MIND MAPPING TECHNIQUE TO IMPROVE STUDENTS' SPEAKING ABILITY IN RETELLING NARRATIVE STORY

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Abstract: The purpose of this study is to find out whether or not the mind mapping technique is effective to improve students' speaking ability in retelling narrative stories. It is experimental research using pretest and posttest design. The population of this study was 8th-grade students of Junior High School 8 Mataram, consisting of 160 students. Of the population, 20 students were selected using a purposive sampling technique as control group and other 20 students as experimental group. The data of pretest and posttest were collected using speaking tests, assessed by two assessors to ensure the reliability of the assessment. The collected data were then analyzed quantitatively. From the analysis it was found that the degree of freedom was 38, t – table was 1.68 at significance level 0.05 (95%) and 3.31 at significance level 0.01 (99%), while the value of t-test (t_0) was 9.875, higher than t – table distribution value which means that the null hypothesis (H_0) is rejected. Thus, it is concluded that the Mind Mapping technique is effective in improving students' speaking ability in retelling the narrative story at 8th grade Junior High School 8 Mataram.

INTRODUCTION

Teaching English at school contexts both at junior and senior high schools in Indonesia requires students to master all the receptive (listening and reading) and the productive (speaking and writing) skills. Those targets are reflected in Basic Competency, stating that students *can grasp meaning* of certain texts (receptive skills) and *produce spoken and written texts* (productive skills) (Kemdikbud, 2017). Of those language skills, most language learners find speaking the most difficult yet the most crucial skill to be learned (Zhang, 2009). Richards (2008) stated that English speaking skill mastery is important most for ESL or EFL learning. The ideal target of learning language is learning how to function the language in the forms of communication. Gebhard (2006) also stated building up the communicative competence is the top goal of learning English at school contexts.

However, learning oral communication for junior high schools in Indonesia education contexts raises a lot of problems. It is due to the complexity of aspects involved in English communication. It relates to expressing and organizing ideas, selecting appropriate lexicon-grammatical features to social functions to be achieved, etc. (Harmer, 2008; Ur, 2012). Other factors of difficulty in communication are learners' psychological factors such as motivation, interest, tensions, and so on. Such kinds of problems are also found at 8th graders of SMPN 8 Mataram Lombok. From observation during teaching and learning practice at this school, students are difficult to communicate because of lack of practices, not enough language input

(vocabulary, grammar, pronunciation), the selection of teaching methods, which do not give chance for students to practice communication.

To solve problems mentioned above, it is necessary to find appropriate solutions to improve students' speaking ability. Considering various problems mentioned above, this research offers a Mind Mapping Technique as a solution. A mind mapping is a technique for illustrating ideas practicing different concepts in terms of free form and color (Liu, Tong, & Yang, 2018). The mind mapping technique encourages a brainstorming approach to planning tasks freely. It encourages users to list and connect topics rather of starting from a certain conceptual framework.

This technique is believed to be very helpful and meaningful as it's a natural way of gathering ideas and developing information. The students have a lot of ideas and opinions to speak. They were able to speak chronologically based on the correct arrangement of the mind mapping. Therefore, it is critical to get pupils to take notes or learn how to use a mind map technique so they will focus on essential points, classify or summarize them, and link the points (Sujana, 2012).

Other scholars, such as Syam, Natriani, and Ramlah (2015), Buzan (2015), and Ying, Guoqing, Guozhen, & Yuwei (2014) have emphasized the advantages of mind mapping. They claimed that mind mapping may assist to balance the brain, organize thoughts, boost creativity, and speed up learning and memory. Furthermore, Mind Mapping is adaptable and can promote creativity. Mind mapping allows all connected topics to be displayed on the map with keywords and links represented by images, symbols, and colors, allowing students' memory storage to be improved. The mind map can not only help kids be more creative, but it can also help them pay more attention providing students with a more appealing and enjoyable format for their eyes and minds (Buzan, 2007; Liu, et al., 2018)

Mind mapping has the potential to be a solution to the problem of poor speaking performance. Teachers can use this strategy by asking their students to create a mind map before performing and providing some ideas in the form of an outline. As a result, when the students begin speaking in front of the class, they can see their outline. The Mind Mapping Technique is used in this study to teach a Narrative Story (folktale) which is one of the key subjects in the eighth grade. Students are frequently asked to repeat the story in this subject. The usage of Mind Mapping Technique is assumed to be appropriate for teaching narrative text. The purpose of this experiment study is to prove the application of Mind Mapping Technique in recreating stories (narrative texts) at 8th grade students of SMPN 8 Mataram.

RESEARCH METHOD

This study applied experimental research using pretest and posttest design. It was conducted at VIII grade students of SMPN 8 Mataram, consisting of 160 students. Of this population, two groups – control group and experimental group – were selected using purposive sampling technique. 20 students from class VIIIA were selected to be an experimental group treaded using a Mind Mapping Technique, while 20 students of class VIIIB were selected as a control group treated using Summarizing Technique.

The data on the pretest and posttest for the control and experimental group were collected using speaking test involving two assessors. The collected data were then analyzed

quantitatively using statistical computation to find mean score, standard deviation, and t-score.

FINDING AND DISCUSSION
Findings

The students were given a posttest after being treated with Mind Mapping Technique for the experimental group and Summarizing Technique for the control group. The mean score, interval class, and space of interval class of the pre-test and post-test for both the experimental (X) and control (Y) groups are shown in Table 1 below.

Table 1 Both groups pretest and posttest results.

NO.	Control (Mx)		Pretest Post–test (X)	X^2	Experiment (My)		Pre– test Post-test (Y)	Y^2
	Pre – test	Post – test			Pre – test	Post – test		
1.	77.5	70	7.5	56.25	62.5	75	12.5	156.25
2.	30	37.5	7.5	56.25	32.5	62.5	30	900
3.	70	65	5	25	0	22.5	22.5	506.25
4.	62.5	60	2.5	6.25	30	52.5	22.5	506.25
5.	32.5	37.5	5	25	37.5	45	7.5	56.25
6.	15	15	0	0	22.5	37.5	15	225
7.	30	30	0	0	50	65	15	225
8.	15	15	0	0	32.5	37.5	5	25
9.	0	0	0	0	45	52.5	7.5	56.25
10.	70	67.5	2.5	6.25	7.5	30	22.5	506.25
11.	75	75	0	0	70	75	5	25
12.	22.5	37.5	15	225	52.5	62.5	10	100
13.	52.5	52.5	0	0	40	50	10	100
14.	45	52.5	7.5	56.25	22.5	47.5	25	625
15.	65	65	0	0	22.5	45	22.5	506.25
16.	65	62.5	2.5	6.25	52.5	60	7.5	56.25
17.	70	70	0	0	42.5	65	22.5	506.25
18.	45	52.5	7.5	56.25	60	52.5	7.5	56.25
19.	70	70	0	0	37.5	52.5	15	225
20.	65	65	0	0	67.5	72.5	5	25
	$\sum= 20$	$\sum= 20$	$\sum= 62.5$	$\sum= 518.75$	$\sum= 20$	$\sum= 20$	$\sum= 290$	$\sum= 5387.5$
	Mean Score X			Mx= 3.13	Mean Score Y			My = 14.5
	Standard Deviation SDx			323.44	Standard Deviation SDy			1182.5
	Standard Eror x-y							1.99

The average scores from two assessors for both the experimental and control groups are shown in Table 1. The students in the Control Group had the highest pre-test score of 77.5, while the lowest was 0. The Experimental Group students had the greatest average score of 70 and the lowest average score of 0. The students in the Control Group had the highest posttest score of 75, while the lowest score was 0. The Experimental Group students had the highest average score of 75 and the lowest average score of 22.5. The Control Group and Experiment Group have different scores on the pretest and posttest. The following table shows the final results of the pre-test and post-test:

Table 2. The computation of pretest and posttest score of both groups

Control Group					
Pretest			Posttest		
Lowest score	Highest score	Mean	Lowest score	Highest score	Mean
0	77.5	47.95	0	75	51.35
Experiment Group					
Pretest			Posttest		
Lowest score	Highest score	Mean	Lowest score	Highest score	Mean
0	70	40.3	22.5	75	53.05

The next step was to use table 4.1 to get the mean score of the Control and Experiment groups. Mx had a score of 3.13, My had a score of 14.5 and S x-y had a score of 1.99. The following table shows the final result of MX, MY, and Standard Deviation of two variables X and Y:

Table 3 The computation of standard deviation score and
mean deviation score of both groups

Control Group		Experiment Group		Standard Error of the mean difference (Sx-y)
Standard Deviation score (SDx)	The mean deviation score (Mx)	Standard Deviation score (SDy)	The mean deviation score (My)	
∑SDx = 323.44	Mx = 3.13	∑SDy = 1182.5	My = 14.5	1.99

The standard deviation and mean deviation scores for the control and experimental groups are shown in Table 3. Finding the t-test and the degree of freedom were the following stages. The Degree of Freedom resulted in 38, and the t-table distribution value at the significant level of 0.05 (95%) is 1.68. Meanwhile, the t-test (t0) value is higher than the t-table distribution value at 9.875. The t-test value exceeds the t-table value, then t-table distribution (H0) was rejected because 9.875 was higher than 1.68. As a result, the alternate hypothesis (Ha) was accepted in this study, which claimed that the use of the Mind Mapping Technique to improve students' speaking abilities on retelling a narrative story was effective among 8th graders at Junior High School 8 Mataram.

Discussion

Tables 1 and 2 show that the pre-test mean score of the Experiment Group was significantly higher than that of the Control Group, based on the final scores of both groups (Control and Experiment). The mean pre-test score in the Control Group was 47.95, whlie the mean post-test score was 51.35. The rise was 3.4. Furthermore, in the Experimental Group, the mean pre-test score was 40.3 while the mean post-test score was 53.05. It was a 12.75 gain. As a result, the Control Group's increase was lower than the Experimental Group's. This indicates that the Experimental Group's usage of the mind mapping approach is beneficial.

According to the data, the maximum pretest score in the Control Group was 77.5, while the lowest score was 0. In the Experiment Group's pretest, the highest score was 70 while the lowest score was 0. In the Experiment Group, the highest posttest score was 75, and the lowest

score was 22.5 after the students received treatment. In the Control Group, on the other hand, the maximum posttest score was 75, while the lowest score was 0.

As a result, it was discovered that applying the mind mapping technique has a considerable impact on the students' capacity to speak. The two groups had different treatments: the Control Group received treatment without utilizing the mind mapping approach, whereas the Experimental Group received treatment using the mind mapping technique. It taught the experiment group's students how to represent their thoughts or knowledge using mind mapping, which they created on blank paper with drawings, lines, and links to connect their ideas. Pramono (2013) supported this by stating that using the mind mapping approach motivated students to enhance their speaking abilities in such areas as pronunciation, vocabulary, clarity, and naturalness of speech, as well as task completion and communication skills. The vocabulary, pronunciation, grammar, and fluency were some of the aspects of the speaking assessment stated by the researcher. It was discovered that the students' vocabulary had grown and their pronunciation had improved. They spoke English more fluently because they had mastered the language and knew how to pronounce it better. They used English and had a better understanding of how to put words together to form correct sentences. Students were taught to utilize English instinctively and communicatively when they participated in communicative activities using a mind mapping approach.

The result of this research was accomplished by comparing the results of t-test and the t-table which can be seen in Table 4 below:

Table 4 the comparison of t-test and t-table

T-test value	t-table value		
	Degree of Freedom (Df)	0.05 Confidence level of 95%	0.01 Confidence level of 99%
9.875	38	1.68	3.31

The results revealed that the t-table values were 1.68 and 3.31 at 95 percent and 99 percent confidence levels, respectively, at significant levels of 0.05 and 0.01 and were lower than the t-test at 9.875. The null hypothesis (H0), mind mapping technique is not effective to be used to enhance students speaking ability, is rejected based on the analysis. However, the alternate hypothesis (Ha), mind mapping technique is effective to be used to improve students speaking ability, is accepted. It is clear that the students were more confident to communicate in English. Mind mapping allowed them to be more engaged and confident in expressing their ideas. It agrees with Buzan's (2004) that mind mapping is a powerful graphic technique that gives a universal key to unlock the brain's potential and is an exceptionally effective method of taking notes and emphasizing the words before the speaking activity. Students gain more confidence in English communication as a result. It suggests that using the mind mapping technique to improve students' speaking abilities on retelling a narrative story is successful. It was discovered that employing mind mapping had a considerable impact on students' speaking abilities, implying that the null hypothesis (H0) is rejected while the alternate hypothesis (Ha) is accepted.

Students' ability to speak English could be improved by using mind mapping. Furthermore, mind mapping could assist and motivate them to communicate about what they

had learned. Vocabulary, pronunciation, grammar, and fluency are the most crucial aspects. Students should be able to increase their ability to speak English if they grasp at least four of the aspects. Finally, it can be stated that using the mind mapping technique to increase students' speaking abilities on retelling the narrative story at Junior High School 8 Mataram is effective.

CONCLUSION

According to the advantages of mind mapping and the outcomes of this study, the mind mapping technique could increase students' speaking abilities on retelling the narrative story at the 8th grade Junior High School 8 Mataram. The t-test (t0) resulted in a high effect of 9.875 while the t-test resulted in 1.68 at a significant level of 0.05 (95 percent) and t – table 3.31 at a significant level of 0.01 (99 percent). Finally, the results show that the t-test value is higher than t – table 9.875 > 3.31, indicating that the alternate hypothesis (Ha) is accepted, or it can be stated that mind mapping technique is effective in improving the students' speaking abilities on retelling the narrative story.

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