OPTIMIZING MIND MAPPING TO IMPROVE STUDENTS’ THINKING SKILL FOR READING COMPREHENSION
(A Classroom Action Research at IKIP PGRI Madiun in Academic Year 2013/2014)

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Abstract

This article aims to describe 1) whether and to what extent the optimizing of Mind Mapping can improve students’ thinking skill in reading comprehension; 2) the difficulties of the implementation of Mind Mapping to improve students’ thinking skill in reading comprehension. The research findings show that Mind Mapping can improve students’ thinking skill in reading comprehension such as: 1) the mean score of the students’ thinking skill was increased from 80.7 to 96.6 and all of students’ scores were above the passing grade; 2) the total of students’ right answer of each thinking skill indicator was increased such as: part-whole relation from 192 to 228, conclusion from 141 to 192, similarities from 172 to 200 and differences from 181 to 203; 3) in the implementation of mind mapping, the students got some difficulties such as: the students were confused when they cannot find supporting statements in all of their articles, they were confused to choose the key words or shorten the sentences for the mind mapping step 3, and they were confused to put the key words in mind mapping step 3. It was quite difficult to find articles with the same topic but comes from different resources that consist of the same subtopics inside it as seen in the interview result in attachment, It was needed 2 meeting to do all the mind mapping process that means the mind mapping technique is time consuming.

Key words: Mind Mapping, thinking skill, reading comprehension, action research.

INTRODUCTION

Reading is the key of language teaching learning process because of the importance of reading in order to fulfill the need of information, knowledge and science in our life. As Grabe (2009: 5) says “Citizens of modern societies must be good readers to be successful. Reading skill does not guarantee success for anyone, but success is much harder to come by without being a skilled reader.” This statement implied that anyone should read if they want to be successful, including youngsters which are obviously at studying age. Reading
leads another subjects or materials in language teaching learning process. Without reading the material first, students are not able to study about another subject's material. It is difficult for the students to understand and to process the information related to subject material that they learnt without read it first.

From the elaboration above, it is obvious that students should not underestimate reading. However, there are many students neglect this activity. Usually they read when they are assigned by their teachers, or they read only the page they like such as gossip and entertainment news that will have no support in their academic. In short, students tend to read only when then they feel that the reading is interested for them. To be successful students, reading has to be a must. The effort of making students to make reading as student habit is the thing that is now being tried by the researcher of this study to be implemented in IKIP PGRI Madiun.

There are reading 1 up to reading 4 in IKIP PGRI Madiun. In reading 4 class of IKIP PGRI Madiun, the students are taught about the micro skill of reading comprehension. This class is emphasizing in point 4 of Brown's micro skills of reading comprehension. The micros skill is about recognize a core of words, and interpret word order patterns and their significance. This micro skill is related to thinking skill in which the students need little outside knowledge and they should be able to guess the rights answer of the context inside the exercise (Mikulecky and Jeffries, 1986: 281). In guessing the right context inside thinking skill exercise, the students should be able to identify the core words, interpret word order and their significance to obtain the right answer.

According to result of interview with the lecturer of reading class in IKIP PGRI Madiun on October 21st 2013, thinking skill exercises are provided for the students to be done before they depart to reading 4 material. An interview with reading 4 lecturer shows that before the students study in reading 4 class, they have to do thinking skill test in the 3rd semester or in Reading 3 class. The goal of this test is to identify the students' thinking skill through a text or English text, because in this reading 4 class, the students not only read 1 or 2 texts but in many sheets or even in a form of book. If the students’ thinking skills are weak, it can be sure that the student cannot comprehend the text well, that means the students need a special treatment. This exercises provided as the requirement in entering reading 4 class to know the students thinking skill ability.

Thinking skills is about the readers' way to think about their reading material (Mikulecky and Jeffries, 1986: 10). Thinking skills test is a test done at
the end of the third semester of Reading 3 subject. It works as a prerequisite for entering the next reading class given in the fourth semester. It is necessary for students to take this test before joining the reading 4 class since the thinking skills test shows how they understand simple texts. It is assumed when students are not able to understand a simple text they will not be able to understand the more complex texts in reading 4 class. There are four indicators of thinking skills. Mikulecky and Jeffries (1997: 164) state that in thinking skill exercises, the students should be able to identify the (1) synonyms, (2) opposites, (3) part-whole relationship, and (4) drawn conclusion based on evidence to solve the problems in exercises. As a matter of fact, many students have failed meeting the four indicators in thinking skills in the form of thinking skill test that held in the end of Reading 3 class (Intensive Reading class) in IKIP PGRI Madiun. In making conclusion, students were not able to choose the correct answer of the following question:

Question: Whales are the largest animals. But they eat very tiny fish and sea plants. That means they must:

a) eat larger fish.
b) eat a lot.
c) drink a lot of water.
d) travel far.

To answer this question, students must first, find the key word of the question. The key word are largest and tiny that categorized as opposite of each other. After finding the key word of the question, they must conclude the answer that a largest animal will need a large amount of food, so if they eat a very small fish, then they have to eat a lot. Thus, students should choose answer (B) eat a lot. In this question, 16 of 34 students in the class cannot answer it correctly.

In similarities or synonymy, students were not able to choose the correct answer of the following question:

Question: Some kinds of trees are always green. They do not lose their leaves. So they are called

a) flowers. b) lifeless.
c) evergreens. d) leafless.

To answer this question, students must find the core word or key word of the question. The key word is always green, and then the students should find the synonymy of always green that is evergreen. Thus, students should choose answer (C) evergreen. In this question, 12 of 34 students in the class cannot answer it correctly.

In opposites, students were not able to choose the correct answer of the following question:

Question: Glassmaking is a very old art. The Romans and the Egyptians made glass many years ago. Now we can make special kinds of glass in many different colors. But the art is

a) the same. b) very new.
c) beautiful. d) not old.

To answer this question, students must find the core word or key word of the question. The key words are old art, now, and different colors. Then the students should think the opposite condition that
even now we can make glass in different colors but we still use the old art. Thus, students should choose answer (A) the same. In this question, 17 of 34 students in the class cannot answer it correctly.

In Part-whole relationship, students were not able to choose the correct answer of the following question:

| Question: Reading is a very good way to learn a new language. You can learn new vocabulary. You can also learn to think in that
| a) book. b) language. c) comprehension. d) word.

To answer this question, students must find the core word or key word of the question. The key word is language. Then the students should find the relationship of the key word in the answer choice. Thus, students should choose answer (C) language. In this question, 11 of 34 students in the class cannot answer it correctly.

The problems of the students in doing the thinking skill exercises are caused by the students of IKIP PGRI Madiun have less motivation in reading. It is indicated through the less hours students use for reading. From the interview done in October by the researcher students mostly read various articles without focus. As a result, their reading quality is low since they read because the reading is offered to them not that they need to read it. Consequently when students do not read a lot it affects their thinking skills. Usually students find it difficult when they have got from their reading. It happens because they cannot conclude what they have read due to the unfamiliar vocabulary and lack of ability in reading between and beyond the line. The students’ lack of reading finally results a bad score in thinking skills test. To overcome this problem, the researcher offers Mind Mapping reading techniques for her reading 4 class.

Before entering the reading 4 class the researcher feels it necessary for the students to read a lot of writings in English since the aim of the reading 4 class is the students can understand articles, journals, and books they read that later the materials they read may be a help in their thesis writing. According to (Mikulecky and Jeffries, 1986: 10) “When the goal of the students is to be able to read English well, then the students should think in English.” Richards (2001; 5) supports “The goal of foreign language study is to learn a language in order to read its literature or in order to benefit from the mental discipline and intellectual development that results from foreign language study.” Based on this statement, the researcher asks students to read at least three articles in English with the same topics but from different sources. To ease their understanding toward what they are reading, students can make use of mind mapping. Mind Mapping is a diagram of brainstorming based on central idea or image which usually used...
to aid organization, solving the problems, and making decision. (Thomas, 2006: 3).
The statement about the characters of Mind Mapping make the researcher has a strong belief that Mind Mapping is able to improve students’ thinking skill. Therefore, the researcher is interested to conduct a research entitled “Optimizing Mind Mapping to Improve Students’ Thinking Skill for Reading Comprehension”. The implementation of this technique will be conducted in 4A class of Reading 4 class using Collaborative Research. Activities in the class will not just filling out the week documents but also following with discussion and consultation about difficulties faced by the students. It is hoped that this research will make the students to have a high motivation in reading, to interact with reading materials habitually, to be able to conclude the content of reading material that have the same theme and combine those idea of the materials in a form of structured explanation. So this strategy will make the students interact with reading material that they learnt in other subject deeply, even with every single English text that comes from other science can be handled by them in the future.

Therefore, the objective of this study are: 1) To identify whether Mind Mapping Strategy can improve students’ English thinking skill in reading subject. 2) To describe the difficulties of the implementation of Mind Mapping in reading class.

RESEARCH METHODOLOGY

In this research, I use action research. Action research is defined as a research and any systematic inquiry that is handled by teacher, researcher, principals, school counselors, or other stakeholders in teaching or learning environment to get information about teaching and learning process in the school and the school operation (Mills, 2000: 6). The goal of this research is to develop, improve and give a positive effect for the students outcomes, teaching learning process and school operation.

There are two kinds of action research based on the result, those are critical and practical action research (Mills, 2000: 25). Critical action research is aimed to liberate the knowledge gathering. Practical action research is a research which is emphasising in the process of the research. This research is categorized as practical action research which has goal to improve and get informations about the students difficulties in 4A class.

In analyzing the quantitave data, in this case, the writer used descriptive statistics that consist of means, highest and lowest score. This quantitative data was used to compare the result of the
students’ Thinking Skill score in pre
thinking skill test and post thinking skill
test. The formula can be seen as follows:

\[ x = \frac{\sum x}{N} \quad y = \frac{\sum y}{N} \]

in which:
\( x \) = means of pre thinking skill test scores
\( y \) = means of post thinking skill test scores
\( N \) = the number of students

In analyzing the qualitative data, I used interactive model As Huberman
and Miles (in Berg, 2009:54), “… data
analysis can be defined as consisting of
three concurrent flows of action: data
reduction, data display, and conclusion
and verification”.

a. Data Reduction

This step is needed when I
classify the data. In classifying the
data, I needed to reduce unused data
of the analyzed subject to find the
valid data to be shown in the data
display. Data reduction is used in
interview result where I only put the
important conversation that can
support the data of this research.

b. Data Display

After doing the data
reduction step, the researcher did
the data displaying process that
classify the similar useful data into
one category to be displayed in
order to give clear and structuring
description about the research. The
field notes, diary, the test data,
interview data and documentation
data related to the participant’s
activity was displayed.

c. Conclusion Drawing or Verification

This research used three
steps or techniques of collecting
data called data triangulation to
verify that the data gotten are valid.
As seen in the data collecting
techniques above, the researcher
used field notes, diary,
documentation, questionnaire and
interview. The step of conclusion
drawing was done after the data
reduction and data display process
have done. In this final step, the
conclusion based on the data was
made. Based on the explanation
above, it could be said that to get the
valid data in the research, the
researcher should did three steps of
analyzing the data, such as: reducing
the data, displaying the data and
also concluding the data.

RESULT AND DISCUSSION

The details of the findings are
discussed as follows.

1. Mind Mapping can improve the
students’ thinking skill.

The implementations of Mind
Mapping to 4A class of IKIP PGRI
Madiun can improve the students’
thinking skill, it can be seen
through:
a) The amount right answer of each indicator was increased as shown in table 4.5.
b) The mean score of the students’ thinking skill was increased as shown in table 4.4.
c) The improvement of students’ vocabulary collection as seen in interview result.
d) The improvements of students’ motivation in reading as shown in attachment.
e) The implementation of Mind Mapping increased the students’ reading experience. Mind Mapping made the students active to read and think more about what they had read. This situation can be seen from the observation result and research diary that the students are getting active in asking question, discussing, consulting and responding the questions as shown in attachment.

2. The research showed the difficulties during the teaching thinking skill using Mind Mapping process.
a) The students were confused when they cannot find supporting statements in all of their articles
b) They were confused to choose the key words or shorten the sentences for the mind mapping step 3.
c) They were confused to put the key words in mind mapping step 3.
d) It was quite difficult to find articles with the same topic but comes from different resources that consist of the same subtopics inside it as seen in the interview result in attachment.
e) It was needed 2 meeting to do all the mind mapping process that means the mind mapping technique is time consuming. It is in line with the research result written by Rima Mei Dwi Novitasari (2012: 66) she stated that Mind Mapping has disadvantages related to time consuming. It spends too much time to be applied. This problem happened because there are many steps in Mind Mapping.

According to all of the findings, it can be concluded that Mind Mapping was successful in improving students’ thinking skill. It works in improving the students understanding of each indicator of thinking skill such as: part-whole relation, conclusion, similarities and differences.
CONCLUSION AND SUGGESTION

I categorized the conclusion of this action research into strong and weak points. Those strong points of optimizing Mind Mapping to improve students' thinking skill are:

1. Mind Mapping is successful in improving students thinking skill. It can be seen from the amount of right answer of each indicator that was getting better from cycle to cycle as shown in table 4.4.
2. The mean score of the students thinking skill was increased as shown in table 4.3.
3. The improvement of students' vocabulary collection as seen in interview result.
4. The improvements of the students' motivation in reading as shown in attachment.
5. The implementation of Mind Mapping increased the students' reading experience. Mind Mapping made the students active to read and think more about what they had read. This situation can be seen from the observation result and research diary that the students are getting active in asking question, discussing, consulting and responding the questions as shown in attachment.

Meanwhile, the weak points of the implementation of Mind Mapping are:

1. The students were confused when they cannot find supporting statements in all of their articles
2. They were confused to choose the key words or shorten the sentences for the mind mapping step 3.
3. They were confused to put the key words in mind mapping step 3.
4. It was quite difficult to find articles with the same topic but comes from different resources that consist of the same subtopics inside it as seen in the interview result in attachment.
5. It was needed 2 meeting to do all the mind mapping process that means the mind mapping technique is time consuming.

Besides the conclusion and the implication, the researcher also proposes some suggestion related to teaching reading. The suggestions are:

1. For Teachers

As the teachers, we all know that students need variations in learning. It also happens in learning reading comprehension. Therefore, it is important for the teachers to decide an effective to be applied in their classes. The implementation of Mind Mapping in this research is one of alternative that can be used by the teachers to improve the students' thinking skill in reading comprehension. The teachers can also use this kind of Mind Mapping in their classes. The teachers may adopt and modify this kind of Mind
Mapping to be applied in their classes to teach other language skills.

2. For Students

Reading is a basis for other language skills. That is why reading becomes very important. Without reading, the students will not be able to understand anything. Therefore, the students need to be able to read and comprehend their reading materials well. But sometimes, students find difficulties in concluding and quoting what they have read. Applying Mind Mapping can be the solution of their difficulties. Mind Mapping can be act as a bridge to combine the articles that they have read.

3. For Institution IKIP PGRI Madiun

Mind Mapping is one of popular technique that can be used in any kind of subject materials. But doing it in multiple steps is rare. It will be a good contribution for the institution if the other lecturer if they want to make another research about Mind Mapping, especially lecturer of IKIP PGRI Madiun.

4. For Readers

Talking about Mind Mapping is always interesting. Thus, there are many researches about Mind Mapping have been conducted. But, it cannot stop us to make another research about Mind Mapping. Therefore, by reading this research report, it is hoped that the readers will get more inspiration in modifying Mind Mapping to be more useful techniques.

REFERENCES


