

OPTIMIZING GRAPHIC ORGANIZERS TO IMPROVE STUDENTS' READING COMPREHENSION

(A Classroom Action Research at the Eleventh Year Students of SMA Negeri 6 Surakarta in 2009/2010 Academic Year)

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Abstract :

This action research is carried out to (1) identify whether graphic organizers can improve students' reading comprehension; and (2) to describe the classroom situation when graphic organizers are employed in instructional process of reading comprehension.

The research is conducted in two cycles from March to May 2010 in the second grade of SMA N.6 Surakarta. The procedure of the research consists of identifying the problem, planning the action, implementing the action, observing the action, and reflecting the result of the research. Qualitative data are collected through interview, observation, questionnaire, and research diary. Quantitative data are collected through test. To analyze qualitative data, the researcher used constant comparative method. It consists of four steps: (1) comparing incidents applicable to each category; (2) Integrating categories and their properties; (3) delimiting the theory; (4) Writing the theory. Meanwhile, to analyze quantitative data, the researcher employed descriptive statistic.

The result of the research shows that using graphic organizers can improve students' reading comprehension and classroom situation. The improvement on students' reading comprehension included; (a) students are able to find explicit information in a text; (b) students are able to comprehend of the text; (c) Students are able to find main idea in a paragraph; (d) students are able to infer the meaning of the text. The improvement of the classroom situation; (a) students come on time in the class (b) students are more motivated to join the class (c) Students pay more attention in the instructional process (d) students' participation in responding the questions are high. In addition, the improvement also happens to the scores. The mean score increases from 57.56 in the pre-test, 63.34 in the formative test of cycle 1, and 69.56 in the post test of cycle 2. The mean score of writing is higher than the writing KKM (Kriteria Kelulusan Minimal) which is 63.

Based on the result of the research, it can be concluded that students' reading comprehension could be improved by the implementation of graphic organizers. Therefore, it is recommended that (1) teacher should give the explicit model during implementing graphic organizers in teaching reading; and (2) teachers need to improve their acquisition of knowledge about graphic organizers through collaboration with other teachers.

I. INTRODUCTION

A. Background of the study

Reading is one of the four important skills in English. Reading is regarded as a decoding skill, that is interpreting codes into ideas. In line with Nunan (1989: 33), he states that reading is viewed as a process of decoding written symbols, working from smaller units (individual letters) to larger ones (words, clauses and sentences).

In this case, reading comprehension may be interpreted as a complex process in which the reader interacts with the text and then decodes the written symbols, it is begun from smaller units (individual letters) to larger

ones (words, clauses and sentences). In addition, in order to support comprehension, it requires reading skills involving explicit information, vocabulary, main idea and inference.

Even though reading comprehension is an important activity, student's reading comprehension in SMA Negeri 6 Surakarta is still unsatisfying. It can be seen from test result of preliminary research, the average score is 57 with the highest score is 73.33 and the lowest score is 43.33. Supporting the result of preliminary research, students' scores viewed from students' reading comprehension are as follows:

No	Skills	High	Low	Average
1.	Explicit	75	50	57.78
2.	Information	75	37.5	55.78
3.	Vocabulary	71.43	28.57	47.17
4.	Main Idea Inference	57.14	28.57	41.42

The problem above may be caused by several reasons; could be the students or teacher. Based on my informal interview, (1) the students' vocabulary mastery was poor, so the students had difficulty to comprehend the text. Besides, the students have lack of motivation in language learning since the students get bored with teaching method used by teacher; (2) in the process of teaching learning, the teacher seldom gave motivation to the students. So it made students unmotivated to join the instructional process. Furthermore, the teacher still used conventional method in the process of teaching learning. In addition, the teacher still dominated the class by using English as the medium all the time. So that, it made the students didn't understand what the teacher said. As the result, student' reading comprehension is not satisfying.

To overcome this problem, I would like to propose graphic organizers to teach reading. Graphic organizer has been defined as a visual representation of knowledge. It is a way of structuring information, of arranging important information aspects of a concept or topic into a pattern using label. (Bromley, et el, (1995: 7).

B. Problem Statements

The problems of the research are formulated as follows:

1. Can and to what extent Graphic organizers improve students' reading comprehension?
2. How is the situation when Graphic organizers are used in the reading class?

C. Objectives of the Research

1. To identify whether and to what extent Graphic organizers can improve students' reading comprehension.
2. To describe the situation when Graphic Organizers are used in reading class.

D. The Benefits of the Research

The findings of this class action research would give benefit to:

1. Students: The students' reading comprehension will be better.
2. Teachers: the result of the research can be useful input in teaching reading using Graphic organizers.
3. The writer: the writer will have more knowledge using Graphic organizers in teaching reading.
4. The institution: The result of this study can be used as alternative to compose lesson plan and arrange the further research.

II. REVIEW OF RELATED LITERATURE

A. Reading Comprehension

1. The Nature of Reading Comprehension

Before discussing the definition of reading comprehension the research should begin by knowing what comprehension involves and how it relates to reading process.

According to Nunan (1989:33) reading is viewed as a process of decoding written symbols, working from smaller units (individual letters) to larger ones (words, clauses and sentences). In other words, we use strategies to decode written forms in order to arrive at meaning. The other definition stated by Rumelhart in Aebersold and Field (1997: 5) reading involves the reader, the text, and the interaction between the reader and the text. In addition, Davies (1995: 1) says

that reading is a private activity. It is a mental or cognitive process, which involves a reader in trying to follow and respond to a message from a writer, who is in distant space and time.

Based on some theories above, the researcher can infer that reading comprehension is a complex process in which the reader interacts with the text and then decodes the written symbols, it is begun from smaller units (individual letters) to larger ones (words, clauses and sentences). In addition, in order to support comprehension, it requires reading skills involving explicit information, vocabulary, main idea and inference.

2. Reading Comprehension Skill

Grellet (1995: 5) states that reading comprehension involves a variety of skills. The main ones are listed as bellow.

- 1) Recognizing the script of a language
- 2) Deducing the meaning and use of unfamiliar lexical items
- 3) Understanding explicitly stated information
- 4) Understanding information when not explicitly stated
- 5) Understanding conceptual meaning
- 6) Understanding the communicative value (function) of sentences and utterances
- 7) Understanding relations within the sentence
- 8) Understanding relations between the parts of a text through lexical cohesion devices
- 9) Understanding cohesion between parts of a text through grammatical cohesion devices
- 10) Interpreting text by going outside it
- 11) Recognizing indicators in discourse
- 12) Identifying the main point or important information in a piece of discourse
- 13) Distinguishing the main idea from supporting details

- 14) Extracting salient points to summarize (the text, an idea etc.)
- 15) Selective extraction of relevant points from a text
- 16) Basic reference skills
- 17) Skimming
- 18) Scanning to locate specifically required information
- 19) Trans coding information to diagrammatic display

3. Definition of Graphic Organizers

There are many definitions about graphic organizers. Among them are from Bromley et al, Sousa, Zwiers.

Bromley, et al. (1995:7) define graphic organizer as a visual representation of knowledge. It is a way of structuring information, of arranging important information aspects of a concept or topic into a pattern using label. Besides, Sousa (2005:192) states that graphic organizers as valuable tool for organizing and representing knowledge and for illustrating relationship between concepts. In addition, Herley in Zwiers (2004:17) states that graphic organizers are drawings that use geometric shapes or tables to show connections between pieces of information.

4. Types of Graphic Organizers

Bellanca (2007) supports and add some graphic organizers. In his book entitled *A Guide to Graphic Organizers*, he puts graphic organizers in total twenty four types. They are KWL, Web, Sequence Chart, Starburst, Gathering Grid, 5+1 Newspaper, Jigsaw, Making Ladder, Scale, PMI, Venn Diagram, Spider map, Classification Grid, Agree-Disagree Chart, Prediction Tree, Decision Maker' Flow Chart, Concept Map, Fishbone analyze, Problem Solving Chart, Two-Way Thinking Tower, Classification Flow Chart, Right Angle, Inference Funnel, and what is the big idea.

5. The Benefits of Graphic Organizers

Graphic organizers research (2005) states that:

The benefit of graphic organizers across several content areas (Science, social studies, mathematics, Spanish as second language, vocabulary, reading, and writing), multi grade level (first through senior high school), and different students populations (regular education students and students with learning disabilities) have been verified in the 29 experimental and quasi-experimental SBR cited throughout this paper. All of the studies included in this review have shown that using graphic organizers led to improve student performance as measured by various forms of assessments (classroom-based, observation, textbook, and standardized). Graphic organizers also have found to result in superior student performance when compared with more traditional forms of instruction (e.g., lecture, linear note taking, question/answering).

6. Graphic Organizers in the Classroom Activities

Three steps in teaching reading are pre-reading, whilst reading, and post reading. In each step the writer would like to explain the role of graphic organizers in the classroom activities.

Pre- reading

Jones (2004: 149) states:

Before you read graphic organizers reminds you of what you already know about a topic and help you to think about what you want or need to know about the topic you will be reading. By asking you to use your background knowledge, you can connect or glue yourself to what you are reading which makes the reading easier and more interesting.

Whilst reading

Again Jones (2004: 149) states that:

While you read graphic organizers help you to keep your reading brain alert and awake and focused on what you are reading. They also help you fix up any confusing passage you come across. They may also ask you to predict or think about what is coming next, which helps to keep you glued to the reading.

Post reading

Finally, Jones (2004: 150) says that graphic organizers remind the readers of what they read after reading. Graphic organizers also help them to navigate through all the sounds of words to find the most important ideas in the reading. And to keep what they read in their head.

Graphic organizers in this research means any graphic displays that help the readers obtain the meaning of the text in term of organizing and linking ideas in purpose of finding main idea, explicit information, implicit information and inference.

III. RESEARCH METHOD

A. Context of the Research

1. The Setting and the Time of the Research

The place of this classroom action research is SMA Negeri 6 Surakarta. It is located on Jl. Mr. Sartono No. 30, Surakarta, Central Java. A number of students in SMA Negeri 6 Surakarta is 1950.

This classroom action research was carried out in eight months started in September 2009 up to July 2010, preliminary research was done in September, designing research proposal was done in October up to February 2009, conducting proposal seminar in March 2010, making research instruments in April 2010, giving treatment and

collecting the data in May 2010, analyzing the collected data and discussing the data analysis in June 2010 and the writing research report in June 2010.

Table 3.1 Research Schedule

Month	Activities
September 2009	<ul style="list-style-type: none"> • Preliminary Research
October – Feb 2009/2010	<ul style="list-style-type: none"> • Designing Research Proposal
March 2010	<ul style="list-style-type: none"> • Conducting Proposal
April 2010	<ul style="list-style-type: none"> • Making Research Instruments
May 2010	<ul style="list-style-type: none"> • Treatment, Collecting Data
June 2010	<ul style="list-style-type: none"> • Analyzing Data, Writing Report

B. Research Subject

The subject of this classroom action research is second grade of SMA Negeri 6 Surakarta in the academic year of 2009-2010. In this class, there are 30 students. In general 2 Bahasa 1 has low English skill, especially reading skill. Besides, based on the result of pre test, the students' score in reading comprehension is unsatisfying.

C. Research Method

This research is carried out as classroom action research in collaboration with an English teacher of SMA Negeri 6 Surakarta in the academic year of 2009-2010. Some definitions of the action research that are proposed by experts are as follows: Burns (1993: 30) states that action research is the application of fact finding to practical problem solving in social situation with a view to improve the quality of action within it, involving the collaboration and cooperation of researcher, practitioners and laymen. In addition, Nunan (1998:229) states that action research is a form of self-reflective inquiry carried out by practitioners, aimed

at solving problems, improving practice, or enhancing understanding. It is often collaborative".

Furthermore, Burns (1999: 30) said that there are four characteristics of action research:

1. Action research is contextual, small scale and localized, it identifies and investigates problems within a specific situation.
2. It is evaluative and reflective as it aims to bring about change and improvement in practice.
3. It is participatory as it provides for collaborative investigation by team of colleagues, practitioners, and researcher.
4. Change in practice is based on the collection of information or data which provides the impetus for change.

D. The Model of Action Research

The model of action research used in this study is the model developed by Kemmis Mc Taggart (1998) stated in Hopkins (1993: 48). According to the model, the implementation of action research consists of four essential moments: planning, action, observation, and reflection.

E. The Procedure of the Action Research

The Procedures of the classroom action research are as follows:

1. Problem Identification
2. Planning
3. Acting
4. Observing
5. Reflecting
6. Revising the plan

F. Technique of Collecting Data

In data collecting, the researcher involved two kinds of data: quantitative data and qualitative data. The quantitative data are gained from test: pre- and post test. It is conducted in order that the

researcher gets the data pertaining to whether or not there is significant improvement on students' reading comprehension after being introduced with graphic organizers technique.

For collecting qualitative data the researcher used interview, observation, documentation and questionnaire.

1. Interview
2. Observation
3. Documentation
4. Questionnaire

G. Technique of Analyzing Data

Quantitative Data

Calculating the percentage of the correct answers of each student by using percentage correction. The percentage is used to measure the students' reading comprehension.

The percentage formula that is used is:

$$S = \frac{R}{N} \times SM$$

Where:

S = the students' mastery in %

R = the students' right answer

N = the maximum number of the whole answer

SM = standard mark (100) (Arikunto, 1998: 38)

After analyzing the scores of the written test, the writer uses a statistical technique to find students' mean score. The researcher uses the following formula:

$$M = \frac{\sum X}{N}$$

Qualitative Data

To analyze the qualitative data, the researcher applied constant comparative method as suggested by Glaser (1980:

105-115). The method consists of four steps: (1) comparing incidents applicable to each category; (2) integrating categories and their properties; (3) Delimiting the theory; and (4) writing the theory. The following is a brief description of each step:

- a. Comparing incidents applicable to each category
- b. Integrating categories and their properties
- c. Delimiting the theory
- d. Writing the theory

IV. RESEARCH RESULT AND DISCUSSION

A. Introduction

This research is aimed at finding out whether the use of graphic organizers improves students' reading comprehension and to identify to what extent the improvement is. Furthermore, the research describes the teaching learning situation when graphic organizers are implemented in reading class. The research was carried out at SMA Negeri 6 Surakarta, especially 2 Bhs 1.

The situation before the research was identified in pre-research stage. This was aimed at finding out the problems during the teaching learning process in reading and to find out the current students' reading comprehension. Furthermore, the pre research activity was carried out to identify students' problem in reading comprehension. As the problems were identified, the researcher could decide what kind of solution would be used. To reach this purpose, the writer conducted interview to the students, giving questionnaire, and pre-test as well.

The main problems that could be identified are: students' problem in comprehending the text and classroom situation. Furthermore the researcher found out the causes of the problem. They are also written in the table below. The

result of pre-research activities was described in table 4.1.

Table 4.1. The Result of previous condition

Condition
1. Students' reading comprehension <ul style="list-style-type: none"> Students had difficulty to identify explicit information of the text. Students had difficulty to comprehend the text as they lack of vocabulary. Students were unable to find main idea in paragraph. Students had difficulty to infer the meaning of the text.
2. Reading classroom situation <ul style="list-style-type: none"> Some students often came late They came to reading class reluctantly They chatted each other They had no response when they were asked questions
3. The causes of the problem <ul style="list-style-type: none"> Teacher seldom gave motivation to the students The teaching method used by the teacher is not inspiring Students' vocabulary mastery was poor Teacher dominated class with broad oral communication

Students' reading comprehension

The competence of students of 2 BHS 1 of SMA Surakarta in reading comprehension was poor. This condition was identified as their pretest score which was gained in the preliminary research was mostly unsatisfying. The result of the students' scores in reading comprehension was as follows:

Table 4.2 The Result of Preliminary Research

Explanation	Preliminary Research Score
The Highest	73.33
The Lowest	43.33

The Average	57
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Table 4.3 Post Test Score of Cycle 1

No	Explanation	Students' score
1.	Highest Score	76.67
2.	Lowest Score	46.67
3.	Average Score	63.44

Table 4.4 Post Test Score of Cycle 2

No	Explanation	Students' score
1.	Highest Score	90
2.	Lowest Score	53.33
3.	Average Score	69.56

B. Changes in Classroom Situation

The implementation of conflict dissection graphic organizer to improve students' reading comprehension changed classroom situation in SMA 6 Surakarta.

- The students didn't come late any longer as they were interested in the new teaching method used by the teacher.
- The students were more enthusiastic to join the class, since they were motivated with the new teaching method applied by the teacher. Besides, the teacher always gave motivation to the students during the instructional process.
- The process of teaching learning was inspiring as the teacher mixed English and Indonesian language the instructional process. By so doing, the students paid more attention during the class.
- The students' response in answering question was high during the teaching learning. So, it is clear that the use of graphic organizers in teaching reading increased students' participation in the process of teaching learning.

Based on the result of the observation, interview and questionnaire the researcher could identify some strengths and weaknesses of

implementation of graphic organizer in teaching reading comprehension.

The strengths

1. The students were more interested and motivated to join the class as they were introduced a new technique that is GO.
2. The students were familiar with the text, so it encouraged the students to activate their background knowledge. By activating their background knowledge, the students would understand the text well.
3. Conflict Dissection GO was affective to solve the students' difficulties on reading comprehension, such as explicit information, vocabulary, main idea and inference.
4. The researcher and the teacher actively discussed before and after meeting. Together, they made reflection and evaluation of teaching-learning process. By so doing, it is hoped that it can improve teaching proficiency.

The weaknesses

1. There were some students who had difficulty to find explicit information.
2. There were some students who had difficulty to find the word meaning.
3. There were many students who had difficulty to find main idea in paragraph.
4. There were some students who had difficulty to infer the meaning of the text.
5. There were some students did not understand the concept of conflict dissection graphic organizer clearly.
6. In the teaching-learning process, the groups didn't run as the teacher expected as the students did not participate well in their group. Besides, the students tend to depend on their partner.

C. The Improvement on Students' Reading Comprehension

The implementations of graphic organizers in teaching reading improve students' reading comprehension. The improvements of students' reading comprehension are as follows:

- a. Students are able to find explicit information of the text. Here, the students are trained to identify characters and setting in a text. By doing that, the students are able to find information which is explicitly stated in a text.
- b. Students are able to find the word meaning in a text. Their skills improved as they were trained to reconstruct passage of the text into the graphic organizers.
- c. Students are able to find main idea in a paragraph of the text. Their skills improved during the process of teaching learning using graphic organizers. They were trained to identify a problem and solution arising in a text. By doing so, the students are able to find main idea in a paragraph of the text.
- d. Students are able to infer the meaning of the text. Their skills improved as they were trained to take a moral message or moral value of the text.

V. CONCLUSSION, IMPLICATION, AND SUGGESTION

A. Conclusion

1. The Improvement on Students' Reading Comprehension

The implementations of graphic organizers in teaching reading improve students' reading comprehension. The improvements of students' reading comprehension are as follows:

- e. Students are able to find explicit information of the text. Here, the students are trained to identify characters and setting in a text. By doing that, the students are able to find

information which is explicitly stated in a text.

- f. Students are able to find the word meaning in a text. Their skills improved as they were trained to reconstruct passage of the text into the graphic organizers.
- g. Students are able to find main idea in a paragraph of the text. Their skills improved during the process of teaching learning using graphic organizers. They were trained to identify a problem and solution arising in a text. By doing so, the students are able to find main idea in a paragraph of the text.
- h. Students are able to infer the meaning of the text. Their skills improved as they were trained to take a moral message or moral value of the text.

The improvement can also be concluded from their scores. Before the use of graphic organizers their reading score was low but after the implementation of graphic organizers, the score was much higher. The mean score increased from 57.56 in the pre-test, 63.34 in the formative test of cycle 1, and 69.56 in the post test of cycle 2. It can be concluded that there is improvement on the students reading comprehension skills as the mean scores are gradually up from pre-research to research cycle 1 and from the research cycle 1 to research cycle 2.

2. The Changes of Classroom Situation

- a. The students don't come late any longer as they are interested in the new teaching method used by the teacher.
- b. The students are more enthusiastic to join the class, since they are motivated with the new teaching method applied by the teacher.

Besides, the teacher always gives motivation to the students during the instructional process.

- c. The process of teaching learning is inspiring as the teacher mixed English and Bahasa Indonesia in the instructional process. By so doing, the students pay more attention during the class.
- d. The students' response in answering question is high during the teaching learning process. So, it is clear that the use of graphic organizers in teaching reading increases students' participation in the process of teaching learning.

B. Implication

The research findings of this action research imply that graphic organizers can improve students' reading comprehension. Furthermore, the classroom situation also improved fabulously. It is also found that the students' attitude toward reading is improved fantastically.

Based on the result of the study, teaching reading using graphic organizers as a newly-develop technique is suitable technique to improve students' reading comprehension. To implement graphic organizers, the teacher needs some steps. Here are the steps for implementing graphic organizers: (1) Modeling, (2) Guided practice, (3) independent application.

This study can be used as a reference for the teacher in improving the teaching quality by applying the suitable technique toward improving the students' ability in reading. Beside that, a teacher can apply graphic organizers in the writing class. Considering the potential of graphic organizers in enhancing students' skill in English, it is necessary for the teacher to learn about graphic organizers.

CONFLICT DISSECTION GRAPHIC ORGANIZER

CHARACTERS	SETTING
PROBLEM/CONFLICT	SOLUTION/RESOLUTION

**MORAL
VALUE/MESSAGE**

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