THE EFFECT OF MIND MAPPING TECHNIQUE ON THE ABILITY OF THE FIRST GRADE STUDENTS OF SMPN 25 PEKANBARU IN COMPREHENDING DESCRIPTIVE TEXTS

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Abstract: This research is intended to find out whether or not there was a significant effect of Mind Mapping Technique on the ability of the first grade students of SMPN 25 Pekanbaru in comprehending Descriptive Texts. The research design was pre-experimental research with one group pre-test and post-test design. The samples were VII 7 students chosen by using cluster random sampling technique. The Data were calculated by using Microsoft Excel 2010 and analyzed by using SPSS. The result of the data analysis showed that mean score of the pre-test was 59,23 and the mean score of the post-test was 69,32. In other words, the mean score of the post-test was higher than pre-test. The result also showed that the value of t-test (6.648) was higher than t-table (2.024) at significance level of 5%. It can be concluded that Alternative Hypothesis was accepted. Thus, there was a significant effect of Mind Mapping Technique on the ability of the first grade students of SMPN 25 Pekanbaru in comprehending Descriptive Texts. Several recommendations were given for students such as to read more texts, learn to distinguish the important components of the text, learn a lot of material quickly, and share information with their friend in order to get more knowledge and be more focus on increasing their vocabulary. In line with it, the teachers need to give more attention on how to improve students' comprehension when implementing Mind Mapping in the class.

Key Words: Effect, Mind Mapping, Technique, Descriptive Texts

PENGARUH TEKNIK PEMETAAN PIKIRAN TERHADAP KEMAMPUAN SISWA KELAS SATU SMPN 25 PEKANBARU DALAM MEMAHAMI TEKS DESKRIPSI

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Abstrak: Penelitian ini bertujuan untuk mengetahui ada atau tidaknya pengaruh Teknik Pemetaan Pikiran terhadap kemampuan siswa kelas 1 SMPN 25 Pekanbaru dalam memahami Teks Deskriptif. Desain penelitian adalah penelitian pra-eksperimental dengan desain satu kelompok pre-test dan post-test. Sampel adalah VII 7 dipilih dengan menggunakan teknik cluster random sampling. Data dihitung dengan menggunakan Microsoft Excel 2010 dan dianalisis dengan menggunakan SPSS. Hasil analisis data menunjukkan bahwa skor rata-rata dari pre-test adalah 59,23 dan skor rata-rata dari post-test adalah 69,32. Dengan kata lain, nilai rata-rata post-test lebih tinggi daripada pre-test. Hasil penelitian juga menunjukkan bahwa nilai t-test (6,648) lebih tinggi dari t-tabel (2,024) pada tingkat signifikansi 5%. Dapat disimpulkan bahwa Hipotesis Alternatif diterima. Dengan demikian, ada pengaruh yang signifikan dari Teknik Pemetaan Pikiran pada kemampuan siswa kelas satu SMPN 25 Pekanbaru dalam memahami Teks Deskriptif. Beberapa rekomendasi diberikan kepada siswa seperti membaca lebih banyak teks, belajar untuk membedakan komponen penting dari teks, belajar banyak materi dengan cepat, dan berbagi informasi dengan teman mereka untuk mendapatkan lebih banyak pengetahuan dan lebih fokus pada peningkatan kosa kata mereka. Sejalan dengan itu, para guru perlu memberi perhatian lebih pada bagaimana meningkatkan pemahaman siswa ketika menerapkan Pemetaan Pikiran di kelas.

Kata Kunci: *Pengaruh, Mind Mapping, Teknik, Teks Deskriptif*

INTRODUCTION

Reading is one of language skills noted as a part of important ability in boarding reader's perspective and giving them a chance to see the world. The ability to read empowers the readers to take control of their own knowledge and decide their future. It means, reading is a thinking process to get information or an idea, according to Burn (2003) defines that reading is an interactive process. The process means that the reader engages in an exchange of idea with an author via the text. As we know to be able to comprehend the message or ideas of the whole text, the reader should know what they read.

Also reading is something crucial and indispensable for the students because the success of their study depends on their reading ability. By having good ability to read, they will be able to improve their knowledge. According to (Jerolimek, 2004), reading is a major point to satisfactory achievement in study because a high percentage of all instruction relies on the students' ability to read. It can be stated if they are poor in reading ability, they are failed on their study or at least they will have difficulty in making progress. On the other hand, if they have a good ability in reading, they will have a better chance to success in their study. Therefore, reading has to be though to the students how to read well, they are able to master and read some reading materials effectively.

In the school, the students always deal with some materials given by the English teacher that are presented in the written form, for example in form of textbooks. In order to understand the materials, the students must have the ability to comprehend the text. In the case, comprehension is needed. In line with (Hornby, 2000), comprehension is the power of understanding. It means that comprehension the process of thinking sense of written ideas through meaningful interpretation and interaction as a multifaceted process affected by several thinking and language abilities.

But one of the most difficult situations in reading teaching and learning process is in comprehending the text, there are many students that can read the English text but they do not know what they read. Whereas, the teachers have tried many ways to teach the students to be able to read the text that written in English text, but the fact there are still many students could not do it well though reading is one of the skill that teach almost English class. It happened because of so many factors. Start from the students getting bored while in teaching progress, they are still lack of vocabularies, etc.

It is known, the expectation of 2013 Curriculum is the students not only read the author writes on the textbooks as usual but students should be able to comprehend what they read. The comprehension of reading will be shown by answering correctly question the text provided such as to know main idea, factual information, vocabulary, reference and inference as stated by King and Stanley (1989) as the five components of reading. In addition, based on the syllabus of 2013 Curriculum class VII the basic competence to be achieved on reading skill is that the students should comprehend the mind idea, find generic structure, language features and social function of descriptive text. In this research, the researcher focuses on reading comprehension of the first grade students of SMPN 25 Pekanbaru, especially on descriptive text.

This study focuses on comprehending descriptive texts because descriptive text is included in the syllabus for the first grade students of Junior High School. Descriptive text also an important aspect for the students to learn as stated in the 2013 Curriculum. So it is important for the researcher to conduct this research which is expected to help

students understand about descriptive text so that they can answer every examination, which is mostly found in reading. This research will use Mind Mapping to measure the ability of students in comprehending descriptive texts.

Based on the result of observation and discussion with the English teacher at SMPN 25 Pekanbaru, the students got some difficulties in comprehending the text for the first grade students, such as; students were low ability to comprehend the reading text, it makes the difficulty in getting the information such as main idea or specific information of the text. The students often get difficulty in interpreting the meaning of the difficult word. It makes the difficulty for them to clearly understand the information implied in the text, the students will feel bored when they find some difficult words while reading text. Lack and limited vocabulary of handling WH questions. The ineffective technique applied is probably one of the causes of the students' difficulties in comprehending text.

In addition, based on the interview with the students, they said that they feel bored when reading the text because the text is quiet long and difficult to understand. They were also given some questions based on the text and it is hard for them to handle it by themself. Moreover, they are not interested in the learning process because they need some new activities that provide a change of mood in the classroom. It will motivate them to read the text and increase their interest on reading activity in the classroom. Because of that, a teacher should use an appropriate technique in teaching reading comprehension so that they are able to comprehend the text.

In this case, this research is intended to find out whether or not there was a significant effect of Mind Mapping Technique on the ability of the first grade students of SMPN 25 Pekanbaru in comprehending descriptive texts.

METHODOLOGY

Research Design

The design of this research was Pre-experimental research. There was one class as the objects of the research. Mind mapping technique was used in the experimental class. This research was conducted by used a pre-test – treatment – post-test design. Pre-test was used to measure how far the students' reading comprehension. Treatment was used to help the students to improve their reading comprehension. Post-test was used to measure students' reading comprehension after giving the treatment.

The instrument used to collect the data was reading comprehension tests in the form of descriptive text. There are pre-test and post-test. The test is self-constructed by referring to level of the first year students. The test consisted of 30 items concerning to descriptive texts. The test consisted of six texts. The test is in form of multiple choices. Each text has five components. The test items were developed based on the components of reading comprehension on descriptive texts.

The population of the research was the first grade students of SMPN 25 Pekanbaru. There were nine classes which consisted of thirty nine up to forty two students. The number of population was 360 students The sample was collected by using cluster random sampling technique. Arikunto (2006) states if the population is more than 100, the sample should be 10-15% of the population. Because the number of

the first grade students of SMPN 25 Pekanbaru was 360, it means 10% x 360 equals 36 students minimally. The sample of this research is VII.7 which consisted of 39 students.

The Data Analysis Technique

The data are calculated by using Microsoft Excel 2010 and analyzed by using SPSS 19.0 (Statistical Product and Service Solution). To know the classification of students' reading ability, the students' score on the pre-test and post-test are classified in order to make the scores clearer based on the classification of students' score by Curriculum 2013 :

Table 1. The Classification of Students' Ability

Test Score	Level of Ability
85,00 – 100	Excellent
69,00 – 85,00	Good
55,00 – 69,00	Mediocre
00,00 – 55,00	Poor

(KEMENDIKBUD)

RESULTS AND DISCUSSIONS

The Results of Pre-test

The pre-test is intended to know the students reading achievement before the students got the treatment. After conducting the Pre-test, the attained mean score of 39 students is **59,23**, the median is **60** and the mode is **70**. In addition, the standard deviation is **4,13**. the frequency of the students' score is presented in table 2.

Table 2. Frequency of Pre-test

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	30.00	1	2.6	2.6	2.6
	40.00	3	7.7	7.7	10.3
	43.33	2	5.1	5.1	15.4
	46.67	2	5.1	5.1	20.5
	50.00	1	2.6	2.6	23.1
	53.33	4	10.3	10.3	33.3
	56.67	3	7.7	7.7	41.0
	60.00	5	12.8	12.8	53.8
	63.33	5	12.8	12.8	66.7
	66.67	2	5.1	5.1	71.8
	70.00	6	15.4	15.4	87.2
	73.33	3	7.7	7.7	94.9
	76.67	1	2.6	2.6	97.4
	80.00	1	2.6	2.6	100.0
	Total	39	100.0	100.0	

From the table 2, based on the criteria of students' score, it shows that the students who got score 30, 30, 43.33, 46.67, 50, 53.33 are categorized into *poor* level. The students who got score 56.67, 60, 63.33 and 66.67 are categorized into *mediocre* level. The students who got score 70, 73.33, 76.67 and 80 are categorized into *good* level. It means that there are no students who are in *excellent* level.

The Results of Post-test

The students' post test result show that the mean score of Post-test is **69.32** and the median is **70**, the mode is **76.67**, the standard deviation is **3.53**. Futhermore, after the men score is calculated, the frequency of the Post-test

Table 3. Frequency of Post-test
POST TEST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	46.67	1	2.6	2.6	2.6
	50.00	1	2.6	2.6	5.1
	53.33	2	5.1	5.1	10.3
	56.67	2	5.1	5.1	15.4
	60.00	4	10.3	10.3	25.6
	63.33	3	7.7	7.7	33.3
	66.67	4	10.3	10.3	43.6
	70.00	4	10.3	10.3	53.8
	73.33	5	12.8	12.8	66.7
	76.67	6	15.4	15.4	82.1
	80.00	2	5.1	5.1	87.2
	83.33	3	7.7	7.7	94.9
	86.67	2	5.1	5.1	100.0
	Total	39	100.0	100.0	

From the table 3, based on the criteria of students' score, it shows that the students who got score 46.67, 50, 53.33 are categorized into *poor* level. The students who got score 56.67, 60, 63.33 and 66.67 are categorized into *mediocre* level. The students who got score 70, 73.33, 76.67, 80, and 83.33 are categorized into *good* level and the students who got score 86.67 are categorized into *excellent* level.

The Improvement of Students' Reading Comprehension for each Components of Comprehending Reading Descriptive Text on Pre-test and Post-test

After conducting the pre-test and post-test, students' answers are analyzed per component to see which component that was effected significantly and which component that has the highest increased score by using mind mapping technique on the students' reading comprehension in reading descriptive texts.

Table 4. The Improvement of Students' Reading Comprehension for each Components of Comprehending Reading Descriptive Text on Pre-test and Post-test

Test	Component of Comprehending Reading				
	FFI	FMI	IR	FI	FV
Pre-test	146	139	130	133	144
Post-test	165	173	163	155	160
Improvement	19	34	33	22	16

According to Table 4, it shows that there are some improvements of the achievement after being taught by using Mind Mapping technique. It shows that the highest improvement of the six components is finding mind idea (34) while the lowest improvement is finding the meaning of vocabulary (16).

Hypothesis Analysis

In this research, t-test formula is used to compare the pre-test and the post-test results to determine whether the hypothesis is accepted and measuring whether the treatment could give an effect on the students' reading comprehension or not.

Table 5. Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	POST TEST - PRE TEST	10.08615	9.47416	1.51708	7.01499	13.15732	6.648	38	.000

From table 5, the researcher found that the standard deviation is **9.47416.** After obtaining the standard deviation, the standard error can be calculated. The standard error mean is **1.51708.**

$$t\text{-table} = \text{n-1} ; \alpha/2$$
$$= 39 - 1 ; 0{,}05/2$$
$$= 38 ; 0{,}025$$
$$= 2.024$$

Based on the data analysis, it shows that the mean different is significant. The value of t-test is 6.648. Meanwhile, the values of t table on the df (degree of freedom) 38 is 2.024 with the level of significance (α) = 5%. Then, according to the result, the t-test is larger than the t table on significant level 5%. The level of significance is 6.648 > 2.024. It means that the alternative hypothesis regarding the effect of mind mapping is accepted and its null hypothesis is rejected. In other words, there is a significant effect of mind mapping technique on the ability of the first grade students of SMPN 25 Pekanbaru in comprehending descriptive texts.

Discussion

The results of data analysis which are established as the finding of this research showed the application of mind mapping technique on students' ability in comprehending descriptive texts. The average score of students' ability in comprehending descriptive texts in pre-test is 59.23. It shows that the students' ability

in comprehending descriptive texts is categorized as mediocre. There are some students had the lowest score. The reason that made the students had the lowest score is they are lacked of vocabulary. On the other hand, the average score of students' ability in comprehending descriptive texts in post-test is 69.32 which categorized as good. The results showed that the post-test is better than the pre-test which indicated that there is an improvement of students' ability in comprehending descriptive texts.

Based on the results of pre-test and post-test, the results showed that the students' range score for each component of comprehending descriptive texts is increased. The researcher also found out that from the five components of reading comprehension as stated by King and Stanley (1989), the lowest range that found out of aspect of reading comprehension in the pre-test and post-test are 16 (144 < 160) in vocabulary. It happened because the students not familiar with the words, so the students got difficulties in finding the meaning of the words. Meanwhile, the highest number in pre-test is 146 in finding factual information. It happened because in factual information, the answer is clearly stated in the text that the students could point it out easily. In addition, the aspect that has significant increase in the pre-test to the post-test is finding the main idea. After applying mind mapping technique, the students are able to catch the ideas easily because the text is presented in a mind mapping clearly.

The result of this research showed that the t-observation score is higher than t-table score. In other words, the Alternative Hypothesis (Ha) is accepted and the Null Hypothesis (Ho) is rejected. In line with, Buzan (2013) mind mapping technique can helps the students to be focused on the ideas. After that, mind mapping takes the students to develop their new idea and also gives easy way for the students to plan or explain the idea efficiently. It will give the strength prior knowledge.

Finally, the finding of this research has answered the research question: There is a significant effect of mind mapping technique on the ability of the first grade students of SMPN 25 Pekanbaru in comprehending descriptive texts. Because the data analysis showed that t-test is higher that t-table (6648 > 2024). It means that alternative hypothesis is accepted. So, it can be stated that mind mapping technique is one valuable and effectively ways to improve the ability of the first grade students of SMPN 25 Pekanbaru in comprehending descriptive texts.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

After analyzing the data of this research, some conclusions can be drawn Mind Mapping technique is effective in reading comprehension. It can be seen from the improvement in the post-test which is 69.31 compared to the pre-test score which is 59.23. The average of pre-test and post-test is categorized into good level. Moreover, it can be seen that the post-test result is higher than the pre-test result indicating that there is an improvement in the students' ability in comprehending descriptive text.

Furthermore, the result also shows that the value of t-test (6.648) is higher than the value of t-table (2.024) at the significance level of 5%. It means that Alternative Hypothesis (Ha) is accepted and Null Hypothesis (Ho) is rejected. In other words, there

is a significant effect of Mind mapping Technique on the ability of the first grade students of SMPN 25 Pekanbaru in comprehending descriptive texts.

Recommendations

Based on the results of this study, the researcher would like to give three recommendations as follows: first, for the students, it is important for them to read more texts, learn to distinguish the important components of the text, learn a lot of material quickly, and share information with their friend in order to get more knowledge and be more focus on increasing their vocabulary. The English teacher can apply mind mapping technique as one of the techniques in teaching reading especially descriptive texts since it helps the students focus on finding some ideas on reading comprehension. By applying this technique, the teachers need to give more attention on how to improve students' comprehension. In order to make this technique more effective in teaching and learning process, the time spent during teaching reading using Mind Mapping Technique should be controlled and considered. Finally, the researcher recommends that the next researcher can conduct a research by using Mind Mapping with different population, text, and in more meetings. In addition, they should organize the time as good as possible in conducting the research effectively in order to get satisfied result.

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