Improving students' reading comprehension through visualization strategy

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ABSTRACT

This research was aimed to improve students' reading comprehension ability through the visualization strategy, and also to investigate students' perception toward the use of the visualization strategy. The subjects were 30 students of class VIII at SMPN 1 Seputih Raman. One group pre-test and post-test designs were used in this research. The instruments used in this research were reading comprehension tests (pre-and post-test) and questionnaires. The result of this research showed that the student's average progress score from pre-test was 52.37 and became 70,67 in post-test. After that, the Paired Sample t-test confirmed the hypothesis proposed by the researcher that there were significant differences in students' reading comprehension ability at the $p<0.05$, $p = .000$. The results of the questionnaire to answer the second research question showed that most of the students' perceptions above 70% were in the high category. Therefore, based on the result, it is concluded the student's perceptions toward the use of visualization strategy were classified as a positive perception.

Keywords: reading, reading comprehension, visualization, students' perception.

I.   INTRODUCTION

Reading is the important skills besides listening, speaking, and writing that needed by the student from elementary school through university levels. According to Janette, Vaughn, and Boardman, (2007) reading is an activity that has a purpose. Students may read in order to get the information or expand students' knowledge. Whereas according to Nation and Newton (2009), reading is a source of learning and a source of enjoyment.

A study about comparing Indonesian reading ability based on local tests and on Progress in International Reading Literacy Study (PIRLS) test shows that reading comprehension for fourth grade students is low in both tests (Suhardjono, Waras & Basuki, 2009). It reaches only 35.64% for local test and 33.27% for PIRLS test. The local test scores correlated significantly with the PIRLS test (r=0.673). There is a significant influence based on student factor which is mainly due to their habit of Indonesian language speaking habits, reading at home, and reading at school. Moreover, these factors are often linked to reading aspects such as reading experience, process, and comprehension. Suhardjono, Kamdi, & Basuki (2009) also mentions that some factors related to the problems of Indonesian reading ability based on PIRLS 2006 come from students and from teachers and schools.

In fact, many factors can solve students' reading comprehension ability problems. The teacher should know how to teach the students well. The correct method, strategy, or media is very important that the students can understand the lesson easily. Besides, the use of interesting teaching strategies, methods, and media can improve the student's enthusiasm and motivation to learn English.

Based on that, researcher decided to use visualization strategy to improve the students reading comprehension. According to Puett Miller (2004), visualization is a proven strategy that used to improve reading comprehension. Through guided visualization, students learn how to create mental

pictures as they read. They use sensory images like sounds, physical sensations, smells, touch, and describe the emotions to help them picture the texts.

Visualization is being read by drawing and speculate what may happen in our mind, to help students improve their ability (Stephanie Harvey and Anne Goudvis, 2000). This strategy can make the student focus on the text that they read and also can develop student's interest to read the text by speculating what may be happening with the characters in the text. In summary, the teacher can determine whether the students truly understand the text or not. Additionally, the researcher found some studies related to the use of visualization strategy in teaching reading comprehension. The research was conducted by Seyyed Mahdi Erfani, Abutaleb Iranmehr, and Hossein Davari (2011) in their study which focused on the extent to which visualization can improve student's ESP reading comprehension. They found that this strategy did help Iranian students ESP reading comprehension. In summary, based on the results of this study, the following pedagogical implications can be presented: First, visualization as a key to effective reading comprehension strategy can be a useful alternative to ESP classes. Second, the teacher's notes show that visualization triggers students to participate more actively. Third, strategies such as visualization might remove the tightness and formality of language learning classes and allow students to be more actively involved. Finally, the teacher's creativity to use effective strategies such as visualization may cover some of the obvious shortcomings of textbooks.

Moreover, Ade Norma Fitria (2014) found there was a significant effect of using Visualization strategy in narrative text of the second-year students at Senior High School 2 Tambang Kampar Regency. She found that teaching through visualization strategy can be used to improve students' focus on the text and has a positive result in teaching-learning activities in the class.

Another research was done by Dalilah Fitri (2017). She investigated improving students ' reading comprehension through visualization strategy in the descriptive text in the first grade of senior high school. She stated that students feel easier to memorizing the text. Besides, students feel that the visualization strategy is more interesting, and improves their creativity.

The previous research has investigated about teaching reading through visualization strategy in narrative text, and descriptive text. It seems that the previous research has not conducted a research of teaching reading comprehension through visualization strategy especially in 2013 curriculum. Considering the problem above and regarding the advantages of visualization strategy above, the researcher is interested to conduct a research entitled "Improving Students Reading Comprehension through Visualization Strategy".

II.   METHODOLOGY

This research aimed to find out the improvement in reading comprehension of the students after practicing using visualization strategy. The researcher used the one-group pretest-posttest design in which there was one group as the sample. The pre-test was provided to measure the students' capability before the treatment, and the post-test was given to measure how far the students' performance was after they completed the treatment. The research design can be represented as follows:

T1   X   T2

Which are:
T1   : Pre-test
X   : Treatment (using visualization strategy)

T2   : Post-test

(Setiyadi, 2006).

Population and Sample

The population in this research was the second grade of SMPN 1 Seputih Raman for the 2020/2021 academic year. The class consists of 30 students. In this research, the researcher only used one class as the sample of the research. The researcher wanted to know how visualization can improve the students' reading comprehension as well as their perception toward the use of visualization strategy.

Research Instruments

In collecting data, the researcher used a reading comprehension test and questionnaire. The reading comprehension test consisting of pre-test and post-test. This test was used to find how far the students have improved after being taught using visualization strategies. The pre-test and post-test consisted of 30 multiple-choice reading comprehension items with four choices a, b, c, and d include identifying main ideas, identifying specific information, determining references, making conclusions, and understanding vocabulary. For the questionnaire in this research was used to measure the students' perception toward the use of visualization strategy. The questionnaire consisted of 10 close-ended statements which were modified from Hedwigis (2018) with 4 scales that could be chosen by the respondent; strongly agree, agree, disagree, and strongly disagree. The scale was given based on the Thurstone Scale.

III.   RESULTS AND DISCUSSION

The Result ofPre-test and Post-test

This section below will show the results of the reading comprehension score before and after the treatment. This table shows the comparison between the students' scores in the pre-test and post-test:

Table 1.Comparison of Frequencyof Students' Reading Comprehension Scores in Pre-test and Post-test.

No	Score	Classification	Pretest	Posttest
1	80-100	Very good	-	05
2	66-79	Good	05	20
3	56-65	Enough	06	05
4	40-55	Less	15	-
5	30-39	Very less	04	-

From the results above, it can be seen that the score has increased. In the pre-test, no students reach the "very good" criteria, and fifteen students have the "less criteria". But, their scores increased in the post-test. There were 20 who got a good score. Nonetheless, five students still get enough scores.

Surprisingly, five students have a very good score. To prove this result, *paired samples t-test* were used below:

Table 2. Paired Samples Test

		Paired Differences					T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Post_Test - Pre_Test	18.300	7.447	1.360	15.519	21.081	13.459	29	.000

Based on the table, it can be seen that the mean difference of students' reading comprehension in pre-test and post-test was improved since the significant (2-tailed) value was .000 lower than 0.05. It proves that the implementation of the visualization strategy has a significant effect and influences the students reading comprehension ability.

The Result of the Questionnaire

This research was oriented to find out the students' perception towards the use of visualization strategy to improve the students reading comprehension ability. The researcher has already collected the data from the students using the questionnaire. The researcher analyzed the data with a formula as follows:

Table 3. Result of the Questionnaire

No	Students Initial	1	2	3	4	5	6	7	8	9	10	Total
1	AJA	2	4	2	3	3	3	3	3	3	3	29
2	ACN	4	4	2	4	4	4	3	4	4	4	37
3	BGD	3	3	2	4	4	3	3	3	3	3	31
4	CNCA	4	4	3	3	2	3	3	4	3	3	32
5	CNR	3	3	3	3	3	3	3	3	3	3	30
6	DP	2	4	3	3	3	4	3	2	3	3	30
7	EP	4	2	3	3	3	2	2	4	4	4	31
8	FAR	3	3	3	3	4	3	3	3	3	3	31
9	GS	3	2	3	3	4	2	2	4	3	3	29
10	IGAG	3	3	3	2	3	3	3	3	3	3	29
11	IGFS	4	2	2	3	3	3	4	3	4	3	31
12	IMBWDA	3	3	3	3	3	3	3	3	3	3	30
13	IPFA	4	3	4	3	4	3	3	4	3	4	35
14	IWPS	2	3	3	4	2	4	3	3	3	3	30
15	KA	3	3	3	4	4	4	3	3	4	3	34
16	KAZ	4	2	3	3	2	3	4	3	3	4	31
17	MHA	4	3	4	3	4	3	3	3	4	4	35
18	MRR	3	2	2	3	3	2	3	3	3	3	27
19	NNMS	4	3	4	3	3	3	3	3	3	3	32
20	NPAMN	3	4	3	3	4	3	3	4	4	3	34
21	NWMK	3	3	3	2	4	2	3	4	3	4	31

22	**PJ**	3	2	3	3	3	4	3	3	3	3	**30**
23	**RP**	3	3	4	3	4	3	3	4	4	3	**34**
24	**RR**	4	3	2	3	3	2	3	3	4	3	**30**
25	**RNIS**	3	3	3	3	3	3	4	3	3	4	**32**
26	**RAP**	3	2	3	3	3	3	2	3	3	3	**28**
27	**RBR**	3	3	4	3	3	3	3	3	3	3	**31**
28	**SPCL**	3	4	3	3	4	3	4	3	3	4	**34**
29	**SA**	3	3	4	3	3	3	2	4	3	3	**31**
30	**TAW**	3	3	3	3	4	3	2	3	4	3	**31**

To find out the percentages the researcher used the formula as follows:

$$\frac{T}{Y} \times 100$$

Where:

T: Total score

Y: Total of high score

In order to classify the students' level of perception, the data below shows the percentages as well as the categories based on Ratminingsih et. Al (2017):

Table 4.Criteria of Students' Perception

No	Percentage	Frequency	Criteria
1	$\geq 85\%$	6	Very positive
2	70% - 84%	23	Positive
3	55% – 69%	1	Moderate
4	40% – 54%	0	Negative
5	≤ 39	0	Very negative

Based on the table above shows that 76,6% of the students were in the positive criteria, 20% in the very positive criteria, 3,3% in moderate criteria and there were 0% in the negative and very negative criteria. Most of the students' perceptions were in the high criteria, which was above 95%. It means that the students have positive perceptions toward the use of visualization strategy to improve reading comprehension.

Discussions

Answering the first research question, the result of this research showed that the use of visualization strategy improves the student's ability in reading comprehension. There was an average progress score from pre-test 52.37 and became 70,67 in post-test. We can see that there was an improvement in the average score and total of the students who passed the test from pre-test to post-test. The student's scores improved because the student was already trained with visuals as a strategy. It was a strategy for learning individuals to make the students easier to explore their ideas, feeling, and experiences that the students get their comprehension and improved reading comprehension.

During the pre-test, some students could not answer the questions because they had difficulty getting information from the text. While the treatment on the use of visualization strategy, students understand the reading material because they can see images from the text they read through their

imagination. Students are very interested in using visualization because they can imagine what they read. This makes them more creative and has a strong impact on their memory. In line with the above findings, Reynolds and Miller (2003) stated that in working memory, there are two ways of processing information; verbal and visual. Verbal models come from words spoken through the sense of hearing while visual models come from images or words that are printed through visual sensory memory. Both of these are used in visualization and can make students remember things in long-term memory.

Moreover, The students were active during the group discussion. They enjoyed the group discussion because they shared their ideas freely. However, the students become passive during the teaching and learning process of reading. The students read the text by themselves and tried to understand the text by themselves without asking anyone. It happened due to several factors such as lack of learning interest and anxiety problems. But, after getting the treatments, their interest and reading skills become better. Students can freely describe their ideas without feeling anxious and afraid. They also show their interest such as opening the dictionary more often and asking the teacher. It means good for the students because the visualization strategy builds their interest in reading and understanding English. As mentioned by Dalilah Fitri (2017), she stated that students feel easier to memorize the text. Besides, students feel that the visualization strategy is built their interest and improved their creativity.

To answer the second research question, the researcher already distributed the questionnaire to students. Based on the results of the questionnaire, it can be seen that most of the students gave a positive response about visualization strategy for learning reading comprehension. Table 4.18 shows that most of the students' perceptions were in the high/very high category, which is above 70%. Following that criteria, the student's perception toward the use of visualization strategy to improve the student's reading comprehension was classified as positive perception. As mentioned by Ratna Dyah Anggraeni (2009), she stated that the students were happy and could enjoy reading by using visualization strategy. The improvement of the students made the students have positive perceptions. The perception was a step to understanding a concept of information. Since it was easier for the students to understand the topic, it was also easier for them to understand the concept of information (Hedwigis, 2018).

Based on the results above showed that students were already interested in learning with visualization strategies. In line with it, Fatemipour and Hashemi (2016) stated that visualization can be effective and can make students motivated and the classroom environment more interesting. When students were interested in a learning method, they will tend to give a good perception. It was supported by Vermon (1963), who stated that interests, movies, and desires could affect someone's perception.

IV.   CONCLUSION AND SUGGESTION

The purpose of this research was to determine whether visualization strategies can improve students' reading comprehension or not and to determine students' perceptions of visualization strategies. The conclusions of this research were as follows:

Based on the results of the implementation of the Visualization Strategy in reading comprehension ability, this strategy can be used effectively and as an alternative way of teaching reading. This strategy is easy to implement and interesting which makes student learning activities more enjoyable.

The students were actively involved in the teaching-learning process. This strategy makes it easier for students to understand the material.

In addition, to find out whether there was an improvement in student's reading comprehension ability after using visualization strategy, the researcher already tested the significant level of pre-test and post-test. It can be seen that from the computation in which the mean score of the student's pre-test was 52.37 and became 70,67 in post-test. It means there was an improvement in the average score and total of the students who passed the test from pre-test to post-test. Therefore, the researcher concludes that the visualization strategy can be used to improve the student's reading comprehension ability.

By analyzing the student's questionnaire, the researcher found that the use of visualization strategy brought a positive side to the student's perception. This can be seen from what has been explained in the previous chapter that most of the students' perceptions were in the high/very high category, which is above 70%.

From the conclusion above, the researcher proposes some suggestions for English teachers and other researchers as follows.

First suggestions for the Englishteacher, this technique has the disadvantage that it will use a long time. Because of that, the teacher must consider the time learning to apply this strategy. Teachers can overcome the use of longer time by providing text or images that are simpler but also attractive. In addition, English teachers also need to be aware of the level of anxiety, and the level of students' vocabulary, both are very important in learning using visualization strategies and can be an obstacle in teaching-learning activities. If the teacher can overcome these obstacles by creating a good atmosphere in the classroom during the teaching-learning activities of reading, the students will feel comfortable and pleasant during the discussion.

Second suggestions for theother researcherswho want to research with the same strategy, they must prepare the better material or different kind of text. They have to explain every step clearly to avoid student's misunderstanding. They also have to know how to solve the student's problem with this strategy. This research was done at the junior high school level. Therefore, further researchers can try to find out the use of visualization strategy in different levels of schools.

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