

THE EFFECTIVENESS OF INDEX CARD MATCH STRATEGY TO TEACH STUDENTS' READING COMPREHENSION

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Abstrak

Penelitian ini bertujuan untuk menemukan apakah ada perbedaan pada kemampuan pemahaman membaca siswa sebelum dan setelah implementasi perlakuan Index Card Match dan seberapa efektif efek dari Index Card Match Strategy pada pemahaman membaca siswa kelas VIII SMP Negeri 3 Sanggau tahun akademik 2018/2019. Metode yang dalam penelitian ini adalah penelitian kuantitatif menggunakan desain penelitian Pre-Experimental. Hasil dari data menunjukkan SD dari pre-test adalah (8.884) lebih tinggi dari SD dari post-test (7.863). Ini menunjukkan perlakuan baik diimplementasikan. Kemudian dibuktikan dengan nilai paired sample t-test, nilai dari t-test lebih tinggi dari t-table 19.165 > 2.064 yang mana H_a diterima. Efek dari menggunakan Index Card Match Strategy memberikan level efek kuat berdasarkan dari Cohen's effect. Dengan nilai 1.05 yang mana memberikan efek kuat untuk meningkatkan pemahaman membaca siswa.

Kata kunci : Strategi Index Card Match, Pemahaman membaca, Penelitian Pre-Experimental

Abstract

The objective of this research were to find out whether there was any differences of students reading comprehension achievement before and after the implementation the treatment Index Card Match Strategy and how effective Index Card Match Strategy in reading comprehension to the Eight grade students of SMP Negeri 3 Sanggau in Academic Year of 2018/2019. The method of this research was quantitative research using experimental design. The result of the data showed the SD of pre-test (8.884) was higher than SD of post-test (7.863). It showed that the treatment was well implemented. Lastly it was proved by paired sample t-test value, the value of t-test was higher than t-table 19.165 > 2.064 which meant that H_a was accepted. The effect of the used Index Card Match Strategy was strong effect level based on the Cohen's effect. It was 1.05 which meant that strong effect to increase students' reading comprehension.

Keyword: Index Card Match Strategy, Reading Comprehension, Pre-Experimental Research

INTRODUCTION

A person can obtain information from a written text via reading. Students can develop their skills and knowledge via reading. Since reading is the primary method used to communicate knowledge, reading is crucial to the advancement of science. Reading involves communication between the reader and the author as well. A text contains details that the authors want the reader to comprehend in particular ways (Grabe, 2009: 15). Therefore, reading must be mastered by every student who wants to master the English textbook.

Reading comprehension is an ability to comprehend written text with the meaning. Woolley (2011:15) states that “reading comprehension is the process of making meaning from text.” The ability to understand what they are reading, including the process of grammatical structures, vocabulary, and meaning, is a must for readers. Reading is nothing more than eye tracking and sounding out symbols on a written page without comprehension. Students who are proficient readers can decipher the meaning of a text and determine the answers to any queries.

Nowadays, curriculum 2013 has been prepared in the era of globalization. As in curriculum 2013, the effectiveness of learning process prioritizing personal experiences through observation (listening, seeing, reading, and listening), asking, associations, conclude and communicate. As a result, learning is accomplished, put into practice, and utilized for life (Lubis, 2014). Curriculum 2013 requires students to be more active in comprehend texts in order to open up students' insight.

Many different approaches or techniques can be utilized to teach reading comprehension. Index Card Match Strategy is a method for teaching reading comprehension. Index Card Match is an example of active learning; active learning involves students in content in ways that foster competencies and skill-building rather than merely knowledge transfer. Teachers can use the index card match strategy to encourage students to identify responses that correspond to the prepared questions. According to Rambe (2018:101), “Index Card Match Strategy is looking for pair cards which are a fun way to repeat learning that has been given previously.”

The purpose of the index card strategy, a form of active learning, is to make studying more engaging and fun for the pupils. Rambe (2018:101) claims that Index Card Match Strategy offers benefits like making the learning process entertaining so that students will find the subject matter more fascinating and pay attention to it. This tactic can improve students' learning outcomes by fostering an engaging and enjoyable learning environment.

To implementing Index Card Match strategy, first the researcher have to write a question on a separate index card about whatever is taught in class after that, made a question card with the amount equal to half the number of students and the

other on a separate card, wrote the answers to each question. Then, mix two sets of cards and shake them several times to be completely mixed up. After every card mixed, the researcher gave one of the cards to every student. Tell them this is a matching game. Some students receive questions, while others receive cards with answers. Tell your students to hunt for the matching card. As soon as a pair forms, tell the students to go find a seat together. (say to them do not reveal to other partners what's on their card). If all of the pairs have sat together, instruct to each pair to give a quiz to others by reading aloud their questions and challenge others to give answers. The last is the researcher tell to them the correct answers and give conclusion (cited in Silberman, 2011: 240).

Flashcards have been utilized by many academics, the researcher acknowledges. However, the researcher created this Flash card from scratch and customized it to the needs and subject matter of the recount narrative. English texts would be simpler for students to comprehend, especially when it comes to reading comprehension. Therefore, the researcher chooses Index Card Match to see whether this strategy is effective to teach reading comprehension at SMPN 3 Sanggau in the Academic Year of 2018/2019.

The purposes of this research are to find out whether the use of Index Card Match Strategy is effective to teach students' reading comprehension and to find out the effectiveness of Index Card Match Strategy to teach reading comprehension to the Eighth grade students of SMP Negeri 3 Sanggau in the Academic Year of 2018/2019. It was anticipated that the research will help foreign language students learn more about reading comprehension. Additionally, it is intended that this research will contribute to the knowledge base on the use of the Index Card Match Strategy in teaching reading comprehension to students.

METHODS

The researcher's method for this study was quantitative. To ascertain cause and effect relationships and the strength of the effect following treatment of the experimental group, experimental research is used. The study used a pre-experimental design with a single group pretest-posttest. To check students'

comprehension of recount texts, the researcher administered a pre-test. Following that, the researcher treated the students by using the Index Card Match Strategy. The researcher then administered a post-test to them in order to compare the results of the Index Card Match Strategy intervention to those of the pretest. The one group pre-test and post-test design could be represented as:

Table 1. Research Design

O ₁	X	O ₂
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Where :

- O₁ : Pre-test
- X : Treatment
- O₂ : post-test

Adopted from Cohen *et al* (2018: 407)

The population of this study is the eighth-grade students of SMP Negeri 3 Sanggau during the 2018–19 academic year. Cluster random sampling was employed to select the sample in this study, which reflected the population. Administration issues arise when taking a simple random sample of a big, geographically scattered population (Cohen, 2018:216). The following actions were taken with the sample: On a sheet of paper, the researcher first spelled out the name of the class. The papers were then placed inside and shaken until one roll of papers was removed. The 8C class of 25 students was selected as the sample for this investigation, according to a paper that would outperform the class.

The researcher used measurement as the technique in this research. The measurement technique aims to measure students' reading comprehension mastery by using test. This technique is needed in order to determine the result of this research. To collecting the data, choosing a proper tool or an instrument that measured critical to the success in this research. The researcher used an achievement test to a measure student's score in pre-test and post-test. The researcher gave pre-test to see students' comprehension in recount text. After giving that, the researcher applied Index Card Match Strategy as the treatment to the students. Then, the researcher gave them post-test to see the differences between pretest and post-test score from the treatment of Index Card Match Strategy. This

research used multiple choice test. Before the researcher gave students pre-test and post-test, the researcher conducted a tryout. A try out conducted to examine the test validity and reliability to the other class which is not class as a sample. In reading comprehension, the indicator consists of four aspects, they are main idea, factual information, reference, and vocabulary. The data were then analyzed to answer the research questions. Since this is pre-experimental research, so to be easy in analyzing the data, the researcher carried out several activities: Finding Individual score, Mean Score, Standard Deviation, Normality Test, T-test and Effect Size.

FINDINGS AND DISCUSSIONS

The researcher's analysis of the data produced two results: a pre-test and a post-test. 25 students contributed a total of 1330 toward the pre-test grade. The minimum and maximum scores from the pre-test were 35 and 70, respectively. The pre-test mean score was rounded to 53.20. The pre-standard test's deviation was 8.884 The students were still having trouble understanding what was being read to them throughout the pre-test implementation phase since they were unfamiliar with a lot of the jargon.

The minimum and maximum scores on the post-test were 55 and 85, respectively. Out of a total of 25 students, the post-test score was 1770. The post-standard test's deviation was 7.863 and its mean score was 70, 80. Due to the prior treatments' explanation of the content, the students started to comprehend the researcher's query while the post-test was being administered. The following diagram compares descriptive statistics between the pre-test and post-test:

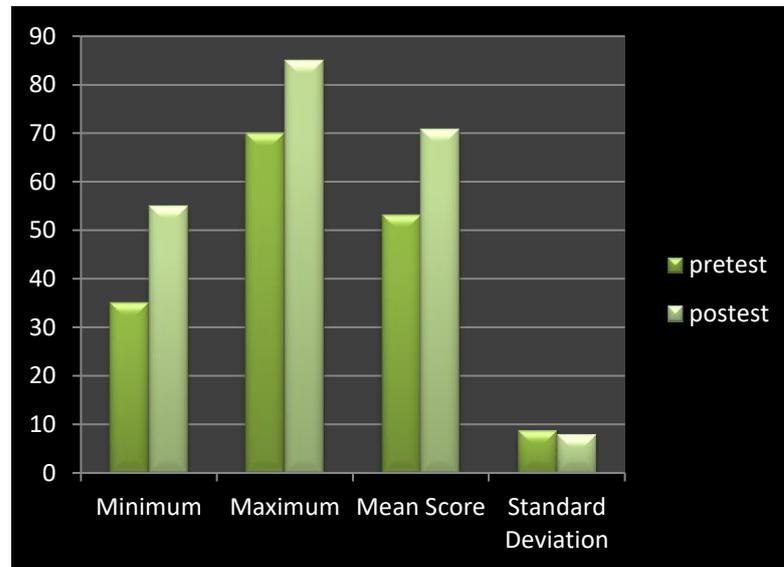


Diagram 1. Descriptive Statistics Comparison between the Pre-Test and Post-Test

The pre-test mean score was 53.20, while the post-test mean score was 70.80, showing that there was a difference between the two. By deducting the pre-test from the post-test, the difference may be determined as shown below:

$$\begin{aligned}\text{Difference} &= \text{Post-test} - \text{pre-test} \\ &= 70.80 - 53.20 \\ &= 17.60\end{aligned}$$

The outcome revealed a 17.60 point difference between the pre-test mean score and the post-test mean score. The variation between the pre- and post-tests suggested that there may be a chance that the treatment had an impact on the students' reading comprehension. To determine which signs were higher and lower, the researcher attempted to calculate the mean score for each indicator. see the illustration below:

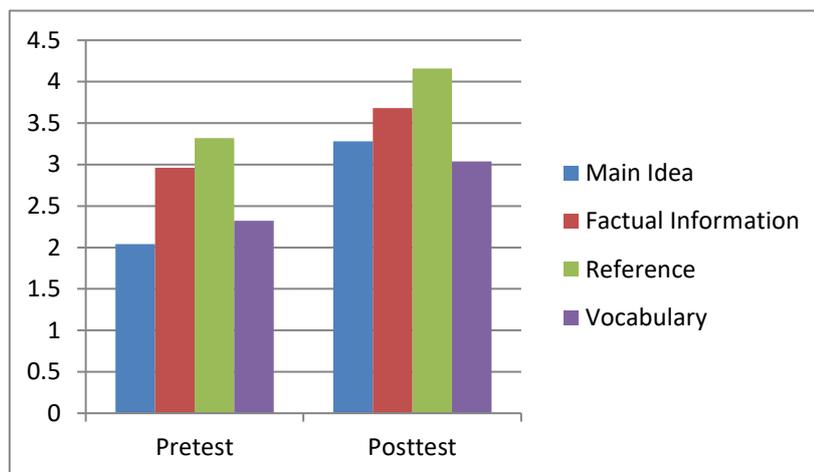


Diagram 2. Pre-test and Post-test per indicators

From the diagram above the mean score of pre-test per indicators has difference value. The higher mean score was reference 3.32 and the lower was main idea 2.04 with the total max score 5. The result proved that students had difficulties to comprehend and did not understand the text, so the researcher had to conduct the treatments. The students then received a post-test from the researcher. Any significant post-test results were obtained following the administration of the interventions. According to the figure, vocabulary had a lower mean score than references (4.16), but all other indicators had increased.

The variation of a set of data values from the average or mean is represented by the Standard Deviation (SD). It displays the distribution of the various values in a specific data set. Lower SD post-test readings indicate values that are extremely near to their average. On the other hand, if the SD post-test is greater than the pre-test, it indicates that the results are widely dispersed and not representative of the average. The result of the calculated can be seen in Table 2. The calculation showed that the standard deviation of pre-test was 8.884 and the post-test was 7.863. It can be said that the students' reading score was closer to average after the treatment of Index Card Match Strategy applied.

To know the significant difference of the results of study before and after the treatment has been given, this study has applied inferential statistics by using t-test paired sample as the normality testing has shown that the results of the pre-test and post-test are in normal distribution. To be specific, the Kolmogorov-Smirnov

test was found out the data distribution by comparing the p-value (d) to the alpha-value (α). If the value of $(p) < 0.05 (\alpha)$, it means that the data is not normally distributed. If the value of $(p) \geq 0.05 (\alpha)$ it means that the data is normally distributed. Therefore, the result can be seen as follows:

Table 2. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		25
Normal Parameters ^a	Mean	.0000000
	Std. Deviation	4.05816128
Most Extreme Differences	Absolute	.097
	Positive	.082
	Negative	-.097
Kolmogorov-Smirnov Z		.484
Asymp. Sig. (2-tailed)		.973

The data have undergone the normality test and are evenly distributed. To find the responses to the first study question, the researcher used a paired sample t-test. By comparing the t-value to the t-table, a paired sample t-test was performed to determine whether or not the Index Card Match Strategy was effective in teaching reading comprehension in recount texts. When the t-value exceeds the t-table, the Index Card Match Strategy is successful and H_a is approved. If the t-value is less than the t-table, the Index Card Match Strategy is unsuccessful, and H_0 is rejected. As a result, the following table shows the data analysis findings:

Table 3. Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 pre - post	-17.600	4.592	.918	-19.495	-15.705	-19.165	24	.000

The result shown that t-value score (19.165) was higher than t-table (2.064) at 5% with degree of freedom (df) = 24 (see t-table in appendix 11), or $19.165 > 2.064$. It indicates that the null hypothesis (H_0) was rejected while the alternative hypothesis (H_a) was accepted. The second component of the research involved determining how to use effect size to evaluate the impact of the index card match strategy. The researcher used the following formula to manually compute the effect size:

$$ES = \frac{X_{\text{posttest}} - X_{\text{pretest}}}{(SD)}$$
$$ES = \frac{70,20 - 53,20}{(8,884 + 7,863)}$$
$$ES = \frac{17,60}{(16,747)}$$
$$ES = 1,05$$

The result of the effect size was 1,05, by considering the interpretation above by Cohen *et al*, 1,05 was greater than 1.00 ($1,05 > 1.00$). The use of the Index Card Match Strategy in the class had a significant impact on the students' reading comprehension, it may be inferred. It demonstrates that throughout the academic year 2018–19, Index Card Match was highly effective in teaching reading comprehension to eighth-grade students at SMPN 3 Sanggau.

CONCLUSIONS

According to the statistics, it was determined that Index Card Match Strategy works well to teach reading comprehension to eighth graders at SMP Negeri 3 Sanggau during the 2018–19 academic year. The researcher concluded that Index Card Match brought a positive effect to improve students reading comprehension. By conducting this strategy students more active, understood and more interesting with English class especially in reading comprehension. After conducted this strategy students got a better result than before in reading

comprehension test, proved in pre-test the students' mean score was 53.20 after conducting the treatments in the post-test students' mean score was 70.80. Meanwhile, the result of the effect size was 1,05. The use of the Index Card Match Strategy in the class had a significant impact on the students' reading comprehension, it may be inferred. The crucial one is Index Card Match, which is the suitable tactic and helpful to instruct reading comprehension.

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