Using Story Mapping Technique to Enhance Senior High School Students' Reading Comprehension Achievement

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Abstract
This research was intended to enhance the senior high school students" reading comprehension achievement by using Story Mapping Technique at SMA Muhammadiyah 3 Jember. The design of the research was Classroom Action Research with the research participants were the Grade XI IPS 3. The result of the reading comprehension test in cycle 1 showed that the average percentage of the student who achieved the rarget was higher than before. The results of reading test, there were 25 students (78.11%) achieved the success criteria and 7 students (21.89%) got ≤ 75. Thus, the use of story mapping technique could enhance the eleventh grade students" reading comprehension achievement. It was suggested for the teachers to use Story Mapping Technique to enhance the sudents" reading comprehension achievement in reading class.

Keywords: story mapping technique; reading comprehension; classroom action research

Introduction

Reading, as one of the English language skills, has an important role to discover any information in the written text. The main aim of reading is to gain an overall understanding about what is described in the text. Through reading the written text or written literature, the students can discover any new information in any different fields of knowledge, such as education, science, economy, politic, and technology (Santoso, 2017). Woolley (2011) also states that reading comprehension is the process of getting meaning from the text.

Based on the preliminary study using interview with the English teacher of SMA Muhammadiyah 3 Jember, it was identified that students read slowly and many of them were not able to find the information appropriately. The English teacher stated that many students experienced difficulties in understanding the whole text meaning and finding specific information during reading activity. As a result, they were passive in joining the English reading class.

Dealing with those problems, the researcher tried to find solutions to anticipate such issues for reading comprehension, one of the possible solutions was through teaching techniques. In the present study, story mapping technique is chosen as reading technique that can enhanced students" comprehension in reading text. Beck and McKeown (in Buehl 2001:135) argue that Story Mapping is a technique that helps the students to use their knowledge of narrative structure to analyze stories. Story Mapping technique appears to be the effective technique to be applied during reading activity (Gersten, 2001). Beck and McKeown (1981) state that story map is a unified

representation of a story based on a logical organization of events and ideas of central importance to the story and the interrelationships of these events and ideas. Moreover, Reutzel (1985) defines Story Mapping as visual representations is similar in constructing to semantic mapping, webbing, or networking-graphically organize and integrate the concepts and events contained in a story. In addition, this reading techniques could helped the students to find general idea and collect specific piece of information in a text.

In other words, Story Mapping can be defined as the visual diagram that contains a brief representation of the text in order to help the students enhance their ability in comprehending the text. According to Amer (2003), Story Mapping is a common format usually used to represent key component of the story. It provides a visual representation for readers to facilitate their identification, organization, and analysis of story elements (Stetter & Hughes, 2010). Based on those definitions, it can be said that Story Mapping belongs to the visual representation of the story elements that is used to make the students get the meaning of the text easily. By providing some elements, students are able to map the important information of the story before they understand the whole text.

The previous studies above used experimental research designs and descriptive study with the junior high school students and university students as their participants. The differences between the previous researches and this research laid on the research design, the text, and the subject of this research. The text type mostly used was descriptive text. The research participants were mostly junior high school EF students. To fill the gap, the researcher addressed a research issue focusing on the use of story mapping as the technique in order to solve the students‟ problem in reading, with senior high school students as the participants.

Literature Review

Reading Comprehension

Reading comprehension is the process of making meaning from text. The goal was to gain an overall understanding of what was described in the text rather than to obtain meaning from isolated words or sentences. According to Biddulph (2002), reading is an interactive process in which readers are actively engaged with texts, building their own understanding of the author‟s message. As mentioned by Grellet (1996), reading is an active skill because it involves guessing, predicting, checking and asking oneself question. The readers are required to think, predict and guess the author‟s message. In other words, reading was not a passive skill because students need to think, predict and guess the author‟s message in a reading text.

Reading Comprehension Achievement

Grabe & Stoller (2002) state that reading is the ability to draw meaning from printed page and interpret the information appropriately. By reading, hopefully the students can comprehend and interpret the information from the text. Hennings (1997) defines comprehension as interacting and constructing meaning with text. It means that comprehension here is an active process of deriving meaning from the text which involves word knowledge, sentence and paragraph. McWhorter (1986) also states that

there are some aspects of reading comprehension that can be used to comprehend the text involving word, sentence, paragraph, and text comprehension. All those aspects will be explained in the following section.

a. *Word Comprehension*

Word comprehension is one of the unit of comprehension that has great influence to the students in the process of comprehending a text, this is as what Cain states that word comprehension is a good starting place for an examination of which skills support and facilitate reading comprehension (Cain, 2010).

In fact, it is impossible for the students to comprehend the text or material without understanding the words" meanings. On the other hand, the common problem faced by the students in comprehending the text was that they were lack of vocabulary, they only knew a few words" meaning and got difficulties in understanding a new word or vocabulary when it comes up in the sentence.

b. *Sentence Comprehension*

Sentence comprehension is also crucial for the students in comprehending a text. Cain (2010) argues that comprehension of individual sentence is essential for comprehension of longer units of text. In order to understand the text properly, students should be able to know the meaning of word by word so that they can easily interpret the meaning of the sentence itself. On the other hand, comprehending sentence means understanding what the sentence tells about. So students did not just translate word by word, but also all the words which were put together completely to make sense of the sentence.

c. *Paragraph Comprehension*

Paragraph comprehension is very difficult to understand a text without comprehending each paragraph. In every paragraph usually contains different meaning or idea and it is related one to another. Wingersky (1999) states that a good paragraph consists of several related sentences that support main idea, which is focused on one sentence. To understand the main point of the paragraph, it is better for the students to know several essential parts related to comprehending paragraph.

d. *Text Comprehension*

As we know that comprehend the text was very important for the students in order to know the writers" message that stated in the text. Moreover, Wood (1991) states that one way to accomplish this goal is to recognize and understand the parts first, the small units of meaning, and then combine them to understand the whole. It means that comprehending text is acquired by students after they have understood all parts of the text. Therefore, what readers have to do here are to understand all parts of the text, including words, sentences, and paragraphs.

The Use of Story Mapping in Teaching Reading

This classroom action research was mainly focused on the use of story mapping technique to enhance the eleventh grade students" reading comprehension achievement on narrative texts. To run the story mapping technique successfully, the teacher and the students should follow the right procedures. The following figure belongs to the model of Story Mapping Technique by Idol. (Source: Bos and Vaughn, 2012:264)
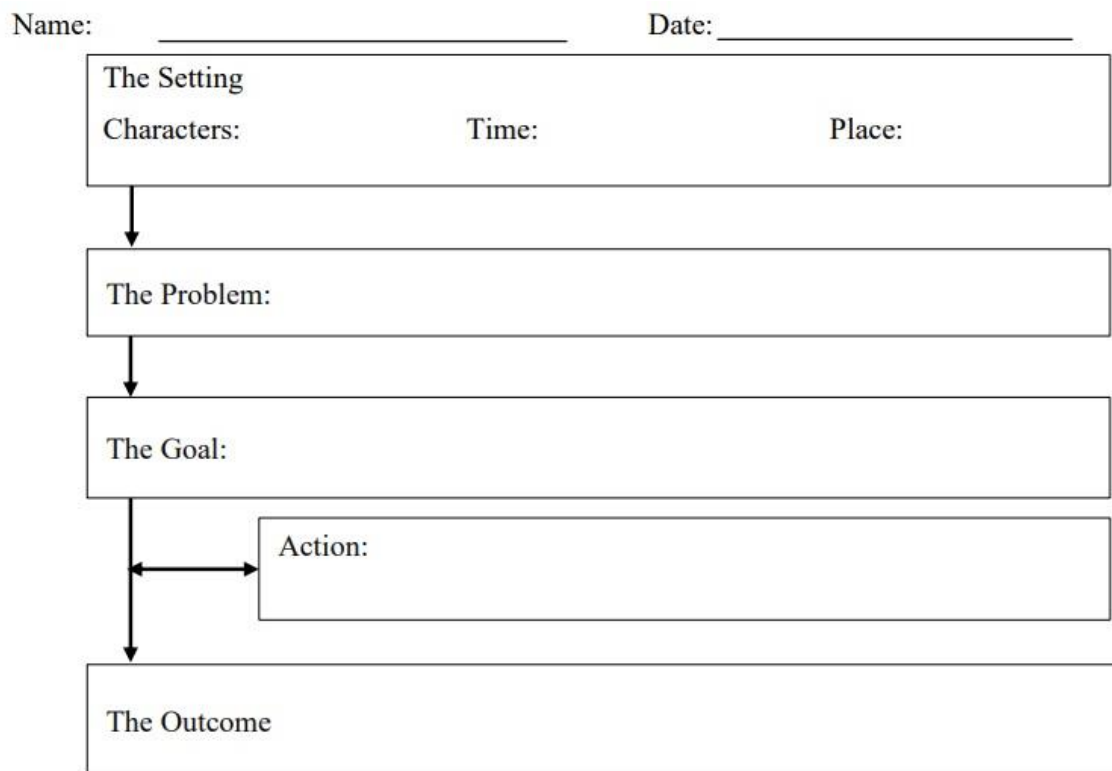
Name: _____   Date: _____

| The Setting |
| Characters: Time: Place: |

| The Problem: |

| The Goal: |

| Action: |

| The Outcome |

Figure 1. Story Map Organizer

That outline contains the elements of story mapping that is able to help students to understand the text easily. By looking at the elements, and filling it with the information from the text, the students will be helped to undestand the whole text easily. According to Rathvon (2008), there are 3 stages for teaching reading comprehension by using Story Mapping as follows:

1. Modeling the Use of Story Mapping
   a. Explaining to the students the use and the function of Story Mapping
   b. Displaying story mapping template in front of the class

    c. Explaining to the students about the meaning of each elements of Story Mapping and how to complete them

    d. Helping the students to understand how the elements of Story Mapping are interrelated by giving some questions

2. Leading the Use of Story Mapping

    a. Asking the students to read the story independently then identify the elements of the story

    b. Asking the students to state their opinion and discuss it with the class

    c. Asking the students to complete the correct answer into their own map

3. Independent Use of Story Mapping

    a. Asking the students to read the story independently and generate their map independently

    b. Asking the students to answer the questions

In this case, the researcher adapted the steps to be done at SMA Muhammadiyah 3 Jember. Those steps were as follows;

1. Modeling the Use of Story Mapping
    a. Displaying story mapping template in front of the class
    b. Helping the students to understand how the elements of Story Mapping are interrelated by giving some questions

2. Leading the Use of Story Mapping
    a. Asking the students to read the story, then identifying the elements of the story
    b. Asking the students to complete and state their opinion into their own map and discussing it with the class

3. Independent Use of Story Mapping
    a. Asking the students to read the story independently and generate their map
    b. Asking the students to answer the questions

Research Methods

The Research Design

The design of this research was a classroom action research because it was intended to enhance the tenth grade students" narrative text reading comprehension achievement by using Story mapping technique. This action research was conducted in class XI IPS 3 to help the students solving their problems in reading comprehension.

The Research Participants

The participants of this research were the students of XI IPS 3 at SMA Muhammadiyah 3 Jember that were chosen purposively. The average score of the students" reading comprehension achievement in this class was the lowest compared to the other classes.

The Data Collection Methods

The methods of collecting the research data were a reading comprehension test, interview, and documentation.

Reading Comprehension Test

The reading comprehension test material was constructed based on school-based curriculum (Kurikulum Tingkat Satuan Pendidikan (KTSP) 2013) for English senior high school. Objective test was applied in this research especially in the form of multiple choice insisting 4 options.

Interview

In this research, semi structured interview was conducted to get the information needed. A list of questions was prepared to get the information about the English

curriculum, the schedule, the materials, as well as the problems faced by the student, especially in learning reading. The interviee was the English teacher of the tenth grade.

Documentation

Document, in this research, was used to get the information about the students" previous scores in reading comprehension test of the elevent grade (XI IPS 3) of SMA Muhammadiyah 3 Jember.

Data Analysis Method

The last stage in this research design was data analysis of the action. It dealt with how to analyze the data obtain from implementing the action. Then, the result of the data analysis were interpreted for further reflection of the action.

The data obtain from the reading test and students" participation were analyzed by using the following formula:

$$M = \frac{\sum X}{N}$$

Notes:

M : the students" mean score
$\sum M$: the total score of the students" reading test
N : the total number of the students doing the test

(Cohen *et al*, 2000:326)

$$S = \frac{R}{N} x\ 100\%$$

Notes:

S: the percentage of the total number of the students whose score ≥ 75
R: the total number of the students whose score ≥ 75
N : the total number of the students doing the test

(Purwanto, 2009:112)

Findings And Discussion

The Result of the Students' Reading Comprehension Achievement in Cycle 1

This classroom action research was conducted at SMA Muhammadiyah 3 Jember. The activities done in the Cycle 1 covered the implementation of the action and the result of the students" achievement in reading comprehension test

The Implementation of the Action in Cycle 1

The implementations of these actions were done in three meetings. The first and the second meetings were done for implementing the action and the third meeting was done for administering the test. During the implementation of the action, the

researcher and the English teacher did the action collaboratively. In the first meeting, the researcher took a part as the teacher while the English teacher took a part as the observer. Furthermore, in the second meeting the English teacher was the teacher while the researcher was the observer. The first meeting was done on January 8, 2020 by implementing Lesson Plan 1 enclosed in Appendix 6. The topic of the first meeting was "Dove and Aunt". The researcher started the lesson plan by giving set-induction activity. Before reading, the students were taught about what Story Mapping is by displaying story mapping template in front of the class and told them about those elements. The students were also taught reading comprehension by using the Story Maping technique. Then, the teacher divided the students into groups and distributed the learning task. After that, the students were asked: to read the learning task, to do the learning task with their group by using Story Mapping technique. Next, the students were asked to do the worksheet independently. At last, the researcher asked the students to swap their work to the other students and discussed the answers together.

The Result of the Reading Comprehension Achievement Test in Cycle 1

The reading comprehension achievement test was done on January 22, 2020 after the researcher implemented lesson plans for Meetings 1 and 2. The test consisted of 20 questions in the form of multiple choices and the time allocation was 45 minutes. Dealing with the scoring, each correct answer was scored 5 and each incorrect answer was scored 0. The result of the students" reading comprehension achievement test can be seen on following table.

No	Students' Initial Name	Score	Achieved	Not Achieved
1	ABP	70		√
2	ADP	75	√	
3	ALK	85	√	
4	BNP	80	√	
5	DBT	75	√	
6	DS	75	√	
7	DWF	75	√	
8	DN	70		√
9	EKY	75	√	
10	GYW	80	√	
11	GPRT	80	√	
12	HAHP	75	√	
13	IDSJ	75	√	
14	IEF	80	√	
15	IWS	90	√	
16	IM	85	√	
17	MDA	80	√	
18	MAZA	80	√	
19	MDANA	65		√
20	MRA	85	√	
21	MFA	80	√	
22	MAW	70		√
23	MAS	95	√	
24	NH	70		√
25	RAV	90	√	
26	RAS	80	√	
27	RBP	65		√
28	RSK	75	√	

29	SA	75	√	
30	SAR	75	√	
31	SIS	75	√	
32	SAWK	69		√
	Total	2465	25 students	7 students
	Mean score	77,03		
	Percentage	78,11		

Based on the table above, the result of the students" reading comprehension achievement test was analyzed by using the following formula

$$S = \frac{R}{N} x\ 100\%$$

$$S = \frac{25}{30} x\ 100\% = 78,11\%$$

Notes:

S: the percentage of the total number of the students whose score $\geq$ 75
R: the total number of the students whose score $\geq$ 75
N : the total number of the students doing the test

Based on the result of the students" reading comprehension achievement test, it concluded that Story Mapping Technique could improve the students" reading comprehension achievement. It was proved by the improvement of the students who got score $\geq$75 on their reading comprehension scores. Before the students were taught by using Story Mapping Technique, only 15,62% could achieve the standard score of reading comprehension achievement. However, after they were taught by using Story Mapping Technique, the total number of the students that got score $\geq$75 on their reading comprehension achievement test became 78,11%. Therefore, it can be said that the students" reading comprehension achievement score already met the target that was expected in this research.

The Result of Reflection in Cycle 1

The result of the evaluation process after implementing the action in Cycle 1 by using Story Mapping technique, showed that there was a lot of improvement on the students who got score $\geq$75 in Cycle 1. There were 25 or 78.11% students who got score $\geq$75. Thus, the action of Cycle 1 met its target, then the action was stopped. The improvement of the students" scores in reading comprehension achievement test can be seen in this following chart.
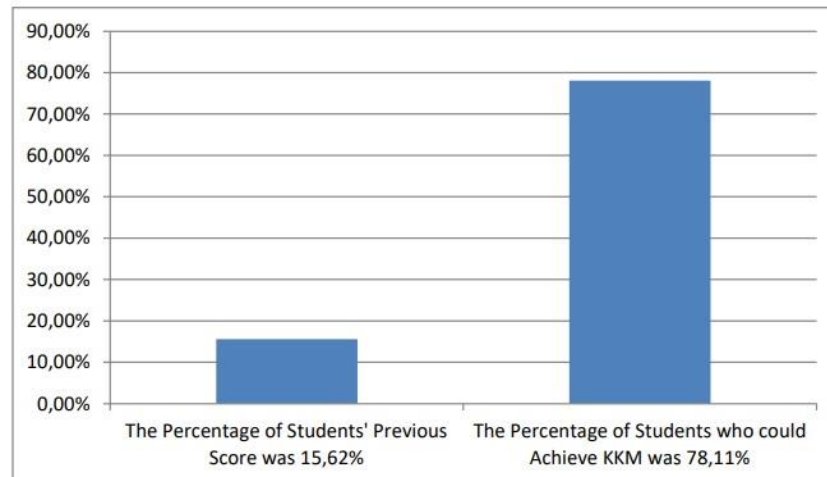
Figure 2:   Students' Score Improvement in Reading Comprehension

Discussion

The purpose of this research was to improve the Senior High School students,, achievement in reading comprehension by using Story Mapping technique. The result of reading comprehension achievement test showed that the students" score had improved from 15.62% to 78.11%. It proved that the use of Story Mapping technique for teaching reading comprehension could give significant improvement for the students" ability in reading comprehension achievement.

Besides, the result of the reading comprehension achievement test already achieved the target of this research. The previous score of the students" reading comprehension achievement showed that only 15.62% of the students could achieve score ≥75 for reading comprehension. Then, after they learnt reading comprehension by using Story Mapping technique, the total number of students who could achieve the minimum standard score was 78.11%. This means that Story Mapping technique could improve the percentage of the students who achieved the standard score in teaching and learning process of reading comprehension.

Based on the data above, there had been significant improvement of the students" reading comprehension score. The significant improvement was shown from the difference of the previous percentage score that was 15.62% to 78.11%. The reason why the percentage improved so much from the previous (15.62%) to the one after being given the treatment (78.11%) was perhaps the items given by the researcher are too easy. This can be one of the weaknesses of this research. Moreover, the teacher did not apply Story Mapping technique in teaching reading comprehension to the students, but he usually applies Question and Answer technique. This made the students not enthusiasm during the teaching and learning proccess of reading comprehension.

From the results of reading comprehension test and the students" participation, it could be stated that Story Mapping technique could help students understand easily and improve the their reading comprehension. This finding was in line with Phantharakphonga and Suteera Pothithab (2013) who stated that concept maps helped the students understand English reading better.

The result of Cycle 1 is also relevant with the result of the previous findings. A study conducted by Kurniawan (2013) who stated that story mapping technique was appropriate for teaching reading comprehension. He did his research in SMP Negeri 12 Sungai Raya, The students" mean score increased from 56.68 to 73.19. It was in line with the result of this reseach which had the improvement on the result of reading comprehension achievement. Based on the findings of the previous researches, it proved that applying Story Mapping Technique in teaching reading comprehension could give positive improvement on students" reading comprehension achievement.

Conclusions And Suggestions

Conclusions

Based on the result of the data analysis and the discussion, it could be concluded that the use of story mapping technique could enhance the eleventh grade students" reading comprehension achievement in the teaching reading learning process at SMA Muhammadiyah 3 Jember.

Suggestions

Based on the result of this classroom action research, it was suggested to the English teacher to use story mapping technique as the teaching technique to enhance the sudents" reading comprehension achievement in reading class. For the future researchers to use the results of this research as a reference and information to conduct a further research dealing with the use of story mapping technique as the teaching technique with different language skills, research designs, and research participants.

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