# THE EFFECT OF USING MIND MAPPING TECHNIQUE TOWARDS STUDENTS' SPEAKING SKILL AT THE SECOND GRADERS OF SMPN 30 MUARO JAMBI

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#### **Abstract**

This research was aimed to find out the effect of using mind mapping technique on students' speaking skill at the second graders of SMPN 30 Muaro Jambi. The research design used in this research was quasi-experimental byusing non-equivalent group design with pretest and posttest. The population of this research was 59 students and sample were 40students of two classes were experimental class and control class in second graders of SMPN 30 Muaro Jambi. The data of the research were collected by giving pretest and posttest to the students. The collected data was analyzed by using t-test (independent sample test).

The result of the data analysis showed that the mean score of pretest in experimental and control class were 9.30 and 7.47 while the mean score of posttest in experimental and control class were 13.65 and 10.05. Moreover, the result of independent sample test of posttest score in experimental and control class showed that the result of Sig.(2-tailed) was 0.00 < 0.05. It meantsthat, null hypothesis  $(H_0)$  was rejected and alternative hypothesis  $(H_a)$  was accepted. It can be concluded that the students have better achievement in their speaking skill by using mind mapping. The result of this research indicated that mind mapping technique was affective on students' speaking skill.

Key words: Speaking skill, Mind map and Effect

#### CHAPTER 1

#### INTRODUCTION

# 1.1 Background of the Research

Speaking is one of the important basic skills in learning English. According to Hedge (2003), learning speaking is very important for students. They may need this skill for a variety of reasons, such as for exchanging information, for influencing people, and for persuading the other people to speak with different background. Moreover, speaking skill used to express someone ideas or used to transferring information with the oral communication, it takes places everywhere and has become part of our daily activity. In learning English speaking at school, the students are usually asked by their teacher to speak English such as telling story, telling their experience, and describing their friends or something in the class.

The process should be designed to make the students active and creative in order to speak. The teacher can use the some techniques to enhance the students' speaking skill. One of the techniques is Mind Mapping technique. According to Buzan (2005), Mind Mapping is a very powerful tool for brainstorming, creative thinking, problem solving, organizing of Mind Mapping is an important technique which can improve the way to make students focus concentrate to the topic.Mind mapping can help students students'understanding about the topic or material and gave a new insight for the students because it contains the key word or outline about the topic that will be conveyed to the others. In addition, this is creative method which is possible for students to identificate the topic that they have planned and students can be able to concenterate on their talk as to convey their opinion systematically. For example, the students write the topic in the middle of paper. Usually, the topic uses pictures because using pictures can help the students in developing an imagination to open their mind. After that, it connects the branch of mind to the central picture, the branches use colors because the color makes mind mapping funny, increases creativity, and enjoyable. And then, the students practice to speak in front of the class one by one based on their mind mapping.

#### 1.2 Research question

Based on the background of the research, the researcher formulates the research questions as follows: is there any significance effect of using mind mapping technique towards students'speaking skill at the second graders of SMP N 30 Muaro Jambi?

## CHAPTER II

#### REVIEW OF RELATED LITERATURE

# 2.1 The Nature of Speaking

Speaking the ability or activity by transfering information for someone else in order someone get the idea or message about something that we deliver to. Speaking is one of four English basic skills that have to be mastered by students in learning English. With speaking someone can express their ideas, feeling or something else with oral communication. According to Nunan (1991), speaking is an instrument act, speaker have some effect of talk in their listener. Speaking is an activity that become a part of our daily activities. It means that speaking is used in everyday in our life, in our activity we always do the speaking. When we want to give some information or tell something, express our ideas in our mind and many other activity we always do the speaking skill. So, speaking skill is become a part of our daily activity.

## 2.1.1 Aspect of Speaking Ability

Speaking is also one of the language arts that are most frequently used by people all over the world. The art of speaking is very complex. It requires the simultaneous use of the number of abilities which often develop at different rates. Generally, there are at least four components of speaking skill concerned with grammar, vocabulary, pronunciation, and fluency (Syakur, 1987):

## a) Grammar

It is needed for students to arrange a correct sentence in conversation. As argued by Heaton (1978) that student's ability to manipulate structure and to distinguish appropriate grammatical from in appropriate ones. The utility of grammar also learns the correct way to gain expertise in a language in oral and written form.

## b) Vocabulary

One cannot conduct communication effectively or express their ideas both oral and written form if they do not have sufficient vocabulary.

# c) Pronunciation

Pronunciation is the way for student's to produce clearer language when they speak. It deals with the phonological process that refers to the component of a grammar made up of the elements and principles that determine how sounds vary and pattern in a language.

#### d) Fluency

Fluency can be defined as the ability to speak fluently and accurately. Fluency in speaking is the aim of many language learners.

## 2.1.2 Teaching Speaking

The teaching of English is very important. It is focused on the communicative proficiency rather than on more material of structure. Here, speaking becomes the objectives of English teaching. To make the students speak fluently in English, a teacher has a big role in determining the student's mastery of English speaking.

The greater problem is how to build up the motivation of the students in learning language. In general, the students are highly motivated, but it is primarily motivation toward practical use of the language. In addition, Harmer (1998) suggests that integrative motivation of the students is more powerful than instrumental motivation in learning foreign language. Some students study a foreign language because they want to know more about the people who speak English very well and success in using foreign language.

Speaking skill has a very important role in language learning, including foreign language teaching (Richard,2002). Because speaking is a process of building and sharing meaning through the use of verbal and nonverbal symbol, in a variety contexts, beside the ability to speak a second of foreign language well is very complex task, because speaking is used for many different purposes, and each purpose involves different skill. For example when people use casual conversation, their purposes may be to establish social contact with other or to establish rapport or to engage in the harmless chitchat that occupies most of the time learners spend with friends.

## 2.2 Definition of Mind Mapping Technique

Mind Mapping / Concept Mapping is a process which identifies concept within an oral or written text, it can be organized these concepts in hierarchy from the most general to the most specific concepts, and illustrated by using linking words the meaning relationships between conceptsBuzan, (2007). The diagram produces map of the hierarchical arrangement of the identified concept and the meaning relationship between these concepts. On a concept map, concepts are represented by boxes or circles which are joined with lines are arrows. The linking words are written on or near the line which link the concept. The linking words are particularly important because they provide an indication of what the learner understands and the depth of that understanding.

Mind Mapping is a diagram used to represent words, ideas, tasks or other items linked to and around a central key word or idea. Mind maps can also help to recall of exiting memories. The element of a given mind map are arranged intuitively according to the importance of the concepts, and are classified into groupings, branches or areas, with the goal of representing semantic or other connections between portions of information. Concept mapping can be also recall by mind maps. According to Buzan (2005), mind mapping is a very powerful tool for brainstorming, creative thinking, problem solving, organizing of ideas and of course, note taking. Mind mapping as a note taking technique can be used for almost any subject and done in any language. It is especially useful for students in tertiary education and beyond, because the more advanced the studied material, the greater the need to condense and simplify it in a form that is easy to learn.

Based on the explanation above, mind mapping technique can make the students more creative and easy to develop their mind. They have also interest to learn by using mind mapping technique.

# 2.2.1 The Characteristics of Mind Mapping

The five essential characteristics of Mind Mapping based on Buzan in the (1993):

- a. The mind idea, subject or focus is crystallized in a central image.
- b. The main themes radiate from the central images as 'branches'
- c. The branches comprise a key images or key word drawn or printed on its associated line.
- d. Topics of lesser importance are represented as 'twigs' of the relevant branch.
- e. The branches from a connected nodal structure.

## 2.2.2 How to Implement Mind Mapping Technique

Here are the steps and purpose to draw mind mapping provided below Buzan(2004):

- a. Write the topic in the middle of paper, and use single word or simple phrase for information it gives freedom of brain to explore our mind.
- b. Use picture from the central idea, because use a picture can help us in appear an imagination to open our mind.
- c. Use colors, the color make mind mapping life, add creative brain, and enjoyable.
- d. Connect the branch of mind to the central picture, make cross-linkages continuously. It can help us understand and memorable, on part of the subject connect to others.

Make curved lines because the straight line make bored brain, a cured branch likes tree move attractive.

- e. Use key for every line because single key word given the power and flexible for mind mapping.
- f. Use picture, picture can help or remember information more effectively than word.

#### **BAB III**

#### RESEARCH METHOD

# 3.1 Research Design

The purpose of this research was to find out the effect of using mind mapping technique towards students' speaking skill at the second grade of SMPN 30 Muaro Jambi. This researchuse quantitative design. It was experimental research. Fraenkel Wallen (2003) said that the best type of testing hypotheses about cause effect is experimental research. Itused quasi experimental design by choosing two classes as two groups. According to Cresswell (2008), quasi experimental is used when researcher wants to establish possible cause and effect between independent and dependent variable.

The design of this research involved two classes as control class and experimental class whichwere given pre-test and post-test. The different treatment was applied to the two classes (control class and experimental class). Pre-test was given to experimental class and control class. In experimental class, mind mapping is used as a treatment and teacher used normal techniques in control class. The treatment was given in six meeting, the first meeting was pre-test and the last meeting was post-test. Post-test was given to both of class, in order to know the students' ability after using mind mapping.

## 3.3 Population and Sample

#### 3.3.1 Population

According to Creswell (2008) population is a group of individuals who have the same characteristic. Population is complete elements such as person or object that possess some common characteristics define by the sampling criteria established by the researcher. The portion of the population to which the researcher has reasonable access may be a subset of the target population. The populations of this research were the students at the eighth grade of SMPN30 Muaro Jambi. The populations of this research were divided intothree classes; VIIIA 20 students, VIIIB 20 students, and VIIIC 19 students.

#### 3.3.2 Sample

Sample is a subgroup of the target population that the researcher plans to study for generalizing about the target population (Creswell, 2008). The sample was selected from the population which is consisted of three classes at the second grade. To got two classes for the sample, the researcher used cluster purposive sampling.

In cluster purposive sampling, the researcher only used his judgment to select a sample that she believed based on prior information provided the data she needed. The researcher assumed that she could use her knowledge of the population to judge whether or not a particular sample will be representative. The goal of using purposive sampling is to get rich information from selecting students.

# 3.4 Technique of Data Collection

This research used quantitativedata that wasgotten from the students' score of speaking tests. To collect the data, the researcher used pre-test, treatment, and post-test. Pre-test was given to experimental class (VIII A) and control class (VIII B), in order to know students' speaking skill before the treatment, after that, treatment was given by using mind mapping with the gave two different pictures to the experimental class. Pretest, treatment and posttest was given during 1 month. In control class the treatment of mind mapping was not given. Finally, post-test was given for both of the class after the treatment. The students' score was collected to be analyzed.

## 3.4.1 Audio Recording

Audio recording is the technique that was used in collecting the data. According to O'Malley (1996), recording oral language provide option such as rating the performance and enabling the students to look back at their progress over time. The researcher used phone recorder to record the students' speaking in pre-test and post-test, it help the researcher gave the score to the students. Researcher gave a picture to the students and ask the students to mention the picture by some clue or key word by the researcher. When the students perform in front of the class, the researcher record them.

## 3.5 Technique of Data analysis

The data derives from the students' score take from the result of post-test of the experimental class and the control class. The score in pre-test and post-test were analyzed by Scoring Rubric for Speaking, the researcher categorize student's speaking ability by this approach. The data will be analyze by using Descriptive statistic and T-Test (Independent sample T-test) in order to calculate the pre-test and post-test results.

## 3.6 Descriptive Statistics

In this step, it was used to obtain descriptive statistics like means and standard deviation. It was also to describe demographic finding and description finding of pretest and posttest.

# 3.6.1 Independent Sample T-test

In this step, it compared the data from two difference samples. There were a prerequisite in independent sample t-test. First, the data should be distributed normally. Second, two samples were independent or not interrelated. It meant that the data would be compared from two difference samples. Third, type of data wasnumeric. The researcher compared pretest scores in experimental and control class then compared posttest scores in experimental and control class. The procedure of data analysis by using independent sample t-test is described with SPSS.

#### **CHAPTER IV**

#### RESEARCH FINDINGS AND DISCUSSION

## 4.1 Research Findings

The result of pretest in experimental class showed that the lowest score was 5.5 and the highest score was 11.5, while in control class showed that the lowest score was 5 and the highest score was 8.5. It showed that the students did not speak well in describing the picture.

The result of posttest in experimental class showed that the lowest score was 11.5 and the highest score was 15.5, while the result of posttest in control class showed that the lowest score was 8.5 and the highest score was 11.5. It showed that there was improvement in students speaking ability.

## 4.2 The Statistical Data Analysis

The statistical data analysis was applied to verify the hypotheses propose. Descriptive statistic and T-test (independent sample T-test) used in this research. They were used to find out whether there was significant difference on students' speaking ability before and after treatment (mind mapping). Moreover test validity and reliability were analyzed by inter-rater reliability. The researcher used Cronchbach alpha in inter-rater reliability. The procedure of statistical data analysis were described below:

## 4.2.1 Descriptive Statistics

In this case, it found mean and standard deviation. Also, it described the total number of students. The description of descriptive statistics described as follows.

**Table 4.15 Descriptive Statistics** 

	Class	N	Mean		Std. Error Mean
PretestScore	Experimental Class	20	9.3000	1.53383	.34297
	Control Class	20	7.4750	1.12945	.25255

	Class	N	Mean		Std. Error Mean
PosttestScore	Experimental Class	20	13.6500	1.21504	.27169
	Control Class	20	10.0500	.93048	.20806

Based on the table 4.15 Descriptive statistics showed that the mean score of pretest between experimental and control class were 9.30 and 7.47 with standard deviation of both classes experimental and control class were 1.53 and 1.12. Also, the mean score of posttest between experimental and control class were 13.65 and 10.05 with standard deviation of both classes experimental and control class were 1.21 and 0.93

# 4.2.2 Independent Sample T-Test

In this case, it counted the data based on the result of posttest in experimental and control class. The hypothesis included in this research was described as follows.

- 1. Alternative Hypothesis (H<sub>a</sub>): there was significance difference between students' speaking score was taught by using mind mapping technique and without mind mapping technique.
- 2. Null Hypothesis ( H<sub>0</sub>): there was no significance difference between students' speaking score was taught by using mind mapping technique and without mind mapping technique.

If the result of significant or Sig.(2-tailed) > 0.05 so null hypothesis (H<sub>0</sub>) is accepted and alternative hypothesis (H<sub>a</sub>) is rejected. Meanwhile, if the result of significant or Sig.(2-tailed) < 0.05 so null hypothesis (H<sub>0</sub>) is rejected and alternative hypothesis (H<sub>a</sub>) is accepted. The students' average score of posttest in experimental and control class is presented as follows:

Table 4.16Independent Sample Test of Posttest Score in Experimental and Control class

	Levene's T	est for								
Equality of										
Variances		t-test for	Equalit	y of Me	eans					
									95% Co	nfidence
								Std. Error		
					Sig.	(2-	Mean	Differenc	Difference	
	F	Sig.	Τ	Df	tailed)		Difference	e	Lower	Upper

2.110	.155	10.520	38	.000	3.60000	.34221	2.90724	4.29276
		10.520	35.582	.000	3.60000	.34221	2.90569	4.29431

Significant level at 0.05

As displayed in table 4.16independent sample test of posttest score in experimental and control class, it shows that the result of Sig.(2-tailed) was 0.00 < 0.05. The conclusion that null hypothesis (H<sub>0</sub>) was rejected and alternative hypothesis (H<sub>a</sub>) is accepted. In other words, there was significant difference between students' speaking score after thaught by using mind mapping technique and conventional technique. In short, it can be conclude that the students get better achievement by using mind mapping in speaking skill or there is significance effect of using mind mapping on students' speaking skill.

#### 4.3 Discussion

Storytelling increases students' speaking skill in some aspect, such as, pronunciation, grammar, fluency and vocabulary.

In pronunciation, mind mapping gives good effect for this speaking aspect. Students' pronunciation is increased by mind mapping. They have good pronunciation after learned by using mind mapping, because during their study with mind mapping technique, they are more often to speak English in front of the class, because mind mapping is an affective way to connect and organize our minds by doing colours, images or symbols, and associations. So, it can help students' to plan and deliver our speech and can generate their own mind map to convey ideas to be presented visually as supporting materials to talk about the lessons. Thus, they are accustomed in speaking English. The students could produce English words with good pronunciation.

Mind mapping also increased students' grammar, students could speak English with good grammatical and just a little of grammatical errors were done by studentsduring the researcher gave treatment. The researcher also taught the students how to use tense and study about grammar.

Students' fluency is also increased by mind mapping. The students could speak English not in long pauses again. They did not need long pauses to search for words of meaning and they also has unlimited expression when they were spoke English, because students have representation in their minds by knowing central theme and supporting ideas arround it.

The last aspect is vocabulary. By teaching with mind mapping, the students' vocabulary is increased because, when the students learned with mind mapping, they could add their vocabulary and select the appropriate words connect with the concepts and ideas that they want to use to express their picture. Because of many picture that they have got and they have told, so they could produce many new vocabularies.

It can be concluded that, mind mapping technique has significance effect on the students' speaking skill, and also the implementation of mind mapping on their research was succesfull.

#### CHAPTER V

#### CONCLUSION AND SUGGESTION

#### 5.1 Conclusion

Based on theresult of the research, it is concluded that mind mapping has positive effect toward students' speaking ability. The result of the data analysis indicated that the students' speaking skill in terms of pronunciation, grammar, fluency, and vocabulary has increased from the pretest to posttest. The result of posttest in experimental class was higher than in control class. The mean score of the students' speaking skill in experimental class is also higher than in control class. Mind mapping made students more active and creative in shared their ideas by speaking English.It indicated the treatment by using mind mapping has positive affect for students' speaking skill.

## 5.2 Suggestion

Having analized the result of this study, it is found that mind mapping helped the students to develop students' speaking skill in terms of pronunciation, grammar, fluency and vocabulary. The researcher gave some suggestions were as follow

- 1. English teacher was suggested to use mind mapping as an alternative way in teaching speaking. So mind mapping an encourage the students to be more active in learning process.
- 2. The English learner were suggested to be more active, creative and enjoy in exploring their ability in speaking by applying mind mapping technique in order make them more easier in expressed their ability in speaking English.
- 3. The readers were suggested to read the findings to widen and broaden their horizon in the theory of learning English and the decision makers were suggested to read the findings of this study as one of the considerations in making decision for the policy of the teaching learning process.