

THE INFLUENCE OF USING SEMANTIC MAPPING ON THE STUDENTS' READING COMPREHENSION.

Wiwied Pratiwi

Institut Agama Islam Ma'arif (IAIM) NU Metro

Email: mei201448@gmail.com

Abstrak

Tujuan penelitian ini adalah untuk mendeskripsikan penggunaan Semantic Mapping pada pemahaman membaca siswa di kelas XI SMA TMI Roudlatul Qur'an Metro, in the Tahun Ajaran 2014/2015 . Penelitian ini merupakan penelitian Experiment Murni. Data yang diambil berasal dari nilai pemahaman membaca. Tes yang digunakan adalah tes pilihan ganda dengan empat opsi jawaban (A,B, C, D) Penelitian ini menggunakan kelas pretest dan posttest baik dalam kelas kontrol maupun kelas eksperimen.materi yang ditekankan berupa materi pemahaman membaca.hasil akhir menyatakan bahwa Semantic Mapping adalah salah satu metode yang efektif untuk menambah pemahaman membaca siswa dengan melihat hasil pretest pada kelas eksperimen 58,83 dengan rata rata posttest 77. Sedangkan pada kelas kontrol hasil pretest 61,36 dan hasil posttest nya 69,84.standar KKM yang dicapai pada kelas eksperimen(93,3%) dan pada kelas kontrol (66,7%). Artinya hasil yang dicapai pada eksperimen kelas lebih tinggi daripada hasil dari kelas kontrol.

Semantic Mapping teknik bisa menjadi alternative pilihan dari pembelajaran Pemahaman Membaca. Khususnya bagi siswa kelas XI SMA TMI Roudlatul Qur'an Metro. Tahun Ajaran 2014/2015.

Keywords: Reading, Semantic Mapping.

A. INTRODUCTION

Reading English text is important for us, because by reading, the students get knowledge and information, but, for having a good reading is not easy thing, the student need

more understanding about main ideas of the reading text. after reading a lot of books about reading, it can be found find that there are many expert who define reading based on their own research. Reading is the meaningful interpretation of printed or written verbal symbols. Based on that statement above, reading is not only read, but also needs thinking and our language skills, moreover, reading (especially for English text) without using that skill, someone will get misunderstanding in comprehending what the author message on the reading.

In Oxford Advanced Learner's Dictionary the word of semantics is defined as branch of linguistics concerned with studying the meanings of words and sentences.¹ Semantic is the technical term used to refer to the study of meaning, and, since meaning is a part of language, semantics is part of linguistic.² The sense of mean is basically as a form of cognitive knowledge in the language and structured in language that is understood by the system of more or less equally by speaker in the communication and activities in generally and normally.³

About mapping, Novak and Gowin argue that concept mapping are graphical tools for organizing, representing, and sharing knowledge.⁴ It mean that semantic mapping is a strategy for graphically tools of study knowledge to representing a conceptual relationship meaning.

Saule Raiziene and Bronislava Grigaitė state that semantic mapping is a cognitive strategy in which information is categorized structure in a graphic or visual form.⁵ It means that semantic mapping is easy strategy to visually organize of information with drawn graphic.

In addition, Ernest state that semantic mapping contains nodes, drawn as circles, squares, triangles, each of which

¹ A.S, Hornby, *Oxford advance learner's dictionary*, Oxford University Press., New York. p.775

² E.R. Palmer, *Semantic second edition*, Cambridge university pers. 1981

³ Hasan Alwi and Sugono, *Telaah bahasa dan sastra*, Pusat Bahasa. 2002. p.112

⁴ http://webserver.ignov.ac.in/institute/stride_Hb8_webcd/chapter22.pdf

⁵ Edgar Krull, *Theory and practice in today's teacher education*, Trames; Journal of the Humanities and Social Sciences, Vol 9, No 2, 2005. p.192

contains key words.⁶ It means that semantic mapping is technical term used to categorization of concepts and representation of those concepts by classifications in visual knowledge with drawn circles, square, and triangles, which contains key words.

Moreover, Heimlich and Pittelman explain that semantic mapping is graphic displays of words meanings that offer students a visual representation of how words and concepts are related through a network of organized knowledge.⁷

Based on the quotations above, it can be inferred that semantic mapping is a graphic arrangement showing the major ideas and relationships in text or among word meanings designed to graphic and visual relationship of concepts or ideas. The semantic mapping has essentially two aspects: visual and conceptual. A visual semantic map is made up of forms, such as circles, triangles, etc. A conceptual semantic mapping contains verbal information inside and between the forms, which represents relationship between words or ideas. Thus semantic mapping is one way of representing and communicating one's understanding of concepts. Semantic mapping is designed to have students prepare and share new knowledge of the words, phrases, sentences, paragraphs, text, or discourse they have learned with a partner, other groups, or individuals during centers'.⁸ It means that semantic mapping strategies presented here can be used with individuals, small groups, or even the entire class. Semantic mapping can also be introduced by inviting students to write important information on separate index cards, slips of paper, or sticky notes.

Semantic mapping as visual categorization of information serve a number of purposes. First, if one person show to another how relationship between may be represented using semantic mapping, she or he reveal to categorize, relate, and

⁶ Ernest Balajthy, *Struggling readers: assessment and instruction in grades k-6*, The Guilford Press. 2003

⁷ Patricia A. Antonacci and Catherine M. O'Callaghan, *40 Strategies for Middle and Secondary Classrooms*, Developing Content Area Literacy. 2011

⁸ Killie Buis, *Making words stick: strategies that build vocabulary and reading comprehension in the elementary grades*, Library and Archives. Canada. 2004

organize ideas.⁹ It means that semantic mapping helps students develop prior knowledge by seeing the relationships in a given topic. And also helps students to visually organize information and can be an alternative to note taking and outlining.

When teaching the process of mapping to students many times before they can do it independently. Model step by step process during the read aloud or picture study before having students work with them independently as a centre activity. Some students will need only a few demonstrations to be able to create a map from key words of a story of their choice. Others will need many examples and a carefully selected level of text to be successful. When creating a map, use words the students are familiar with. And they can apply their semantic mapping to more challenging vocabulary.

1. The Procedure of Semantic Mapping

The semantic mapping strategy is most effective when it is used before, during, and after reading and when the teacher serves as the guide or facilitator to the students who construct their own semantic mapping. Therefore, this step by step procedure is designed for using semantic maps as a strategy at different phases of reading informational text.¹⁰

a) Before Reading

Prior to reading the text, the teacher examines the text to be read and carefully selects the key words to be learned that are critical for understanding the text and the lesson.

- 1) The teacher introduces the selected content words using the semantic word map and guided discussion.
- 2) Using chart paper, the blackboard, or software program with graphics tool, draw or project the word map so that it is visible to the students. Write the topic or main concept in the center of the map.
- 3) Distribute semantic maps to the students.
- 4) Begin the pre-reading discussion that focuses on the content words. As students respond to concept-related questions, write the word and student's

⁹ Edgar Krull, *op.cit.*, p.193

¹⁰ Patricia A. Antonacci and Catherine M. O'Callaghan, *Op.cit.*

meanings and response on the map and direct students to do same.

- 5) When students fail to respond to the concept related questions, the teacher should offer a contextual definition of the word that facilitates students' understanding of the text.¹¹

b) During Reading

As students read, they use their semantic maps to add to the meaning of the words

- 1). Before directing the students to read the assigned text, the teacher provides a quick review of the key words.
- 2). The teacher instructs students to add additional information from their readings to clarify the meanings of the key words. She encourages the students to note additional words that further explain the ideas from their readings.
- 3). As students read, the teacher reminds students to write down questions about words that need classification.¹²

c) After Reading

The teacher engages students in an extended discussion on their readings, focusing on the content words and their meanings

- 1). The teacher directs the students to use their semantic maps during the discussion of their reading. She engages students in a discussion that further promotes and deepens their understanding of the content words by building on their conceptual knowledge.
- 2) As the students discuss the reading and use the map as their guides, the teacher directs them to clarify the information that they gleaned from their readings.
- 3) The teacher guides the discussion with questions that will help students to further understand what

¹¹ Patricia A. Antonacci and Catherine M. O'Callaghan, *Op.cit.*

¹² Patricia A. Antonacci and Catherine M. O'Callaghan, *Op.cit.*

they have read. As the students respond to the questions, the teacher notes their responses on the large semantic map as they take additional notes on their own maps.¹³

2. The Advantages and Disadvantages of Semantic Mapping

Maps are useful for describing we already know about a subject. It can help to improve the transfer of knowledge for one area or discipline to another and teacher created maps can be especially helpful in getting an overview of a topic or even a whole course.

Semantic maps provide the additional benefit of helping students visualize how word meanings can be categorized. Mapping is also an effective technique for teaching reading skill and textual patterns of organization, and it is effective for improving note taking and creative thinking skills. Semantic maps as a strategy to allow students to record what they are learning during the assignment. The semantic mapping technique as being used to motivate and involve students in the thinking, reading, and writing aspects. It enhances vocabulary development by helping student link new information with previous experience

However mapping is an acquired skill, which can take a several hour of training before we are able to use it. It is not necessarily an intuitive. Semantic maps providing students with a systematic means to integrate their new knowledge with their prior understanding, activating students prior knowledge and stimulating them to use that knowledge to interact with the text and promoting semantic mapping as a pre reading activity that encourages students to map out their ideas. It need several time to teach it.

Based on explanation above, it can be known that when semantic mapping is used as pre reading strategy, its help to activate student's prior knowledge. Further, the teacher may use the students' pre reading semantic maps to determine how much knowledge building is required before students read the text. When semantic mapping as a post reading instructional strategy, teachers guided students' discussions to help them recall and organize information that

¹³ Patricia A. Antonacci and Catherine M. O'Callaghan, *Op.cit.*, p.20

they have learned from reading text as they make connections to words or concepts related to the topic. Semantic mapping is a process or a method about how to understanding a student reading text with visualizing word meaning. It is communicative language teaching. The teacher may lead a semantic mapping activity prior to reading to introduce key terms, activate prior knowledge, and as a reassessment. Alternatively, semantic maps may also be used after reading to summarize and review key terms and ideas and to informally assess student understanding. Therefore the implementation of semantic mapping in teaching learning is strongly needed and the student or the learner will feel that they are always being observed by the teacher, and as the result, the learner or the student will follows and participate the lesson seriously. In the other word, the function of teacher in the process of teaching learning is a director, facilitator, moderator and motivator of learning. When the teacher provides a new lesson about reading text, the teacher must be able to make the student understand what the text mean. So the teacher used to motivate and involve students in the thinking, reading, and writing aspects.

The objective of his research is to find out the influence of the using of Semantic Mapping On The Students' Reading Comprehension for the eleventh graders of SMA TMI Roudlatul Qur'an.

The purpose of reading activity is looking at the text and trying to understand its message, so that the reader can catch the explicit and implicit information from the reading text, the complex processes involved in reading comprehension are divided into three categories. The categories include vocabulary instruction, text comprehension instruction, and teacher preparation and comprehension strategies instruction.¹⁴

In fact to gain the aim of reading comprehension is not done by the student only, but the English teacher have play to play a part a facilitator and motivator to guide the student to comprehend the English reading passage that is thought by the teacher because it is impossible for the student to master this ability without helping from the English teacher.

¹⁴ <http://www.literacy.uconn.edu/compre.htm#vocab>

Referring to the importance of reading some experts define reading with different points of view. Reading Anthony, Pearson, and Raphael in Thomas's book state that "reading is the process of constructing meaning through the dynamic interaction among the reader's existing knowledge, the information suggested by the written language, and the context of the reading situation".¹⁵

Reading English text is important for us, because by reading, the students get knowledge and information, but, for having a good reading is not easy thing, the student need more understanding about main ideas of the reading text. after reading a lot of books about reading, it can be found find that there are many expert who define reading based on their own research. Reading is the meaningful interpretation of printed or written verbal symbols.¹⁶

Based on that statement above, reading is not only read, but also needs thinking and our language skills, moreover, reading (especially for English text) without using that skill, someone will get misunderstanding in comprehending what the author message on the reading.

The purpose of reading activity is looking at the text and trying to understand its message, so that the reader can catch the explicit and implicit information from the reading text, the complex processes involved in reading comprehension are divided into three categories. The categories include vocabulary instruction, text comprehension instruction, and teacher preparation and comprehension strategies instruction.¹⁷

In fact to gain the aim of reading comprehension is not done by the student only, but the English teacher have play to play a part a facilitator and motivator to guide the student to comprehend the English reading passage that is thought by the teacher because it is impossible for the student to master this ability without helping from the English teacher.

¹⁵ Thomas S.C Farrell, *Planning Lessons for a Reading Class* (Singapore: SEAMEO Regional Language Centre, 2002), p.1

¹⁶ Albert J. Harrs and Edward R. Sipay, *How To Increase Reading Ability.*, p.12

¹⁷ <http://www.literacy.uconn.edu/compre.htm#vocab>

Hence, the English teacher have to give the reading material step by step, from easy into medium material then complicated material.

3. Factors in Reading Comprehension

Reading is an interactive process involving what is in the reader's head and what is on the printed page.¹⁸ Reading comprehension involves much more than readers' responses to text. In reading comprehension have two factors involved the reader's prior knowledge, and text coherence and structure.

a. Prior Knowledge

Prior knowledge is defined as all information an individual has in her or his long-term memory.¹⁹ Prior knowledge is an important factor that the readers must have in reading to get new information. Moreover, according Adams and Bruce, "comprehension is the use the prior knowledge to create new knowledge, without prior knowledge, written material would be meaningless".²⁰ It means that prior knowledge is very important in reading to get meaning of passage.

b. Text Coherence and Structure

The readers and how text is written should be attention in reading comprehension. A good text, there is relationship between one paragraph and another that has logical connection and coherent, so the readers can comprehend text easily.

Text structure has purpose involved how the ideas in a text are interrelated to convey the author's message to the reader. Text structure specifies the logical connection among ideas. Text structure may be analyzed at three primary levels: 1). the sentences level, 2). the paragraph level, 3). the top level structure.²¹ It means that text structure has logical connection among ideas in order to the readers can understand the author's purpose.

¹⁸ Albert J. HARRIS and Edward R. Sipay, *Op.Cit.*, p.479

¹⁹ Albert J. HARRIS and Edward R. Sipay, *Op.Cit.*, p.480

²⁰ Albert J. HARRIS and Edward R. Sipay, *Op.Cit.*

²¹ Albert J. HARRIS and Edward R. Sipay, *Op.Cit.*, p.485

4. The influence of Semantic Mapping on Reading Comprehension

Lim et. all state that the use of semantic maps allows the learner to create an understanding of the world by making connection, by creating links, by exploring and testing links, a basic process of all creative thinking.²² Using semantic maps is a popular technique among reading teachers. The maps improve students' reading comprehension by showing them not only how vocabulary words are related to each other in some conceptual, but also how the ideas in texts are organized in associative ways. Mapping is a cognitive strategy that the teacher conceptually organizes the text for student use.

Moreover, Antonacci state that semantic maps are most effective when (a) they are used with teacher guided discussion before, during, and after reading a text; (b) teacher select a few critical key words to be taught; and (c) students are actively engaged in constructing their word maps through participating in lively discussions on the conceptual nature of words.²³

B. DISCUSSION OF THE RESEARCH

1. Research Design

According to Kumarsingh, research design is a choice of an investigator about the components of his project and development of certain components of the design.²⁴ This research is an experiment research which would be conducted a quantitative; it would be held in SMA TMI Roudlatul Qur'an Metro. The researcher would investigate the eleventh graders in the academic year of 2014/2015.

2. Population and Sampling Technique

a. Population.

²² Lim et.all, *Early Child Development and Care*, Hongkong institute of education, 2003

²³ Patricia A. Antonacci and Catherine M. O'Callaghan, *Op.cit.*

²⁴ Yogesh Kumarsingh, *Fundamental of Research Methodology and statistics*, New Delhi, New Age International (P) Limited, 2006, P. 86.

Population or universe means the entire mass of observation, which is the parent group from which a sample is to be formed.²⁵ It means that the population was all subject that would be observed in this research.

The population of this research is the eleventh graders of SMA TMI Roudlatul Qur'an Metro. The researcher would investigate the eleventh grader in the academic year of 2014/2015. The total population in this research was about 159 students, which are divided into five classes.

Bellow was the data of the population:

Table, 2

The quantity of eleventh graders of SMA TMI Roudlatul Qur'an Metro
in the academic year of 2014/2015

No	Class	Gender		Data
		Male	Female	
1	XI IPS 1	20	13	33
2	XI IPS 2	19	14	33
3	XI IPA 1	12	18	30
4	XI IPA 2	11	22	33
5	XI IPA 3	11	29	30
Total students		73	86	159

Source: Documentation of SMA TMI Roudlatul Qur'an Metro

b. Sampling Technique.

In this research, the researcher will be used cluster sampling in take sample. Cluster sampling is sample units contain groups of elements (cluster) instead of individual members or items in the population.²⁶

The population of this research was the eleventh graders of SMA TMI Roudlatul Qur'an Metro, in the academic year of 2014/2015. There were five classes that consist of 159 students.

²⁵.Ibid, P. 82.

²⁶ Yogesh Kumar Singh, Op.Cit., p.86

In order that in deciding the experiment class, the researcher uses cluster sampling, and decide that class XI IPA 1 as an experiment class and class XI IPA 2 as a control class. Experiment class as the class that used semantic mapping in teaching reading process, and control class as the class that not used the semantic mapping in teaching reading process, and all of this action was to know whether using semantic mapping has significant influences on the students' reading comprehension.

3. Operational Definition Of Variable

Operational definition is the definition which based on the characteristic of the things that would be defined, and it can be observed or measured²⁷. Based on the statement, the operational definition of variable in this research was:

a. Independent Variable

The independent variable in this research is semantic mapping which is defined as an understanding of the words meaning by making connections, by creating links, by exploring and testing links as a basic process of creative thinking. Thus, creating a semantic map is one way of representing and communicating one understands of concepts.

Furthermore, based on the theoretical review, the indicators of semantic mapping in teaching reading of the eleventh graders of SMA TMI Roudlatul Qur'an Metro in the academic year of 2014/2015 are:

- 1) Clarity, Clarity refers the clarity of the content knowledge reflected in the semantic maps drawn by the students and teacher as well as clarity of structure of the maps for representing content knowledge.
- 2) Relevance, Relevance refers to the appropriateness of the content knowledge in the map as related to the subject areas.
- 3) Integration and organization, refers to the overall quality the map in reflecting the complexity of the relationship among the concept portrayed in the map.

²⁷ Edi Kusnadi, *Methodologi Penelitian*, Metro:STAIN, Metro, 2008, P. 29

- 4) Creativity refers to the extent which students and teacher has used creative ideas or structures to represent content. Moreover based on the theoretical review, to measure the researcher gives semantic mapping as a treatment in teaching reading comprehension lesson.

b. **Dependent Variable**

Dependent Variable in this research is the reading comprehension which is defined as the process of reading activity to get clear information about the topic. To get it, the readers need comprehend text and the readers must recognize word, so they can understand text easily. It means that the students reading comprehension are the students understanding about the content of reading text that the teacher has given it to them. It can be known that, the indicators of reading comprehension in:

- 1) Getting ideas
- 2) Understanding meaning
- 3) Identifying new words

To measure reading comprehension text, the researcher gives a pretest and posttest to the students. Both pretest and post test give 20 items to the students as the test. The score of each question is 5 point for right answer, and 0 for false answer. So, the highest score is 100 and the lowest score is 0.

4. Data Collection Method

a. **Test**

Test is sequence of statements or questions using to measure skill, knowledge, intelligence, ability, or talent which have by individual or group.²⁸ The test will be arranged by using multiple choices. It consists of 20 items. The score of item is 2 for the true answer. This method is used to measure the use of semantic mapping technique on the reading comprehension by pre-test and post-test.

Pre-test and pot-test is to know students' reading comprehension. Pre-test was done to know students' reading comprehension before treatment and post-test

²⁸ Edi Kusnadi, *Op.Cit.*, p.90

was given to know students' reading comprehension after treatment. The test was given to the students at the eleventh graders. The test is a primary method in collecting the data.

b. Documentation

The instrument would be used for documentation. It can be defined that documentation is as the method which is used to get information from written language/documentation (for example: book, magazine, note, ect).

The researcher uses the documentation method to get detail information about condition of the teacher, employers, and organization structure of SMA TMI Roudlatul Qur'an Metro in the academic year of 2014/2015

c. Observation

Observation is the data collection method that has purpose of observation is to explain the situation that we examine, the activities that occur, the individuals involved in an activity and the relationship between situations, between activities and between individuals.

The researcher uses this method to get detail information and the process of the events whiles the research at SMA TMI Roudlatul Qur'an Metro in the academic year of 2014/2015.

5. Research Instrument

Suharsimi Arikunto defines instrument as the tool of research which is used in each method.²⁹ Furthermore, the researcher instrument involves:

a. Instrument Blue Print

Instrument in this research is designed and adjusted with the indicators which have been specified. Moreover, research instrument which will be used in this research is the test form.

Furthermore, there are two tests in this research. The first is pre test and the second test is post test.

b. Instrument Calibration

²⁹ Suharsimi Arikunto, *Op. Cit.*, P.26

Instrument is the scale of measurement which will be used to decide the instrument standard will be used. Furthermore, instrument calibration is screening or examination of items of instrument that made by the researcher.³⁰ From the quotation above, it can be inferred that the instrument calibration is the scale of measurement which will be used to screening or examination of items instrument that made by researcher. Furthermore, the researcher used to the standard for test instrument as following:

There are two steps of test. These are pre-test and post-test. The researcher used the objective test. It is multiple choices test which consists of four options for each answer (A, B, C, and D). Multiple choices test is used since its marking is rapid, simple and most important are reliable. The material will be tested is reading comprehension. The researcher used 20 items for pre-test and 20 for post-test. The score of each question is 5 point for right answer, and 0 for false answer. So, the highest score is 100 and the lowest score is 0.

c. Validity

Kusnadi said that “construct validity (logical validity) demonstrates that the arranged instrument is based on theoretical construction about the measured factors in the research variable.³¹ It means that construct validity or logical validity is used to evaluate if the instrument have fulfill the theoretical of variables.

Testing of validity of the test instrument in this research use excel counting validity. Then, the researcher analyzed by using the formulation of Product Moment. The formula as follow:

$$r = \frac{(N \cdot \sum XY) - (\sum X)(\sum Y)}{\sqrt{\{(N \cdot X^2) - (\sum Y)^2\} \{(N \cdot \sum X^2) - (\sum Y)^2\}}}$$

d. Reliability

³⁰ Team of STAIN, *Pedoman Penulisan Karya Ilmiah*, (Metro: STAIN Jurai Siwo Metro, 2010), p.33

³¹ Edi Kusnadi, *Op.Cit.*, p. 107

Kusnadi states that “reliability is the index which demonstrates that in what level instrument can be trusted or can be pledge.”³² In order word, reliability directs to the level of reliability of thing. It means that, if the instrument is reliable, the result data will be trusted or reliable.

In this research, the researcher tried out the instruments first before used on real sample to keep its reliability. The items of the test were analyzed use Alfa Coefficient from Cronbach formulation. The formula as follow:

$$r_{11} = \frac{k}{k-1} \left(1 - \frac{\sum \sigma_b^2}{\sigma_t^2} \right)$$

6. Data Analysis Technique

To investigate whether there is influence of the using semantic mapping technique on the students’ reading comprehension at the eleventh class of SMA TMI Roudlatul Qur’an Metro, the researcher analyzes the data using t-test.

The formulation of t-test:³³

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left(\frac{S^2}{N_1}\right)\left(\frac{S^2}{N_2}\right)}}$$

Where :

T : t-test.

\bar{X}_1 : Average score of the Experiment class.

\bar{X}_2 : Average score in the Control class.

S^2 : Variants of population

N_1 : Number of students in the experiment class.

N_2 : Number of students in the control class.

C. THE RESULT OF THE RESEARCH

The findings of the study indicate that there are statistically significant differences between the

³² Edi Kusnadi, *Op.Cit.*, p. 128

³³ Marzuki, et.al, *Statistik Terapan*, (Yogyakarta: Gadjah Mada University Press,2000), p.183

experimental group and the control group. The mean scores of the students in the experimental group on the reading comprehension achievement post-test is 77. It is considered higher than the mean scores achieved by the students in the control group which is only 69.84. The t-value calculated on the t-test is 2.582 showing a significant difference at ($\alpha=.05$) as illustrated in table 16. Consequently, the null hypothesis "That there is no statistically significant differences at ($\alpha=.05$) between the experimental and the control group which can be attributed to the semantic mapping strategies" is rejected while the alternative one " that there is statistically significant differences at ($\alpha=.05$) between the experimental and the control group which can be attributed to the semantic mapping strategies" is accepted. The researcher observes how enthusiastic students were with this way of teaching reading. They were very active to the extent that they started giving their suggestions to develop the map. One of their suggestions is to include the good things and the bad things of the characters and how they should behave in the text. Their suggestions were unexpected and great. Students become familiar with the nature of the semantic maps, they can create their own as a during-reading or post-reading activity. Its found t-observed (2.582), and the stipulation of hypothesis testing is that, if the t-observed higher than t-table, H_a is accepted and H_o is rejected and on the other way t-observed smaller that t-table, H_a is rejected and H_o is accepted.

To know whether hypothesis is accepted or rejected. The reseacher frstly counted degree of freedom. To know the critical value of t-test (t-observed), the researcher firstly counted df. df is Degree of Freedom.

After considering the t-test table by using df 61, the researcher not found it in t-table. So, it is done interpolation because 61 are higher that 60 and smaller that 120.

Table 16
Critical Value of t-table

	5%	1%	0.1%
d.f	2.000	2.660	3.460

60			
d.f 120	1.980	2.617	3.373

	5%	1%	0.1%
<u>d.f 60 +</u>	<u>2.000 +</u>	<u>2.660 +</u>	<u>3.460 +</u>
<u>d.f 120</u>	<u>1.980</u>	<u>2.617</u>	<u>3.373</u>
2	2	2	2
	= 1.990	= 2.638	= 3.416

From all data analysis above, it can be known that:

t- observed = 2.582

t- table = 1.990 (5%), 2.638 (1%) and 3.416 (0.1%)

The data confirm that t-observed is higher than t-table. Therefore, it can be inferred that H_a is accepted and H_o is rejected. It means that there is significant influence of Semantic Mapping Technique on the students' reading comprehension at the eleventh grades of SMA TMI Roudlatul Qur'an Metro in the academic year of 2014/2015.

1. CONCLUSION AND SUGGESTION

Semantic mapping technique can be as alternative choice in learning reading comprehension, It can be seen from the critical value "t-observed" was 2.582, so that it was higher than t-table (0,05, df 61) = 1.990, (0,01, df 61) = 2.638. Therefore, it can be inferred that the Hypothesis alternative (H_a) of this research is accepted. It means that there is influence of using semantic mapping technique on the students' reading comprehension at the eleventh graders of SMA TMI Roudlatul Qur'an Metro .Based on the analysis and the result of this research, the researcher concluded that semantic mapping technique is the good technique in teaching reading process at the eleventh graders of SMA TMI Roudlatul Qur'an Metro , because it can influence the students reading comprehension.

The semantic mapping as an effective technique in reading comprehension that can influence the students

reading comprehension. This case can be seen from the result of pre-test and post-test. In the pre-test, average score of experiment class was 58,83. And the average score of post test was 77. Meanwhile, the control class got average in pre-test was 61.36, while in post-test was 69,84. Most of students in control class (66.7%) and in experiment class (93.3%) students who have reached minimum standard. It means that the result of experiment class was higher than control class.

Semantic mapping technique can be as alternative choice in learning reading comprehension, It can be seen from the critical value “t-observed” was 2.582, so that it was higher than t-table $(0,05, df 61) = 1.990$, $(0,01, df 61) = 2.638$. Therefore, it can be inferred that the Hypothesis alternative (H_a) of this research is accepted. It means that there is influence of using semantic mapping technique on the students’ reading comprehension at the eleventh graders of SMA TMI Roudlatul Qur’an Metro.

the research, it can be concluded that Semantic Mapping is an effective technique to teach reading at the eleventh graders of SMA TMI Roudlatul Qur’an.

2. SUGGESTION

Considering the discussion of the research which was conducted at the eleventh grade students of SMA TMI Roudlatul Qur’an Metro in the academic year of 2014/2015, the researcher proposes suggestion as follow:

a. For the teachers:

The teacher should give some guidelines to help students in the reading process. And also the teacher should choose the suitable technique in teaching English especially in reading class in order that the student can understand the material delivered by the teacher, because by an effective technique in teaching learning, it can automatically improved the student motivation in learning process and it can make them try the best effort to accepting the material taught by the teacher.

b. For the students:

- 1) The students should be more active in learning English, if they do not understand about their lesson delivered by their teacher, they should ask to the teacher.
 - 2) The students should choose the best strategy and technique in reading that enable they can comprehend text more easily.
 - 3) The students should be able to concentrate more to comprehend text.
 - 4) Encouraging students to read stories and make maps following the general semantic map.
 - 5) Encouraging students to gather ideas and develop them in a well organized concept maps.
- c. For the school
- 1) The researcher greatly expects that this research can give contribution for the school, such as a reference for further studies in learning reading comprehension.
 - 2) The school is recommended to make further studied in applying semantic mapping in learning reading comprehension text, so the students can concentrate more when reading because the classroom is quite situation.

REFERENCES

- A.S, Hornby, *Oxford advance learner's dictionary*, Oxford University Press., New York. p.775
- Antonacci, Patricia, A. and Catherine M. O'Callaghan, 2011, *40 Strategies for Middle and Secondary Classrooms*, United States: Developing Content Area Literacy.
- Balajthy, Ernest, 2003, *Struggling readers: assessment and instruction in grades k-6*, The Guilford Press.
- Brown, H. Douglas, 2001, *Teaching By Principle*, San Francisco: San Francisco state university
- Buis, Killie, 2004, *Making words stick: strategies that build vocabulary and reading comprehension in the elementary grades*, Canada: Library and Archives,
- Cooper, J. David and Nancy D. Kiger, 2009, *Literacy: Helping Students Construct Meaning*, 7ed. Houghton Million Company.

- E.R. Palmer, 1981, *Semantic second edition*, Cambridge university pers.
- Edgar Krull, 2005, *Theory and practice in today's teacher education*, Trames; Journal of the Humanities and Social Sciences, Vol 9, No 2.
- Edi Kusnadi, 2008, *Methodology Penelitian*, Metro: STAIN jurai siwo metro,
- Ernest Balajthy, 2003, *Struggling readers: assessment and instruction in grades k-6*, The Guilford Press.
- Farrell, Thomas, 2002, *S.C Planning Lessons for a Reading Class*, Singapore: SEAMEO Regional Language Centre,
- Gillet, Jean Wallace and Temple, Charles, 1994, *understanding reading problems*, 4ed. HarperCollinsCollegePublisher.
- Harris, J Albert and Edward R. Sipay, 1984, *How To Increase Reading Ability*, New York & London: Longman,
- Hasan Alwi and Sugono, 2002, *Telaah Bahasa dan Sastra*, Pusat Bahasa.
- Hasan Alwi and Sugono. 2002, *Telaah bahasa dan sastra*, Pusat Bahasa. p.112
- http://webserver.ignov.ac.in/institute/stride_Hb8_webcd/chapter22.pdf
- <Http://www.Literacy.Uconn.Edu/Compre.Htm#Vocab>
- Http://Www.Webserver.Ignov.Ac.In/Institute/Stride_Hb8_Webcd/Chapter22.Pdf
- Killie Buis, 2004, *Making words stick: strategies that build vocabulary and reading comprehension in the elementary grades*, Library and Archives. Canada.
- Krull, Edgar, 2005 *Theory and practice in today's teacher education*, Trames; Journal of the Humanities and Social Sciences, Vol 9, No 2,
- Kumarsingh, Yogesh, 2006, *Fundamental of Research Methodology and statistics*, New Delhi, New Age International (P) Limited.
- Palmer, E.R, 1981, *Semantic second edition*, Cambridge university pers.
- Patricia A. Antonacci and Catherine M. O'Callaghan, 2011, *40 Strategies for Middle and Secondary Classrooms*, Developing Content Area Literacy.

- Richardson, S. Judy, Raymond F. Morgan, and Charlene E. Fleener, 2009, *Reading to learn in the content areas*, 8 ed. Wadsworth.
- Siahaan, Sanggam, 2008, *Issues in Linguistics*, Graha Ilmu, Yogyakarta
- Suharsini Arikunto, 2006, *Prosedur Penelitian Suatu Pendekatan Praktik*, Jakarta: PT.Rineka Cipta