THE EFFECT OF WEBBING STRATEGY TO IMPROVE STUDENTS' READING COMPREHENSION AT THE TENTH GRADE OF MAS MUHAMMADIYAH SEI APUNG JAYA

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ABSTRACT

This study was conducted to find out effect of using webbing strategy on students' reading comprehension in. The objective of the study is to find out whether any significant effect of using webbing strategy on students' reading comprehension at the tenth grade of MAS Muhammadiyah Sei Apung Jaya. The method of this research was quantitatitave research. This quantitative research used quasi-experimental design. The population of the study was the tenth grade of MAS Muhammadiyah Sei Apung Jaya which consisted of 56 students. While, the sample of this research was consisted of experimental group and controlled group, each group consisted of 28 students. The experimental group taught by using webbing strategy, while the controlled group without webbing strategy. The instrument of collecting data was tests (pre-test and post-test) and doccumentation. The data were analysed used preliminary tests and T-test. In conclusion, webbing strategy can give significant effect tn students' improvement inreading comprehension. The mean score of post-test in experimental group is 88,03, meanwhile the mean score of post-test in controlled group is 62,86. Beside that, the significant effect can be seen in the hypothesis test, which $T_{observed}$ is higher than T_{table}, (9,186 > 1,673) in the level of degree α is in significant 0,05. It means that there was significant effect of using webbing strategy to improve students' reading somprehension at the Tenth grade of MAS Muhammadiyah Sei Apung Jaya.

Keywords : Webbing Strategy, Students' Reading Comprehension

INTRODUCTION

There are four basic but important skills that must be learned if we would like to master English, they are speaking, writing, listening and reading. Every skill has its own specification, include reading skill. Reading comprehension is a complex interaction among automatic and strategic cognitive processes that enables the reader to create a

mental representation of the text[1]. Rather than only understand about acquire meaning, but also to understanding the text deeply such as identifying main idea, supporting ideas, finding reference, making inference, and answering the question that relates with the text, etc. Through reading, it is not only increase insightful and knowledge but also can gain strength imagination and spiritual experience through the text that have been read.

Helena shows that Indonesia is one of the countries which has poor reading qualities. The poor reading quality can effect to shape understanding from reading material. The poor reading quality is caused by the lack of reading habit in life. It is because reading is not become important activity in school or education institution. Besides, reading plays important role in language learning.[2]

The objectives of teaching English subject for senior high school level is the students are able to express their idea, feeling, and information well, that's why teaching english as a subject in school is not easy as teaching first language or national language.

In reality, the objective of reading comprehension as mentioned above is not fully achieved yet. All the objectives about reading comprehension that we expected to be mastered by the students are not totally gained. It can be seen from what Helena stated about Indonesia's reading quality that effected to students' reading comprehension. It also can be seen from what researcher found in reality. Based on the first observation in MAS Muhammadiyah Sei Apung Jaya, approximately all of the students have problem in reading comprehension. First, there are some of the students hard to link the ideas of the text. Second, the students were hard to answer question related to text because they faced difficulties in getting main idea of the text.

After the researcher analysed some of the students' reading comprehension difficulties by asking the students. Then, researcher analysed teaching reading activity. The researcher found there are some causes can be described regarding to the factors why students' reading comprehension low. First, reader's ability in reading process that caused by internal factor, such as motivation, IQ (Intelligence Quotient), etc. Second, the teacher only asked the students to read the text and look up to difficult words in dictionary, the teacher didn't guide students how to get the meaning of the word related to the contextual situation. Third, the teacher taught the students to understand the reading material monotonously. Teacher did not facilitate the students with the certain strategy to find out the meaning contextually and to comprehend the reading material deeply.

One of the factors that students less interest in reading activity is the teacher seldom uses various strategies. Teacher teaches reading skill monotonously. Whereas, strategy is the way that teacher use to delivery lesson in the classroom. We all know that reading comprehension is multicomponents, it is a complex process involve cognitive process of

[1] Van den Broek, P., & Espin, C. A, (2012), Connecting cognitive theory and assessment: Measuring individual differences in reading comprehension, *School Psychology Review*, Vol 41(3), p.315-325

[2] Helena Ceranic, (2014), *Panduan Bagi Guru Bahasa Inggris,* Jakarta: Erlangga, p. 27

the reader interaction to the text. Teaching reading comprehension is quite hard because the product can't be seen directly unlike writing skill, It is related to cognitive process in students' mind process. It is one of teacher's duties to experiences new strategy that can help students encounter problems and difficulties in comprehending the reading material. Cooper states that students can add background knowledge, making conclusion, prior knowledge, vocabulary learning in comprehending a text through concept webbing.[3] Ruzic and O'Connell (2001: 1) state that webbing is a visual and a graphic representation or organizer of information that shows both small units of information and relationship between these units.[4] Zaid (1995: 1) defines that "students who use webbing, manifest considerable improvement in reading comprehension, written expression, and vocabulary development".[5] One of the suggested strategies that can be used to teach reading comprehension is webbing strategy. This strategy is expected to help student to find the meaning of the vocabulary regarding to comprehend the reading material easily, also can help students to find sollution to increase students' reading achievement. Webbing strategy can be used to help students to create background knowledge about the reading material, also to help students to link among vocabulary terms in the reading material by connecting new information to prior knowledge. These were some considerations from the advantages of webbing strategy in the learning reading comprehension.

For that reason, the researcher tried to apply new strategy in teaching reading comprehension to find out the whether is it effective or not to improve students' reading comprehension, especially in MAS Muhammadiyah Sei Apung Jaya. So, the researcher carried out this research to help the teacher of MAS Muhammadiyah Sei Apung Jaya to overcome the students' difficulties in reading comprehension.

THEORETICAL REVIEW

Reading as a Language Skill

According to Brown, there are four language skills in English that should be mastered. They are listening, speaking, reading, and writing.[6] Reading is one of essential skills for second language learners. Reading is the basic skill in language learning that everyone should have. Reading is the key of knowledge because the biggest source of knowledge is written form. There are many definition about reading given by experts. Reading is the activity of looking at and understanding written words.[7] It means that reading process can be done if someone do the reading activity by looking at reading material and understand the content of it.

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[3] D.J. Cooper, (2000), *Literacy Helping Children Construct Reading,* The fourth edition, Boston. Houghton Mifflin Company. p. 244

[4] R. Ruzic & K. O' Connell, (2001), *Concept Maps.* Accessed on September 2020

[5] Mohammed Abdullah Zaid, (1995), Semantic Webbing in Communicative Language Teaching, Open Educational Web, Vol 33(3), p.6

[6] Brown H. Douglas, (1994), *Teaching by Principles:An Interactive Approach to Language Pedagogy,* Prentice Hall Regents: New Jersey, p.217

[7] Martin H. Manser, (1991), Oxford Learner's Pocket Dictionary, Oxford: Oxford University Press, p. 343

Reading means to understand the meaning of printed word written symbols. From what Patel stated, reading means the activity of the reader finds out and understand the message or information from what writer put in the text. The writer as informant (sender) who sends the message or information to readers (receiver) through text or written symbols. From those definitions can be concluded that reading is an activity of someone tries to get information through written forms in case to catch what the writer means or says.[8]

Reading Comprehension has some types, they are; 1) Literal comprehension: reading in order understand, remember, or recall the information explicitly contained in passage. 2) Inferential comprehension: reading in order to find information which is not explicitly stated in passage, using the reader"s experience and intuition, and by inferring. 3) Critical/evaluative comprehension: reading in order to compare information in a passage with the reader"s own knowledge and value. 4) Appreciative comprehension: reading in order o gain an emotional or the kind of valued response from passage.[9]

Kinds of reading
1. Intensive reading.

Intensive reading means to read shorter texts to extract specific information.[10] In this type of reading, readers focus on linguistics feature and semantic feature of the text. There are two types of intensive reading, they are:
1) Reading Aloud. It means read with sound. In reading aloud, the students will get experience in producing the sound, which should be practiced as many as possible.
2) Reading Fast. Reading fast used to improve speed and comprehension in reading. Sometimes this kind of reading is just to find main idea or reference that do not need deeper understanding about the whole meaning of the text.
3) Extensive reading

Extensive reading usually reading activity in a longer text. Extensive reading is also to obtain a general understanding of a subject and include reading longer text for pleasure use extensive reading is to improve general knowledge.[11] The purpose of extensive reading will be to train the students to read directly and fluently in the target language for enjoyment, without the aid of the teacher.[12] A type of extensive reading, it is silent reading. It means reading without producing sound. Sometimes whispering what they read, but sometimes don't make any sound

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[8] M.F Patel, (2008), English Language Teaching, (Methods, Tools, and Techniques). Jaipur: Sunrise publishers, p.35

[9] Jack Richard, Jhon Platt and Heidi Weber, (1985), *Language Dictionary of Applied Linguistic*, England; Longman, p, 238

[10] Jeremy Harmer, (2007), *How to Teach English*, Harlow: Longman Pearson, p.99

[11] Jeremy Harmer, (2001), *The Precice of English Language Teaching Longman Handbooks for Language Teacher*, London : Longman Eight, p. 210

[12] M. F Patel and Preveen M. Jain, (2008), *English Language Teaching (Methods, Tools & Techniques)*, Jaipur: Sunrise Publisher & Distributors, p. 119

regarding to understand the text. Silent reading is done to acquire a lot of information.[13]

Webbing as a Strategy of Teaching Reading Comprehension

J. W. Gillet noted Webbing is a simple way to help students begin to recall prior knowledge and form relationship is to use webbing. Webbing strategy is one of suggested strategies from experts if the teacher would like to teach reading. Because the webbing can help the students build their thinking about organizing ideas and information from a topic. Webbing also can help the students to remember old information related to the reading material and help students create expectation from their perception about what they read.[14]

The Procedure of Webbing Strategy

Denton, et.al (2007: 115) suggest the teacher to implement the procedures of webbing strategy in helping students to do comprehending on reading stages. These reading stages are:

1. Pre-reading that includes activities as showing the webbing stragey to students and discuss students' prior knowledge, using the webbing strategy as a tool to preview the chapter or text, and asking students to make predictions about the text based on the graphic organizer or ovals. Therefore, in the pre-reading, the activities are focused on the students' vocabulary and background or prior knowledge through questioning and some ovals or webbing;

2. During-reading that includes activities as having students fill in important information as they read the text, and conforming and/or modify students' predictions about the text. In this stage, the activities are focused on grasping and extracting the topics, explicit and implicit information;

3. Post-reading that includes activities as having students write a summary of the chapter or text using the webbing strategy as a guide, having students use the webbing strategy to present the content orally to a peer, tutor, or mentor, and having students write guide or test questions based on the webbing strategy.[15]

RESEARCH METHODOLOGY
Research Design

The researcher conducted the research using quasi-experimental design. John Creswell stated that quasi-experiment is experimental situation in which the researcher assigns participants to groups, but not randomly.[16] Quasi-experimental design involved subject as a group (intact groups). There will be two groups in this research, they are experimental group and controlled group.

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[13] *Ibid*, pp. 122-123

[14] Harris A Larry and Smith B Carl, (1986), Understanding Reading Problems Assessment and Instruction, New York; Macmillan Pub. Co, P. 219

[15] C Denton. Bryan, D. Wexler, J. Reed, D. & Vaughn, S. (2007). *Effective Instruction for Middle School Students with Reading Difficulties*. (*https://teachingenglish4all.wordpress.com/*, accessed on September 22, 2020)

[16] John W. Cresswell. (2008). Educational Research (Third Edition). New Jersey: Pearson Education. p. 313

Variable

There are two variables in this research. Variable X is webbing strategy and variable Y is reading comprehension.

Population and Sample

This research held in MAS Muhammadiyah Sei Apung Jaya. The location in Jln. Raya Bagan Asahan, Sei Apung Jaya Village, Kec. Tanjung Balai, Kab. Asahan, North Sumatera. According to Ary, population is all of members of any well defined class of people, events, or object.[17] The population of this research is the tenth grade of MAS Muhammadiyah Sei Apung Jaya 2020/2021. It consists 2 classes. The grade X MIA-1 consists of 28 students. The grade X MIA-2 consists of 28 students. According to Syahrum that sample is a part of population of object which wants to research.[18] In choosing sample, the researcher used Saturation sampling. It was a method includes all of elements in a population.[19] The sample for experimental group is 28 students, consisted of 13 males and 15 females. For controlled group there are 28 students as well, 12 students males and 16 females. The researcher applied lottery to choose the group randomly. The result of the lottery is X MIA-1 as the experimental group and X MIA-2 as the conrolled group.

Research Instrument

Research instrument refers to any equipment used to collect the data.[20] To measure the students' achievement, the researcher prepares the test. The test in this research is pre-test and post-test. Pre-test is the initial test aims to know how far the learning material to be taught is known by the students.[21] The post-test is used to collect the data from the students about how far successfulness teaching learning process using webbing strategy.

Validity and Reliability

The researcher used the instruments in this study based on the previous researcher. The tests are adapted from the previous study so that the tests have already valid. To obtain the reliability of the tests, the researcher used Arikunto's formula.[22] The score of the test calculated by applying the formula:

$$S = \frac{R}{N} \times 100$$

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[17] Donald Ary, Lucy Cheser Jacobs, and Chris Sorensen. (2010). (8th edition), Introduction To Research in Education, Canada, Wadsworth Cengange Learning. p.148

[18] Syahrum and Salim. (2012). Metodologi Penelitian Kuantitatif. Bandung: Citapustaka Media. p.114

[19] M. Rajamanickam, (2001), *Statistical Methods in Psychological and Educational Research,* New Delhi: Concept Publishing Company, P.84

[20] Suharsimi Arikunto. Op. cit. p. 192.

[21] Djaali, Pudji Muljono and Sudarmanto, (2008), *Pengukuran dalam Bidang Pendidikan,* Jakarta: Grasindo, P. 10

[22] Suharsimi Arikunto, Procedure penelitian suatu pendekatan praktek (RinekaCipta, Jakarta, 2014),p.130

In which:

S = Score of the test

R = Number of the correct answer

N = Number of the question

Data Analysis

Preliminary analysis is the first thing to do. The purpose of this analysis is to know whether the data is accepted or not as requirement for t-test and hypothesis test. Before T-test is used, the normality and homogenity data should be tested. The calculation of normality test is using Microsoft Excel 2010. Test criteria if $L_o \geq L_{table}$, the data is not normally distributed. In other words $L_o \leq L_{table}$ then the data is normally distributed. Homogeneity test samples originated from populations that were homogenous. This test used statistical formulation of homogeneity test by using two variants in pre-test and post-test.

RESULT AND DISCUSSION

The data were analysed based on students' score in pre-test and post test. The score analysis will be shown in this table below:

Table 1 Descriptive Statistics

	N	Min	Max	Mean	Standart deviation
Pre-test Experimental group	28	20	60	41,97	11,4939
Post-test Experimental Group	28	70	100	88,03	9,6550
Pre-test Controlled Group	28	15	60	36,25	11,0239
Post-test Controlled Group	28	40	80	62,86	10,8379
Valid N	28				

There is significant effect of using webbing strategy to improve students' reading somprehension at the tenth grade of MAS Muhammadiyah Sei Apung Jaya. It can be seen that the students who were tought using webbing strategy gained much higher score than the students who were tought without webbing strategy.
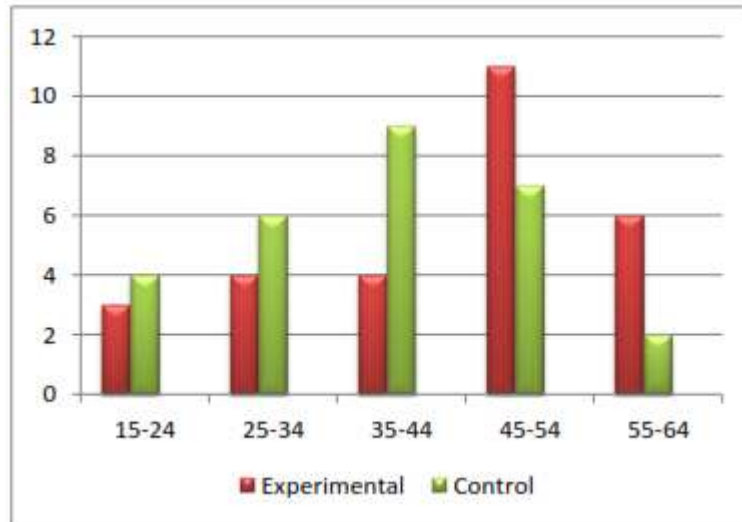
Fugure 1. Score of Pre-Test

Figure 1 in Pre test shows that the experimental group and controlled group have same range score in pre-test. The range of the score in experimental group and controlled group is around 15-64. It can be meant that the lowest and the highest score of pre-test in experimental group and controlled group are quite simillar, but these two groups have different number of the students in each range of the score. Based on the result, the gap of pre-test of both groups is not so huge. It means that the students in both group have same level of knowledge in reading comprehension.
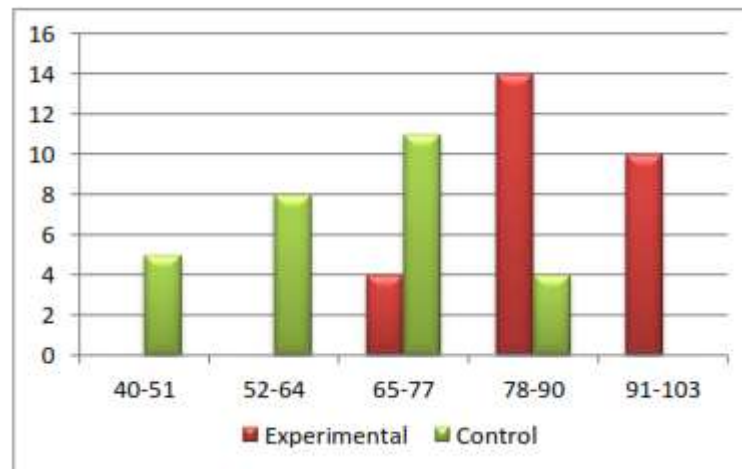

Figure 2. Score of Post-test

Based on the figure 4.2 above, these two groups, experimental group and controlled group have difference in range of score. We can see the range of lowest and highest score is different. It can be seen in the figure above that there is a huge gap number of students in the range 78-90. In this range, the number of students of experimental group is around 14 students, meanwhile the number of the students of controlled group in this range is around 4 students. In this range becomes the highest number of students who get the score in experimental group. The range of score 65-77 becomes the highest number of students who get the score in controlled group. There are 11 students obtained the score in this range.

The calculation of T-test as follows :

$$T = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_1{}^2}{n1} + \frac{S_2{}^2}{n2}}}$$

$$T = \frac{88{,}03 - 62{,}86}{\sqrt{\frac{93{,}22}{28} + \frac{117{,}46}{28}}}$$

$$T = \frac{25{,}17}{\sqrt{\frac{210{,}68}{28}}}$$

$$T = \frac{25{,}17}{\sqrt{210{,}68}}$$

$$T = \frac{25{,}17}{2{,}74} = \mathbf{9{,}186}$$

Based on the T-test calculation above, it shows the result of t observation is around 9,186. From this testing, the calculation of T_{table} with the degree of freedom 56 (df = N_{1+} $N_2 - 2$) (df = (28+28) – 2) and at the level of significant 0,05 in T_{table} is 1,673. From that testing calculation, it can be concluded that T_o is higher than T_{table} (9,186 > 1,673). It means that there is significant effect of using webbing strategy to improve students' reading somprehension at the tenth grade of MAS Muhammadiyah Sei Apung Jaya.

This strategy is one of suggested strategies in teaching reading comprehension. This strategy is expected to help student to find the meaning of the vocabulary regarding to comprehend the reading material easily, also can help students to find sollution to increase students' reading achievement. Webbing strategy can be used to help students to create background knowledge about the reading material, also to help students to link among vocabulary terms in the reading material by connecting new information to prior knowledge. These were some considerations from the advantages of webbing strategy in the learning reading comprehension.

CONCLUSION

Based on the research finding and discussion in this study, it can be concluded that webbing strategy can give significant effect on the students' reading comprehension at the tenth grade of MAS Muhammadiyah Sei Apung Jaya. The effect of the result in this research is not only supported by the researcher, but it is also supported by several things. One of them is the students' enthusiasm. During the teaching and learning process, the students gave so much attention to the material given. The students were actively involved in the teaching and learning process so that the students' got many benefit from the treatment. For the students, This strategy is quite easy to use. This strategy can be used individually not only in school but also in home when doing their homeworks. For

the English teachers. It is become one of teacher duties to use various strategies in teaching English, not only fun strategy but suitable strategy. Webbing strategy is one of the suggested strategies by expert that can help to improve students' reading comprehension.

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