| RESEARCH ARTICLE

An Investigation of EFL Learners' Reading Strategy Use

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| ABSTRACT
Reading is one of the four primary skills, alongside listening, writing, and speaking. It involves cognitive and comprehension processes. Reading is a dynamic skill that urges learners to find and use a variety of materials and resources. This study was conducted to reveal the type of reading strategies used by EFL preparatory university students at a foreign language department in a foundational university. The participants of this study were 65 EFL learners aged between 18 to 22 years old. The data was collected and analyzed through a questionnaire and semi-structured follow-up interviews. The findings gave insight into the reading strategies most and least used by learners. Furthermore, it provided EFL instructors with the opportunity to focus on the learners' reading weaknesses. It also highlighted the importance of reading strategies awareness among learners and underscored the significance of acquiring reading strategies as a vital method for EFL learners to improve their reading comprehension.

1. Introduction
Learning English as a foreign language successfully requires a great acquisition of listening, speaking, reading, and writing abilities. Reading is a linguistic and cognitive process that includes the interpretation and comprehension of written or printed words to derive meaning, information, or knowledge from a certain text. It involves the ability to comprehend the relationship between sentences and paragraphs in addition to the implied meaning, essential messages, and contextual differences.

Reading skills are not only an acquisition process of English knowledge but also a link to improving other language subskills such as grammar comprehension, vocabulary acquisition, and writing proficiency. It is through reading that students are exposed to authentic language usage, cultural differences, and various text genres. Reading strategies have an effective function in developing learners' reading ability to engage with complex texts, navigate unfamiliar topics, and read between the lines to get deeper meaning from the text. To achieve this goal, reading strategies are utilized to engage in comprehending passages, including tactics used and controlled by the reader (Paris, Wasik, & Turner, 1991). Moreover, during learners' studies, responsive students should have the capability of comprehending, assessing, and analyzing scholarly articles, journals, and publications. University students need to acquire academic manuscripts, whether they are English as a second language (ESL) or English as foreign language (EFL) learners (Levine, Ferenz & Reves, 2000). Munby and Shuyun (1996) also consider that English academic reading is a complex and deliberate process that allows students to be involved actively in using reading strategies. Students usually use reading strategies to overcome their reading difficulties when they encounter comprehension obstacles. Hence, learners use different methods and techniques when they solve reading tasks, and some of these methods help to better understand. Additionally, textbooks serve as aids in solidifying the learning process. Therefore, it is essential to incorporate diverse reading strategies that cater to learners' needs and support the overall learning objectives. To appeal to students across various fields of study, teachers may employ several different strategies adaptable to the requirements and preferences of different learners.

1.1 Significance of the Study

This study carries various potential benefits. Firstly, it facilitates students' becoming aware of their reading behaviors and the frequency with which they use different reading strategies when engaging with English classroom materials. This self-awareness encourages students to consider adjustments to their reading behaviors and discover ways to improve their utilization of effective strategies. Second, the study provides information about the reading methods that learners use when working with English-language materials—before, during, and after reading. By this information transfer, learners are better equipped to use appropriate reading strategies that help them comprehend the primary ideas in the texts they are reading. Thirdly, the study offers instructors insightful knowledge to understand the reading habits and techniques of their learners. Armed with this understanding, teachers can adapt their teaching approaches to facilitate a more unified reading experience for their students. Furthermore, the research elucidates how reading strategies are implemented differently based on gender and academic discipline, allowing instructors and authors to adapt their contents to the reading needs of their students. Finally, this current study can be utilized as a guide for future research, assisting scholars to grasp how students currently read and allowing a focus on addressing specific weaknesses to offer more effective ideas and teaching strategies for learners having trouble with English reading.

1.2 Purpose of the Study and Research Questions

The aim of this study is to determine and investigate the reading methods that learners at English preparatory schools use as well as the reading techniques that learners use before, during, and after reading. Whether or not students employ the same reading methods or different ones, the study concentrates on which reading strategies they employ the most or the least, depending on their reading process. Therefore, teachers may take serious steps to assist students to practice the least reading strategies they rarely or never use. The research questions guiding this study are as follows:

1. What are the most frequently used reading strategies by students?
2. What are the least frequently used reading strategies by students?

2. Literature Review

Several scholars classified reading strategies as the key points of reading skills. They discovered that these strategies were different from the ones used in most classrooms. Hence, they divided reading strategies into two categories: cognitive and metacognitive strategies. Cognitive strategies can be defined as the mental process that learners utilize to process sociolinguistic content and linguistics content (Wenden & Rubin, 1987, p.19). These strategies are used to construct relationships between learners' new and present knowledge, in addition to operating on returning information to improve learning (O'Malley & Chamot, 1990). The major cognitive strategies are grouping, note-taking, translation, deduction, imagery, contextualization, inferencing, and elaboration (Brown, 2007).

On the contrary, metacognitive strategies are more related to critical thinking skills, which pave the way for learners to achieve their awareness of understating the reading passage. Bishop et al. (2005, p.207-208) categorize these metacognitive strategies as the following: making connections with learners' background knowledge, analyzing the structure of the text, asking questions, evaluating, and summarizing. Hence, this chapter elaborates on the most significant reading strategy research, language learning strategies, reading comprehension, strategies-based instruction, reading instruction, reading strategy, and integration of reading strategies.

2.1 Reading Strategies Research

There have been a great number of studies about language learning in general and reading strategies in particular since the second part of the nineteenth century. Macaro (2006) found that learners of the second language try to perform different tasks when they use the second language. Rigney (1978) stated that learners can employ different strategies to help them acquire, store, and recall information. These strategies are the backbone of understanding the text, doing certain tasks after reading, and the steps learners take when they are incapable of comprehending a reading text. Thanks to Singhal (2001), reading strategies are the methods that students employ to expand their horizons in reading comprehension and results. Akkakoson & Setobol (2009) carried out a study to look at the impact of reading methods on Thai learners' comprehension of English.

Therefore, the outcomes showed that learners with high and medium proficiency used more strategies when reading passages than before. In other words, the post-test results of all high, medium, and low participants' reading proficiency groups were statistically higher than their pre-test results. According to Barnett (1989), reading skill is a cooperative process that combines the utilization of top-down and bottom-up strategies. Hence, learners need to employ the most suitable reading strategies to develop their reading comprehension. Learners need to integrate and apply several strategies or skills to achieve reading comprehension. Memory, metacognitive, task-taking, and social communication are all examples of reading strategies (Caverly, 1997; O'Malley, Chamot, Stewner-Manzanares, Kupper, & Russo, 1985; Oxford, 1990; Zhang, 1993).

2.2 Language Learning Strategies

It has been approved that "strategy" can prompt the meaning of the word "tactic" since they both employ it to achieve goals. However, they are different from each other as strategies involve tactics. Hence, the idea of using the strategy is a sophisticated process, so many language experts and researchers recommend employing various methods to develop the language development process. According to Rubin (1987), language-learning strategy (LLS) is another form of language-learning process where learners' learning is built by these strategies. Therefore, LLS supports learners in enhancing their linguistic abilities because the use of these strategies develops students' knowledge and the educational process. Rigney (1978) is on the same page, emphasizing his perspective that learners have the ability to acquire information and implement it in a variety of ways while using strategies. Similarly, Wenden (1987) and Schmeck (1988) indicated that the use of these strategies is considered one of the most important educational tools that have an effective role in organizing the language acquisition process for learners and play an important role in finishing tasks as they require a set of several patterns that affect positive learning.

According to Oxford (1990), strategies are defined as a term used to achieve a specific aim with a variety of steps, such as planning and taking action. Hence, we can emphasize the tools for relying on active participation and self-employment, which emphasizes the importance of using reading strategies in the process of language learning to improve the communicative competence of learners. Moreover, LLS deals with certain tasks taken by learners to make the learning process faster, easier, more effective, more entertaining, and more transferable to real-life situations.

O'Malley and Chamot (1990) define language-learning strategies as special opinions and behaviors of processing information, which assist learners in comprehending, learning, and recalling information. As stated above, the impact of LLS in the development of language learning has a great increasing interest among researchers (Fewell, 2010). O'Malley and Chamot (1990) define strategies of language-learning as behaviors and special perspectives tackling information, which assist learners in learning, comprehend, and recall rundown. As stated above, most of the studies have been focused on the importance of language learning development due to the impact of LLS on learning (Fewell, 2010). Additionally, Cohen (2007) highlighted how learners are able to guide themselves by relying on the significance of using LLS when the teacher is not available in the classroom. At this phase, students can try to fulfill their learning objectives on their own. LLS is, therefore, crucial for language learners since it stimulates and supports their independent learning style. LLS is, however, considered a certain type of instrument that is utilized to solve problems and achieve goals. It is the conscious and planned method taken by learners to facilitate and support the language learning process. Consequently, it is noticed that the impact of LLS on learners' ESL looks promotive and advantageous.

3. Methodology

This study aimed to determine the reading strategies most and least frequently utilized by the participants. A questionnaire and semi-structured follow-up interview were employed in this present study. In this study, we employed quantitative and qualitative research methods to gather and evaluate the participants' data. According to Williams (2011), quantitative and qualitative research employ investigative strategies; for example, questionnaires and interviews are used to collect data on pre-established instruments that provide statistical data. In quantitative research techniques, numerical data is used to produce statistical findings in the last part of the study, while in qualitative research techniques, an interview was employed to have an in-depth exploration of what learners think when they utilize reading strategies during the learning process.

3.1 Participants

This study was conducted at the Foreign Languages Department, Biruni University, which provides English lessons to students enrolled in different majors whose language of instruction is English. Hence, students study English for one year as a preparatory course to be able to start their major in English in the following year. The participants of this study are 65 students, 22 males and 43 females aged between 18 – 22 years old. All the participants passed the English Place Test and were assigned a B1 English proficiency level according to The Common European Framework of Reference for Languages (CEFR). The participants' native language is Arabic and Turkish. They are undergraduate students enrolled in different fields at the university. Most participants stated that they could not have the chance to apply what they had learned outside the classrooms, nor did they practice English during school time.

Table 3.1: Participants' Age Distribution.

Age	f	%
18	24	36,9
19	19	29,2
20	12	18,5
21	7	10,7
22	3	4,7
Total	65	100,0

f=frequency %= percentage

Table 3.1 illustrates that the participants were university students with various ages ranging from 18 to 22. To explain elaborately, 24 participants (36,9%) were at the age of 18, and 19 participants (29,2%) were at the age of 19. While 12 participants (18,5%) were at the age of 20, only 7 participants (10,7%) were at the age of 21, and 3 participants (4,7%) were at the age of 22.

3.2 Data Collection Instrument

The study's data was gathered through a "Reading Strategy Questionnaire", which was developed by Oxford et al. (2004) and, in a later stage, adapted by Uzunçakmak (2005). All the information and data about learners' report use of reading strategies was gathered accordingly. The questionnaire was built using a five-point Likert scale from number 1, which means (*Never*) to number 5, which means (*Almost always*). The questionnaire had 45 items in total grouped under three categories: before-reading, while-reading, and post-reading strategies. Items from 1 to 6 are concerned about strategies employed pre-reading the text, for example, predicting the reading passage, asking-answering questions, checking the unfamiliar vocabulary, and using sub-skills techniques such as skimming or scanning. Items 7 to 43 are concerned with the while-reading strategies employed in the text, for example, reading silently, guessing, highlighting, marking, and searching for answers. Finally, items 44 and 45 are concerned with strategies employed after reading the text, for instance, summarizing the text and evaluating the author's point of view.

Two phases were applied in this study to reach the research questions. Phase one was a questionnaire administered to the students to gather data on the utilized reading strategies. The questionnaire took around 15 to 25 minutes to be completed. All learners' answers were used for research purposes only. The process of gathering data was effective and beneficial because the questionnaire statements were reliable in terms of the participants' English language level. Phase two was a semi-structured follow-up interview. This stage was important because it provided a great chance to get closer to the learners, share their opinions about reading in detail, and hear from them about the challenges they face while using strategies in reading. This interview enriched the research with valuable ideas and information collected from the learners.

3.3 Data Collection and Analysis

The first stage of data collection procedures was to get an approval letter from Istanbul Aydin University, Turkey. After that, I requested permission from the foreign language department of Biruni University, Istanbul. After receiving permission from the department, I started my research. Before disseminating the questionnaire, the students were advised that their responses would solely serve research intentions. The questionnaire took fifteen to thirty minutes to complete. The data-gathering phase proceeded smoothly and efficiently as the questionnaire items consistently matched the English proficiency level of the participants. In the current study, descriptive statistics were used to analyze and examine the data collected from the questionnaire using SPSS version 29 (SPSS Inc. USA), while descriptive analysis was used to analyze semi-structured follow-up interviews.

4. Findings and Discussions
4.1 Findings Related to the Pre-Reading Strategies

This section provides insights into the highest and the lowest pre-reading strategies employed by the study participants. Table 4.1 reveals the responses given to the questionnaire items in detail from item 1 to item 6.

Table 4.1: Ranking of Pre-Reading Strategy Use

No	Statement	N		R		S		O		Aa	
		f	%	f	%	f	%	f	%	f	%
1	I use the title to help predict the contents.	1	1,5	1	1,5	9	13,8	19	29,2	35	53,8
5	I pay attention to visuals such as graphs, pictures, or tables.	1	1,5	3	4,6	12	18,5	15	23,1	34	52,3
4	I look through the text to spot specific information such as dates, names, or numbers.	0	0,0	3	4,6	11	16,9	19	29,2	32	49,2
3	I skim it first, and later I read for details.	1	1,5	3	4,6	8	12,3	25	38,5	28	43,1
6	I use my prior knowledge about the topic to predict the content.	1	1,5	1	1,5	16	24,6	25	38,5	22	33,8
2	I consider what type of text it is, such as a newspaper article, a scientific paper, or a novel.	0	0,0	11	16,9	18	27,7	21	32,3	15	23,1

Note: Aa = almost always; O = often; S = sometimes; R = rarely; N = never; f = frequency; % = percentage

According to the responses provided in Table 4.1, the strategies utilized before the reading process showed that the highest frequent strategies applied by the participants are in this respective order: *using the title of the text to anticipate the reading passage content (Item 1); paying attention to the reading passage visuals, for example, pictures and tables (Item 5); scanning the reading passage to locate important and specific information (Item 4); skimming the reading passage at first and later reading for more details (Item 3); using their background knowledge to predict the reading content (Item 6); considering the text's genre (Item 2).* It is very crucial to answer the study's questions here. Hence, the most repeated pre-reading strategy employed by participants is using the title of the text to anticipate the reading passage content (Item 1), and the least repeated pre-reading strategy employed is *considering the text's genre (Item 2)*. Although the number of participants of the least repeatedly pre-reading strategy is not as low as expected, it is important to highlight the least repeated strategy applied in this section.

4.2 Findings Related to While-Reading Strategies
This section presents the outcome of the most preferred while-reading strategy utilized by the participants in the process of reading comprehension. Table 4.2 illustrates the utilization of the while-reading strategy ranking and order according to the participants of this study.

Table 4.2: Ranking of While-Reading Strategy Use

No	Statement	N		R		S		O		Aa	
		f	%	f	%	f	%	f	%	f	%
15	I change reading speed depending on the difficulty of a text.	1	1,5	2	3,1	11	16,9	18	27,7	33	50,8
30	I try to connect information within the text.	0	0	1	1,5	8	12,3	24	36,9	32	49,2
14	I continue reading even if I have difficulty	0	0	1	1,5	11	16,9	23	35,4	30	46,2
20	If I don't understand something, such as word or phrase, I guess its meaning using clues from the text.	0	0	4	6,2	14	21,5	19	29,2	28	43,1
12	I start reading from the first paragraph and read all the way through the last paragraph.	0	0	3	4,6	14	21,5	21	32,3	27	41,5
29	If I'm having trouble, I go back to previous sentences.	0	0.0	5	7,7	12	18,5	22	33,8	26	40,0
8	I pay attention to the beginning and the end of each paragraph.	0	0	7	10,8	15	23,1	19	29,2	24	36,9
11	I translate each sentence into my native language.	0	0	11	16,9	19	29,2	12	18,5	23	35,4
23	I underline important parts.	1	1,5	4	6,2	18	27,7	19	29,2	23	35,4
25	I go over difficult parts several times.	2	3,1	2	3,1	19	29,2	20	30,8	22	33,8
37	I pay attention to linking words such as "however" and "besides" so that I can understand the structure.	0	0	1	1,5	12	18,5	30	46,2	22	33,8
43	I read the comprehension questions first and then read the text.	2	3,1	6	9,2	12	18,5	23	35,4	22	33,8
18	I link the content with what I already know.	1	1,5	3	4,6	22	33,8	18	27,7	21	32,3
24	I mark important parts using colored pens or drawing stars.	7	10,8	8	12,3	12	18,5	18	27,7	20	30,8
9	I focus on the tense of a verb, such as present tense and past tense	5	7,7	5	7,7	14	21,5	22	33,8	19	29,2

Note: Aa = almost always; O = often; S = sometimes; R = rarely; N = never; f = frequency; % = percentage

No	Statement	N		R		S		O		Aa	
		f	%	f	%	f	%	f	%	f	%
21	If I don't understand something such as word or phrase, I guess its meaning using information I know about the topic.	0	0	0	0	19	29,2	27	41,5	19	29,2
32	I follow the line I am reading with my finger or my pen.	6	9,2	8	12,3	15	23,1	17	26,2	19	29,2
40	I try to figure out the main idea of each paragraph.	2	3,1	5	7,7	21	32,3	18	27,7	19	29,2
28	I try to understand the meaning without translating the text into my native language.	2	3,1	6	9,2	19	29,2	20	30,8	18	27,7
38	I write down key words.	3	4,6	10	15,4	20	30,8	14	21,5	18	27,7
10	I try to understand the meaning of every word in a text	6	9,2	7	10,8	17	26,2	18	27,7	17	26,2
39	I try to distinguish between factual sentences and the writer's subjective opinions in the text.	6	9,2	9	13,8	18	27,7	15	23,1	17	26,2
19	I try to understand the meaning of an unknown word by dividing it into parts.	6	9,2	8	12,3	14	21,5	21	32,3	16	24,6
42	I pay attention to indirectly stated ideas and try to make inferences about them.	4	6,2	8	12,3	16	24,6	21	32,3	16	24,6
27	I make a picture in my mind about what the text is saying.	4	6,2	6	9,2	16	24,6	24	36,9	15	23,1
31	I ask questions related to the text or what I have read.	1	1,5	11	16,9	21	32,3	17	26,2	15	23,1
16	I read aloud the difficult parts of a text.	11	16,9	9	13,8	18	27,7	13	20,0	14	21,5
22	I check what each pronoun refers to.	4	6,2	11	16,9	21	32,3	15	23,1	14	21,5
36	I try to confirm or disconfirm the predictions, guesses, or inferences I have made	4	6,2	7	10,8	22	33,8	18	27,7	14	21,5
7	I pay attention to parts of sentences such as phrases and clauses.	1	1,5	5	7,7	23	35,4	23	35,4	13	20,0
13	I pay attention to sentence structure, such as subjects and objects	7	10,8	10	15,4	13	20,0	22	33,8	13	20,0
33	I use slashes to divide a sentence grammatically.	17	26,2	10	15,4	16	24,6	10	15,4	12	18,5
34	When I cannot understand a sentence even if I know every word, I skip that sentence.	12	18,5	16	24,6	10	15,4	15	23,1	12	18,5
41	I try to distinguish between the main idea and the supporting details in the text.	3	4,6	9	13,8	16	24,6	25	38,5	12	18,5
35	I predict what will come next.	5	7,7	8	12,3	20	30,8	21	32,3	11	16,9
17	I skip unknown words.	9	13,8	14	21,5	19	29,2	15	23,1	8	12,3
26	I read aloud the entire text.	15	23,1	13	20,0	16	24,6	13	20,0	8	12,3

Note: Aa = almost always; O = often; S = sometimes; R = rarely; N = never; f = frequency; % = percentage

Regarding the responses shown in Table 4.2, the strategies employed during the reading process showed that more than half of the participants (50,8%) selected Strategy Fifteen, which was *I change reading speed depending on the difficulty of a text*. It was given the first and most regularly utilized while-reading strategy. The second strategy selected by participants was Strategy Thirty which was *I try to connect information within the text*. The third strategy employed during the reading process was given to Strategy Fourteen, which was *I continue reading even if I have difficulty*. The next strategy was given to Strategy Twenty, which was *If I don't understand something, such as word or phrase, I guess its meaning using clues from the text*. The last strategy applied by participants (41,5%) was given to Strategy Twelve which was *I start reading from the first paragraph and read all the way through the last paragraph*. Therefore, it is understood from the results above that most students are aware of the top-down reading strategy. It assists them in activating their prior knowledge to predict the meaning of new vocabulary from the context, guess the main idea of the reading passage, make a connection between what they know with what they read, and incorporate their learning with their acquiring while reading the text.

Accordingly, the least regularly applied of the five while-reading strategies were Strategy Twenty-Six, *I read aloud the entire text*, and Strategy Seventeen took the same lowest number of participants (12,3%). The following strategy was given to Strategy Thirty-Five: *I predict what will come next*. The last two strategies, Thirty-Four, *When I cannot understand a sentence even if I know every word, I skip that sentence*, and Strategy Forty-One, *I try to distinguish between the main idea and the supporting details in the text*, had the same percentage of participants (18,5%). Hence, the results showed that participants lack the skills in some top-down and bottom-up strategies. These strategies need to be the teacher's focus to assist learners in learning and practice more about predicting the ideas, understanding vocabulary from the context, and learning more about the major ideas and supporting ones.

4.3 Findings Related to Post-reading Strategies.

This section reveals the findings of the participants' preferences for post-reading strategy use in reading comprehension. Table 4.3 shows the ranking order of post-reading strategy use according to the participants of this study.

Table 4.3: Ranking of Post-Reading Strategy Use

No	Item	N		R		S		O		Aa	
		f	%	f	%	f	%	f	%	f	%
44	I summarize it in my own words.	1	1,5	3	4,6	18	27,7	23	35,4	20	30,8
45	After reading the text in detail, I evaluate the text and the writer's viewpoint.	4	6,2	5	7,7	22	33,8	23	35,4	11	16,9

Note: Aa = almost always; O = often; S = sometimes; R = rarely; N = never; f = frequency; % = percentage

According to the responses illustrated in Table 4.3, the strategies utilized after the reading process showed that Strategy Forty-Four, *I summarize it in my own words*, was the most regularly employed, whereas the least one was Strategy Forty-Five, *after reading the text in detail, I evaluate the text and the writer's viewpoint*. In other words, students need to concentrate on reading comprehension sections to have a better understanding of the author's view besides their personal view.

5. Conclusions

The first primary research question concentrates on identifying the most frequent reading strategies employed by students to have a better understanding of the reading materials. The findings of the study showed that pre-reading strategies were employed by most of the students in respective sequences: *I use the title to help predict the contents, I pay attention to visuals such as graphs, pictures, or tables*; in addition to, *I look through the text to spot specific information such as dates, names, or numbers*. The results from pre-reading strategies showed that the students are aware that these strategies develop their reading comprehension. Furthermore, their English language teachers could consider teaching the students the correct and most useful pre-reading strategies to help them have effective reading comprehension.

The results of the while-reading strategies revealed that the five most while-reading strategies utilized by students were four top-down strategies and one bottom-up strategy. The first most employed strategy was changing the speed of the reading according to the difficulties of the reading passage to be able to understand the passage point completely. The second strategy employed by the students was connecting the ideas in the reading passage to generate a full understanding of the topic in sequence. The third most used strategy was that students kept reading the passage even though there was certain difficult vocabulary. The fourth most used strategy was *If I don't understand something, such as word or phrase, I guess its meaning using clues from the text*. This finding was in line with Uzunçakmak (2005), who conducted a study on successful and unsuccessful readers. She found out that successful readers tend to utilize top-down reading strategies because they focus on the meaning rather than the form. Successful readers activate their background knowledge and predict the meaning of the difficult words through the reading context. The fifth most employed while-reading strategy was reading the whole passage from the beginning till the end. This finding was in line with Zafar (2021), who conducted research on the most and least frequent reading strategy use. In her findings, she discovered that 65% of her participants employed bottom-up while-reading strategy in their reading process. To sum up, regarding the first research question, the conclusion of this present study revealed that most participants employed top-down strategies rather than bottom-up strategies during their reading processes.

Upon reviewing the students' responses to post-reading strategies employment, we found that only 30,8% of the participants *summarized the reading passage using their own words,* while 16,9% of the participants *evaluated the text and writer's point of view after reading the whole passage*. In light of this finding, we understand that more than half the students do not pay attention to the final stage of reading. In other words, upon reading the passage, students think that they have achieved their reading goal. However, teachers could assist their students in practicing some post-reading strategies. For instance, thinking in pairs, retelling the reading passage using their words, organizing pictures, asking-answering related questions, and using exit tickets tasks such as cloze test, multi-choices, and true/false questions.

The second primary research question focused on determining the least frequent reading strategies utilized by students. According to participants' responses, the least frequent pre-reading strategy employed by students (23,1%) was considering the reading text type such as newspaper, magazine, article, novel, story, or academic article. Although the responses to this strategy were very few, students were aware of using top-down strategies instead of bottom-up strategies.

The finding of the while-reading strategies revealed that the five least while-reading strategies used by students were three top-down strategies and two bottom-up strategies. Top-down strategies were *When I cannot understand a sentence, even if I know every word, I skip that sentence, I try to distinguish between the main idea and the supporting details in the text, I predict what will come next*. Considering these selections, students tend to employ these while-reading strategies as their least option when they are reading the passage. Therefore, they need to practice these strategies and make them their first option because around 18% of all participants used these strategies. The least two bottom-up while-reading strategies utilized among participants (12,3%) were skipping the unfamiliar vocabulary and reading aloud the whole reading passage. These techniques are not extremely beneficial for their reading-learning processes. They employed these techniques because they were not aware of the negative aspects of their reading skills development, or they were used to learning these strategies during their school life.

As a result, the pre-reading strategies that were the least employed by the students in a respective order are (1) *I read aloud the entire text, (2) I skip unknown words*, (3) *I predict what will come next, (4) I try to distinguish between the main idea and the suppo*rting *details in the text*, (5) *when I cannot understand a sentence even if I know every word*, *I skip that sentence.* It is understood from these findings that students should be concerned about learning how to develop these bottom-up techniques to top-down ones. In other words, instead of reading the whole text aloud, they can read it silently with more concentration on the main idea of the passage. Furthermore, they can try to understand the meaning of difficult vocabulary from the context instead of skipping them so that they have barriers in comprehending the reading passage.

The findings of the study showed that the least regularly employed post-reading strategy by the students was that they evaluate the author's opinion after reading the whole passage. This strategy got 16,9% of the participants. Although it is a top-down strategy, students need to be more careful to utilize this method after reading the passage to comprehend the text appropriately.

Conflicts of Interest: The authors declare no conflict of interest.
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