Investigating the Effect of Story Mapping Strategy Toward Students’ Reading Comprehension of Narrative Text

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Abstract
The objective of this research was to investigate the effect of story mapping strategy toward students’ reading comprehension of narrative text. Type of this research was a quantitative research which used quasi-experimental design. It was conducted at the ninth grade of SMPN 2 Tilatang Kamang Agam. The sample was chosen by using cluster random sampling technique. The sample of this research was 56 students of IX grade which divided into two groups, IX.4 as experimental class and IX.3 as control class. Each group consists of 28 students. The story mapping strategy was used in the experimental class and the conventional strategy was used in the control class in teaching reading comprehension. Reading comprehension test was used to collect the data of this research. Then, the data was analyzed by using t-test formula. The result of data analysis showed that story mapping strategy gave better result than conventional teaching strategy on students’ reading comprehension of narrative text.

Keywords: story mapping strategy, reading comprehension, narrative text

Introduction
Reading is a necessary skill especially in English class because the students should be capable to understand the text. Therefore, reading should be mastered by the students because it cannot be separated in the teaching and learning process. Snow (2002:11) states that reading comprehension as the process of concurrently taking and making meaning through interaction in written language. By learning reading skill, students get a lot of information, ideas, and knowledge which can enrich the students’ vocabulary and expressions which are very useful in developing English skill such as listening, speaking and writing.

Reading comprehension is not easy to be achieved because there are some factors which influence it, such as, the same background, the same language, and the same concept in reading. Whereas reading is one of skills that must be comprehended by students based on Curriculum which is applied in Indonesia. To support the students in learning reading comprehension, the teachers use various strategies in aiding teaching and learning activities. One of the strategies that commonly used by teachers at schools is by asking the students to remembering or summarizing what is read. In the conventional strategy, teachers ask the students to read the passages from the beginning until the end of text. Then, the students translate the text into their native language. After translating, the students answer the questions. The students tend to focus on the difficult words and not on the whole text.

Actually, there are some creative and attractive strategies that can be applied by teachers in teaching reading comprehension of narrative text. One of strategies is story mapping. According to Ibnian (2010:3), story mapping is a strategy that uses picture frames to find important information from text. This strategy makes students or readers get the key information of the text easily. This strategy of instruction uses a diagram to describe visually the setting or the sequence of events and action of the story. The purpose of a story mapping is to help students focus on the important elements of narrative text such as theme, characters, setting (orientation), problems (complication), plot events, and resolution.

The purpose of this research was to investigate whether the story mapping strategy gives better result than conventional strategy on students’ reading comprehension of narrative text. The result of this research was expected to a give significant input for English teachers as a guideline to apply the teaching strategy and to improve the teaching quality. Furthermore, this research can be valuable knowledge and information for researcher and as additional information for other researchers who are going to do further research on the same field.

Alderson (2002) proposes some methods to assess reading comprehension; a) proposing the students to read the part of text, then asking some questions about the text, and inferential question about the information which is undiscovered from the text, b) students’ reading comprehension is examined by their
ability to restate the story in their own words or to summarize the moral value of the story, c) another assessment is a cloze task-words are removed from passage, and the students are asked to fill in the blanks with appropriate words.

Boulaineau, et al. (2004: 27) also mention that several purposes of story mapping. The first is story mapping provides the elements of story that make students be easier to read the story. In story mapping, there are elements of story such as title, characters, setting, problem, and solution that make students know the chronological sequence of the story. The second is story mapping can be a guide for students to remember the important information after they read the text. According to Serbessa (2010: 124), conventional strategy is teaching in general by using a method, a technique, or a strategy that usually done by the teacher. It gives lesson through lecturers, exercises, and administration tasks. Discourse is one way to deliver information verbally from one to the number of listeners in a room. Activities centered on the direction of the speaker and reader communication to the listeners. Speaker dominates all activities, while the listeners only observe and take notes as needed.

Munand (2016: 3) states that narrative text is a story that has problem and conflict, and there are resolutions to solve those problems. An important part in narrative text is a narration process that makes the story becomes communicative. The purpose of narrative text is to console the reader with a story.

According to Gay (2002: 71) “Hypothesis is researcher’s tentative prediction of the result of research findings”. It means hypothesis states researchers’ anticipation which concern on the relationship between two variables in the research problems. The hypothesis of this research is based on the research problem. The hypothesis of this research was story mapping strategy gives better result on students’ reading comprehension of narrative text than conventional teaching strategy.

There were some researchers reported the use of story mapping in teaching reading comprehension. Some researchers conducted experimental research on junior and senior high school. First, Sholichah (2017) carried out experimental research with using story mapping strategy. It was used to find out the effect toward reading comprehension of eighth grade students. The researcher found that this strategy had significant result on students reading comprehension of narrative text. Second, Nugraha (2013) conducted a research on teaching reading comprehension of narrative text by using story mapping strategy. Based on the result of the research, story mapping strategy was effective on students’ reading comprehension at tenth grade students. It can be concluded that there was significant different achievement after taught by using story mapping strategy.

Method

This was a quasi-experimental research. This research was conducted at SMPN 2 Tilatang Kamang Agam. The population of this research was the ninth grade. There were two classes involved in this research. They were experimental class by using story mapping strategy and control class by using conventional strategy. Both classes had the same material, length of time and the same teacher. There were 110 students who are divided into four classes; they are IX1, IX2, IX3, and IX4. The researcher used cluster random sampling to determine the sample. Gay et.al (2002: 129) views that cluster random sampling is the process to determining the sample of groups within similar characters. Another consideration using cluster random sampling is because of its practicality, and time efficiency. In selecting the sample, the researcher used lottery. The researcher wrote on four small papers with different number from one until four. The groups chosen in this research were the classes of grade IX4 and IX3.

In this research, reading comprehension test was used as the instrument to collect the data. In collecting the data, the researcher used post-test only. The test was designed by the researcher based on the indicators of reading comprehension. The researcher used a multiple choice test as the instrument that demand the students to answer the questions with four option answers (a, b, c, or d). The test was used to measure students’ reading comprehension. The test was done at the end of meeting (post-test). In doing the test, the students were given 80 minutes to accomplish 30 items which was developed by indicators of reading comprehension related to narrative text were adapted from Medina and Pilonieta (2006: 231) and Caldwell (2008:72). The test was tried out before it was used in order to check whether the instrument used the criterion of a good test or not. In addition, the instrument was validated before it was used in this research. The test items were made through the guidance of the specification of reading test. Then, this test was consulted to the expert since it needed judgment to evaluate and analyze the instrument. The validity of reading test items was validated by Dra. Yetti Zainil, M.A., PhD, the lecturer of English Education Department of UNP Padang.

The procedures of the research were (1) formulating and defining the research problem. (2) Determining the population of the research. The population is ninth grade students of SMPN 2 Tilatang Kamang Agam. There are two classes (experimental and control class) involved in this research. (3)
Selecting the sample. The sample is total sampling. (4) Conducting the try out instrument at ninth grade students of SMPN 2 Tilatang Kamang Agam to make sure that the test is reliable and valid. (5) Giving the treatment to each group. The experimental group is taught by using story mapping strategy and control group is taught by using conventional strategy. (6) Giving post-test to the students and calculating the mean after the treatment. (7) The last was writing the final report of the research.

The researcher used interval scale data which use parametric statistical techniques that consist of mean score, standards deviation and variance. After the data have been collected, it will be analyzed in terms of normality, homogeneity, and hypothesis testing. The normality testing was done to observe whether the data collected from both groups were normally distributed or not. It was analyzed by using SPSS 17 for windows with Shapiro-Wilk formula. The data were normally distributed if the significant alpha was higher than 0.05. Homogeneity testing was done to see whether the data in both of treatment groups are homogeneity or not. The homogeneity testing was analyzed by using Levene statistic to examine the homogeneity of data. The hypothesis testing was calculated by using t-test formula in order to find out the differentiation of students’ score between experimental and control class.

Results and Discussion

The data were collected by using reading comprehension test. Then, the data were analyzed by using SPSS 17. The results of the data were presented as follow:

Table 1. Summary of Students’ Reading Comprehension Score Analysis in Experimental and Control Class

| Class      | N  | Mean | Xmax | Xmin | Sum  | Std. Dev | Variance |
|------------|----|------|------|------|------|----------|----------|
| Experimental | 28 | 73   | 100  | 50   | 2047 | 12.913   | 166.735  |
| Control    | 28 | 67   | 90   | 50   | 1887 | 9.607    | 92.300   |

The table above showed that the mean score of the students’ reading comprehension test in experimental class was 73 and the mean score of the students’ reading comprehension test in control class was 67. It proved that story mapping strategy gave better result on students’ reading comprehension of narrative text than conventional strategy.

The normality testing was done to observe whether the data collected from both groups were normally distributed or not. It was analyzed by using Shapiro-Wilk formula. The data were normally distributed if the significant alpha was higher than 0.05. The product of normality testing can be seen in the following table:

Table 2. Normality Testing of Students’ Reading Comprehension in Experimental and Control Class

| Tests of Normality | Kolmogorov-Smirnov* | Shapiro-Wilk |
|--------------------|---------------------|-------------|
| Class              | Statistic | df | Sig. | Statistic | df | Sig. |
| reading            | Experiment | .130 | 28 | .200 | .964 | 28 | .441 |
| Control            | .140      | 28 | .169 | .971 | 28 | .605 |

a. Lilliefors Significance Correction

* This is a lower bound of the true significance.

Based on the table above, it showed that the significance value of experimental class was 0.441. It was higher than significance alpha 0.05. It can be stated that the data were normally distributed. In line with the control class, the significance value was 0.605. It was higher than significance alpha 0.05. Thus, the data were normally distributed.

Homogeneity testing aimed to see whether the data were homogeneous or not. The homogeneity testing was calculated by using SPSS 17 with Levene Statistic for Windows with Test of Homogeneity Variance with significance level 0.05.
Table 3. Homogeneity Testing of Students’ Reading Comprehension in Experimental and Control Class

| Test of Homogeneity of Variance | Levene Statistic | df1 | df2 | Sig. |
|---------------------------------|------------------|-----|-----|------|
| Reading Based on Mean           | 2.371            | 1   | 54  | .129 |
| Reading Based on Median         | 1.753            | 1   | 54  | .191 |
| Reading Based on Median and with adjusted df | 1,753            | 1   | 48,355 | .192 |
| Reading Based on trimmed mean   | 2,334            | 1   | 54  | .132 |

Based on the table above, the significance value of students’ reading comprehension in experimental and control class was 0.129. It means that the data were homogeneous since it was higher than significance alpha 0.05.

Table 4. The Result of T-test Analysis of Students’ Reading Comprehension in Experimental and Control Class

| t-test analysis | t_{observed} | t_{table} | Note           |
|-----------------|--------------|-----------|----------------|
| Students’ reading comprehension score | 1.890       | 1.6736    | t_{observed} > t_{table} |
|                  |              |           | H_a is accepted |

Then, the hypothesis testing was calculated by using t-test formula in order to find out the differentiation of students’ score between experimental and control class. The result showed that the value of t_{observed} was 1.890 and the value of t_{table} for degrees of freedom (df) = (n – 2) = (56 – 2) = 54 with significance α 0.05 = 1.6736. Through comparing the t_{observed} (1.890) and t_{table} (1.6736), it proved that t_{observed} was higher than t_{table}.

From the result, the alternative hypothesis (H_a) is accepted or the null hypothesis (H_0) is rejected because the t_{observed} is higher than the t_{table}. In other words, it can be concluded that there was a significant result of story mapping strategy toward students’ reading comprehension of narrative text.

Based on the findings, there are several explanations about the effect of story mapping toward students’ reading comprehension of narrative text. The hypothesis was story mapping strategy gave better effect on students’ reading comprehension of narrative text. It happened since story mapping is beneficial strategy to teach students about narrative text. They were very excited to read the fairy tales and made their own story mapping. The students made their own story mapping in groups. Each group has three students. Story mapping strategy made the students became creative and enjoy during learning narrative text. The treatment given to the experimental group was teaching reading comprehension by using the story mapping strategy while the control group was teaching reading comprehension by using the conventional strategy. After giving a different treatment to both groups, a post-test was administered to get the data of their reading comprehension. The result of the average score, it showed that story mapping strategy gave better effect on students’ reading comprehension of narrative text than conventional strategy.

Conclusion

The result of this research indicated that story mapping strategy gave significant effect on students’ reading comprehension of narrative text. It was supported by the result of the average score. The mean score of experimental class was 73 while the mean score of control class was 67. It means that the mean score of experimental class showed significant difference than control class. It can also be seen that the value of t_{observed} was 1.890 and the value of t_{table} for degrees of freedom (df) = (n – 2) = (56 – 2) = 54 with significance α 0.05 was 1.6736. Through comparing the t_{observed} (1.890) and t_{table} (1.6736), it proved that t_{observed} was higher than t_{table}. Since the value of t_{observed} is higher than the value of t_{table}, it can be inferred that H_0 is rejected and H_a is accepted. In other words, it can be concluded that there was a significant effect of story mapping strategy toward students’ reading comprehension of narrative text.

Based on the conclusion above, it is implied that story mapping strategy has positive effect for both teacher and students in reading comprehension instruction. This strategy can be applied as alternative strategy to teach reading comprehension. Story mapping strategy reflects that teaching reading comprehension become more enjoyable for the students, since it provides the activity clear instruction.

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