68.6	76.5 (4)
Intervention 3	12	12	24	68.3	59, 62 (4)
Intervention 4	14	12	26	67.9	73 (4)
Quiz 2	24	9	33	73.1	79.5 (4)

Intervention 5	11	9	20	66.7	66, 68, 81.5 (2)
Midterm Exam	27	6	33	68.3	69, 74.5, 77.5, 84 (3)

As Table 10 shows, there was significant improvement in the first intervention as well as in the three formal assessments regarding the number of students whose grades were higher than 67,5. It is hypothesized that more students obtained passing grades in the formal assessments than in the interventions because the interventions were the means for them to practice and to study for the quizzes and the midterm exam; thus, the pre-reading exercise (the K-P-W-L chart) might not have been a determining factor in their results. This explanation can also be reinforced by comparing the results of the formal assessments and the first

two interventions in which there was more variety in terms of the pre-reading exercises done in class. Moreover, it seems that the key factor that could affect students' performance in reading comprehension is the difficulty of the exercises because the majority of learners showed comprehension of the texts in the summaries. The results of the mean for each task also help to support this idea since they were not excelling.

Students were asked about the frequency with which they felt confident that they had understood the text in English. Table 11 shows that the results after the interventions were very similar to the ones before the interventions.

Table 11
Students' Perception about the Frequency with which They Felt Confident that They Understood the Text in English
Pre and Post Intervention Questionnaires, 2016

	Frequency			
	Always	Usually	Seldom	Never
Pre-intervention questionnaire (32 students)	5	20	5	2
Post-intervention questionnaire (31 students)	7	19	4	1

As it can be observed in Table 11, there was not a significant change in terms of the confidence that students felt in their comprehension of texts after the interventions. However, the individual analysis of these results are

encouraging because three out of the five students who chose "seldom" responses in the pre-intervention questionnaire, improved their perception by answering "usually" in the post-intervention questionnaire. There was

only one student who chose “usually” in the pre-intervention survey, but he chose “never” after the interventions. Compared to the students whose perception changed positively, this student did not attend classes very often, and his performance in the course was poor. Thus, he might not have felt confident enough after reading the texts because he was not able to perform well in the exercises.

Conclusions and Recommendations

Based on the analysis of the results, it is possible to conclude that the pre-reading strategies generally helped students to comprehend the texts because they were able to write summaries that showed complete or sufficient understanding of the main ideas. Nevertheless, the completion of pre-reading exercises does not guarantee satisfactory outcomes in more specific types of reading comprehension exercises.

In order for learners to succeed in achieving the goals of the course, they need to be provided with scaffolding and constant feedback about the mistakes they make; however, absenteeism is a big problem because those students who need more help are the ones who do not attend classes very often. It was observed that assigning homework and asking students to send their answers by mail had a positive effect on them because the constant practice out of class forced them to study more, and many of them performed well on the formal assessments. Therefore, it is pivotal to raise awareness about the need of practicing and constantly using the strategies taught in the course in order to

see improvement progressively. For this to happen, students need modeling and clear oral and written instructions of the steps to follow when employing the strategies.

Since lack of time sometimes constitutes an issue in order to do different activities in class, teachers can take advantage of the use of technology outside the class to work on suitable pre-reading exercises; this alternative actually can help students to become autonomous and responsible for their own learning.

Students benefit from the activation of background knowledge. The use of pre-reading strategies can help students overcome the fear of reading texts in English because they become aware of the fact that there are other solutions that they can adopt to understand texts without worrying too much about their linguistic gaps. Suitable pre-reading strategies can ease the reading process and make it more purposeful. For this reason, there should be variety of activities for them to activate the three types of schemata.

An aspect to consider when choosing the pre-reading strategies that will be taught to students is practicality. Even though a lot of students had a positive perception of the K-P-W-L chart, there were some disadvantages pointed out that indicate the need of making changes to the way information is elicited from the learners. That is, instead of asking students to write the answers for each column, they can work in pairs or small groups to talk about what they know or have heard about the topic, what their predictions are, what they want to learn from the text and what they learned after reading it. In this way the reading sessions

can become more meaningful, engaging and interactive because those are strategies that students can actually use in real-life before reading texts.

Summarizing is a useful strategy for both learners and teachers. Students show what they understand from the text, and the instructor can assess their comprehension. In the post-reading stage, teachers can collect valuable data to be able to make decisions about possible changes in the teaching practices that help learners improve their reading skills. However, it is suggested to ask students at the beginning of the course if they enjoy writing in order to look for alternatives in the case that the majority dislikes it. The idea is not to be acquiescent, but reading lessons should be memorable and somehow enjoyable for them so that they increase their interest in reading actively and effectively.

Limitations

The fact that some students did not complete the pre and the post intervention questionnaires constitutes a limitation in this study. Indeed, when the course started some students were not registered in it, and they started attending classes after the first survey was completed. The teacher did not ask them to complete it online because they had already participated in the first intervention.

Absenteeism to class constitutes another limitation because students missed the teacher's explanations about the subject matter and feedback. The feedback sessions were crucial for them to analyze their performance on the reading comprehension exercises done in class and out of class.

Lack of time to do other types of pre-reading activities in class was an issue. In fact, some students complained that the predictions that they sometimes made about the text were too broad, so it would have been useful to use skimming and scanning to help them narrow the topic. Because students had to do some exercises at home, some variables were not controlled. For example, when students work at home, they spend much more time doing the exercises because they start looking up the meaning of all the unknown words in the dictionary, and that is something they cannot do in class. Moreover, the teacher does not know if the students requested for help to translate the text or to do the exercises. This is an aspect that might affect the reliability of the results in terms of their performance on summaries and the other reading comprehension exercises.

The teacher was not able to give them feedback about the summaries that they wrote for each of the interventions. Even though the majority of students showed comprehension of texts, students who wrote good summaries might have written excellent ones if they had been given feedback about the information they missed. The same applies for those who wrote ineffective or below average summaries.

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