

# THE EFFECTIVENESS OF APPLYING MIND MAPPING STRATEGY ON

# THE STUDENTS' SPEAKING ABILITY OF SMA DHARMA BAKTI MEDAN

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## Abstract

This research is concerned with applying mind mapping strategy in increasing students' speaking ability. The aim of the research is to find out if applying mind mapping strategy increases the students' speaking ability. The research is conducted by experimental method. The population of the research is the tenth grade of SMA Dharma Bakti Medan in academic year 2021-2022. They consist of 120 students and the sample consist of 80 students then divided in two groups, 40 students as experimental group and 40 students as control group. The experimental group is taught by applying mind mapping strategy and the control group without applying mind mapping strategy. The writer uses oral test communication as instrument of the research. The test is explain the students exercise sheet. The score of the test obtained from fluency, pronunciation and comprehension. After applying the test to the students, the writes analyzed the data by using the formula of t-test commonly used. After calculating and analyzing the data, it is concluded that is higher that (5.55>1.66). it showed that there is a significant difference. The pre-test mean score of experimental is 50.38 and post-test is 76.80, the difference 26.42. the value is bigger than (5.55> 1.66) degree freedom is 70, and the level of significance is 0.05. the result is applying mind mapping strategy gives significant effect on the students' speaking ability. Concerning the result of t-test above, it shows that applying mind mapping strategy can increase the students' speaking ability. It is concluded the hypothesis of this study is accepted.

Keywords: mind mapping strategy, speaking ability

## Abstrak

Artikel ini berkaitan dengan penerapan strategi mind mapping dalam meningkatkan kemampuan berbicara siwa. Tujuan dari penelitian ini adalah untuk mengetaui apakah menerapkan strategi mind mapping meningkatkan kemampuan berbicara siswa. Penelitian ini dilakukan dengan metode eksperimental. Populasi penelitian ini adalah siswa kelas sepuluh SMA Dharma Bakti Medan tahun ajaran 2021-2022. Mereka terdiri dari 120 siswa dan sampel terdiri dari 80 siswa kemudian dibagi menjadi dua kelompok, 40 siswa sebagai kelompok eksperimen dan 40 siswa sebagai kelompok control. Kelompok eksperimen diajarkan dengan menerapkan strategi mind mapping



dan kelompok control tanpa menerapkan strategi mind mapping. penulis menggunakan ujian lisan sebagai instrument penelitian. Tes tersebut adalah menjelaskan hasil lembar kerja peserta didik. Skor siswa bisa diperoleh dari kefasihan berbicara, pengucapan, kosa kata dan pemahaman. Setelah menerapkan test pada siswa, penulis menganalisis data dengan rumus t-test yang umum digunakan. Setelah menghitung dan menganalisis data, disimpulkan bahwa lebih tinggi dari (5.55> 1.66). Itu menunjukkan bahwa ada perbedaan yang signifikan. Nilai pre-test eksperimental adalah 50.38 dan post-test adalah 76.8, perbedaannya adalah 26.42. nilai lebih besar dari (5.55> 1.66) df adalah 78, dan tingkat signifikannya adalah 0.05. Hal ini menyatakan bahwa menerapkan strategi mind mapping memberikan pengaruh yang signifikan dalam kemampuan berbicara siswa. Berdasarkan hasil test diatas, itu menunjukkan bahwa menerapkan strategi mind mapping sangat efektif dalam meningkatkan kemampuan berbicara siswa. Dapat disimpulkan bahwa hipotesis penelitian ini diterima.

Kata kunci : strategi mind mapping, kemampuan berbicara

## 1. Introduction

Speaking is one of four skills among reading, writing and listening. Speaking is a language skill that is vital for humans, especially for students. By nature humans are in contact with others, they do more with spoken language as the transmission of messages and receiving of the messages from the process of communication in return.

Meanwhile, Leong and Ahmadi (2017: 34) state that speaking not only just saying words through the mouth (utterance) but it means conveying a message through the words. By speaking the people can convey information and ideas, express opinion, and feeling, share experiences, and mention social relationships by communicating with others.

Based on earlier observations at SMA Dharma Bakti Medan It is known that the KKM in English subject is 75. The results from interviews With the English teacher there at the school that the average student scores are still a lot Under the fixed KKM value. The year before that student KKM's unfinished material is 75% at an average value of 6

This can be influenced by the process of teaching classes using Methods of speech, discussion and conferral. In the learning process at SMA Dharma Bakti Medan, the teacher explained the lesson materials, and Question and answer to students. A method of learning used by teachers at school is a method of discussion and a lecture. So many students are getting saturated In the process of learning to teach. Taking notes of what a student did was copying Right from the textbook or using the book language so students Boredom and lack of activity. And so during learning time, Students respond less to the materials being taught. That learning method Such results are evident from learning achievement in general still Less than satisfactory.

A learning strategy that can applied to changing those conditions, that is By applying the mind-mapping method. The mind is used by teachers to make it easier to know the lesson material, It's a concept that facilitates and enhances student activity process Learning. The mind mapping method is chosen because it can be Helping students learn more quickly in speaking mainly To the descriptive material, so the Researchers apply it to the interfacing of the material in class, So that students can get good study results.

Mind mapping is well-known as visual mapping, concept mapping, flow- charting, visual thinking, spider diagramming, memory mapping, semantic mapping and thought webbing. Regardless of what you call it, basically the principles are the same (Krasnic, 2012:



30). Mind mapping is an important tool for students who want to speed up and improve learning and their understanding. Remember the amount of information they want master, accelerate and upgrade like that is very important to student academic success. Through concept and idea mapping, students become a good learner and thinker better. Mind mapping offers sufficient flexibility for maintain interest and encourage curiosity and sufficient structure to keep students on the path.

Mind mapping is a cooperative learning strategy that promotes students to better learning English, improves student's motivation to speak up their ideas, increase enjoyment in teaching and learning process creative and imaginative. Learning English through Mind mapping strategy is interesting and lessen the student's freedom. They also more active and creative during the teaching learning process. By show a mind map is more easy to understand because students given many opinion, idea, and questions related to the material that given by the teacher. Besides that, this strategy focuses on team-works that can build students ability to communicate and share their idea or ask questions to the teacher.

Because of the fact, it proved that Mind mapping can make students more active and creative in learning English speaking skill. By applying this approach, the teacher hope that the students are able to speak English well and improve their speaking ability. Based on the explanation above the researcher decides to do a study entitled

"The effectiveness of applying mind mapping strategy on the students' speaking ability of SMA Dharma Bakti Medan"

## 2. Literature Review

#### 2.1 Learning strategy

The selection of learning strategies does not fall apart from the curriculum used and the characteristics of learners. The characteristics of learners are primarily associated with the initial experiences and knowledge of learners, the interest of learners, the learning styles of learners, and the development of learners. Strategy comes from a noun and a Greek verb. As a noun, strategos is a combination of stratos (military) with "ago" (lead). As a verb, stratego means planning (to plan). Strategy has the sense of a careful plan regarding activities to achieve specific (desired) goals. In general strategy can be Having a teacher's strategy have guidelines in inverse as to the various possible alternatives to make and must be made. So the teaching learning would be systematic, purposeful, lancer and effective.

### 2.2 Mind Mapping

The understanding of the mind mapping is one of the various forms of teaching and learning strategy that is used to train the ability of the students to furnish content with mind mapping. The mind mapping was developed by Tony Buzan as a way to encourage discerning learners using only key words and images.

Moreover, Buzan (2012) argues that, mind mapping is a way of developing thinking activities in all directions, capturing a variety of mind in a variety of angles. Mind mapping develop divergent thinking, creative thinking. Mind mapping is the easiest way to put the information into the brain and retrieve information when needed. From the above opinion can be said that mind mapping is a strategy designed by the teacher so that students can be skilled in thinking, and can help students to link concepts that are important in learning a subject matter as well as enhance the creativity of the students about a concept.

There are seven steps in making a mind map (Buzan, 2012:15), including:



- 1. Start making the central idea from the center of the blank sheet of paper that the long side is laid horizontally.
- 2. Use pictures and photos for a central idea.
- 3. Use color.
- 4. Connect the main branches to the central image (central idea) and connect each branch. Branches at levels two and three are connected to levels one and two, and so on.
- 5. Make connecting lines that curve like branches, not straight lines.
- 6. Use one keyword for each line.
- 7. Use pictures.

The mind mapping is a diagram used for Presenting words, ideas, duties or anything else to link and organize around the key word of the main idea. The mapping of the mind is a creative way for individual learners to come up with ideas, record lessons, or plan new research and instruct learners to make a mind map, they find it easy to identify clearly and creatively what they have learned and what they plan to do. A mind map differs from a concept map, which is also used to facilitate its mastery. The mapping of the mind is a technique for using the visual image and other graphic participants to form impressions. The brain often remembers information in the form of pictures, symbols, sounds, forms, and feelings. The mind map uses these visual and sensory reminders in a pattern of ideas related to the road map used for study, organization, and planning. This map can resurrect original ideas and trigger easy memories. It is also soothing, enjoyable, and creative. So the mind mapping is a learning model that uses a strategy to note using key words and images. The mind mapping can also make it easier for students to remember in the Settings of pictures, symbols, sounds, forms, and feelings.

### 2.3 Speaking Ability

Speaking is one of four skills that should be mastered in learning English. Speaking is productive language skill the same like writing. The productive language should pass the mental process or it is called as a process of thinking. When the people want to say something and transmit information they need communication. Speaking English as a foreign language is difficult skill to be taught and learned because the learners should master some aspects like mastery vocabulary, correct pronunciation, know about grammar, and other. When the learners want to speak, they also should think about all of those aspects. (Haryudin and Jamilah, 2018: 59).

Therefore, speaking skill is the most difficult aspect for learners to master. This is a hard thing because when people want to talk or say something to others, they have to consider several things that are interrelated like ideas, language that is used, what to say, how to use grammar and vocabulary, pronunciation, as well as listening and reacting to interlocutors. There are lots of definitions about speaking according to some expert. Speaking is process of conveying or sharing ideas orally (Eliyasun, Rosnija, and Salam, 2018: 1). Therefore, if learners do not learn how to speak and never practice in the classroom, they soon lose interest in learning and get motivation to learn or practice English speaking. Learners who do not develop strong oral skill during this time find it difficult to keep face with their peer in the later years.



### 2.3.1 Factors of Speaking Effectiveness

To master speaking skill, learners should know not only linguistic knowledge, but also the culturally acceptable ways of interacting with other in different situations and relationship. There are several factors that make speaking effective Abbaspour (2016: 146) has summed some factors of speaking effectiveness. According to his research, factors of speaking effectiveness are grammar, discourse, sociolinguistic, strategy, interaction, accuracy and fluency.

### 2.3.2 The definition of speaking ability

There are many definitions of speaking that have been proposed by some experts in language learning. According to efrizal (2012: 127), speaking is a speech or utterances with purpose of having intention to be recognized by speaker and the receiver process the statements in order to recognize their intention. Speaking is one way to communicate which ideas and through a message orally. Meanwhile, Khorashadyzadeh (2014: 12) states that speaking not only needs the learners' understanding about the way how to produce the linguistic competence such as grammar, pronunciation, and vocabulary but also students' comprehension abut sociolinguistic competence such as when, why, and how to speak.

### 3. Method

This research conducted on the action quantitative method. According to Ary (2010: 22), quantitative research uses objective measurement to gather numeric data that are used to answer questions or test predetermined hypotheses. It generally requires a well-controlled setting. This study classified as pre-experimental study, according to Ary (2010: 303) because they provide little or no control of extraneous variables.

The data analysis uses quantitative research which means that researcher collects the data from samples. The researcher used experimental research because in the research there are pre-test and post-test to get the data, two classes where involved in this research, experimental class and control class. The experimental class consists of the students who received treatment.

However, the control classes received a pre-test on whatever instrument is used to use the effect of the experiment before the treatment has been given.

## 4. Result and Discussion

Based on the score of the class in the table, it can be known that the sum of their score is 3060 thus, the mean score of them computed as below:

$$M_{X=}\frac{3060}{40}$$

From the post-test, it was found that the control class had mean score: 76.5 After doing the treatment for the students, the researcher gave post-test. The mean score post-test for both of groups were significantly different. The mean score of experimental group was 76.8 on contrary, the mean score of control group was 76.5. Here is the students' speaking ability score. Thus, the calculation fmeans of post-test of experimental group and control group in the students in speaking ability can be seen as below:



Table 4.1

The Calculation of Comparison of Means Post-test of Both Group inSpeaking
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Test						
Post-test	Post-test	Difference				
Experimental group	Control group					
76.8	76.5	0.3				

After knowing differentiate of the mean score of post-test in speaking ability, here is the means and the standards deviation of students' score : 6,2.

Tabl	e 4	.10
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#### **Result of Post-test Score both Experimental and Control Group**

Group	N	Max score	Min score	Mean	Standard deviation	Sum score
Experimental	40	90	70	76.8	5.80	3075
Control	40	80	70	76.5	4.26	3060

#### **Data Analysis**

Based on data on the table above, it can be describe that the score of experimental group after getting treatment were 90 as the highest score, the lowest score 70, mean score was 76.8, standard deviation was 5.80, and sum score was 3075. While the result of post-test of control group were 80 as the highest score, the lowest was 70. Mean score was 76.5, standard deviation was 4.26, and sum score was 3060.

Based on the calculation above, it was obtained  $t_{calculate}$  is 5.55 meanwhilefor N = 78 and  $\alpha$  = 0.05 is 1.66.

Based on the analysis, it was found that applying mind mapping strategy gives significant effect in students' speaking ability. The students' score taught by applying mind mapping strategy was higher than score taught by without applying mind mapping. it approved by the pre-test and post-test both experimental group and control group. The averages score of students' speaking ability is still low for the control class, they are 49.50 and for the experiment class is 50.38. it showing that the student is still did not understand the material with a maximal and still not effective, but after the researcher gave the treatment, the result of the speaking ability is increasing. Then if the averages score of post test is compared, for experiment class is 76.8 and for the control class is 76.5, the writer take the averages score of post-test is higher than the averages score of pre-test.

### 5. Conclusion

After collected and analyzed the data of the research, the writer conclude that : 1) The grade X students' ability at SMA Dharma Bakti Medan in academic year 2021-2022 were better by applying mind mapping strategy and give significant effect to the students. 2) It stated by applying mind mapping strategy is effective to the grade X students' speaking ability of SMA Dharma Bakti Medan in academic year 2021-2022. Concerning the result of t-test, it showed that applying mind mapping can improve the students' speaking ability. It is concluded the hypothesis of this research was accepted.



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