

# The Effect of Skimming and Scanning Strategies on Students' Reading Comprehension at Computer-Based Text

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Abstract— This paper discusses the effect of skimming and scanning strategies for English language teaching and learning. It has a good effect on students' reading comprehension skills, especially on computer-based text. The study is quasi-experimental research as it applies one group pretest-posttest design based on the experimental class. The data were collected by using classroom observation, questionnaires, and a pre- and post-reading test. The data were analyzed quantitatively including the mean, standard deviation, frequency distribution, and percentage. T-test was used to get the mean difference. The study found that; a) the high and medium students' English proficiency who applied skimming and scanning strategies on computer-based English reading text did not have significantly higher post-test scores than those with high and medium proficiency ones who did not apply the strategies. b) The low students' English proficiency who applied the strategies on the computer-based test had significantly higher post-test scores than those with low proficiency ones who did not apply the strategies. c) Above all, the students who applied skimming and scanning strategies had very positive opinions towards the strategies and the effects on computerized reading text.

**Keywords**— skimming and scanning strategies, computerbased text, reading comprehension, positive opinion.

## I. INTRODUCTION

Learning English as a foreign language (EFL) in Indonesia certainly cannot be separated from the four aspects of language skills, namely listening, speaking, reading and writing. Among those skills, reading plays an important role in teaching and learning English because reading skill can be considered as the main medium for Indonesian English classes. Most of the materials that should be mastered by EFL students are presented in the form of textbooks to be read. So, they mostly start learning English by reading textbooks or other print media such as posters, pictures, etc.

Some new challenges have emerged as a result of globalization and the development of communication and technology. Beside textbooks, many other sources of English material can be found on computer and internet. Even In many parts of the world, students engage in communication with peers and pursue their academic goals through the use of information and communication technology. The use of information and communication technology in education in Indonesia has been implemented by conducting a computer-based test system for national examinations. As a result, EFL students are forced to be prepared to face the computerized test despite many problems arising in the application.

Apart from the problems it poses, advances in information and communication technology present several new opportunities and challenges for teachers and students. The pervasive effect of technology on the use of language outside the classroom affects students' knowledge and expectations for the use of technology in the classroom so that teachers who fail to use technology in language teaching at present tend to be considered at least out of date. Reading from a computer screen is becoming increasingly common in our daily lives because the amount of reading material available online is increasing rapidly.

On the other hand, the problem of students now is that they are not accustomed to using computers as a medium for teaching and learning process especially for computerized reading texts during English class, particularly for those who are in rural areas where they are still dominant to use printed textbooks as the main source of English learning materials. They only use computers when all kinds of assignments or homework are given to be printed, or they only use computers to play games outside their school. Thus, the use of computers is only limited to certain types of works.

Based on the researchers' observations and examinations in the teaching-learning process in the eleventh-grade students of SMAN 2 Masbagik, it was found that the students' problems on facing English as a foreign language (EFL) especially for computer-based English reading texts were mainly related to the lack of students' vocabularies. This can be seen from the reactions of students whenever they found a particular difficult word, they would spontaneously open the dictionary, or they tried to find its meaning by operating their mobile phones, or by asking their friends about its meaning. They did such kinds of activities because of their doubt about the meaning or because of their inability to guess the meaning of the word from the context.

Further, the limited time allocated for completing computerized reading comprehension assignments made students do various ways to be able to answer the questions quickly, whether by cheating on their friend's work, or doing a lottery, or even answering recklessly. The worst is when the teachers were involved in helping them to answer the test. In such a case, students must be able to manage the time allotted to end the reading class on time. Therefore, it is a problem for them to use computerized passages or tests if they are not familiar with the use of computers in their English classes throughout their school year Besides, many EFL students have low interest in their reading class, especially when they are doing some assignments in the form of reading comprehension. Their reading speed was very slow because they required a relatively long time to understand a text. They spent time reading by just reading word per word without relating it to the context. Then the words were translated based on the meaning stated in their dictionary. The worse was that students sometimes could not get the meaning of the intended text, so when they were asked to answer a series of reading comprehension tests, they often got the wrong answer. These conditions indicate that their efficiency in understanding the meaning of texts is very bad.

Above all, many EFL students assume that English is a boring and unattractive subject, perhaps because English is not their native language. Such conditions can affect their attitude towards English classes that can lead them to become less active and not motivated to follow the teaching and learning process. Such student passivity will result in low absorption or mastery of the subject matter being studied even in their reading skills.

So, applying the best way or strategy of teaching reading comprehension to build up their interest and motivation, especially for computer-based reading texts, are very needed. This is in line with what was stated by Zhao, cited in Jamiludin, Darnawati and Uke1, that the teacher's role does not only focus on students' knowledge but also on giving them motivation [1]. One way to do this is to provide material that is inspiring and interesting through computers or multimedia. Also as stated by Heafner, students feel happy doing their projects using technology media because it is more interesting and entertaining since the technology can make their projects can be in the form of computerized texts or tests.

Computerized text can be referred to as a computer-based text in which English learning materials are arranged into digital presentations on monitor screens from laptops, computers, etc. Students' reading comprehension from the text given on the screen shows a higher understanding than students' reading from printed material [2][3]. Reading on the screen can involve various aspects of online processing such as responding to animated icons, hypertexts, sound effects, and continuous paths between and in the screen for the Internet and intranet [3].

Many strategies can be used to read whether the text is printed or computerized to gain meaningful comprehension. In this study, the focus is only on two of the reading strategies, namely skimming and scanning. Skimming is the same as reading a text quickly to establish the essence or to form an overall impression about the topic [4]. Then scanning refers to the process of reading a text quickly to find certain information, such as phrases, numbers, certain names, and so on. In line with the previous opinions, Sutz & Weverka, stated that skimming is done at a speed of three to four times faster than normal reading. Readers often read skim when they have a lot of material to read in a limited amount of time. In a cursory reading, the reader only needs to take information and most importantly the main idea rather than reading all the words [5]. Scanning is not like skimming, according to Brown, scanning is the process of quickly searching for a particular piece of relevant information in a text [6]. The purpose of scanning is to extract specific information without reading the entire text. Furthermore, Sutz & Weverka8, explained that in scanning the reader does not care about the broader meaning of the text, but the details. In this technique, the reader looks for specific information in the text such as date, name, and place, among other things. To do so, it involves moving your eyes quickly down the page looking for certain words or phrases.

Bringing these opinions together, it can be defined that Skimming is an activities of speed reading to find a general idea of a section of the text, while Scanning is an activity of speed reading to find details or specific ideas in that section of the text.

Considering the importance of strategy in reading for EFL students and the demands to use computers as a media or source of teaching and learning, and also as a good preparation for them to get used to using computer-based English texts and/or tests, the researchers were interested in conducting the research to find out the effects of skimming and scanning strategies in teaching reading comprehension in computer-based texts for eleventh-grade students of SMAN 2 Masbagik in academic year 2019-2020.

## II. METHOD

The design of this study was a quasi-experimental research with one pretest-posttest design group. The population of this research is the eleventh-grade students of SMAN 2 Masbagik in the academic year 2019 - 2020 consisting of 111 students. As for the sample, cluster random sampling is used. The researcher chose XI social class 1 which consisted of 28 students as an Experimental class because they could be considered as the real representatives of all students there because their culture and behavior seemed to be the same as other classes in either science or social classes.

In this study, researchers used one type of instrument only, which was pre and post-reading tests. Here, the participants were asked to work on multiple-choice questions in English using a computer-based test.

Data collection procedures for the experimental class are as follows: 1) giving pre-test to the students before the treatment given, 2) treatments, in which three times of treatment was given during the study, 3) giving post-test after the treatment.

In Analyzing the data, students' answers in the pre-test and post-test were scored through the following ways: 1) making the correct answer score at the time of the pre-test and post-test. 2) classifying the score of the student's answer into three-level classifications consisting of high, medium, and low levels. 3) calculating students' scores, average scores, standard deviations, and t-test scores between pretest and post-test.

### **III. RESULTS AND DISCUSSION**

The findings show that skimming and scanning strategies can improve students' reading comprehension in computerbased reading. The application of these strategies can activate students' interest in learning in class, by activating their interest will foster their attention, and by activating their attention will invite their understanding. Because it will be difficult to explain the lesson and ask them what they should do if they are not interested and pay attention to reading English text comprehension.

This increase is evidenced by the results of the total score of students' reading comprehension wherein the pre-test stage they only obtained an average score of 75.43 where 17 students can be classified into the low-level score, and the rest were classified into the high and medium level score (for detail see Table 1).

No	Range of Score	Freq	Value	Percent- age (%)	Mean
	(Level)				
1	90 - 100	2	184	7.14 %	
	(High)				
2	80 - 89	9	736	32.14 %	75 42
	(Medium)				75.43
3	<70-79	17	1192	60.72 %	
	(Low)				
Total		28	2112	100 %	

TABLE 1. THE PRE-TEST SCORE

While in the post-test stage, after they got three times treatments during the study, the students reached an average score of 77.43 where 2 students from the low-level score can reach the medium level, and the rest can increase their score in general although they were still in the low-level score. In other words, the mean of post-test score increased 2 % from that of pre-test score (for detail see Table 2)

TABLE 2.POST-TEST SCORE

No.	Range of Score (Level)	Freq	Value	Percent- age (%)	Mean
1	90 – 100 (High)	2	184	7.14 %	
2	80 – 89 (Medium)	11	900	39.29 %	77.43
3	<70 – 79 (Low)	15	1084	53.57 %	
	Total	28	2168	100 %	

Furthermore, the researcher also analyzed the understanding of text readings per indicator; namely in identifying general information, specific information, and determining reference. In the first indicator, the average reading comprehension of students about general information is about twenty-three out of twenty-eight students who have understood general information. The second indicator is specific information to which sixteen students answer correctly. The last indicator is the determining reference in which fourteen students have answered correctly (for detail see Table 3).

TABLE 3.	READING	INDICATORS

No.	Reading Indicators	Item No.	Students' Answers	
			Correct	Incorrect
1	Identifying general idea	1,5,6,10,11, 16,21	23	5
2	Finding specific information	2,3,7,8,12,1 3,14,17,18, 19,22,23,24	16	12
3	Determining reference	4,9,15,20,2 5	14	14
	Total	25		

The use of skimming and scanning strategies in computerized English texts can improve students' reading comprehension skills more significantly especially in finding out the main idea of a text. The researcher recommends the teacher to use these two strategies in computerized English reading texts because they have many advantages.

The advantage is less time to finish the reading class since students only focused on finding out parts of text where the answer of reading comprehension question are stated without spending time reading the entire contents of the text. This practically makes their time effective and efficient. It is hoped that students can easily get an understanding of the text.

In addition, applying both of these strategies can help build students' perceptions of the importance of reading strategies to be applied in facing computer-based text. It was important to know that their insights turned out to be positively related to reading comprehension and skimming and scanning strategies.

During the computerized reading class, we noticed that the use of both strategies was important in increasing the participants' reading comprehension since the results obtained after the implementation of this project were significant especially for the low-level proficiency students. When starting to implement this research, one of its goals was to motivate participants to use these strategies all the time because we know that by doing so, students can be interested in reading texts with more effective and efficient use of time.

#### **IV. CONCLUSION**

Based on the research findings and discussion above, it can be concluded that the skimming and scanning strategy is effective to teach reading comprehension on the computerbased text. The use of computer media in teaching language classes in reading comprehension skills has stimulated greater students' motivation and attention, where they can interact through dynamic forms that allow the teacher to display clearer pictures or illustrations.

To sum up, having various strategies in understanding and responding to reading comprehension in computerized mode plays an important role in the success of our students in this globalization era. In this case, it is recommended that teachers teach skimming and scanning strategies to the students to make effective and efficient reading.

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