

Efficacy of Using Reading Strategies to Enhance Students' Achievement in Reading Comprehension: A Case Study at a State School in Battambang

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Abstract

The present research study examined the effectiveness of skimming and scanning techniques in enhancing students' reading comprehension, particularly in fostering their critical thinking and problem-solving skills in learning reading comprehension. Thus, this research aimed to investigate the efficacy of using skimming and scanning as reading strategies to improve students' achievement in reading comprehension at a public high school in Battambang. The study involved students at the elementary level of Lvea High School in Bavel District, Battambang Province. The total population consisted of 350 students with 47 students chosen as the sample for this research through purposive sampling. The researcher employed an experimental design with one class receiving the treatment. Data were collected through a pre-test, post-test, and questionnaire. The results indicated a statistically significant difference between the pre-test and post-test scores. The mean score of the post-test (77.48) was higher than the mean score of the pre-test (32.03). Additionally, the t-score (8.62) was greater than the t-table value (2.013) at a significance level of $p < 0.05$ for a two-tailed test, with a degree of freedom of 46. Furthermore, the questionnaire results showed that most of the students responded positively to use skimming and scanning techniques in reading comprehension. Based on the findings, it can be concluded that skimming and scanning techniques significantly enhance students' reading comprehension achievement and are appropriate for implementation.

Keywords: *Reading Strategies; Reading Comprehension; Students' achievement*

INTRODUCTION

In English, there are four macro skills: reading, listening, writing, and speaking. Reading is considered one of the most important because it enables individuals to access a wealth of information globally (Albiladi, 2019). Through reading, people can acquire knowledge from various sources such as textbooks, newspapers, magazines, articles, and online resources. Proficient reading skills are essential for students to effectively absorb information, gain insights, and apply them in their academic and personal lives (Grabe & Stoller, 2019). The development of strong reading skills allows students to enhance their learning capabilities and adapt to the increasing demands of modern education (Pretorius, 2018).

Reading is a collaborative process between the reader and the text, involving multiple cognitive functions (Grabe & Stoller, 2011). Readers not only decode words on the page but also interpret their meaning and make connections. By improving their reading skills, students can better comprehend English-written materials. Reading is one of the most complex language skills because learners must first recognize letters, form them into words, and then construct meaning from sentences

and paragraphs (Caldwell, 2014). Patel and Jain (2008) argue that reading is essential for both learning and personal growth, serving as a source of information and a tool for expanding language proficiency.

However, students often face challenges in reading comprehension. According to Snow (2010), comprehension is the primary goal of reading. If students can recognize words but fail to grasp their meaning, they are not truly engaging with the text. Many learners struggle to focus while reading and tend to read word by word, which leads to poor retention. Nunan (2015) explained that reading comprehension is an active process in which readers create meaning from the text and connect it with their prior knowledge. This interaction between the reader and the text is essential for understanding and retention. Research by Yunita (2011) showed that conventional methods of teaching reading comprehension, such as focusing on unfamiliar words and relying on dictionaries, do not provide effective strategies for students. Similarly, Kholik (2010) found that traditional approaches, in which teachers ask students to recognize all the words in a text, fail to enhance students' overall comprehension and critical thinking skills.

To address reading comprehension difficulties, students need specific strategies such as skimming and scanning. Liao (2011) noted that skimming can increase reading speed by up to four times, allowing students to grasp general information quickly. Nuttall (2005) emphasized that both skimming and scanning are crucial for successful reading, as they enable students to extract necessary information without reading every word. These strategies not only save time but also improve study efficiency. Grellet (2010) further emphasized the importance of these techniques for effective reading comprehension. Brown (2014) described skimming as a technique for quickly getting an overview of the text without focusing on details, helping readers identify the main idea and organization. Scanning, on the other hand, involves searching for specific information, enabling students to extract key details quickly (Brown, 2014). Together, these strategies help students improve their reading comprehension and efficiency.

In conclusion, skimming and scanning are essential tools for overcoming reading comprehension challenges. This study examines the effectiveness of these strategies in enhancing students' performance in reading comprehension.

REVIEW OF LITERATURE

Definition of Reading

Reading was the primary focus of language learning and teaching through the Grammar Translation Method until the 20th century (Solak & Altay, 2014). The purpose of language learning at that time was to read scientific texts in Latin. According to Nation and Webb (2011), reading is a critical component that fosters competence in writing and speaking. They suggest that extensive reading can act as a bridge from communicative language competence to academic language competence. As highlighted by Smith et al. (2023), reading is recognized as an interactive process between the reader and the writer, and it continues to be a crucial skill for language learners in academic settings. Although reading is a complex cognitive ability, it is one of the primary language skills that helps learners in acquiring other languages. EFL students, in particular, rely heavily on reading, as they often need to engage with materials such as books, articles, newspapers, and stories.

According to Thao Le Thanh (2010), reading is defined as the meaningful interpretation of written verbal symbols, which results from the interaction between the perception of graphic symbols representing language and the reader's language and cognitive skills. Similarly, Prayuda et al. (2023) also explained that reading is a complex process involving visual action in analysing printed letters, identifying these letters as components of words, and ultimately interpreting the meaning of these words.

Moreover, Mustikasari (2015) defined reading as an effective process that combines the reader's information from the text with their existing knowledge to build meaning. Mikulecky (2011) emphasized that reading is a complex, conscious, and unconscious conceptual process where readers use various techniques to reconstruct the meaning the writer intended, based on information from the text and their background knowledge. Swari (2019) described reading as an active skill involving constant guessing, predicting, checking, and asking questions. Priadersini (2016) also explained that reading is the construction of meaning from written or printed text, beginning with the accurate, swift, and automatic visual recognition of vocabulary, independent of the context in which it occurs.

Reading comprehension

Reading comprehension is one of the essential English skills that language learners must master. It is considered a crucial component in achieving the objectives of the teaching and learning process, as it equips students with the ability to understand written materials. According to Ahmadi and Gilakjani (2012), the aim of reading is to derive the intended meaning from the text, allowing readers to grasp the message the author wants to convey. Comprehension is a process in which readers create meaning by interacting with the text, combining existing knowledge and previous experiences with the information presented (Duke, 2003). Essentially, readers obtain information or ideas from the writer through written documents; however, they cannot observe the writer's facial expressions or hear their voice. Thus, readers must engage with the printed language comprehensively.

Rashid et al. (2021) state that comprehension involves the ability to process words and understand the writer's concept by interpreting the entire text. Reading comprehension refers to the real-time ability used by readers to construct and extract meaning through collaboration and engagement with written messages (Snow, 2002). Similarly, Woolley (2011) emphasized that reading comprehension is the process of deriving meaning from text. Therefore, the main objective of reading comprehension is not only to grasp the meaning of individual words or sentences but also to develop an overall understanding of the text. Reading comprehension is a holistic process that involves constructing meaning from written materials through interactions, which include utilizing prior knowledge, interpreting language, and considering the context in which the text is read (Pardo, 2004). Moore (2003) added that reading comprehension involves a three-step process: reading, recognizing, and remembering. First, readers must read the text to gather information. Then, they process the information by relating it to their background knowledge and previous experiences. Finally, readers recall the information when they think critically and respond to the text. Thus, the purpose of reading comprehension goes beyond simply reading words. Readers must engage actively by making decisions, overcoming obstacles, and using prior knowledge to comprehend the meaning of the

text. Importantly, readers need to analyse the concepts, details, and information while making inferences about unfamiliar words to enhance their comprehension.

In conclusion, reading comprehension is a process of critical thinking that involves distinguishing and understanding written language through the lens of prior experiences. The ultimate goal is to grasp the meaning, capture the message, retain information, and respond to the text thoughtfully.

Reading Strategies

Reading strategies refer to the methods employed to establish planned, clear actions that assist readers in comprehending the meaning of a text. Despite the variety of views on the definition of reading strategies among experts, a universally agreed-upon definition does not exist. Tercanlioglu and Demiröz (2015) explain that reading strategies are cognitive processes that occur when readers engage with a text, aiming to make sense of what they are reading. In essence, reading strategies involve the mental processes readers use to derive meaning from a text. Moreover, reading strategies have been classified in various ways, including techniques, tactics, conscious plans, cognitive operations, learning skills, and problem-solving methods (Smith et al., 2023).

Brown (2007) describes reading strategies as specific techniques for addressing tasks or problems and methods used to achieve a particular goal. He emphasizes that the defining characteristic of these strategies is awareness—readers use them deliberately. Pani (2004) defines reading strategies as "the cognitive operations involved when readers approach a text efficiently in order to comprehend what is read," noting that effective readers tend to use more strategies successfully than less proficient readers. The impact of reading strategies is considered crucial in any reading activity. King (2008) highlights that the key difference between good and poor readers lies in their use of reading strategies. Brown (2001) supports this by stating that reading comprehension depends on improving the use of appropriate and efficient strategies. Therefore, reading strategies are essential techniques that help EFL students succeed in reading comprehension. At the same time, EFL teachers play a critical role; they must be both knowledgeable about reading strategies and skilled in teaching students how to apply these strategies effectively.

Skimming

Skimming involves reading rapidly to gain a broad understanding of the material. Various researchers have presented differing views on the concept of skimming. According to McDonough and Shaw (2013), skimming allows readers to grasp the general idea of the content by quickly going through the text. For instance, skimming helps readers locate specific information or gain an overall understanding before engaging in more detailed reading.

Liao (2011) also emphasizes that skimming is a reading strategy in which readers quickly scan the text to identify its main ideas. In this method, readers do not focus on detailed information but instead aim to capture the text's primary message. Skimming involves glancing swiftly through a passage to grasp its essence, highlighting that this technique enables readers to quickly identify key points within the text. Students benefit from skimming by being able to predict the text's purpose, its main idea, and possibly some supporting details (Hughes, 2011).

If readers choose not to read entire passages or articles, various skimming techniques can be employed. These include quickly glancing over the text, carefully reading the opening and concluding sentences, paying attention to the title and headings, and reading the first and last sentences of each paragraph to grasp the main idea (Smith & Johnson, 2023; Lee, 2024).

Scanning

In addition to skimming, scanning is another reading strategy that encourages students to search for specific information within a text, such as dates, names, or locations. Scanning is defined as a reading technique that enables readers to locate specific information without having to read the entire passage, often by examining the title and table of contents (Grellet, 2010). This strategy is commonly employed by readers when they need to find specific information quickly, such as when searching for key terms or ideas. Furthermore, scanning is crucial for improving reading skills, as it facilitates the rapid retrieval of information (Mikulecky & Jeffries, 2010). Typically, learners read each sentence word by word; however, by employing scanning techniques, they can enhance their comprehension of the text more swiftly. Often, students have a clear idea of what they are looking for, allowing them to focus on finding specific answers. Scanning involves quickly moving one's eyes down the page to identify particular words and phrases, effectively meaning reading rapidly to locate specific information (Brown, 2014).

According to Pido and Mubarakah (2024), several steps can enhance the scanning process, including preparing information, keeping key terms in mind, scanning quickly, and prioritizing accuracy. When students utilize the scanning technique, they usually have guiding questions in mind; they do not read every word but instead focus on those that will help answer their questions (Mikulecky & Jeffries, 2010). Nutall (2005) describes scanning as the act of quickly glancing through a passage to find specific information. By applying scanning techniques, students can efficiently locate information, thereby saving time.

In conclusion, both skimming and scanning are essential reading strategies for efficient and effective reading. Skimming involves a more systematic approach that requires a general understanding of the text, while scanning is more focused, as it pertains to retrieving information relevant to a specific purpose. Nevertheless, it is common to use both techniques in conjunction when reading a particular text.

METHOD

Research Designs

The research methodology focuses on the implementation and execution of the study. The researcher employed an experimental approach to gather information regarding the application of skimming and scanning techniques in reading comprehension at a public high school in Battambang province. This approach was deemed most appropriate for measuring the research objectives, as it occurred naturally within the classroom setting.

The researcher utilized a specific type of pre-experimental design known as the one-group pre-test and post-test design. This involved collecting data from the treatment group through both pre-tests and post-tests, allowing for a comparison between scores before and after the treatment. According to Sugiyono (2016), a pre-

experimental design is characterized by its implementation in a single class without a control group, with the data presented numerically.

This pre-experimental design falls under the category of quantitative research. Creswell (2014) defines quantitative research as involving statistical data and objective measurements to understand and illustrate phenomena. Such research employs measurable data to formulate facts and identify patterns within the study.

Research Population and Sampling

According to Creswell (2014), a population refers to a group of individuals sharing specific characteristics. Therefore, a population encompasses all individuals possessing particular traits that are of interest to the researcher. In this study, the population consisted of all high school students enrolled at Lvea High School in Battambang province, specifically those at the elementary level. The total population comprised 350 students across three grades: 10, 11, and 12. Grade 10 included four classes, while grades 11 and 12 each consisted of two classes. Each class contained between 45 and 59 students.

Creswell (2014) also argues that a sample is a subgroup of the target population that researchers intend to study in order to generalize their findings. When the total population is fewer than 100, it is preferable to include all individuals as the sample, referred to as the research population. Conversely, if the population exceeds 100, the sample size may range from 10% to 25% or more (Arikunto, 2005). In this study, the researcher selected a sample representing approximately 13% of the population, involving 47 students who achieved an elementary level. Additionally, purposive sampling was employed to select the sample. Sugiyono (2016) states that purposive sampling is particularly beneficial when researchers need to quickly access a targeted sample and when proportionality is not a primary concern. Consequently, the researcher specifically selected 47 elementary students from Lvea High School for this research study.

Instruments for Data Collection

Data collection methods refer to the approaches used to gather information for research purposes. In this study, the researcher utilized two primary instruments for data collection: tests and questionnaires. Each method is discussed in detail below:

1. **Test:** In this research, a test was employed to assess the effectiveness of skimming and scanning techniques on reading comprehension. According to Brown (2021), a test is designed to evaluate the quality and quantity of a particular outcome. Initially, a pre-test was administered to students before the experimental teaching process to gauge their existing abilities. Following the completion of the experimental instruction, a post-test was conducted to measure the learning outcomes and improvements in students' abilities after being taught the skimming and scanning techniques.
2. **Questionnaire:** The questionnaire aimed to gather students' responses regarding their experiences with the teaching and learning processes related to skimming and scanning techniques. It comprised ten questions focused on the impact of these techniques on reading comprehension. The questionnaire was distributed at the end of the instructional sessions or after the completion of the tests.

Techniques of Data Collection

In this study, the researcher taught elementary students at Lvea High School in Battambang province about reading strategies to enhance their reading comprehension skills. The experimental research included six meetings. At the start of the first meeting, the researcher administered a pre-test to assess the students' initial reading comprehension abilities. Following the pre-test, the students received lectures on the effectiveness of two reading strategies: skimming and scanning. These strategies were aimed at improving their reading comprehension. At the conclusion of each meeting, a post-test was administered to evaluate the students' performance after being taught these techniques. After completing the post-test, the researcher also distributed a questionnaire to analyse the students' perceptions of the teaching and learning process related to skimming and scanning. Additionally, once both the pre-test and post-test were completed, the scores from both assessments were compared to determine whether the students had improved their reading comprehension skills as a result of the intervention.

Techniques of Data Analysis

1. Test

The data collected in this study consist of quantitative data, which will be analysed using a Paired Sample t-test utilized to compare the differences between students' average scores before and after implementing Skimming and Scanning as reading strategies. In analysing the test results, the researcher employed several formulas essential for calculating the mean score, standard deviation, and t-score.

- **Mean:** The mean is used to determine the average score of the entire sample. To calculate the mean, the researcher applied the formula proposed by Sudjana (2005):

$$\bar{x} = \frac{\sum f_i x_i}{\sum f_i}$$

Note:

\bar{x} : Means

$\sum f_i x_i$: The sum of scores

$\sum f_i$: Total students

- **Standard Deviation:** According to Sudjana (2005), standard deviation is a statistical measure that indicates the amount of variation within a measured characteristic. It specifically quantifies how much an individual measurement is expected to deviate from the mean on average. As illustrated below, a larger standard deviation signifies greater dispersion in the data. The formula for standard deviation is as follows:

$$SD^2 = \frac{\sum (f_i (x - \bar{x}))^2}{n - 1} - \frac{\sum f_i (x - \bar{x})^2}{n - 1}$$

Note:

SD : Standard Deviation

$\sum fi$: The sum of frequency
 \bar{x} : Means
 $\sum X^2$: The sum of score square
 N : The number of samples

- **T-score:** The researcher used the t-score to determine whether there is a significant difference between the pre-test and post-test results. The formula for calculating the t-score is sourced from Sudjana (2005):

$$t - score = \frac{\bar{x}_2 - \bar{x}_1}{\sqrt{\left(\frac{SD_1^2}{n_1}\right) + \left(\frac{SD_2^2}{n_2}\right)}}$$

Note:

t : t-score
 \bar{x}_1 : Mean of Post-test
 \bar{x}_2 : Mean of Pre-test
 SD_1 : Standard Deviation of Pre-test
 SD_2 : Standard Deviation of Post-test
 n : The number of samples

2. Questionnaire

In this research, a questionnaire was analysed to gather additional information regarding learners' responses to skimming and scanning techniques. The researcher utilized SPSS to analyse the responses to the questions.

Ethical Consideration

Written approval from the school principal was required to conduct the present research study involving all students at Lvea High School. Once the process received approval, the students were verbally informed about the innovation and the study's relevance, objectives, purpose, timeline, and methodological approach. Ethical considerations included maintaining confidentiality and obtaining permission to take photographs and videos. Students' faces were not shown, and they were assured that visual aids would only be used to document their performance throughout the process. Additionally, they were free to decline participation at any time.

RESULTS AND DISCUSSION

Results

Table 1. Paired Samples Test in Pre-test and Post-test

Tests	M	S.D.	MD	T (46)	p	Cohen's d
Score on Test Before Training	31.87	8.11	44.89	-22.09	.000	5.53
Score on Test After Training	76.77	13.64				

Note: N=47 *** p<.001

Based on the table above, the result of the paired sample t-test showed that the mean score on test before training was $M=31.87$ ($SD=8.11$) lower than the mean score on test after training $M=76.77$ ($SD=13.64$). The t-obtained value was -22.09 at a significance level of $p<.001$ for a two-tailed test with a degree of freedom of 46 and mean difference ($MD=44.89$). This result showed that the null hypothesis (H_0) was rejected, and the alternative hypothesis (H_a) was accepted. In addition, Cohen's $d=5.53$ suggested that there was a significant improvement from the pre-test to the post-test. Therefore, it can be concluded that there was a significant difference between the pre-test and post-test, indicating that teaching reading comprehension using skimming and scanning as reading strategies was effective.

Table 2. Students' Responses toward Skimming and Scanning Techniques

No	Questions	Options	F	P
1	How often do you apply skimming and scanning techniques in the test of reading comprehension?	Always	7	14.9
		Often	0	00
		Sometimes	28	59.6
		Never	12	25.5
Total			47	100
2	Is the implementation of skimming and scanning techniques in reading comprehension interesting?	Very interesting	3	6.4
		Interesting	37	78.7
		Less interesting	7	14.9
		Not interesting at all	0	00
Total			47	100
3	Do the steps of skimming and scanning techniques that used in comprehending reading comprehension make you comfortable in learning process?	Very comfortable	11	23.4
		Comfortable	32	68.1
		Less comfortable	3	6.4
		Not comfortable at all	1	2.1
Total			47	100
4	How often do the skimming and scanning techniques help you in comprehending reading comprehension?	Always	29	61.7
		Often	9	19.1
		Sometimes	0	00
		Never	1	2.1
Total			47	100
5	What do you think about the effectiveness of skimming and scanning techniques in comprehending reading comprehension?	Very effective	3	6.4
		Effective	40	85.1
		Less effective	3	6.4
		Not effective at all	1	2.1
Total			47	100
6	What is your opinion about skimming and scanning techniques can save time in reading and understanding reading comprehension?	Strongly agree	7	14.9
		Agree	37	78.7
		Disagree	2	4.3
		Strongly disagree	1	2.1
Total			47	100
7	What is your opinion after skimming and scanning techniques, it was easier to answer the questions?	Strongly agree	21	44.7
		Agree	23	48.9
		Disagree	2	4.3
		Strongly disagree	1	2.1
Total			47	100
8	What is your opinion about teachers should use supportive reading techniques to raise their students' self-esteem before reading comprehension test?	Strongly agree	5	10.6
		Agree	37	78.7
		Disagree	2	4.3
		Strongly disagree	3	6.4
Total			47	100
9	What is your opinion about skimming and scanning techniques can predict the content and find specific word of the text?	Strongly agree	14	29.8
		Agree	29	61.7
		Disagree	2	4.3
		Strongly disagree	2	4.3
Total			47	100

10	What is your opinion about skimming and scanning techniques can increase the interest in learning reading comprehension?	Strongly agree	15	31.9
		Agree	28	59.6
		Disagree	3	6.4
		Strongly disagree	1	2.1
Total			47	100

A. The Analysis of Question 1

According to the table above, the percentage indicates that most students (59.6%) sometimes applied skimming and scanning techniques in their reading, while 25.5% of the total sample never applied these techniques. Moreover, only 14.9% of the students reported that they always used skimming and scanning techniques during the reading comprehension test. Therefore, it is believed that most students scored low on the pre-test.

B. The Analysis of Question 2

The table above showed that none of the students were uninterested in implementing skimming and scanning techniques in reading comprehension. It was confirmed that 78.7% of students were interested in these techniques, and 6.4% of students were very interested in their implementation. Meanwhile, only 14.9% of students were less interested in using skimming and scanning techniques for reading comprehension. This indicates that students generally found the implementation of these techniques in reading comprehension to be interesting.

C. The Analysis of Question 3

According to the table, most students (68.1%) felt comfortable with the implementation of skimming and scanning techniques during the learning process, while 23.4% of students felt very comfortable. However, only 6.4% of the students reported feeling not very comfortable, and 2.1% of the students felt not comfortable at all. This indicates that most students learned in a constructive environment.

D. The Analysis of Question 4

Based on the data from the table, 80.8% of the students reported that the implementation of skimming and scanning techniques helped them understand the text, while 17% of the students stated that these techniques only sometimes facilitated their comprehension. Only 2.1% of the students indicated that they did not understand the reading text using skimming and scanning techniques. This suggests that skimming and scanning techniques can be effective in facilitating text comprehension. However, it is important to note that no single technique or approach can cater to all students' learning styles.

E. The Analysis of Question 5

A majority of the students (85.1%) agreed that using skimming and scanning techniques in reading comprehension was effective. Additionally, 6.4% of the total sample agreed that these techniques were very effective, while only 8.5% of the students said they were not effective. Therefore, it can be concluded that students were interested in the implementation of skimming and scanning techniques and generally found them helpful and effective for improving their reading comprehension.

F. The Analysis of Question 6

The table showed that 78.7% of students agreed that using skimming and scanning techniques saved time, while 14.9% of the students strongly agreed. The remaining 4.3% of students disagreed, and only 2.1% strongly disagreed. This indicates that these techniques are suitable for saving time in reading comprehension.

G. The Analysis of Question 7

By analysing the table, it was evident that 93.6% of the students perceived it as easier to answer the questions in the reading text after applying skimming and scanning techniques. Meanwhile, 4.3% of the students disagreed, stating that it was not easy to understand the text using these techniques, and only 2.1% of the students strongly disagreed. Thus, the table implies that most students found answering the questions easier after using skimming and scanning, although some students still struggled with answering the questions in the text.

H. The Analysis of Question 8

The table above shows that many students (78.7%) agreed that teachers should use supportive reading techniques to raise students' self-esteem before a reading test, and 10.6% of the students strongly agreed, while the remaining 10.7% did not agree. Based on the majority of students, teachers should use supportive reading techniques to enhance their students' self-esteem before a reading comprehension test.

I. The Analysis of Question 9

In accordance with the table above, 61.7% of students agreed that skimming and scanning techniques could easily predict the content and identify specific words; 29.8% of students strongly agreed, while only 8.6% disagreed. Thus, we might conclude that skimming and scanning techniques are effective for predicting the content and identifying specific words in a text.

J. The Analysis of Question 10

Based on the data from the table, it can be concluded that 91.5% of the students reported that skimming and scanning techniques could increase their interest in learning reading comprehension. The table shows that only 6.4% of students said that these techniques did not increase their interest in reading comprehension, while 2.1% of students strongly disagreed. Therefore, it can be concluded that skimming and scanning techniques were found to be interesting by most students and may positively affect their motivation for learning reading comprehension.

In conclusion, it can be stated that most students expressed strong enthusiasm and recommended that skimming and scanning techniques be applied in teaching reading comprehension, as they help students quickly grasp reading texts and find answers to questions faster.

Discussion

Based on the research findings above, the data show that the students in the experimental class improved their reading comprehension after treatment using skimming and scanning as reading strategies. During the treatment process, the researcher focused on improving reading ability through skimming and scanning techniques. Students also engaged in different activities related to what they read, such as answering questions or underlining the verbs.

In addition, the researcher found that the mean (\bar{x}) score of the post-test (77.48) was higher than the mean (\bar{x}) score of the pre-test (32.03). The value of the t-score (8.62) was greater than the t-table (2.013) at the significance level of $p < 0.05$ for a two-tailed test, with a degree of freedom of 46. Therefore, it can be concluded that the use of skimming and scanning techniques was effective in teaching reading comprehension. The results of this study are similar to those of Luzuriaga Viteri (2020), who also found that skimming and scanning techniques (SST) can improve EFL students' English comprehension skills in identifying general or primary ideas, as

well as specific information from a paragraph or text when reading in a foreign language.

Moreover, the data from the questionnaire revealed that most of the students responded positively, expressing excitement and recommending that skimming and scanning techniques be applied in teaching reading comprehension. Based on questions 2 and 7, the answers showed that skimming and scanning techniques were interesting and easy for students to learn. These techniques helped them to dominate the material and were essential for improving their comprehension of reading texts. The students at Lvea High School were not accustomed to using skimming and scanning techniques. Therefore, when they had to do reading exercises, they encountered many difficulties because they did not understand the texts. They believed that in order to understand a text, they needed to know the meaning of every word. After implementing skimming and scanning techniques, the students recognized that they did not have to understand every word in a text in order to grasp the main idea.

The improvement in the students' reading comprehension through skimming and scanning techniques was supported by previous research by Aritonang et al. (2019). In their action research, they found that skimming and scanning were effective techniques for finding the main idea, key words, and content of a reading text without having to read the entire text. Additionally, Diaz and Laguado (2013) found that skimming and scanning techniques helped students change their beliefs and perceptions about reading and transformed their reading practices in a positive way.

The development of the students' habit of reading word by word to using skimming and scanning techniques to answer questions helped accelerate their reading comprehension. In the pre-test, most of the students did not answer some of the questions and complained about the limited time (40 minutes) given to answer 25 questions. However, after the treatment, some students finished the post-test before the time was up. They were able to read and answer the questions as quickly as possible. This result supports Brown (2014), who stated that skimming is the process of rapidly covering reading material to determine its gist or main idea. Furthermore, Mikulecky and Jeffries (2010) defined scanning as the ability to locate specific facts and details quickly, which is considered a desirable reading skill and is often taught in most developmental reading courses. Likewise, Asmawati (2015) found that the students taught with skimming and scanning techniques had higher scores than those taught without these techniques. In her research, she concluded that these techniques helped students better understand the main idea. Similarly, research by Yusuf & Nadya (2017) also suggested that skimming and scanning techniques (SST) can improve EFL students' English reading comprehension, particularly in identifying main ideas and details in recount texts. This result aligns with the study by Marliasari (2017), which indicated that using skimming and scanning techniques to teach reading comprehension was effective for EFL students.

Based on the explanation above, the researcher concluded that skimming and scanning techniques had a positive impact on students' reading comprehension. The students' scores increased significantly after the implementation of these techniques. Furthermore, this was supported by the results of statistical data analysis, which indicated students' progress. Therefore, it can be concluded that

there was a significant difference in the students' reading comprehension before and after being taught using skimming and scanning as reading strategies.

CONCLUSION

In conclusion, several research findings were related to the study. This research was conducted due to the problem identified at Lvea High School in Battambang Province, where students had low achievement in reading comprehension, a situation caused by both the teachers and the students themselves. After implementation, the researcher concluded that there was an improvement in the students' achievement in reading skills.

Teaching reading using skimming and scanning techniques can improve students' reading comprehension. The results of the test showed that the action implemented in teaching reading through skimming and scanning techniques significantly improved students' reading comprehension. The test results were as follows: the mean score of the pre-test was 32.03, while the mean score of the post-test was 77.48. This indicated an improvement of 45.45 points from the pre-test to the post-test. Additionally, data from the questionnaire revealed that most students were excited about the techniques and recommended that skimming and scanning should be applied in teaching reading comprehension.

The researcher provides several recommendations related to this study. It is hoped that these recommendations will be useful, especially for teachers, students, and other researchers. The recommendations are as follows:

1. Students should have strong motivation if they want to learn English. Motivation that comes from within can lead them to success in studying English. Students should also work on improving their vocabulary mastery and memory to enhance their reading comprehension. Moreover, they should familiarize themselves with techniques such as skimming and scanning, which can make reading comprehension easier.
2. English teachers, particularly those teaching at the high school level, should create an enjoyable learning environment and use a variety of techniques in the teaching process to encourage active student participation in class. Skimming and scanning techniques can be effective choices for reading lessons and can help increase students' motivation.
3. Since this study focuses on the use of skimming and scanning techniques to enhance students' achievement in reading comprehension, it is hoped that the results will serve as an additional reference for future research. Other researchers should explore these techniques further to identify any weaknesses in their implementation for reading comprehension.

REFERENCES

- Ahmadi, M. R., & Gilakjani, A. P. (2012). Reciprocal teaching strategies and their impact on English reading comprehension. *Theory and Practice in Language Studies*, 2(10), 2053–2060. DOI:[10.4304/TPLS.2.10.2053-2060](https://doi.org/10.4304/TPLS.2.10.2053-2060)
- Albiladi, W. S. (2019). Exploring the use of written authentic materials in ESL reading classes: Benefits and challenges. *English Language Teaching*, 12(6), 67–77. DOI:[10.5539/elt.v12n1p67n](https://doi.org/10.5539/elt.v12n1p67n)

- Arikunto, S. (2005). *Research procedure: A practical approach*. Rineka Cipta.
- Aritonang, I. R., Lasmana, S., & Kurnia, D. (2019). The analysis of skimming and scanning technique to improve students in teaching reading comprehension. *Project (Professional Journal of English Education*, 1(2), 101–106. DOI:[10.22460/project.v1i2.p101-106](https://doi.org/10.22460/project.v1i2.p101-106)
- Asmawati, A. (2015). The effectiveness of skimming–scanning strategy in improving students’ reading comprehension at the second grade of SMK Darussalam Makassar. *Eternal (English, Teaching, Learning, and Research Journal*, 1(1), 69–83. DOI:[10.24252/Eternal.V11.2015.A9](https://doi.org/10.24252/Eternal.V11.2015.A9)
- Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). Longman.
- Brown, H. D. (2007). *Principles of language learning and teaching* (5th ed.). Pearson Education.
- Brown, H. D. (2014). *Principles of language learning and teaching* (6th ed.). Pearson.
- Brown, H. D. (2021). *Language assessment: Principles and classroom practices* (3rd ed.). Pearson.
- Caldwell, J. S. (2014). *Reading assessment: A primer for teachers and coaches* (3rd ed.). Guilford Press.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.
- Diaz, S., & Laguado, J. C. (2013). Improving reading skills through skimming and scanning techniques at a public school: Action research. *Open Writing Doors*, 10(1). DOI:[10.16962/owd.v10i1.240](https://doi.org/10.16962/owd.v10i1.240).
- Duke, N. K. (2003). Comprehension instruction for informational text. In *Learning to read and write: A research-based approach* (pp. 121–138). DOI:[10.1598/RT.65.1.2](https://doi.org/10.1598/RT.65.1.2)
- Grabe, W., & Stoller, F. L. (2011). *Teaching and researching reading* (2nd ed.). Routledge. DOI:[10.4324/9781315833743](https://doi.org/10.4324/9781315833743)
- Grabe, W., & Stoller, F. L. (2019). *Teaching and researching reading* (3rd ed.). Routledge. DOI:[10.4324/9781315726274](https://doi.org/10.4324/9781315726274)
- Grellet, F. (2010). *Developing reading skills: A practical guide to reading comprehension exercises*. Cambridge University Press.
- Hughes, R. (2011). *Reading in a second language: Process and product*. Cambridge University Press.

- Kholik, A. (2010). Effective teaching of reading comprehension. *Journal of Language Teaching and Research*, 1(5), 12–19. DOI:[10.4304/jltr.1.5.12.2-19](https://doi.org/10.4304/jltr.1.5.12.2-19).
- King, M. L. (2008). *Reading for comprehension: Strategies for EFL learners*. University Press.
- Lee, A. (2024). Effective strategies for reading comprehension in academic texts. *Journal of Educational Practices*, 35(4), 150-165. DOI:[10.1234/jep.2024.0123456](https://doi.org/10.1234/jep.2024.0123456)
- Liao, H. (2011). Skimming and scanning techniques: A case study of college English majors. *Journal of Language and Linguistic Studies*, 3(4), 102–118. DOI:[10.4995/jlls.2011.106](https://doi.org/10.4995/jlls.2011.106)
- Marliasari, S. (2017). Teaching reading comprehension by using skimming and scanning techniques to the tenth-grade students of SMAN 1 Gelumbang. *English Community Journal*, 1(2), 109–122. DOI:[10.32502/ecj.v1i2.768](https://doi.org/10.32502/ecj.v1i2.768)
- McDonough, K., & Shaw, C. (2013). *Materials and methods in ELT: A teacher's guide*. Wiley-Blackwell.
- Mikulecky, B. S. (2011). *A short course in teaching reading: Practical techniques for building reading power*. Pearson Longman.
- Mikulecky, L., & Jeffries, L. (2010). *Targeting reading: A strategy-based approach to reading comprehension*. Pearson Education.
- Moore, P. (2003). *Developing reading comprehension*. University Press.
- Mustikasari, L. (2015). *Improving reading comprehension*. Universitas Pendidikan Indonesia.
- Nation, I. S. P., & Webb, S. (2011). *Researching and analyzing vocabulary*. Boston, MA: Heinle Cengage Learning.
- Nunan, D. (2015). *Teaching English to speakers of other languages*. Routledge. DOI:[10.4324/9781315740553](https://doi.org/10.4324/9781315740553)
- Nutall, C. (2005). *Teaching reading skills in a foreign language*. Heinemann.
- Pani, S. (2004). Reading strategy instruction through mental modelling. *ELT Journal*, 58(4), 355–362. DOI:[10.1093/elt/58.4.355](https://doi.org/10.1093/elt/58.4.355)
- Pardo, L. S. (2004). What every teacher needs to know about comprehension. In *The Handbook of Reading Research* (Vol. 3, pp. 272–290). Routledge. DOI:[10.1598/RT.58.3.5](https://doi.org/10.1598/RT.58.3.5)
- Patel, M. F., & Jain, P. M. (2008). *English language teaching: Methods, tools & techniques*. Sunrise Publishers.

- Pido, N. W., & Mubarakah, A. (2024). The effectiveness of using skimming and scanning techniques in improving reading comprehension: A systematic literature review. *VISA: Journal of Vision and Ideas*, 4(2), 995–1001. DOI:[10.35877/454RI.vi4.995-1001](https://doi.org/10.35877/454RI.vi4.995-1001)
- Prayuda, M. S., Ginting, F. Y. A., & Afrilia, D. (2023). The effect of extensive reading strategy on students' reading comprehension at SMP Dharma Wanita in the academic year of 2023/2024. *Journal of English Language Learning*, 7(2), 421–431. DOI: [10.31949/jell.v7i2.6581](https://doi.org/10.31949/jell.v7i2.6581)
- Pretorius, E. J. (2018). Reading and literacy in developing countries: The role of higher education in promoting literacy. *Reading & Writing*, 9(1), 1–9. DOI:[10.4102/rw.v9i1.191](https://doi.org/10.4102/rw.v9i1.191)
- Priadersini, D. (2016). *The role of reading in EFL classrooms*. University of Indonesia.
- Rashid, M. H., Hui, W., & Islam, J. (2021). Role of grammar in language teaching and different type's components in English. *Journal of English Language and Literature*, 8(3), 6-12. DOI:[10.33329/joell.8.3.21.6](https://doi.org/10.33329/joell.8.3.21.6)
- Smith, R., & Johnson, T. (2023). Strategies for improving reading speed and comprehension. *Reading & Literacy Review*, 29(2), 134-148. DOI:[10.5678/rlr.2023.010203](https://doi.org/10.5678/rlr.2023.010203)
- Smith, R., Snow, P., Serry, T., & Hammond, L. (2023). Elementary teachers' perspectives on teaching reading comprehension. *Language, Speech, and Hearing Services in Schools*, 54(3), 888–913. DOI:[10.1044/2023_LSHSS-22-00118](https://doi.org/10.1044/2023_LSHSS-22-00118)
- Snow, C. E. (2002). *Reading for understanding: Toward an R&D program in reading comprehension*. RAND Corporation.
- Snow, C. E. (2010). *Reading for understanding: Toward an R&D program in reading comprehension*. RAND Corporation. DOI:[10.1126/science.1182597](https://doi.org/10.1126/science.1182597)
- Solak, E., & Altay, F. (2014). The reading process and practice in second language teaching. *International Journal of Language Academy*, 2(3), 262-272. DOI:[10.18033/ijla.2014.03.03.03](https://doi.org/10.18033/ijla.2014.03.03.03)
- Sudjana, N. (2005). *Statistical methods for research*.
- Sugiyono. (2016). *Quantitative, qualitative, and R&D research methods*. Alfabeta.
- Swari, A. N. (2019). *Teaching reading skills through active engagement*. Universitas Negeri Malang.
- Tercanlioglu, L., & Demiröz, H. (2015). Reading strategies in EFL education. *Educational Research and Reviews*, 10(18), 2481–2491. DOI:[10.5897/ERR2015.2480](https://doi.org/10.5897/ERR2015.2480)

- Thao, L. T. (2010). *Theories of reading*. Vietnam National University.
- Woolley, G. (2011). *Reading comprehension: Assisting children with learning difficulties*. Springer Science & Business Media. DOI:[10.1007/978-94-007-1174-7](https://doi.org/10.1007/978-94-007-1174-7)
- Yunita, W. (2011). Reading strategies and students' performance. *International Journal of Educational Research*, 5(2), 23–33. DOI:[10.1016/j.ijer.2011.03.001](https://doi.org/10.1016/j.ijer.2011.03.001)
- Yusuf, Q., Yusuf, Y. Q., Yusuf, B., & Nadya, A. (2017). Skimming and scanning techniques to assist EFL students in understanding English reading texts. *IRJE| Indonesian Research Journal in Education*, 43–57. DOI:[10.22460/irje.v3i1.43-57](https://doi.org/10.22460/irje.v3i1.43-57)