THE INFLUENCE OF VISUALIZATION STRATEGY TOWARDS STUDENTS' READING COMPREHENSION

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Abstract: The aim of this research was to find out whether Visualization strategy has influence towards students' reading comprehension. This strategy helped the students to find out the information from the reading text and helped the students to improve students reading comprehension. The objective of the research was to know The Influence of Visualization Strategy Towards Students' Reading Comprehension. In this research, the researcher used experimental method. The population was 175 students in 6 classes. The sample was taken by using cluster random sampling technique. There were two classes for the sample. First, class was experimental class and second class was control class, it consisted of 62 students. In measuring students' reading comprehension was multiple choice which consisted of 40 items test. Each item has four option a, b, c and d. The score each item was 2.5 in calculating the data analysis, the researcher used t-test formula. Based on the data analysis, the researcher got the result that H_a was accepted. It was obtained that $t\_test = 3.41$, t_table for $\alpha=0.05$ was 2.00 and for $\alpha=0.01$ was 2.66 ($3.41 > 2.00 < 2.66$). So, H_a was accepted. It means that there was an influence of Visualization Strategy Towards Students' Reading Comprehension at the Eighth Grade of MTs Al-Hikmah Bandar Lampung in 2022/2023.

Keywords: Experimental Research, Reading Comprehension, Visualization Strategy

INTRODUCTION

Reading is an excellent skill that can provide lot of benefits in many areas of life, particularly in education (Agnescia et al., 2022). Reading is one of skills that must be mastered because it can be bring benefits (Dari et al., 2021). The greatest benefit is being able to add a student is an information. This reading habit can help students to read a curse avoiding mistakes while reading. By reading, the students can explore their skills and knowledge. Reading skill is not only for learning lessons, but also for gaining experience, knowledge, and anything else that can help learners succeed in higher education.

Reading is a process in which readers and writers exchange thoughts to extract information from the text (Fatmala et al., 2020). Reading is very important for students during the teaching-learning process in class because reading is one of the foundations for them to study in every subject, especially English (Hastomo & Aminatun, 2023). Reading skill enable readers to turn written meaning and achieve the goals of independence, comprehension, and fluency. Reading is an active

process of constructing meaning of words. Although the reasons for reading may vary, the primary purpose of reading is to understand the text. To gain more information, students need reading from various sources, such as newspapers, books, blogs, magazines, the internet, and so on (Hastomo & Zulianty, 2022).

Reading comprehension is the process when the reader interacts with the material read to obtain information from a reading text, to obtain a basic idea or to understand the reading text to complete the researcher's message in the reading text (Putri et al., 2023). Harrison (2004: 51) in Umar et al., (2018: 39), comprehension as the process of getting meaning of a communication, as a personal letter, speech, sign language; the knowledge or understanding that is the result of such a process. It means in reading context, the term "comprehension" refers to the process of constructing meaning from any text. Reading comprehension is not only reading English texts, but reading with the aim of gaining a deep and comprehensive understanding (Supriyati et al., 2020). Comprehension is the process of understanding words, sentences and related grammatical knowledge, experience with text and other strategies to help them understand written text (Sutiyono & Hastomo, 2022). Reading comprehension is an ability to read text, process it, and understand its meaning, such as decoding symbols on pages and understand the meaning of words and sentences (Indah, Jaya & Wiratno, 2022). When we are understanding a text, we not only remember the exact words and phrases we read, but we also construct a model of what the text describes by combining the meanings of words and sentences into a meaningful whole (Susana et al., 2021).

Based on preliminary research at MTs Al-Hikmah Bandar Lampung, the researcher found that the students faced some problems in their reading skill. Those problems such as, the students' difficulties in comprehending English text. They find difficulties to identify mind idea, supporting idea and answering questions based on the text. Students limited vocabulary which make them difficult in gaining the message of written text (Andeska et al., 2021). Students lack of interest in reading English text because they thought that English text is more difficult to be understood than Indonesian text. Students' motivation in learning English which need to be increased. It can be concluded that English is a difficult subject for students in MTs Al-Hikmah Bandar Lampung. The researcher would like to introduce one of effective strategies for teaching reading comprehension to the students namely strategy visualization. This visualization strategy is to improve students' understanding ability to read a text. The visualization strategy is one of the proficiency strategies that supports in reading comprehension. Students focus on reading in this technique, but they also describe the results of their reading by making rough sketches or simply imagining as they read. The ability to create mental images based on read or heard words is known as visualization.

Framed within the context of the aforementioned problem, the researcher's focus lies in exploring the impact of employing visualization strategies to enhance students' reading comprehension in the realm of reading instruction. The challenges

faced by students encompass several aspects, including difficulties in discerning the main idea, identifying supporting ideas, comprehending vocabulary usage, recognizing references, and grasping inferences within the text (Parameswara et al., 2022). The researcher's inquiries are distilled into the following query: Does the utilization of visualization strategies significantly affect students' reading comprehension? In pursuit of addressing this question, the research aims to determine whether a noteworthy influence exists in the realm of students' reading comprehension due to the implementation of visualization strategies.

METHOD

In this research, the researcher found the influence of Visualization strategy towards students reading comprehension. The researcher used quantitative research. In conducting the research, the researcher used quasi-experimental design. McMillan & Schumacher (2014: 30), states that "a quasi-experimental mode of inquiry approximates the true-experimental type. Research that has no random assignment of subject, but investigates cause and effect relationship by manipulating the independent variable" (Yulistiani et al., 2020). In this research, the researcher used two classes as the sample of the research. One class as the experimental class which is taught by using visualization strategy and another class as a control class which is taught by using individual reading. The classes were taken from the second semester of the eighth grades at MTs Al-Hikmah Bandar Lampung.

To know the students reading comprehension the researcher used reading test. The kind of the test is multiple-choice which consist of 40 items, each item consists of four options: a, b, c, d. The score for each option was 2.5. The highest score is 100 and the lowest score was 0. The researcher analyzed the data to know the result of the research. In analyzing the data, the researcher used some formulas to calculate the data from the test given in experimental class and control class, as follows:

$$t_{test} \cdot t_{test} = \frac{\bar{X}_1 - \bar{X}_2}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

Normality Test of Data: It is used to know whether the data of two classes are normal distribution or not. In this research, the research used chi-square formula, Sudjana (2005: 273) as follow:

$$X^2_{ratio} = \sum_{i=1}^{K} \frac{(O_i - E_i)^2}{E_i}$$

Homogeneity Test of Variance: It is used to know whether the data are homogenous or not. The researcher used the formula:

$$F_o = \frac{S^2 (\text{The Highest Variance})}{S^2 (\text{The Lowest Variance})}$$

With the test criterion: The criterion H_o is accepted if $F_{ratio} > F_{table}$ ½ α ($V_1 . V_2$).

FINDING AND DISCUSSION

From the result of the data normality in experimental class, it shows that highest score is 87.5 and the lowest score is 47.5 with (n) = 31 students in VIII F. The researcher got the result as follow:

$\sum F_i = 31$

$\sum F_i X_i = 2054$

$\sum F_i X_i^2 = 139660$

So, it can be searched the average score and standard deviation as follows:

$\bar{X}_l = \frac{\sum F_i X_i}{\sum F_i}$

$\bar{X}_l = 66.25$

Standard Deviation:

$S_1^2 = 118.86$

$S_1 = \sqrt{118.86}$

$S_1 = 10.90$

Determining X_{ratio}^2 by using the following formula:

$X_{ratio}^2 = \sum_{i=1}^{k} \frac{(O_i - E_i)^2}{E_i}$

$X_{ratio}^2 = 2.41$

Criterion Test:

Reject H_o if $X_{ratio}^2 \geq X_{tab}^2 (1 - \alpha)(k - 3)$ for significance level of 5% ($\alpha - 0.05$) obtained:

$X_{table}^2 = 7.81$

From the significance level of 1% ($\alpha - 0.01$) obtained:

$X_{table}^2 = 11.3$

Based on the calculation above, it was obtained at significant level of 0.05 and also 0.01 that $X_{ratio}^2 < X_{table}^2 = 2.41 < 7.81 < 11.3$. So, H_o was accepted. It means that the data have normal distribution. From the result of the data normality in control class, it shows that the highest score is 77.5 and the lowest score is 42.5 with (n) =31 students. The researcher got the result as follow:

$\sum F_i = 31$

$\sum F_i X_i = 1793.5$

$\sum F_i X_i^2 = 106549.75$

So, it can be searched the average score and standard deviation as follows:

$\bar{X}_l = \frac{\sum F_i X_i}{\sum F_i}$

$\bar{X}_l = 57.85$

Standard Deviation:

$S_1^2 = 92.90$

$$S_1 = \sqrt{92.90}$$
$$S_1 = 9.64$$

Determining X^2_{ratio} by using the following formula:

$$X^2_{ratio} = \sum_{i=1}^{K} \frac{(O_i - E_i)^2}{E_i}$$

$$X^2_{ratio} = 4.25$$

Criterion Test:

Reject H_o if $X^2_{ratio} \geq X^2_{tab} (1 - \alpha)(k - 3)$ for significance level of 5% ($\alpha - 0.05$) obtained:

$$X^2_{table} = 7.81$$

From the significance level of 1% ($\alpha - 0.01$) obtained:

$$X^2_{table} = 11.3$$

Based on the calculation above, it was obtained at significant level of 0.05 and also 0.01 that $X^2_{ratio} < X^2_{ratio} = 4.25 < 7.81 < 11.3$. Therefore, H_o was accepted. It means that the data have normal distribution.

Statistical formula used:

$$F = \frac{S^2 (The\ Highest\ Variance)}{S^2 (The\ Lowest\ Variance)}$$

$$F = 1.28$$

With the test criterion:

The criterion H_o is accepted if $F_{ratio} > F_{table} \frac{1}{2} \alpha (V_1. V_2)$.

For significance level 5% ($\alpha = 0.05$) obtained: $F_{tab} = 1.84$

For the significance level 1% ($\alpha = 0.01$) obtained: $F_{tab} = 2.38$

Based on the data above F_{ratio} was 1.28. F_{table} at significance level of 0.05 was 1.84 and 0.01 was 2.38. Therefore, H_a was accepted and H_o was rejected (1.28 < 1.84 < 2.38). It means that the variance of the data in experimental class and control class were homogeneous. To know the hypothesis is accepted or not, the researcher used formula to analyzed the data, the formula used can be seen as follows:

$$t_{test} = \frac{\overline{X_i} - \overline{X_2}}{s\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

With:

$$S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

It obtained:

$$n_1 = 31$$
$$n_2 = 31$$
$$\overline{X_i} = 66.25$$
$$\overline{X_2} = 5785$$
$$S_1^2 = 118.86$$

$S_2^2 = 92.90$

The data was concluded into t_{test} the researcher calculated the following formula:

$S^2 = \dfrac{(n_1-1)S_1^2+(n_2-1)S_2^2}{n_1+n_2-2}$

$S^2 = \dfrac{(31-1)118.86+(31-1)92.90}{31+31-2}$

$S^2 = \dfrac{(30)118.86+(30)92.90}{60}$

$S^2 = \dfrac{3565.8+2787}{60}$

$S^2 = \dfrac{6352.8}{60}$

$S^2 = 105.88$

$S = \sqrt{105.88}$

$S = 10.29$

After standard of deviation was found, the researcher calculated into t_{test} formula as follows:

$t_{test} = \dfrac{\overline{X_t}-\overline{X_2}}{S\sqrt{\frac{1}{n_1}+\frac{1}{n_2}}}$

$t_{test} = \dfrac{66.25-57.85}{10.29\sqrt{\frac{1}{31}+\frac{1}{31}}}$

$t_{test} = \dfrac{8.4}{10.29\sqrt{0.03+0.03}}$

$t_{test} = \dfrac{8.4}{10.29\times0.24}$

$t_{test} = 3.41$

To prove the hypothesis of the average score of reading comprehension which is taught by using visualization strategy towards students' reading comprehension was higher than which is taught through individual reading, the researcher tried to see the result of t_{test} or t_{table}.

Testing criterion:

H_a accepted if $t_{test} > t_{table}$ $(1 - {}^1/_2\alpha)$ with $df = (n_1 + n_2 - 2)$ with significance level 5% ($\alpha = 0.05$) and 1% ($\alpha = 0.01$).

$df \quad = 60$

For the significance level 5% ($\alpha = 0.05$) obtained: $t_{tab} = 2.00$

For the significance level 1% ($\alpha = 0.01$) obtained: $t_{tab} = 2.66$

Based on the result above, the researcher got $t_{test} = 3.41$ and t_{table} $0.05 = 2.00$ and t_{table} $0.01 = 2.66$ or $t_{test} > t_{table}$ with significance level 5% and 1% ($3.41 > 2.00 < 2.66$). Therefore, H_a was accepted. It means that there was an influence of Visualization Strategy towards Students' Reading Comprehension.

Based on the data analysis and testing of hypothesis, the researcher got the result that H_a was accepted. The average score in experimental class was 66.25 and the average score in control class was 57.85. It can be seen by t_{test} that was higher that t_{table} with significant level 5% and 1% ($3.41 > 2.00 < 2.66$). It means that there

was significant influence of using visualization strategy towards students' reading comprehension. According to Addinna et al., (2019: 27), using visualization strategy can make it easier for students to accept knowledge from teachers because visualization is one of the memory strategies in reading. It means the visualization strategy approach was designed to help students learn reading comprehension. Therefore, this strategy is very recommended because can be used as a media in teaching reading comprehension.

CONCLUSION

The researcher found that the influence of the visualization strategy on reading comprehension learning is very well because the learning strategy is not dull. Based on the result of the data analysis and the hypothesis test. The researcher concluded that there was an influence of Visualization Strategy Towards Students' Reading Comprehension at the Eighth Grade of MTs Al-Hikmah Bandar Lampung in 2022/2023. It can be seen that the result $ttest$ = 3.41 and $ttable$ 0.05 = 2.00 and $ttable$ 0.01 = 2.66 or $ttest > ttable$ with significance level 5% and 1% (3.41 > 2.00 < 2.66). The average score of students' reading comprehension which was taught through Visualization Strategy higher than which was taught through Individual reading. It can be seen that the average score of experiment class was 66.25 and the average score of control class was 57.85. It means that visualization strategy can be used as a media to teaching reading and make students motivation to improve their reading comprehension.

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