

# THE USE OF MIND MAPPING TECHNIQUE TO INCREASE STUDENTS' READING COMPREHENSION IN DESCRIPTIVE TEXT

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## Abstract

The objective of this research is to find out whether using Mind Mapping technique is an effective way to increase the students' ability in reading comprehension. The population of this research was the second year students of SMP Negeri 3 Bandar Lampung that consists of seven classes and two classes were chosen as the experimental class and the try-out class. The research design was one group pretest posttest design. In collecting data, the reseacher administered pretest, treatments, and posttest. The result of the students' score before and after treatmens implied that mind mapping technique could increase the students' reading comprehesions. The mean score of pre-test was 57.64 and post-test was 72.11. By comparing between the mean of pre-test and post-test, it can be found that the increase of the mean was 14.47 point. Paired-sample t-test indicates signifiant increase of students reading comprehension achievement after the implementation of Mind Mapping technique ( $t(33) = 8.790$ ;  $p = 0.000$ ,  $p < 0.05$ ) Based on the data, it can be concluded that mind mapping technique is worth applying in the teaching –learning of English reading comprehension ability, particularly at the second year students of SMPN 3 Bandar Lampung.

**Keywords:** mind mapping technique, increase, reading comprehension.

Tujuan penelitian ini adalah untuk mengetahui apakah teknik pemetaan pikiran merupakan jalan yang efektif untuk meningkatkan kemampuan sisiwa dalam pemahaman membaca. Populasi dalam penelitian ini adalah siswa kelas 2 SMP Negeri 3 Bandar Lampung yang terdiri dari tujuh kelas dan hanya dua kelas yang dipilih sebagai kelas untuk percobaan dan try-out. Desain yang digunakan dalam penelitian ini adalah pre-test dan post-test satu kelompok. Dalam pengumpulan data, peneliti memberikan pretest, pengajaran, and posttest. Hasil skor siswa sebelum dan sesudah diajar menyatakan bahwa teknik pemetaan pikiran dapat meningkatkan pemahaman siswa dalam membaca. Nilai rata-rata dari pre-test adalah 57.44 dan post-test adalah 72.00. Dengan membandingkan rata-rata dari pre-test dan post-test, itu dapat diketahui bahwa peningkatan rata-rata adalah 14.56 poin. Paired-sample t-test menunjukkan kenaikan yang signifikan pada pencapain siswa dalam pemahaman membaca setelah melaksanakan teknik pemetaan pikiran ( $t(33) = 8.790$ ;  $p = 0.000$ ,  $p < 0.05$ ). Berdasarkan data, ini dapat disimpulkan bahwa teknik pemetaan pikiran dinilai berguna dalam belajar-mengajar bahasa inggris dalam kemampuan pemahaman membaca khususnya, siswa kelas 2 SMP Negeri 3 Bandar Lampung

**Kata Kunci:** tehknik pemetaan pikiran, peningkatan, pemahaman membaca

## **INTRODUCTION**

English has become an international language in the world where people compete to speak in English. The function is not only as a global language but also it is used in relevance with science and technology. English is being a foreign language which is taught in Indonesian schools. English has been learnt by the students in Indonesia since at the elementary level. The educational system of school based curriculum insists on mastering the four skills of language that are; listening, speaking, reading and writing. Moreover, reading is very essential in learning English in order to get information from the written English. In reading activity, the reader should interpret the meaning of written text. According to Hornby A.S (1972:63) mentions that comprehension is the power of understanding fully. It means that comprehension determine the essence of reading process. And reading with comprehension, the one will recognize the purpose and the important point of the text besides understanding the surface of the text. In other words, it can be said that there will be no reading without comprehension. In this activity, the text for students' comprehending is given by the teacher. In the process, the students perform will some tasks given, such as understanding the content. When student cannot get something from what they read, they will not get the knowledge that is a part of learning.

Teaching reading is not an easy task to do especially teaching reading in English. Some student's especially young language learners still encounter difficulties when they are trying to read an English text. It might happen because of the lack of consideration in applying the appropriate technique in teaching learning

process stated from Wood (1988) and lack of reading comprehension that is likely caused by the assumption that reading is not daily habit or students' need, even activity is perceived as boring (Oxford, 1990). Indonesian' students have the same problem. The students' understanding in reading English is still low. Actually, reading ability in English language is as important as the three other skills such as listening, speaking and writing.

In some situations, reading in the first language is very different from foreign language. In fact, reading foreign language is more difficult from reading the first language. Cohen (1994) said that reading foreign language is often slower and less successful because the reader must understand many unknown vocabularies and complicated sentence structure which make the reader difficult. In addition, Nuttal (1996) also said that it is found in Indonesian students encounter reading difficulties as foreign language learner such as, read slowly word by word, incompetence to apply reading strategy, easy frustrated and dissatisfied particularly when they meet some difficulty words, read the text aloud in which it may inhibit comprehension, and they confuse to read authentic text in foreign language.

Based on 2006 curriculum (SBC), the student is supposed to deal with many kind of text such as descriptive text, recount text, narrative text, report text, procedure text, and functional texts such as advertisement, brochure, schedule, message, notice, personal letter, invitation (Depdiknas, 2006). In this research, the researcher was only focus in descriptive text. Descriptive text is a simple text that uses simple present tense that has been learned since in elementary school. In

descriptive text, students have to read after describing something or someone related to material given.

Based on the researcher's pre-observation, when conducting teaching practice (PPL), it were found that students' problems come from the student's inability to recognize what the writer's intends to say in the text, in order words the students are incapable to understand the writer's message. Besides that, the students fell bored because the techniques used by the teacher are monotonous. It is necessary for English teacher to make reading materials more interesting and motivating so that the students can progress in reading.

To overcome the problems above, the researcher assumes that there should be some suitable technique in teaching reading in order to motivate the students to read all the texts so they can get the information fully. There are many ways and techniques to increase students' reading ability. One of them is by using mind mapping technique. In fact teaching reading by using mind mapping is not new issue in English language. Mind mapping technique has been applied in many studies. Buzan (2003) argues that the children can learn in interesting way using certain technique which is called Mind Mapping. In the use of mind mapping, students not only use their left side of their brain but also use the right side of brain in the same time to identify words in learning language. In mind mapping, students was have occasion to make symbols, lines or signs to help them recognize the words or fact in their mind maps. Furthermore, in their own way, student can comprehending certain topic or material by using mind mapping. Mind mapping itself is as personal as our body. So, every student was not felt depressed in understanding the material.

Buzan (2003) also stated that mind mapping can help children in memorizing, making a better notes in their text book, rising the idea, saving their time in order to understand the material, and rising their concentration with the material. In addition, at the end of lesson, they will be able to understand the material well so they can easily tell other people about their understanding of certain topic by using their own mind mapping. The students can use mind mapping to get the deep meaning of a story on the text. Mind mapping is a cognitive strategy that helps to improve the students' ability in reading such as in note taking and summarizing the crucial information for better understanding and memorization (Beare, 2009). When the students interpret the texts visually, it reflects their understanding of what they have read in a unique way. Transferring these visuals into words, phrases and sentences becomes easier as the ideas and comprehension of the texts has become much clearer to them. The use of mind mapping makes it possible to create meaningful reading experiences for students in the classroom. Mind mapping can be easily implemented to modify different teaching styles and providing an opportunity to the teachers, making their learning extremely simple for all.

From the problems stated above, the researcher intended to know whether there is a significant increase of the students' reading comprehension ability after being taught through mind mapping technique at the second year students of SMP Negeri 3 Bandar Lampung in academic year of 2012/2013. In this case, reading is delimited on five reading aspects that is the students' understanding of main idea, supporting details, making inferences, making references, and vocabulary because the students still have insufficient ability in that skill.

## **METHOD**

In this research, the researcher used a quantitative research based on the experimental design. A quantitative research was used to measure how far the mind mapping technique influences the students in increasing their reading comprehension. The researcher used *one group pre-test and post-test design* which took two classes as the experimental class and the try-out class.

The design of the research was presented as follow:

### **T1 X T2**

Note:

- T1 is the pre-test.
  - X is the treatment.
  - T2 is the post-test.
- Setiyadi (2006: 132)

The population of this research was the second year students of SMP Negeri 3 Bandar Lampung in academic year of 2012/2013. The researcher selected the sample by using random sampling technique through lottery drawing because the whole classes had the same rights to be chosen as the sample of the research. The researcher took two classes; the first was VIII F as the try-out class and the other was VIII D as the experimental class which consists of 34 students. The steps in determining experimental group and try out group were the writer provides seven pieces of paper printed the name of class of population. Then, the writer takes two classes randomly and gets the first classes as try out group and the second as experimental class. The experimental class has pretest, posttest, and three treatments

In collecting the data, the researcher used reading test as the instrument. The reading test was given in pre-test and post-test in multiple-choice form. The try-out was administered before giving the pre-test. It was expected to find out whether the test items used in the research were good or not. It refers to validity, reliability, level of difficulty, and discrimination power. This test was conducted in 90 minutes.

## **RESULT AND DISCUSSION**

The pre-test was administered to the experimental class before giving treatments. There were 25 test items for 45 minutes. Statistical Computation with SPSS 16.0 for Windows was used to analyzed the scores on the pre-test in the experimental class. The total score of the pre-test was 1960. The mean of the pre-test was 57.64; the highest score was 80; the lowest score was 36; the median and the mode was 60.

From the data in distribution of the students' pre-test score, it shows that the frequency of students who got the lowest score (36.00) was one student; the highest score (80.00) was two students. The frequency of students who got score more than 67.00 was 5 students with the percentage 14.7%. While the frequency of students who got score less than 70.00 was 29 students with the percentage 85.3%. It can be said that there were only few students who had adequate achievement in reading test that had been tested because the majority of the students did not get the standard score of mastery learning (67), it means that their achievement in pre-test is still low.

From the data in the distribution of students' pre-test achievement in each aspect reading comprehension, it can be seen that the students have better achievement in finding main idea (72.79%) with total answered 99 from maximum answered 136, determining specific information (53.39%) with total answered 145 from maximum answered 272, finding reference (47.05%) with total answered 64 from maximum answered 136, finding inference (50%) with total answered 68 from maximum answered 136, and finding vocabulary (62.94%) with total answered 107 from maximum answered 170. The result also showed that the students still had low achievement in reference (47.05%) with total answered 64 from maximum answered 136 .

Furthermore, the researcher administered the post-test in order to know the students' score whether there was a significant different of students' reading achievement. The total scores of the post-test in the experimental class was 2452. The mean of the post-test was 72.11; the highest score was 84; the lowest score was 56; the median was 72; and the mode was 64.

From the data in distribution of the students' post-test score, it shows that the frequency of students who got the lowest score (56.00) was one student; the highest score (84.00) was three students. The frequency of students who got score more than 67.00 was 23 students with the percentage 67.7%. While the frequency of students who got score less than 67.00 was 11 students with the percentage 32.3%. It can be inferred that there was an increase of students' achievement from the pre-test.



From the data in the distribution of students' post-test achievement in each aspect of reading comprehension, The total students who answered correctly for finding main idea (95.50%) with total answered 130, determining specific information (79.04%) with total answered 215, finding reference (57.35%) with total answered 72, finding inference (67.64%) with total answered 82, and finding vocabulary (75.52%) with total answered 125 . It can be inferred that there was an increase of students' understanding in these reading aspects.

The result of the pre-test and the post-test in the experimental class implied that mind mapping had increased the students' reading comprehension significantly. The total score of the pre-test to the post-test had increased from 1960 to 2452. There was an increase 492 points. The mean was from 57.64 to 72.11. There was an increase 14.47. The result in reading comprehension aspects shows that the highest increase was in reading comprehension aspects (88.88%) while the lowest increase was in finding inference and reference (10.3%). The increase of finding main idea was 22.71%; the increase of determining specific information was 25.65%; and the increase of finding vocabulary was 12.58%. The high increase of main idea, specific information, reference, inference, and vocabulary were happened because the use of mind mapping technique was effective for the students. From the explanation above, it can be inferred that mind mapping technique can significantly increase the students' reading comprehension achievement.

Moreover, the researcher tested the hypothesis to prove whether it is accepted or rejected by using *Paired Samples T-test Formula*. The hypothesis was analyzed at

significant level of 0.05 in which the hypothesis is approved if  $\text{Sig.} < \alpha$ . From the result of hypothesis test analysis, the result of computation showed that t-ratio is 8.790 and t-table is 2.042. The two tail significant show that  $p < 0.05$  ( $p = .000$ ). Because the value of t-ratio is higher than t-table ( $8.790 > 2.042$ ) and the significant is lower than 0.05 ( $0.000 < 0.05$ ),  $H_0$  was rejected and  $H_a$  was accepted. In can be stated that there is a significant difference of the students' score on the pre-test and the post-test after being taught through mind mapping technique.

## **CONCLUSIONS AND SUGGESTIONS**

Based on the data analyzed and the discussions of finding, the researcher draws conclusion, as follows:

- 1) There was a significant increase of students' reading comprehension after being taught through mind mapping technique at SMP Negeri 3 Bandar Lampung. It can be seen from the total score of the pre-test and post-test which increased from 1960 to 2452. The increase was 492 points. The mean of students' pre-test and post-test score increased from 57.64 to 72.11 with gain score 14.47. Mind mapping technique also can increase aspects of reading comprehension. It was proved from the students' pre-test and post-test score of their achievement in reading comprehension aspects; 22.71% for finding main idea, 22.65% for determining specific information, 10.3% for finding reference and inference, and 12.58% for finding vocabulary. It also can be seen from the result of the hypothesis testing which showed that the  $\text{Sig.} < \alpha$  ( $p < 0.05$ ,  $p = 0.000$ ).
- 2) Mind mapping is one of the techniques that are fun to do. Mind mapping

had successfully motivated the students to read the descriptive text in joyful way. It involves colors and pictures or drawing. The students somehow do not realize that they are drawing their comprehension of the text.

- 3) The use of mind mapping in reading descriptive text can help students ease to understand and remember the information from the text. It is because mind mapping involves symbols or pictures, branches to connect each key word to key word. At the same time make students more creative and imaginative in drawing pictures/symbols.
- 4) Mind mapping is good to train students' comprehension on facts and details. It proves that mind map is superior note-taking technique.

Considering the result of the research, the writer would like to give some suggestions as follows:

- 1) It is suggested to English teachers to apply mind mapping technique in descriptive text to make the students well prepared with the ability to identify the language feature and generic structure from the text. The teachers also suggested giving brainstorming before asking the student to make mind mapping. It is important to make students know what they have to do with the text, what kind of information that they need to find from the text.
- 2) Teachers are also suggested not too much do intervention to the students when they make mind mapping. It is because if the teachers do too much intervention, it is make the student can lose their confidence and they may not enjoy the reading process anymore.

- 3) For further researchers, it would be very good if mind mapping technique can be implementation in other genres. In addition, the researchers also suggested conducting the next research which is deal with the effectiveness of mind mapping technique in increasing other language skill such as speaking and writing.

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