The Effectiveness of Webbing Strategy to Improve Reading Comprehension of college student at Mayjen Sungkono University

Yunita Dwi Wikandari *

Program Studi Manajemen Fakultas Ekonomi Universitas Mayjen Sungkono

*Koresponden penulis: Patriciayunita21@yahoo.com

Abstract

The study deals with the improving reading comprehension through webbing strategy of college student at Mayjen Sungkono University. Specifically, the study is aimed into (1) How is the effect of the webbing strategy to improve reading comprehension. The study is a quantitative research. The subjects of the study are first semester of college student at Mayjen Sungkono University. The data of the study are taken in the forms evaluation of the students’ reading comprehension scores of the experimental group and control group. The scores are obtained from the pre-test and the post-test. The appropriate procedure of data collection in application of webbing strategy in teaching reading comprehension encompassed the following steps: (1) tryout, (2) validity, (3) reliability, (4) find out the level of difficulty, (5) find out the discrimination power based on the text. Based on the analysis, the study shows that the effect to improve reading comprehension through webbing strategy is significant. Moreover, on the calculation of the t-test, the results show that there is a significant improvement in the student’s achievement after they got treatment using webbing strategy when studying reading comprehension in the classroom. The t-test indicates that score of the t-value is higher than t table (2.207 > 2.042). Here, the experimental group represents a better improvement after they received the treatment.

Keywords: Webbing Strategy, Reading Comprehension

INTRODUCTION

English is an international language among other languages. English plays an important role in this modern world. English functions not only as a language for science and technology, but also people use English as a means of communication in economic, politics, social, culture and trade, multilateral relationship, as well as for career growth. Since it has great importance in this global world, the Indonesian government, therefore, through its national curriculum focuses its goal at improving student’s ability in all skills in English, including the reading skill.

Reading is directed to activity that enables a reader to understand and gain what the text contains. As one of the language skills, reading contributes to the success of language learning together with the other skills. Reading enables students to find out information from an array of texts, ranging, from textbooks, newspapers, magazines, advertisement, brochures, and the like. Reading also enables students to know how English is actually used in printed and written forms. Hammer (1998: 68) states that reading is beneficial not only for careers, study, and pleasure, but also for language. Here, the teaching of reading is important for students with the basic reading skill in order to be able to gain information and knowledge from any reading text. He further states that reading provides good models for English writing and provides opportunity study language; vocabulary, grammar, punctuation, and the way to construct sentences, paragraphs and texts.

Reading is an important activity in every language. Reading enables people as readers to find out information from a variety of the texts, written or printed information from newspapers, magazines, advertisements, brochures, and so on. According to Djiwandono (1996: 62) reading is an important activity and becomes more important in this modern world, where the development
in every life aspect occurs very quickly. As a part of language skills in reading activity, the students are not only a reading the text, but also trying to understand what they are reading. Djiwandono (1996: 63) points out that to understand all types of information in a selection of the texts; it requires not only the reading activity, but also ability to understand the content, and able to comprehend a lot of information quickly, accurately, and easily.

After finding the students’ comprehension problems or difficulties in comprehending the texts, the researcher analyzes some causes of students’ reading comprehension difficulties by reflecting in teaching. The causes are described as a follows; first, the teacher usually teach students to comprehend the texts with monotonously. The teacher only asks the students to read a text and look up the difficult words in dictionary when they get difficulties in understanding vocabulary meanings. The teacher does not guide them how to find vocabulary meaning contextually. In fact, the students do not need to look up a dictionary then find vocabulary meaning contextually. Second, the teacher does not teach students on the way to remind the important detail information of a text by using certain strategies. Third, the teacher does not facilitate students with certain strategies in finding the meaning of vocabulary to comprehend the texts easily such as on how to find the topic of a text, purpose of the text, and main ideas of paragraphs of the text. Fourth, the teacher focus more on products than process of comprehending the texts in the forms of pre, whilst and post reading activities in order to have the goal of reading, understand the purpose of the text, and take out information as efficient as possible.

Based on its importance some methods and techniques have been developed on teaching and learning in order to construct a meaningful teaching and learning activity. It is a teachers’ duty to help their students to use specific cognitive strategies or to reason strategically when they encounter barriers in comprehending reading text. Duke and Pearson (2002: 215) also suggest some effective individual comprehension strategies on text such as prediction, text structure, visual representation on text, summarizing, and questioning.

One of the suggested strategies which can be used in teaching reading comprehension used visual representation of a text, namely webbing strategy. This strategy was expected to help the students found the vocabulary meaning in order to comprehend the text easily. Cooper (2000: 244) states that students can add background knowledge, making conclusion, prior knowledge, vocabulary learning in comprehending a text through concept webbing. It is consider as mean in any subject area to help students understand relationship and to build concepts about broad topics. 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. Zaid (1995: 1) defines that “students who use webbing, manifest considerable improvement in reading comprehension, written expression, and vocabulary development”. It is consider as a means in helping students to take notes more effectively and a good way to improve students’ thinking ability. Marinak, Moore, and Henk (1998: 81) acknowledge that webbing strategy can use to understand vocabulary terms, to connect new information to prior knowledge, and to help students in organizing information.

Webbing strategy is also well-known as concept mapping, mind mapping, semantic mapping, and text mapping that means to a simple process use for exploring topics and are complex-to make one, draw a circle, and add spokes radiating from it. Put your central idea or subject in the middle, and add subtopics or related ideas around it in any order.

The similarity between webbing strategy and semantic mapping is on the procedure. That is visualize representation about the topic and the relationship of the knowledge, how to recognize
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the vocabulary, main idea and supporting details of the text. And the difference between webbing strategy and semantic mapping is on the mapping, which is the mapping is hierarchical. Webbing is more free flowing and does not need to be hierarchical, or it calls that webbing is simplest than mapping.

These are further considerations from the benefits of webbing strategy in the learning reading comprehension. The webbing strategy helps the students to comprehend the texts in reading activities. In the pre reading, the strategy helps the students to activate their background knowledge and vocabularies about the topic through questions. The students gather information related with the topic and discuss the related vocabularies about the topic. Afterwards, they write the information down in the form of phrases in the webbing. Cooper (2000: 244) states that students can add background knowledge, making conclusion, prior knowledge, vocabulary learning in comprehending a text through concept webbing. In other word, through concept webbing the students are easy to understand the texts and more quickly to find the meaning of unfamiliar vocabulary.

In the post reading, the strategy helps students to increase their vocabulary and makes a summary of text they have read. The students see relationship among key words and the topics or the important detail information and the center of idea or main idea of each paragraph that has written in the webbing. (Tailor 1986: 206-207) states that webbing is an approach to summarizing that has been found to be effective. A web is different from a hierarchical summary in that is composed of important key words as an alternative of main idea and important detail sentences.

Considering the benefits of webbing strategy, the researcher thought that the cause of students’ reading comprehension problems of the texts can be solved by utilizing webbing strategy. Webbing strategy can also be assumed as an effective strategy to improve students’ reading comprehension ability.

Statement of Problem

Based on the background of the study, the problem which will be investigated in this study is formulated as follows:

(1) How is the effect of the Webbing Strategy applied to the students’ reading competence of college student at Mayjen Sungkono University?

Objectives of the study

On the basis of problems above, the objectives of this study is describe:

To find out whether there is a significant difference in reading comprehension through webbing strategy of college student at Mayjen Sungkono University?

LITERATURE REVIEW

2.1 The Nature of Reading

Reading is one of the language skills that play an important role in people life. Reading gives a foundation for children future learning (Belk 2000: 104). It can be concluded that people’s life and reading activity are closely related. (Hornby, 1990: 121) states that reading is means to understand the meaning of written or printed words. Besides, reading is also an activity where a complex performs occurs. In this case, reading does not only involve the skills in understanding the script but also the relationship between the scripts. Thus, reading does not only mean to interpret the script.
Reading includes discovering meaning in print and script, within a social context, through bottom-up model and top-down processing and the use of strategies and skills (Gebhard 1996: 197). Meanwhile, readers have different purposes for reading printed materials. River and Temperly in Nunan (1999: 251) suggest that there are seven main purposes for reading: (1) to obtain information for some purposes or because we are curious about some topics, (2) to obtain instructions on how to perform some task for our work or daily life (e.g., Knowing how an appliance works), (3) to act in a play, play game, and do puzzle, (4) to keep in touch with friends by correspondence, (5) to know where and when something will take place or what the text is talking about, (6) to know what is happening or has happened as reported in newspapers, magazines, reports, etc, (7) to read for enjoyment or excitement.

Besides, Harris and Spay (1980: 8) state that reading is the meaningful of printed or written verbal symbols. It is believe that reading comprehension is a result of the interaction between the perception of graphic symbols that represent language and the reader’s language skills and knowledge of the world. According to Strevens (1983: 109) reading is visual; this implies that reading has something to do with the eyes and printed matters. Also, he claims that reading is an organized and systematic activity dealing with written language that processes beginning and endings. In addition to that, it is also concern with arbitrary and abstract symbols, but also meaningful.

Other explanation states that reading is an active activity (Horsby 1986: 54). Reading is not a passive activity. The readers must rebuild the author’s meaning and can only do this by relating what they are reading to their own knowledge, experience, and emotions. This reconstruction develops and changes as new information acquired from the text.

2.2 The Models of Reading Process

Models of reading comprehension often describe the act of the reading as a communication event between a sender (the writer) and a receiver of information (the reader). Generally, language information flows from the writer to the reader in the sense that the writer has a message to send and transmit it through print to the reader who then must interpret its meaning. Reading models have been developed to describe the way readers use language information to construct meaning from a written text. (Hudson, 2007: 33) mentions that there are three categories: bottom–up, top-down, and interactive models. The brief explanation each type of reading models as follows.

2.2.1 Bottom-up Model

Bottom-up (text-based) processing occurs when linguistic input from the text is mapped against the reader’s previous knowledge (Silberstein 1994: 7). Furthermore, (Brown 2001: 298) defines that in bottom-up processing, readers must first recognize a multiplicity of linguistic signals (letters, morphemes, syllables, words, phrases, grammatical cues, discourse markers) and use their linguistics data processing mechanisms to impose some sort of order on these signals.

In accordance with it, Brown (2001: 299) affirms that the use of the linguistic data or a multiplicity of linguistic signals such as letters, morphemes, syllables, words, phrases, grammatical clues, and discourse markers to get understanding in a bottom–up processing. Since the process is triggered by graphic into embedded in print, the bottom-up models are described as being “data or text-driven processing” (Gebhard, 2000: 200 and Brown, 2001: 299).

In summary, the bottom-up model of the process of reading is that reading is a practice process as (text-driven) involving exact, detailed, sequential perceptions and identification of letters,
words, spelling patterns, structure and larger language units in a text. In other words, this model is recognizing the written symbols to achieve meaning from a text.

2.2.2 Top-down Model

Top-down, knowledge-based or conceptually driven information processing occurs when readers use prior knowledge to make predictions about the data they find in a text. Brown (2001: 299) states that this is where a complementary method of processing written text is imperative: top-down, or conceptually driven, processing in which we draw on our intelligence and experience to understand a text.

According to Cox (1999: 268) the top-down model, which is also called psycholinguistic model, was developed by Kenneth Goodman. This model emphasizes that information during reading is triggered by readers’ prior knowledge and experience in relation to the writer’s messages (Vacca et al., 1991: 20). The process is initiated by making predictions about the meaning of some units of print. To describe the tentative information processing readers do while reading.

In conclusion, town-down reading model is reading model with which readers make hypotheses and predictions about the text and confirm the efforts by working them down into the smallest linguistic units. In the top-down model the readers begin the process of reading comprehension from their understanding on the reading material as a whole then to the part of the text. The readers actively construct the meaning from reading material by guessing or predicting. The linguistics aspects and language components are cues for the readers in the construction of the meaning. In other words, meaning or comprehension is obtained by using only much information as necessary from the graphic, syntactic, and semantic cue system.

2.2.3 Interactive Model

The interactive model, the last model of reading process, interactive approaches to reading have focused on two concepts of interaction. First, it is the interaction of two types of cognitive skills, identification and interpretation. Second, it is interaction between a reader and a text. Fluent readers seem to simultaneously employ what have come to be known as lower level skills that allow them to rapidly and automatically recognize words (and presumably grammatical forms), while higher level skills allow them to comprehend and interpret a text. Lower level skills involve rapid and precise unconscious processing (automatically). In the class, we can assume that students are already relatively efficient at lower level processing.

Taking all into some considerations, the researcher decides to use interactive models in conducting the research. As it is explained previously, the model involves the readers’ recognition on graphic symbols, language skills, and background knowledge. However, the study only focuses on the last two factors: language skills and background knowledge.

2.3 Macro and Micro skills of Reading

Macro skills for reading comprehension based (Brown, 2001: 305) are 1) recognizing the rhetorical form of written discourse for interpretation, 2) Recognizing the communicative functions of written texts, 3) interfering context that is not explicit using the background of knowledge, 4) Distinguishing between literal and implied meanings, 5) Developing and guessing the meaning of words from context and activating schemata for the interpretation of the texts.

Micro reading skills are wide-ranging. Brown (2001: 307) offers some micro skills as follows: 1) distinguishing among the distinctive graphemes and orthographic patterns of English; 2) memorizing the phrases of language of different lengths in short-term memory; 3) reading the text
Each skill is similarly vital as each is interrelated. Each macro skill is made up of a combination of micro skills. Those micro reading skills have been operationally elaborated into some indicators as follows: reading aloud the text, reading the text fast, finding the meaning of difficult words or unfamiliar words, scanning and skimming the text, finding general idea, finding the main ideas of each paragraph, finding supporting idea/details, finding some pronoun reference to seek relationship the idea in the text.

RESEARCH METHODOLOGY

Design

The design of the research is experimental, (Johnson and Christensen 2008: 4) states that experimental research is research in which the researcher manipulates the independent variable and is interested in showing cause and effect. Here, the researcher used pretest - posttest both of experimental group and control group. Moreover, in accordance with the nature of the objective of this study this is to know the effectiveness of webbing strategy on such skill as an alternative technique of teaching reading to natural one.

Variable

There are two variables in this study. They were independent variable and dependent variable

Population and Sample

This research carried out college student at Mayjen Sungkono University on Jl. Irian Jaya No.30 Mojokerto district. The researcher chose to conduct a research in this university because she found a phenomenon which the students’ reading comprehension was still low. Based on the type of random sampling above, the researcher chooses the last type, which is the pure randomize. Because suitable with the students’ conditions and situations college student at Mayjen Sungkono University In this case, the writer took the sample through pure randomize was taken as control group and another one as an experimental group. The pure randomize was done toward the three class of first semester in college student at Mayjen Sungkono University which content of 120 students as a population. The result of random showed 30 students for experimental group and 30 students for control group.

Research Instrument

Research instrument is a device to get data. The data needed for this research was students’ reading comprehension through webbing strategy which was indicated by their scores of reading comprehension test. So, the type of instrument in this study was tests. The type of the test was objective one which content of reading comprehension texts. The tests were then administered three times; try-out test, pre-test and post-test.
Data Analysis

Procedure of Data Collection

Based on the theory, reading comprehension through webbing strategy, it is used for the experimental group, and reading comprehension without webbing strategy, it is used for the control group which has been discussed in detail. Those theories above are applicable to several important educational objectives.

The data of the present study is quantitative data in the forms of the students’ reading comprehension scores of the experimental group and control group. The scores are obtained from the pre-test and the post-test. The pre-test would administer in 90 minutes in order to find out the students’ entry point of both groups before giving the treatments. Like the pretest, the post test is administered in 90 minutes. The aim of giving the post-test found the students’ reading comprehension achievement after they received the treatments.

After administering the pre-test, the researcher constructs the try out session. Here, the testing instrument is reading comprehension test concerning the subject matter that has given during the experiment or treatment.

The tests used in the try out session also used for the pretest and the post test as long as the quality of the test accords the requirements for the pre-test and the post-test activity. Thus, to ensure that the test used in the tryout session complies with the requirement for pre-test and post test, the test items would justified following the evaluation of the reliability of the test, the validity of the test, and the levels of difficulty of the test.

Procedure of Analyzing the Data

Another thing that considered the item tests of pre-test and post-test are the same for both classes. The item tests are constructed by the researcher. Based on the given hypothesis, the researcher used the T test formula.

The analysis of the effectiveness of webbing strategy in reading comprehension achievement was done through several steps. First, the researcher took the score of the pretest and post-test from both of the experimental and control groups. This was followed by second step in which the two tests are marked and given the score following the scoring system that had been already set up.

The third step was determined the mean of the scores from those groups. It is calculated by divided the sum of all scores by the number of the students. The formula form:

\[ M = \frac{\sum X}{N} \]

Where:

M : mean
\( \sum \) : the sum of
X : scores in distribution
N : Number of subjects

Here, the means (M) of pre-test and post-test scores of the groups were compared to find out the progress before and after the treatments. If the mean score of pre-test was the same or higher than the mean score of post-test in the experimental group, it indicated that webbing strategy did not contribute to increase of the students’ reading comprehension. However, if the mean score of the post-test was higher than the mean score of pre-test in the experimental group, it showed that
webbing strategy had contributed positively to the increase of the students’ reading comprehension.

The last step was analyzing the students’ reading comprehension score of the pre-test of the experimental and control groups by using t-test, to know whether the subjects of the experimental and control groups had significantly different or equal level before the experiment was conducted. In addition, the similar statistic measure was applied to the students’ reading comprehension score of the post-test of the experimental and control groups to know to what extent was the difference between students who were taught through webbing strategy and those who were taught through conventional teaching reading activities.

\[
t = \frac{M_1 - M_2}{\sqrt{\frac{s_1^2}{N_1} + \frac{s_2^2}{N_2}}}
\]

where:
M1 : mean of experimental sample
M2 : mean of control sample
N1 : number of cases in experimental sample
N2 : number of cases in control sample
S1^2 : Variance of experimental sample
S2^2 : Variance of control sample (Best, 1981: 270)

Here, the variance was calculated by using the formula

\[
s = \sqrt{\frac{\sum(X-M)^2}{N-1}}
\]

Where :
S : standard deviation
X : individual score
N : the size of the sample (Best, 1981:270)

The analysis of the reading comprehension through webbing strategy was done through following steps.

**DISCUSSION AND CONCLUSION**

The results of the analysis of the data of this research indicate that the use of webbing strategy is “effective” to increase the students’ achievement in teaching reading comprehension for college student at Mayjen Sungkono University. This can be seen from the significant increase in the score of the post test for students in the experimental group, compared to the scores of the post test for the students in the control group who has not receive any treatment with webbing strategy.
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Graph 4.2.1: The Mean of Pretest Scores of the Experimental and Control Groups

It can be seen from the graph that the students’ scores in the pretest sessions, for both control and experimental groups, have no significant difference. In other words, the entry point for all students participating in this research is relatively similar, which means that they all have the same condition and characteristic. Besides, the writer also calculated these scores through a t-test. Here, the result of the calculation of the t-test shows that the t value is less than the t table (.281 < 2.042). It can be interpreted that there is no significant difference between the two groups (the experimental and control groups) before the treatment.

Graph 4.2.2: Mean (M) of the Post-Test Scores of the Experimental and Control Groups

It was stated previously that after completing pretest sessions, the students in both control and experimental groups were given treatment, the students in the experimental group has taught reading comprehension using webbing strategy, while those who are in the control group has taught without using webbing strategy (or conventional strategy). Upon the completing of the treatment for both groups, the writer then administered the post test sessions with the same test items for the two groups.

The attempt to identify the effectiveness of webbing strategy for increasing the students’ achievement in reading comprehension in this research is also conducted through the calculation of the t-test of the post test scores of the students in the experimental and control groups. The result of the calculation of the t-test value indicates that the t value is higher than the t table (2.207 > 2.042), which can be interpreted that hypothesis is accepted. In other words, that webbing strategy is found to be helpful and effective to improve the students’ achievement in reading comprehension, especially the students of senior high school.

Moreover, the results of the analysis of the students’ response to the application of webbing strategy in the teaching learning activities in the classroom provide a strong preference for the student’s study reading comprehension using webbing strategy. This can be seen from the finding that most of the students indicate their ‘strong agreement’ towards the usefulness and effectiveness.
of the use of the webbing strategy for teaching them reading comprehension in the classroom. This means that the students found webbing strategy for studying reading comprehension which is intended to increase their reading achievement.

On the basis of the research findings and discussion elaborated in the preceding chapters, some conclusions are drawn; first, webbing strategy has been an effective way in the pre reading phase since it can stimulate the students’ prior knowledge (schemata). By creating a webbing strategy based on the students’ schemata, the students have prepared with the topic to be read or discussed.

Second, webbing strategy in the while reading phase has helped the students to record the information obtained from the text. By making webbing strategy while reading a text, the students’ are equipped with a technique to relate their prior knowledge with the new information. Third, through webbing strategy in the post reading phase provides the students with an overall description about the text and it has helped the teacher assess the students’ comprehension the text.

Finally, webbing strategy is effective in improving the students’ reading comprehension. The achievement on the students’ mean score proves that the strategy is advantageous for the students.

RECOMMENDATIONS

This researcher has found out that webbing strategy is an effective teaching strategy that can be used to increase students’ achievement in reading comprehension. Thus, it is worth suggesting here that the application of webbing strategy may be strengthened and improved. First, it is suggested that the reading teachers who have similar problems in teaching reading can apply webbing strategy being developed in this research as one of their strategies in teaching reading in their classroom. It is also, for institution, webbing strategy can be new strategy that can improve the students’ reading comprehension ability of college student at Mayjen Sungkono University. Finally, for further researcher, it has expected that the research result can be significant evidence to provide details about the implementations of a particular strategy in reading classes by using webbing strategy in experimental research. Thus, it can be their reference in conducting in the same strategy.

REFERENCES


McDonald & Hershman. 2010. Classrooms That Spakr!. San Fransisco: Jossey-Bass


Tailor, B.M. 1986. “Teaching Middle Grade Students to Summarize Content Textbook Material”. In J.F. Baumann (Ed), *Teaching Main Idea Comprehension*. (pp. 195-209). Newark, Delaware: International Reading Association
(http://olc.spsd.sk.ca/de/pd/instr/strats/webbing/index.html)
http://web.clas.ufl.edu/users/pcraddoc/minkc1.htm
http://www.youthlearn.org/learning/teaching/techniques/webbing/webbing
http://serafini.nevada.edu