INCREASING STUDENTS' READING COMPREHENSION THROUGH MIND MAPPING TECHNIQUE FROM NARRATIVE TEXT

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Abstract: The objectives of this research are (1) to find out whether or not mind mapping technique can be used to increase students' reading comprehension, and (2) to investigate the students' respond after being thought through mind mapping technique. This research was conducted at the first grade students of SMAN 2 Kota Metro numbering of 30 students. This is a quantitative study which had intact group pre-test post-test design. The results show that the students' mean scores in the pre-test was 58.06 and post-test was 70.46. It can be seen that the students' mean score of post-test was increased about 12.4 point after being thought through mind mapping technique. The highest score of the pre-test was 86 and the highest score of post-test was increased to 90, in which the highest score gain was 16. The lowest score of the pre-test was 43 and the lowest score of the post-test was 50, in which the lowest score gain was increased to 7. The effectiveness could be seen from the computation which showed that t-value was 7.050 was higher than t-table (2.045). The results show that mind mapping technique was effective to increase the students' reading comprehension of narrative text. The effectiveness was also supported by the students' respond from the questionnaire' result. From questionnaire' result, 96.6% students gave positive respond toward mind mapping and 3.4% gave negative respond.

Keywords: mind mapping, narrative text, reading comprehension, questionnaire.

MENINGKATKAN PEMAHAMAN MEMBACA SISWA MELALUI MIND MAPPING TEKNIK DARI TEKS NARASI

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Abstrak: Tujuan dari penelitian ini (1) untuk mencari tahu apakah *mind mapping* teknik dapat digunakan untuk meningkatkan pemahaman siswa dalam membaca, dan (2) untuk menyelidiki respon siswa setelah diajarkan menggunakan *mind mapping* teknik. Penelitian ini dilakukan di kelas sepuluh SMAN 2 Kota Metro dengan 30 orang siswa. Penelitian ini merupakan penelitian kuantitatif yang menggunakan grup *pre-test post-test*. Hasil Penelitian menunjukkan bahwa nilai rata-rata siswa di *pre-test* adalah 58.06 dan *post-tes*t 70.46. Dapat dilihat bahwa nilai *post-test* siswa meningkat sekitar 12.4 poin setelah diajarkan menggunakan mind mapping teknik. Skor tertinggi *pre-test* adalah 86 dan skor tertinggi *post-test* meningkat menjadi 90, di mana skornya meningkat 4 point. Nilai terendah *pre-test* 43 dan nilai terendah *post-test* 50, yang mendapatkan skor terendah, nilainya meningkat 7 poin. Efektivitas bisa dilihat dari perhitungan yang menunjukkan bahwa *t-value* 7.050 lebih tinggi dari *t-table* 2.045. Hasilnya menunjukkan bahwa *mind mapping* teknik ini efektif untuk meningkatkan pemahaman siswa dalam membaca narasi teks. Efektivitas juga didukung oleh respon siswa dari kuesioner yang diberikan. Hasil dari kuesioner menunjukkan bahwa 96,6% siswa memberikan respon positif terhadap *mind mapping* dan 3,4% memberikan respon negatif.

Kata kunci: *kuesioner, pemahaman membaca, pemetaan otak, teks narasi.*

INTRODUCTION

Realizing that English plays a very important role in the world of communication, the Indonesian Government has declared English as the first foreign language. Since English as a foreign language, English teachers have to use appropriate materials to develop students' language skills meaningly; listening, speaking, reading, writing, and the aspects of language as well such as vocab and structure. One of the language skills that is very important to be developed is reading skill.

Nuttal (1982: 42) defines reading as the meaningful interpretation of printed or written verbal symbols. Other linguists, Finichiaro and Bonomo (1973: 199) said that reading is bringing and getting meaning from the printend or written materials. Joycey (2006: 2) says that reading is an active skill, where the reader interacts with the text, and to some extent the writer. Smith (1982: 5-6) said that reading certainly implies comprehension, and reading is something that makes sense to the reader." The readers try to understand and get the meaning and the information in the written texts in form of symbols, letters, graphs, etc. Thus they grasp the writers' messages from the texts.

Reading comprehension means that a reader acquires from reading. It is highly related to the conceptual background of the reader. In reading process, a reader utilizes vision, perception, comprehension, and reaction (Brown, 1982: 6). Simanjuntak (1988) states that reading comprehension is a process in which readers use their formal schemata (rhetorical structure of language knowledge) and content schema (background knowledge of context) in order to get meaning of printed symbol.

Reading always has a purpose. It is something that we do everyday, it is an integral part of our daily lives, take very much for granted and generally assumed to be something that everyone can do. The reason for reading depends on the purpose of reading. For examples, an advertisement (e.g. job vacancy), the readers want to know and get the information about a job. Reading news paper articles, the readers want to know about news.

To solve the problems in comprehending the text, the researcher tried to apply the technique that may be effective to increase the students' reading ability. There are many ways and techniques to increase students' reading skill, one of them is by using mind mapping. Mind mapping is the ideal tool for learning (Buzan, 1993) because it is easy to use and engage students in the process of learning (Careyus, 2000). This involves combinations of images, colors and visual spatial arrangements for expressing related ideas and complex problems in a simple way (Marguiles, 1991) which can be used by students different age groups (Careyus, 2000).

Teaching skill by using mind mapping actually is not a new issue in English language. Mind mapping technique has been applied in many studies. Bekti (2009) suggested that mind mapping technique is appropriate to improve students' reading comprehension on a group of vocational school students. Furthermore, Asmiaty (2001) also stated that mind mapping is good to train students' reading comprehension because it helps the students easier to understand the story and make them more creative and imaginative in drawing pictures and symbols. Additionally, Moi & Lian (2007) proved that mind mapping helps the pupils showed better understanding of text

passage as they were able to see the relationship of the content visually and search for keywords in an answer to question.

Based on the purpose of reading above, there are many texts that can be used to teach reading comprehension, for example are narrative, descriptive, news items, recount and others. In this research the researcher used narrative text to develop the student's reading ability. Sofyan (1999: 86) states that narrative is a story which is connected with events based on the plot. Teachers commonly use narrative text because the narrative text is a story of human experience. For many students, interesting literature text can provide a key to motivate them in studying English. By studying literature materials the students will have a wide range of vocabulary and develop four language skills (i.e. reading, writing, speaking, and listening). While feeling entertaining by this interesting material, the students simultaneously can understand the narrative text. In this way it is easier to know the meaning of the words of a presented.

Students will be interested and motivated with the subject if the teacher can arrange the materials interesting, such as by adding a pictures in the reading text and making more colorful. Therefore, teacher's duty is not only to explain the materials, or select suitable material but also to guide, advice, support, and motivate the students whenever they need it. In order to improve students' reading comprehension, the teacher should choose suitable technique and concern with students' obstacles and difficulties in learning reading.

Referring to those explanation above, the research was aimed to investigate the effectiveness of mind mapping technique to increase students' ability in

reading narrative text. As the reason, nowadays, students of junior and senior high school in Indonesia often face genre in their language class, especially English. In details, the research entitled "Increasing Students' Reading Comprehension through Mind Mapping Technique from Narrative text at the First Grade Students of SMA N 2 Kota Metro".

METHOD

This research is a quantitative study since it is focused on the product (result of the test) not the process of teaching learning. This present study has *one group pre-test post-test design.* In this research, the researcher uses regression study. Regression is used to predict the effect of dependent variable toward independent variable. The researcher was selected the class by using *simple random probability sampling*. The learners received the questionnaire. There was treatment for three times, the students were tested before and after the treatment. After the treatment, the students were given a set of questionnaire in order to know the students' response toward the technique being implemented. The research design could be represented as follow:

$$T_1 \quad X \quad T_2$$

Notes:

T1 : Pre-test

T2 : Post-test

X : Treatment

 (Setiyadi, 2006:132)

To see the students' basic reading comprehension. The numbers of qualified items were 30 items in the form of multiple choices which contained four options of answer for each (A, B, C, and D).

RESULT AND DISCUSSION

Result of Reading Test

The total of the pre-test score before the treatment of teaching reading comprehension through mind mapping technique was implemented was 1613, mean score was 58.06, the highest score was 86 and the lowest score was 43. The median and mode was 56, since there was 1 student who got 43.

The total of post-test score after the treatment of teaching reading through mind mapping technique was implemented was 2114, mean score was 70.46, the highest score was 90 and the lowest score was 50. The median was 70 and the mode was 80, since there were 6 students who got 80. The students' scores in post-test were higher than their scores in the pre-test. Therefore, the treatment of teaching reading through mind mapping technique gave a good contribution to attainment of the reading teaching learning. Specifically, the use of mind mapping technique increased the students' reading comprehension in all aspects of reading comprehension, such as determining main idea (6.66% increased), finding detail information (6% increased), inference (9.99% increased), reference (2.38% increased) and vocabulary (8.66% increased). Moreover, mind mapping technique mostly increased the studentss' reading comprehension in inference, in which their ability in that aspect was 9.99 % increased significantly. Mind mapping helps the students to remember information because as described by

Hobartswan (2010) there was symbols/pictures or even colors that could differentiate keywords/sub topics that can enhance the human's brain.

The Improvement of the Students' Reading Comprehension

The comparison of the pre-test and post-test showed that the students' reading comprehension was improved after being taught through drill technique. The comparison between the total score of the pre-test and post-test was increased from 1613 to 2114. Besides that, the mean of the students' scores in the pre-test and post-test was increased from 58.06 to 70.46. It can be seen that the students' mean score of post-test was increased about 12.4 point after the treatment of teaching reading comprehension through mind mapping technique was implemented. The highest score of the pre-test was 86 and the highest score of post-test was increased to 90, in which the highest score gain was 4. The lowest score of the pre-test was 43 and the lowest score of the post-test was 50, in which the lowest score gain was increased to 7.

In testing the hypothesis, *Repeated Measure T-Test* was used and was also statistically tested by using statistical computerization (SPSS 16), in which the significance was determined by $p<0.05$. The T-Test revealed that the result was significant ($p=0.00$). Thus, there was a significant increase of the students' reading comprehension after the treatment of teaching reading comprehension through mind mapping technique was implemented. In other word, H_0 was rejected and H_1 was accepted. Table 6 below served the data of *Independent T-Test* in the pre-test and post-test.

The t-value was 7.050, in which the data significant based on t-table was at least 2.045. T-value was higher than t-table (7050 >2.045). Therefore, it can be concluded that there was a significant increase between the pre-test and post-test score, in which the mean of the post-test score was higher than the pre-test score.

 Result of Questionnaire

The Questionnaire consists of 8 questions that indicated the students' interest toward mind mapping technique and the uses of follows reading comprehension lesson through mind mapping technique. Each item has a numerical value, for example; strongly agree (SS) has 4 points, agree (S) has 3 points, disagree (TS) has 2 points, and strongly disagree (STS) has 1 point.

Table 1. Distribution Frequency of the Students' Questionnaire

No.	Score Interval	Frequency	Percentage
1.	24-32	29	96.6%
2.	17-23	1	3.4%
3.	8-16	0	0%
Total		**30**	**100%**

From the table above, it can concluded that 96.6% of all students give positive respond toward mind mapping technique.

The result of the research showed that the students' reading comprehension was improved after being taught through mind mapping technique. The students' mean score after being taught through mind mapping technique was increased better and significantly. The students' mean score of the pre-test was 58.06; meanwhile, their

mean score of the post-test after being taught through mind mapping technique was 70.46, in which their gain score was 12.40. Based on the finding, it can be seen from the students' mean score of the pre-test and post-test that there was a significant improvement before and after being taught through mind mapping technique. Based on the result of research findings, it can be seen that using mind mapping technique is effective in teaching reading descriptive text. The result of repeated measure t-test computation shows that t obtain value (7.050) is more than to t critical value (2.045) at the level significance 0.00 (two-tailed) which indicates that the null hypothesis (H_0) is rejected. It means that there is significant difference between the posttest score after the treatments. It means that the treatments can work well and can bring a significant effect in improving students' reading ability in narrative text. The result of the research also supported by questionnaire data analysis. The students have positive respond toward mind mapping technique for teaching reading especially narrative text.

Teaching reading comprehension through mind mapping technique can increase students' reading comprehension because; Firstly, mind mapping helps the students to understand the text. In line with that, Buzan (2000) states that mind mapping technique can work effectively as a tool for learning because the use of mind map can help someone became easy to understand and remember what the material has been read. The students do not need to know the meaning of all words which is preserved in the text. They just need to read quickly and mostly focus on the keywords when they start to transfer the information from the text into their mind mapping. Mind mapping makes us

easy to get an overview of the entire project to understand a complicated system or structure because sometimes be hard to see the big picture when there are thousands of factors to keep in mind (Buzan, 2000) and headlines contain single words and short phrases in mind mapping are easier to understand than pure text (Hobartswan, 2010). In the other hand, the disadvantage is the students need a lot of time to read and review in deciding sub topics/branches. They still confuse to transfer the important information from the text to be appropriate branches in their mind mapping. According to Hofland (2007), creating mind mapping may take time but, this help you to recall information and will check your understanding.

Second is mind mapping technique helps the students to remember information. It is because symbols or pictures and even colors used in mind mapping can differentiate keywords or sub topics in their mind mapping. Image can enhance the human's brain to remember in a long term memory (Hobartswan, 2010) because a mind map helps enhance the brain's capacity to recall information (Beare, 2009). In the other hand, the use of symbols/pictures can give some problems for some students. The students who are unable to draw may discourage of drawing these symbols or pictures. Moreover, the disadvantage of the use of symbols/pictures can be difficult for others to understand because those personal symbols or pictures that represent meaning for their creators do not necessarily mean anything to someone who does not take part in the mind mapping creation. In line with that, as described by Hofland (2007) a mind mapping provides a self explanatory presentation of information and structure only to those participants who took part in the creation

of a mind mapping.

The last, this technique can increase the students creativity, imagination and motivation in the learning process. When the students are making their mind mapping, they feel challenge to draw appropriate symbols or pictures because each student wants their mind mapping to be the most interesting one. Therefore, it can motivate them to be more creative in the learning process because unconsciously they need to increase their imagination. As described by Hobartswan (2010), mind mapping is an important technique that improves the way to record information, enhances creativity, imagination, and also motivation, especially in drawing and coloring image to represent the information in mind mapping.

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the research findings and the discussion, it can be drawn that mind mapping technique is effective in teaching reading descriptive text. It can be seen from the computation result of repeated measure t-test in SPSS 16 for windows which shows that t obtain value (7.050) is more than t critical value (2.045) at the level significance 0.00 (two-tailed) which indicates that the null hypothesis (H_0) is rejected. It means that there is significant difference between the posttest score after the treatments. Specifically, the use of mind mapping technique increased the students' reading comprehension in all aspects of reading comprehension, such as determining main idea, finding detail information, inference, reference, and vocabulary. Moreover, mind mapping mostly increased

the students' reading comprehension in inference, in which their ability in that aspect was 9.99% increased significantly. It was because mind mapping helps the students to remember information because there was symbols/pictures or even colors that could differentiate keywords/sub topics that can enhance the human's brain.

Furthermore, mind mapping as a visual diagram has successfully motivated the students to read the narrative text in a joyful way. Mind mapping works the way the brain works. The human's mind remembers keywords and images, not sentences. The use of keywords, colorful pictures, and symbols in mind mapping help the students remember information from the text. Reading by using mind mapping also not only can be seen as a receptive skill but it also can be seen as a productive skill.

Moreover, the use of mind mapping technique is not only limited for the senior high school students, but also this technique is really flexible to be applied in all grades such as for elementary school students, junior high school students, even for college students. It can happen because the readers in all grades like a joyful process in comprehending the text. Mind mapping can encourage the lower learners to read the text quickly by focusing on the keywords, while the faster learners will be faster in comprehend the text.

Besides the discussion and finding can be reported that 96.6% students give positive respond toward mind mapping technique and 3.4% students give negative respond.

Suggestion

The suggestions below are addressed to English teachers and to next researchers which have similar field with the present research.

Teachers are suggested to give brainstorming before asking the students to make a mind mapping. It is important to be conducted in order to make the students know what they have to do with the text they read, what kind of information that they need to find from the text.

Futhermore, the teachers should prepare a good lesson plan and the materials which are suitable and well constructed to avoid monotonous activity in class. At the last activity, it will be better if the teachers can discuss the mind mapping that has been made by the students and give reward for the most interesting one.

For further researchers, it is recommended that mind mapping technique be implemented in other genres. Besides, the researchers also suggested to investigate the effectiveness of using mind mapping technique in improving other language skills such as speaking and writing.

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