**THE EFFECT OF VISUALIZATION STRATEGY ON THE STUDENTS’ READING COMPREHENSION AT SMA SWASTA NURCAHAYA MEDAN**

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**ABSTRACT**

The aim this research was to get the information about the effect of Visualization straregy on the students reading comprehension who were from SMA Swasta Nurcahaya Medan at school year 2022/2023. Quantitative method was applied in carrying out this research. After carrying out the research, the writer got research findings. Visualization strategy has given significant impact on the students’ reading comprehension. From the research result, it was known that the implementation of Visualization Strategy is more effective than conventional teaching strategy in teaching reading comprehension. The writer did the pre-test. From the pre-test it can be seen that 66.90 were the mean scores of the students who came from control class. The writer did the post-test to the students who were control class. The mean scores of the students were 74.28. Meanwhile, the writer also got the data from the experimental class. After doing pre-test in the experimental class, it can be seen that the mean scores of the students were 67.57. After doing the post-test, it can be seen that the mean scores of the students were 85.81. The writer compared the mean scores of the students who were from the control class and the experimental class. The mean scores were compared after doing the pre-test and the post-test. From the result of the post-tests, the writer could make conclusions. The students’ mean scores from the experimental class were higher than the students’ mean scores from the controlc class (85.81>74.28). The difference of mean scores were 11.53. The writer implemented t-test in carrying out this research. After doing the test. it was known that t-observed value was 5.67. After seeing the result, t-test (5.67) was higher than the t-table (1.675) (p = 0.05 and df = 56). By seeing this data, the writer concluded that Visualization Strategy significanlty affected the reading comprehension of the students who were from SMA Swasta Nurcahaya Medan.

***Keywords: The Effect, Visualization Strategy, Reading Comprehension, Descriptive Text***

**CHAPTER I**

**INTRODUCTION**

 Reading comprehension is one of English skills that focused on how to understand a text. Students are able to get many information if the students have good reading comprehension. There are many sources of reading that can be useful for the students. Sources of reading can be taken from the library, whether it is online library or offline library. Reading comprehension is an activity done by the reader to get information from the text that had been read by the reader.

 In fact, there are many students who still have problems when reading the text. It is very hard for students to read the texts and know the information which have been read before. There are many reasons why the students do feel hard to comprehending the text. Several problems are faced by the students when comprehending the text. The students had limited English vocabulary mastery and having less English grammar mastery. Especially for EFL learners, English is still a foreign language. It means there must be more effort to understand the text which is read by the students.

 To facilitate and solve the problem, there are some researchers who have done the research and tried to give solution in improving the the ability of the students in comprehending a text. To support this research, the writer read some researches and got conclusion from the researchers. Firstly, a research was carried out by Musdizal (2019), it could be concluded that visualization strategy was able to help the students in comprehending the text (recount text). From the research result, it can be seen that the students’ mean scores were better after learning by applying Visualization Strategy. Secondly, David, Masliza and Sulaiman, Nur Ainil (2021) carried out a research. After carrying out the research, it was concluded that Visualization Strategy helped the young learners in detecting the level of words, level of sentences, and level of texts. Visualization Straregy enabled the studentrs in learning reading comprehension. The students also were enabled in solving the problems when the students were learning reading comprehension. The students as the readers were able to make better decision before creating the product of visualization after reading a text.

 Based on the curriculum applied by the government of Indonesia nowadays, reading comprehension is the basic level that must be mastered by the learners. The students are expected to have ability in comprehending a text, especially the students who were from Junior High School and Senior High School. In many examinations, there are many reading comprehension questions. According to the result of the text, it was found that there were many difficulties faced by the students when answering the questions, so the students need to learn more about reading comprehension.

 The writer had carried out an observation before at SMA Swasta Nurcahaya Medan at grade XI. This observation was used as the pre-liminary study.From this observation, the writer concluded that the students were still hard to understand the reading comprehension. When the English teacher invited the students to read a text, the students got problems in comprehending the text. Several problems were faced by the students after reading a text. The students felt hard in comprehending the contenct of a text. From an observation conducted before, it can be known that the students were still hard to understand a text. It can be seen from the students’ scores after joining a test. The students need to be taught by applying new concept of teaching model.

 According to the situation seen by the writer, there was an interest from the writer to carry out this research by implementing Visualization Strategy. This Visualization strategy was expected to help the students in comprehending a text. According to Goudis and Harvey (2000), it was stated that visualization is an activity by the readers by creating pictures in their minds when the readers are reading a text. The readers must be able imagine that there has been a picture when the readers are reading a text. By seeing a picture, the readers can understand what picture is being read. In supporting this idea, Debbie Miller (2001) explained that reading is an activity that has meaning in it. The readers are able to visualize a picture in readers’ mind.

The students can feel bored when the students are joining a reading class The students cannot make that reading is a challenge and an interest to do. Because of this situation, the reading comprehension class cannot be undertaken well by the English teachers. According to this situation the writer had interests in carrying out this research. The reseaarch entitled: *“The Effect of Visualization Strategy on the Students’ Reading Comprehension at SMA Swasta Nurcahaya Medan”.*

The writer formulated the problem of this research as “Does Visualization Strategy affect the students’ reading comprehension at SMA Swasta Nurcahaya Medan?”. The objective of this research was to find out the effectivenesss of the implementation of Visualization Straregy on the students’ reading comprehension at SMA Swasta Nurcahaya Medan. The focus of this research was on the reading comprehension. This research focused on the Descriptive text in the reading comprehension. The writer taught descriptive text to the students who were from grade ten at school year 2022/2023.

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**CHAPTER II**

**RESEARCH METHODOLOGY**

Quantitative method was implemented by the writer in carrying out this research. The writer did an investigation about the impact of the use of Visualization Strategy in teaching reading comprehension to the students. Visualization Strategy was used to teach the students who were from grade X-IPA, meanwhile conventional teaching strategy was used to teach the students who were from grade X-IPS.

The research was carried out by the writer at SMA Swasta Nurcahaya Medan. This school is located at Jalan Bunga Cempaka No. 41 Padang Bulan, Medan, North Sumatera, Indonesia. This school had two programs, namely: Science Program (IPA) and Social Program (IPS). This school had three grades, namely: grade X, grade XI, and grade XII. The writer did this research to the students who were from grade X at school year 2022/2023 in term one. X-IPA students were categorized into experimental class and X-IPS students were categorized into control class. This research was carried out in August 2022.

 The writer applied the theory of Fraenkel and Wallen (2009) in carrying out this research. Population is the largest group of people that has expectation when they were researched by the researcher. The population become the research result. The students from grade ten of SMA Swasta Nurcahaya Medan at school year 2022/2023 became the population of this research. Grade then has two classes. The total number was about 70 students. One class consistes of 30-35 students. The total population was 6 classes. The sum of the students was about 180 students. The writer conluded that sampling is the process or technique done by the researcher in taking sample from the population. The sample was chosen by the researhers when doing a research. In obtaining the sample, the writer applied cluster random sampling technique. The writer did applied cluster random sampling in determining the students who were from two classes and the students were chosen as the research sample. Experiemental class was the students who came from grade X-IPA and control class was the students who came from X-IPS.

The writer collected the data from the tests carried out to the students. The data were analyzed by implementing some steps. The writer read the students’ answer sheets, indentified the students’ answers, scored the answer sheets based on correct answers and incorrect answers. After that the writer enlisted the students’ scores based on two categories by using two tables. One table was for experimental class and one table was for control class. The writer calculated all the scores by using two tables. One table was for control class and one table was for experimental class. Students’ mean scores were found by the writer after carrying out the pre-tests and the post-tests. The writer used a formula to know the mean scores.

$$M=\frac{\sum\_{}^{}N}{N}$$

Formula of knowing the Standard Deviation

$$SD\_{x}=\sqrt{\frac{\sum\_{}^{}x^{2}}{N}}$$

Formula of knowing Standard Error of Mean

$$SE M=\frac{SD\_{}}{\sqrt{N2-1}}$$

Formula of knowing the difference of standard error between mean scores from variable one and variable two.

$$SE M\_{1}-M\_{2}=\sqrt{SEM\_{\frac{2}{1}}- }SEM\_{\frac{2}{2}}$$

Formula of Testing Hypothesis

$$t\_{0}=\frac{M\_{1- }M\_{2 }}{SEM\_{1- }M\_{2 }}$$

Notes :

M *x* = mean scores from first variable(x)

M *y* = mean scores from second variable(y)

Σ = Total students’ scores

N1 = Case number from first variable

N2 = Case number from second variable

SD *x* = Standard Deviation from variable x

SD *y* = Standard Deviation for variable y

Σ = Total students’ scores square

SE M*1* – M*2* = Standard Error between M1 and M2

*t 0* = t observed

The data ofnormality and homogeneity tests were examined by the writer. It was done before determining analysis technique statistics. The writer did normality test in obtaining the conclusion whether it was normal or not. In analyzing the data, the writer applied Chi-square. There were several steps done by the writer when using chi-square. They were R (in determining the span), P (in determining many class intervals), making table distribution of frequency, Bk (in determining class boundary) from each class of interval, determining the students’ mean scores who were control and experimental classes. determining the variants, determining Z scores, x 2 (determining chi-square), determining x2 table, and determining distribution of normality.

 Homogenity test was analyzed by the writer in doing this research. In determining the criteria of homogenity, the writer applied this test, whether it was homogenous or not. There were some steps in applying homogenity test. The writer determined the means scores, determined the varians (s2), determined F, and compared Fvalue with Ftable.

**Table.2.1. Formula Used by the writer**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Type of Tests** | **Formula** | **Notes** |
| 1 | Many class Interval | $$P=\frac{span (R)}{Many class}$$ |  |
| 2 | Variants | $$s^{2}=\frac{n \sum\_{}^{}fi. X1^{\begin{array}{c}2 \\\end{array}}- ( \sum\_{}^{}fi.x1)^{2}}{n (n-1)}$$ |  |
| 4 | Z score  | $$z=\frac{x-\overbar{x}}{s}$$ |  |
| 5 | Chi-square | $$x^{2}=\sum\_{}^{}\frac{(fo-fe)^{2}}{fe}$$ |  |
| 6 | F | $$F=\frac{biggest variants}{smaller variants}$$ |  |

A technique was applied bu the writer in analyzing the data from the t-test from independent sample. Dealing with the effectiveness of using the technique, t-test was used by the writer for independent formula.

$$t=\frac{\overbar{x}\_{1}-\overbar{x}\_{2}}{S\sqrt{\frac{1}{n\_{1}}+\frac{1}{n\_{2}}}}$$

Notes:

$\overbar{x}\_{1}$ = mean scores of students who were the experimental class

$\overbar{x}\_{2}$ = mean scores of the students who were from the control class

$n\_{1}$ = students number from experimental class

$n\_{2}$ = students number from control class

s = standard deviation

$s^{2}$= variance

**CHAPTER III**

**DATA ANALYSIS**

**Data Analysis**

The writer taught reading comprehension in the experimental class by implementing visualization strategy. Experimental class was the students who were from grade X-IPA (Science). The writer implemented this strategy to improve the students’ reading comprehension achievement. The teacher taught the students from control class by implementing conventional teaching strategy. Control class was the students who were from grade X-IPA (Science). This research was conducted in November 2022 at SMA Swasta Nurcayaha Medan at school year 2022/2023. After carrying out pre-tests and post-tests, the writer got the data in this research. The writer gathered the students scores from the control class and experimental class, then they were analyzed by the writer.

There were 20 questions given to the students into multiple choice form. The writer gave 20 questions to the students when carrying out pre-tests and there were 20 questions given to the students when carrying out post-tests. There were pre-tests and post-tests in the control class and experimental class. These tests were done by the writer. All the students’ answer sheets were gathered by the writer. The data were analyzed by the writer by using following table.

**Table 3.1.**

**The Achievement Level Based on Brown’s Theory**

|  |  |  |
| --- | --- | --- |
| **Grade Level** | **Scores Level** | **Scores** |
| Level A | Excellent | From 80-100 |
| Level B | Good | From 70-79 |
| Level C | Adequate | From 60-69 |
| Level D | Unsatisfactory or Inadequate | From 50-59 |
| Level E | Unaccepatable or Failed | From 0-49 |

 The tests carried out by the writer to the students who were from control class and experimental class. 30 students were from the experimental class. The students were from grade X-IPA at SMA SwastaNurcahaya Medan at school year 2022/2023. The students’ answer sheets were gathered by the writer. Then the writer analyzed all the answer sheets. After doing the analysis, the writer got the data. After doing the pre-test in the experimental class, it was known that the total scores were 2,500. The mean scores of the students were 67.57. 80 were the highest scores and 55 were the lowest scores. After doing post test in the experimental class, it was known that 3,175 were the total scores and 85.51 were the mean scores of the students. 95 were the highest scores and 75 were the lowest scores. After seeing the table, the writer concluded that the students who were from grade X-IPA could get A Level with excellent scores (80-100).

 The writer also carried out the tests into the control class. Students from grade X-IPS were categorized into control class. 21 students were from this class. There were 21 students in this class. The writer collected the students’ answer sheets, checked them out, and analyzed hem. The total scores from pre-test were 1,405 and the mean scores were 66.90. The highest scores were 75 and the lowest scores were 55. The post-test was carried out by the writer in the control class. The total scores after doing post-test in control class were 1,560. The mean scores of the students were 74.28. The highest scores were 80. The lowest scores were 70. Based on Brown’s theory as described through a table, the students from control class achieved 70-19, so it was categorized into high level.

**Table 3.2.**

**Data Analysis From Experimental and Control Class)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Grades (Scores)** | **Classes** | **Frequencies** | **Percentage** |
| **Category** | Very High (80-100) | Experimental  | 4 | 10.81 |
| Control | 0 | - |
| High (70-79) | Experimental  | 14 | 3.78 |
| Control  | 9 | 42.86 |
| Fair (60-69) | Experimental  | 18 | 4.86 |
| Control  | 11 | 5.24 |
| Low (50-59) | Experimental  | 1 | 0.27 |
| Control  | 1 | 4.76 |
| Very Low (0-49) | Experimental  | 0 | - |
| Control  | 0 | - |

**Table 3.3.**

**The Data of Students’ Scores after Post-Tests**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Grades (Scores)** | **Classes** | **Frequencies** | **Percentage** |
| **Cetegory** | Very High (80-100) | Experimental  | 32 | 86.49 |
| Control  | 4 | 19.05 |
| High (70-79) | Experimental  | 5 | 13.51 |
| Control  | 16 | 76.19 |
| Fair (60-69) | Experimental  | - | - |
| Control  | 1 | 4.76 |
| Low (50-59) | Experimental  | - | - |
| Control  | - | - |
| Very Low (0-49) | Experimental  | - | - |
| Control  | - | - |

**Table 3.4.**

**Descriptive Analysis of Students Scores after thePre-Tests**

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Mean Scores** | Experimental Class | 70.08 |
| Control Class | 66.90 |
| **Standard Deviation** | Experimental Class | 2,593 |
| Control Class | 1,405 |
| **Median** | Experimental Class | 68 |
| Control Class | 65 |
| **Maximum Scores** | Experimental Class | 75 |
| Control Class | 80 |
| **Minimum Scores** | Experimental Class | 55 |
| Control Class | 55 |

**Table 3.4.**

**Descriptive Analysis of Students Scores after the Post-Tests**

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Mean Scores** | Experimental Class | 85.81 |
| Control Class | 74.28 |
| **Standard Deviation** | Experimental Class | 3,175 |
| Control Class | 1,560 |
| **Median** | Experimental Class | 86 |
| Control Class | 79 |
| **Maximum Scores** | Experimental Class | 95 |
| Control Class | 80 |
| **Minimum Scores** | Experimental Class | 75 |
| Control Class | 70 |

**Table 3.5.**

**Data of Improvement from the Control Class and the Experimental Class**

|  |  |  |
| --- | --- | --- |
| ***Variable*** | **In the Control Class** | **In the Experimental Class** |
| Test | Pre-Test Session | Post-Test Session | Pre-Test Session | Post-Test Session |
| Mean | 66.90 | 74.28 | 67.57 | 85.81 |
| Mean Difference | 18.24 | 7.38 |
| Improvement (%) | 26.99 % | 11.03 % |

**Table 3.6.**

**Normality Test Data after Carrying out the Pre-Tests and the Post-Test Sessions**

|  |  |  |
| --- | --- | --- |
| **Group** | ***Experimental Class*** | ***Control Class*** |
| N | 37 | 21 |
| Tests | *Pre-test Session* | *Post-Test Session* | *Pre-Test Session* | *Post-Test Session* |
| Significance Level Value | 5 % |  5 % | 5 % | 5 % |
| *p* | 0.418 | 0.568 | 0.258 | 0,386 |
| Interpretation | *Normal Status* | *Normal Status* | *NormalStatus* | *Normal Status* |

**Table 3.7.**

**Homogenity Test Result**

|  |  |  |
| --- | --- | --- |
| ***Variables*** | ***After Pre-Test*** | ***After Post-Test*** |
|  | X-IPA (Science) | XI-IPA (Science) | X-IPA (Science) | X-IPA (Science) |
| Df1 | 1 | 1 |
| Df2 | 0.682 | 0.533 |
| W | 1,158 | 1,356 |
| P | 73 | 73 |
| Interpretation | *Homogenous Status* | *Homogenous Status* |

**The Reliability and Hypothesis of the Test**

 After measuring the reability, it was known that the result was r = 0.74. According to the result of research done by the writer, it can be known that the reabilitywas categorized nto high level. After doing this resarch and using the t-test, it could be seen that the result was 5.67. Meanwhile, the writer also found that the degree of freedom was 56 based on the significance level of 0,05. Then the writer also found that T-obs > t-table (p = 0,05) based on df 56. It can be conluded that 5.67 > 1.675 based on df 56. Finally, it could be concluded that Ha (alternative hypothesis) was accepted.

**Research Findings**

 The result of this research was known by the writer. All the data of the students were gathered and analyzed by the writer. All the data were taken from the students both from the control class and the experimental class. After analyzing the data, it was known that the mean scores of from the control class and the experimental class were different. The writer carried out the pre-test in the control class and it was found that the students’ mean scores were 66.90. Then the writer did the post-test and it was found that the students’ mean scores were 74.28. From these tests done in the control class, the writer got several conclusions. The writer also did the pre-test in the experimental class and it was known that the students’ mean scores were 67.57. Then the writer did the post-test and it was known that the students’ mean scores were 85.81. After comparing the mean scores of the students who were control and experimental class after doing post-tests the writer conluded that the mean scores were different. The mean scores of the students from the experimental class were 85.81 and the mean scores of the students from the control class were 74.28. Based on this result, it was known that the mean scores of the students from the experimental class were higher than the mean scores of the students who were from the control class. The difference of the students mean scores were 11.53. T-test was applied by the writer when carrying out this research. From the data of T-observe, the value were 5.67. By seeing this research result, it was known that the t-table was lower than the t-test (1.675 < 5.67). The writer knew that p = 0/05. Then it was known that df 56. By analyzing this data, the writer could propose the conclusion that Visualization Strategy had given significant effect on the students’ reading comprehension who were from the experimental class.

**CHAPTER IV**

**CONCLUSIONS AND SUGGESTIONS**

Research was done by the writer and the research result was analyzed by the writer to know the conclusion. After doing the tests (pre-tests and pos-tests) both in the control class and experimental class, it could be stated that Visualization Strategy had given significant impat toward SMA Swasta Nurcahaya Medan students’ reading comprehension. Visualization Strategy gave effective improvement to the students who learned English reading comprehension. It was known after learning English reading comprehension by applied this strategy in the experimental class. There was significant improvement achieved by the students in learning reading comprehension after learning by pplying conventional teaching straregy, but not sifnificant. This conclusion was known after doing the tests, gathering the data, and analyzing all the data.

 After analyzing the data taken from the control class and experimental class, the writer got the conclusions. The students’ mean scores who were from the experimental class were higher than the students’ mean scores who were the experimental class. After doing the pre-test in the experimental class, the mean scores were 67.57. Post-test was done in the experimental class and it was known that the mean scors were 85.81. The writer also did pre-test in the control class and it was known that the mean scores were 6.90. Post-test was done and the writer got the data that the mean scores were 74.28.

In carrying out this research, the writer applied t-test. T-test observed value was 5.67. The writer analyzed all the data of the students’ scores. It was known that t-test were 5.67. Then it was known that t-table were 1.675. Meanwhile p value was 0.05. Then it was known that df were 56. It was known that t-table was lower than t-test. From this result, the writer conclued that Visualization Strategy had given significant effect toward SMA Swasta Nurcahay Medan students’ reading comprehension. Therefore, it could be stated that null hypothesis (Ho)could be rejected and alternative hypothesis (Ha) could be accepted.

The writer gave some suggestions to the English teachers. Visualization Strategy can be applied when teaching English, especially when having reading comprehension class. English teachers are suggested to have more creativity when teaching English reading comprehension. English teachers can explore creative ideas when designing the learning activities in the classroom. The next researchers were suggested by the writer to carry out the next researches that have same topic as researched in this research. After analyzing the data of this research, the writer expected that this research result can be used as one of references in doing the next researches. The students are suggested to have more motivation and interests when learning English, especially when learning about reading comprehension.

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