

**A COMPARATIVE STUDY OF STUDENTS' READING COMPREHENSION  
IN NARRATIVE TEXT THROUGH MIND MAPPING TECHNIQUE AND  
DIRECTED READING THINKING ACTIVITY (DRTA) TECHNIQUE AT  
THE SECOND GRADE OF SMP NEGERI 25 BANDAR LAMPUNG**

**Ulfah Shadrina Adani, Hery Yufrizal, Feni Munifatullah**

FKIP Universitas Lampung, Jl. Prof. Dr. Soemantri Bojonegoro No.1

e-mail: [ulfahadani@gmail.com](mailto:ulfahadani@gmail.com)

**ABSTRACT**

Penelitian ini bertujuan untuk menguji: (i) perbedaan yang signifikan dalam kemampuan membaca siswa melalui penerapan teknik *Mind Mapping* dan *Directed Reading Thinking Activity (DRTA)* dalam teks naratif dan (ii) aspek kemampuan membaca yang paling meningkat. Subyek penelitian ini terdiri dari 28 siswa di kelas VIII B dan VIII E SMP Negeri 25 Bandar Lampung tahun ajaran 2018/2019. Data dikumpulkan melalui tes membaca dalam bentuk teks pilihan ganda dan di analisis menggunakan formula *Independent Sample T-Test* di SPSS versi 16.0. Hasil dari penelitian ini menunjukkan bahwa terdapat perbedaan yang signifikan dalam membaca siswa pada teks naratif melalui penerapan teknik *Mind Mapping* dan *Directed Reading Thinking Activity (DRTA)* karena nilai t-value > t-table ( $3.648 > 1.674$ ) pada tingkat signifikan 0.01. Selanjutnya, ide pokok, kosa kata, dan keterangan merupakan aspek yang meningkat paling tinggi.

This research was aimed at examining: (i) the significant difference on students' reading comprehension after being taught through Mind Mapping technique and Directed Reading Thinking Activity (DRTA) technique in narrative text and (ii) the aspects of reading skills that the highest increase. The subjects of this research were VIII B and VIII E which consisted of 28 students of SMP Negeri 25 Bandar Lampung. The data were collected by using the objective reading test in the form of multiple choices and analysed by using Independent Sample T-Test in SPSS version 16.0. The result of this research showed that there was significant difference of students' reading comprehension after being taught through Mind Mapping technique and Directed Reading Thinking Activity (DRTA) technique since the t-value greater than t-table ( $3.648 > 1.674$ ) at the significant level of 0.01. Then, main idea, vocabulary and reference were the aspects that improved better.

**Keywords:** *Reading Comprehension, Aspects of Reading, Mind Mapping Technique, Conventional Technique, DRTA Technique*

## **INTRODUCTION**

Reading is one of the important skills in language learning because it helps students to master English. According to Harmer (2007) reading is useful for language acquisition. In reading, the students should be taught to use what they know to understand the elements. It means that reading is the ability to interact by understanding the idea and interpreting the text. Since reading is one of skills that helps students to master English. Reading needs comprehension to understand the content, idea, and information in reading. Based on Boardman (2007) states reading comprehension is the process of constructing meaning by coordinating a number of complex processes that includes word reading, word knowledge, and fluency. It refers to the ability in interpreting the words, understanding the meaning and conveying the relationship between ideas in a text. Therefore, reading comprehension is a complex process how to construct meaning, understanding of the text in order to able to discover information of the text by using the skill of thinking highly.

Based on the pre-observation at SMPN 25 Bandar Lampung, the researcher found some problems. First, the students had difficulties to understand the meaning of words because the lack of vocabulary. According to (Nuttall, 1982) there are five aspects of reading which the students should understand to comprehend text well, including determining the main idea, making inference, identifying reference, finding detail information, and the last is understanding vocabulary. Second, the lack of vocabulary also affected students to understand and to get the main idea of the text. Another problem was the lack of appropriate teaching media, they felt afraid or nervous in learning English. The last teacher used a commercial book for teaching English, and teacher did not use the appropriate technique in teaching learning process. A good technique is needed to make students pay attention in classroom and media are needed to be used in the classroom to make them interested in learning process.

There are some reasons of comparing Mind Mapping technique and Directed Reading Thinking Activity (DRTA) technique. Those techniques are good and believed can make the students more active in the class. Then, it will be easy for students to work together with their friends in comprehending a text, it can be work in pairs or in groups. Next, both of these techniques improve the students' social interaction with others by sharing the idea. After that, in these techniques, every student gets a chance to comprehend and elaborate the idea of the text. Therefore, the researcher wants to find out which technique that is better in reading narrative text, either work in groups or work in pairs.

Directed Reading Thinking Activity (DRTA) technique that can be applied to increase the students' reading comprehension. DRTA was developed in 1969 by Russell Stauffer. DRTA is intended to develop students' ability to read critically and reflectively. DRTA helps students comprehend texts by activating their background knowledge related to the texts and promote the use of reading strategies. In addition, the

students' comprehension progress before, while and after reading is monitored during the discussion so as to prevent the students from misunderstanding the texts. Also, DRTA uses media and activities that can help the students understand the text and make them actively involved in the teaching and learning process.

Another technique is Mind Mapping technique. 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 involved writing down a central idea and thinking up new and related ideas which radiate out from the center. It is a good technique that can help students memorizing something because it enables the students to arrange the facts and ideas of the texts. Based on the previous research Malekzadeh. (2015) suggest that Mind Mapping technique is influential in enhancing the students' reading comprehension.

In reference to the description above, the researcher was interested in comparing Mind Mapping and DRTA techniques to improve students' reading comprehension at the second grade of SMPN 25 Bandar Lampung because the students' reading comprehension was still insufficient. Therefore, the research was aimed at examining:: (i) the significant difference in students' reading comprehension after being taught by using a Mind Mapping technique and DRTA technique. (ii) which aspects of reading comprehension that the highest increase after being taught through Mind Mapping technique and DRTA technique.

## **METHODS AND RESEARCH**

The population of this research was the first grade students of SMP Negeri 25 Bandar Lampung academic year 2019/2020. The researcher took two classes, there were VIII B as DRTA class and VIII E as Mind Mapping class that consisted of 28 students. This study applied a quantitative experimental design which used Independent Sample T-Test design since this research used two class as the experimental class to see the comparison of the result before and after the treatments. The variables of this research were Mind Mapping technique as the first independent variable (X1) and DRTA technique as the second independent variable (X2) students' reading comprehension in narrative text as the dependent variable (Y).

Reading tests were used as the instrumen to find the significant difference of students' reading comprehension through Mind Mapping technique and DRTA technique. In analyzing the data, Independent Sample T-Test (SPSS 16.00 for Windows) was used in which the significance was determined by  $p < 0.05$ . Thus, H1 is accepted and H0 is rejected because the t-value was higher than t-table based on the df. In constructing the research, the research procedures went through these following steps: (1) determining research instruments, (2) try-out the instruments, (3) administering the pre-test, (4) conducting the treatments, (5) administering the post-test, and (6) analyzing the data.

## **RESULTS AND DISCUSSIONS**

### **Result**

This research was aimed to answer the questions whether there was a significant difference of the students' reading comprehension after being taught through Mind Mapping technique and DRTA technique and which aspect of reading comprehension that has the highest score. In order to find out the answer, several research procedures had been done which consisted of establishing the research instruments for pre-test, treatments, until conducting post-test. The data were taken from every procedure had been computed and analyzed to draw the answer.

The mean score of pre-test in Mind Mapping score was 61,5, the highest score was 90 and the lowest score was 46.6. Meanwhile, the mean score of pre-test in DRTA technique was 54,9, the highest score was 83,3 and the lowest score was 33,3. From the results of the post-test score, it was found that the mean score of post-test in Mind Mapping was 72,4, the highest score was 93,3, and the lowest score was 60. Furthermore, the mean score of DRTA class was 61,7. Then, the highest score was 90 and the lowest score was 40. The increase of each aspects of reading in Mind Mapping and DRTA can be seen in the gain of each aspects that is calculated by One Way Anova. The aspects that improved better were main idea, reference, and vocabulary.

In addition, Independent Sample T-Test was used to test the hypothesis, in which the significance was determined by  $0.00 < 0.05$ . The significant level was lower than 0.05. It meant that H1 was accepted and H0 was rejected. It proved that the t-value is higher than t-table based on df ( $3.648 > 1.674$ ). Thus, it can be concluded that there was significant difference of the students' reading comprehension after being taught through Mind Mapping technique and DRTA technique at the second grade students of SMP Negeri 25 Bandar Lampung. In other words, the hypothesis was accepted.

Furthermore, Mind Mapping technique and DRTA can increase students' reading comprehension in all aspects of reading skills. The highest improvement was vocabulary with the increase in Mind Mapping class was 23 and in DRTA class was 22. Then, main idea was 20 in Mind Mapping and 17 in DRTA class, reference increased amounting to 21 in Mind Mapping class. As can be noted, the aspect increases the most is vocabulary, then followed by mind idea, and references.

### **Discussions of the Findings**

In this research, the researcher used two techniques for teaching reading to find whether there is significant difference between DRTA and Mind Mapping techniques in students' reading comprehension. DRTA technique and Mind Mapping were used in this research to increase the students' reading comprehension. Therefore, the significant difference between the students' reading comprehension can be measured. It can be seen in hypothesis testing. It was known that there was a significant difference of students' reading achievement after the treatments (t-value > t-table), it indicated that the hypothesis proposed by the researcher was accepted.

The finding confirmed the first objective of this study there was a significant difference of the students' reading achievement between those who are taught through DRTA technique and Mind Mapping techniques at the second grade students of SMP Negeri 25 Bandar Lampung. The students who are taught through Mind Mapping technique got the higher score than who are taught through DRTA technique. The students that were taught by DRTA had difficulty to understand the idea of the text when they not pay attention of the teacher direction or they missed to read the text. Meanwhile, the students who were taught by Mind Mapping can easily connected the idea of the text caused they made the branches that showed the ideas into visualization form.

The result of this study was in line with the statement by Buzan (2010) Mind Mapping is highly effective way of getting information, memorizing the facts of the text and associating their ideas creatively. Therefore, Mind Mapping technique improved students reading comprehension in VIII E class of SMP Negeri 25 Bandar Lampung from the pre-test to post-test. It signified that Mind Mapping technique gave a possitive impact on students' reading comprehension. The technique could help the students comprehend the text especially in narrative text more easily. It could make the students to explore the idea not only rely on the ideas and the background knowledge that they have, but also lend them to discuss ideas in group. In line with the previous researcher stated that mind mapping improved students' reading comprehension. The research from Cahyani (2015) showed that the use of Mind Mapping improved the students' reading comprehension and improved the English class situation especially in reading class.

Based on the explanation above, it can be concluded there was a significant difference between DRTA and Mind Mapping techniques in students' reading comprehension especially in narrative text and Mind Mapping technique is more effective than DRTA technique in teaching reading, especially in narrative text.

On the other hand, the findings did not only analyze the significant difference between Mind Mapping and DRTA techniques in students' reading comprehension, but also the increase of each aspect of reading comprehension. Therefore, the result of this research was deeper and more specific. Based on the result of pre-test and post-test in each aspect of reading comprehension, the aspect of reading that improved more significant after implementing DRTA technique are main idea and vocabulary. The increase of main idea caused by DRTA engaged the students in active process by using their reasoning ability and their own ideas to find the main point of a passage by summarizing its passage and looking for repetition of ideas or words. Another improvement happened in all the items number of vocabulary because DRTA technique helped the students' ability to match the synonyms or antonyms of the words quickly and they also already understand the meaning of the word. It is line with Brown (2001) who states that the students can take the question because prediction is able to active the schemata or background knowledge of the students. It is one of the reasons why

main idea and vocabulary improve in DRTA class, in gathering the information of the text students can conclude the main topic or main idea of the text and also vocabulary.

Moreover, the aspects of reading that improved after implementing Mind Mapping technique are main idea, reference, and vocabulary. The improvement of main idea was typically because Mind Mapping helped the students made the central idea of where one idea is connected to another idea. Thus, students' background knowledge and schemata were motivated and made them easier to find the main topic from the text. Next, Mind Mapping increased reference caused it helped the students to connect the object of the text. Mind Mapping also improved vocabulary because Mind Mapping technique made the students' to memorize the word easily by using visualization therefore, they could match the synonyms or antonyms of the words quickly and they also already understand the meaning of the word. In line with Buzan (2008) by using Mind Mapping, students can represent ideas into visualization and graphic forms where one idea is connected to another idea by using branch. Besides he also says that by using Mind Mapping, it is easy for students to put information into their memory. Mind Mapping is highly effective way of getting information in and out of students' brain.

In conclusion, based on the explanation above, there is a significant difference of students' reading comprehension of the students who are taught by Mind Mapping and DRTA techniques. It means one of the techniques is better than the other, in this research Mind Mapping technique is better than DRTA technique because the gain score in Mind Mapping class is higher than in DRTA class. After that, Mind Mapping and DRTA techniques gave positive effect for the student's reading comprehension especially in term of determining main idea and finding reference and vocabulary.

## **CONCLUSIONS AND SUGGESTIONS**

On the whole, there is a significant difference of students' reading achievement after being taught through Mind Mapping technique and DRTA technique. It showed that the t-value was higher than t-table ( $3.468 > 1.674$ ). It means that there was an improvement of the students' reading achievement in learning English, especially narrative text. Then, Mind Mapping technique is more effective than DRTA technique to help students to increase their reading achievement. That can be identified from gain in Mind Mapping class is 10.95 and in DRTA class is 6.78. It means that the gain in Mind Mapping class is higher than DRTA class.

In order to answer the second research question the researcher also analyzed the improvement of reading aspects in pre-test and post-test. The aspect of reading that improved significant in Mind Mapping and DRTA classes are main idea, reference, and vocabulary. In Mind Mapping class, are main idea, reference, and vocabulary.were the aspect of reading which improved significantly because in Mind Mapping technique students could gather all information of text by representing the ideas into visualization and graphic forms where one idea is connected to another idea by using branch.

Therefore, it is easy for students to put information into their memory. In DRTA class, main idea and vocabulary were the aspects of reading which improved significantly because the directing or predicting of DRTA technique.

Regarding the several conclusion above, the researcher would like to propose some constructive suggestions. Firstly, for the teacher, the researcher suggests the English teacher to implement Mind Mapping technique in teaching reading. There must be good preparation and time allocation, because the materials have to be explained and delivered to the students clearly. The teachers also have to make a clear regulation in order to control the class, to make sure that the students can follow the instruction and focus to the material. Moreover, the teachers should ask the students who are smarter among the others to be the leader of the group in order to help their friends during the learning process. Furthermore, there is an aspect of reading which the students have difficulty to understand, such as finding inference. This aspect actually improved but the students' correct answers of this aspect were very low. Therefore, the teacher should pay more attention in this aspect while teaching reading.

Secondly, further researcher is suggested to conduct this technique on different level of students, different skill or different type of text. For those who want to conduct the same research, it is highly recommended to balance the number of table specification in order to get the accurate data. Use an observation sheet in order to monitor students' activity in the class. Make sure that the try-out test items are already good in order to lower the number of bad items for pre-test and post-test.

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