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ABSTRACT

Muhammad Taufiq. 2011. *USING DIGITAL CROSSWORD AS A MEDIA TO TEACH ENGLISH VOCABULARY TO THE EIGHT GRADE OF SMP IPIEMS SURABAYA*. Unpublished Thesis. IAIN Sunan Ampel Surabaya.

Key Words: Digital Crossword, Teaching, Vocabulary, Eight Grades.

Most of students of secondary school lack of vocabulary. By mastering limited number of vocabulary, they are unable to communicate in English. Here, software game can be an alternative technique to help them master vocabulary better. By playing game, the students will feel free to express their own ideas. Because, when game is used in learning teaching process, it makes the students enjoy the lesson. Therefore, their motivation to learn English will be increased. Considering that, the study on teaching vocabulary is conducted by using "Digital crossword" to Junior High School students in SMP IPIEMS Surabaya in VIII D class.

In line with the matter above, a research study was conducted by formulating research questions. Those were 1. How does digital crossword improve the students' vocabulary mastery? 2. How are the students' responses toward the use of digital crossword in teaching English vocabulary? The researcher applied an action research design. It took two cycles in order to find out the most effective technique to use digital crossword game. Here, there were four stages that must be done; those were planning, acting, observing, and reflecting. To support the observation, the researcher used some instruments; those are: observation checklist, field notes and data of the quizzes.

The result of the study showed that the game enabled the students be more active which in turn motivated the students to learn new vocabulary, used their ability to identify, and made them to be able to memorize new vocabulary related the topic. The result of the quizzes as the tests also showed that the use of "Digital crossword" could improve the students' English vocabulary mastery. This could be seen from the means score of 7.21, 7.6, 8.27, and 8.86. They indicated significant progress for each cycle.

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understanding, this type of exercise provides the tools to overcome the difficulty, without embarrassment to the learner.

Based on the result of the informal interview with the teacher of the class, the class observation, and the result of the preliminary study, the writer chooses the students at the eight grade of SMP IPIEMS Surabaya as subject of this research because this class were not only in less of vocabulary, but they also lack of motivation to learn English. Since they were young learners, the researcher was sure that they will be interested in playing games and motivated to learn English. Therefore, their vocabulary mastery will increase.

In the other hand, SMP IPIEMS Surabaya is one of junior high school that uses Multi Media Laboratory to motivate students' interest in learning English. That is the reason why the researcher chooses SMP IPIEMS Surabaya to conduct his study.

B. Problem of the Study

Based on the background of the study above, this study will try to answer the following questions:

1. How does digital crossword improve the student's vocabulary mastery?
2. How are the students' responses toward the use of digital crossword in teaching English vocabulary?

CHAPTER II

REVIEW OF THE RELATED LITERATURE

In this chapter, presents review literature which is used to analyze the data. It gives an overview about nature of vocabulary, the importance of vocabulary mastery, the characteristic of computer software and the advantages of using digital crossword as a media to teach vocabulary for Junior High School students.

A. Vocabulary

1. The Nature of the Vocabulary

In learning language, especially English as a second language, the students need to master vocabulary. More vocabulary mastered by students will be better their performance in all aspects of learning language.

Vocabulary is an important component of language. Deighton states that

Vocabulary is the most of component language power. In using a language, students who are rich in vocabulary will be successful both in expression skills: speaking and writing, and receptive skills: listening and reading. But those who are poor in vocabulary will get troubles in those skills⁵.

Vocabulary is a collection of words or phrase and a list of words in language textbook, usually alphabetically arranged and explained or defined.

He adds that vocabulary is a total number of words that (with ruler for

⁵ Deighton, L.C, *Vocabulary development in the classroom*, (New York: 1970) P. 461

combining them) makes up a language. Vocabulary contains words to express one's thought, opinion and idea. People will not be able to communicate without language and language will never exist without vocabulary⁶.

Since we learn English as a foreign language, we must master and comprehend many skills. To reach the mastery of those skills, one of the basic elements is vocabulary mastery. Carter supports that a little thing cannot be covered without grammar but no one can be covered without vocabulary. It really shows that vocabulary holds an important part in English⁷.

2. The Importance of Vocabulary

Vocabulary is important in communication. People primarily communicate by using words. They come into contact with words. If someone wants to be able to communicate in certain language, he or she has to know about the vocabulary of the language. We will find vocabulary when we are studying reading, pronunciation, and structure and making dialogue. Richard and Rodger state there are always vocabulary items to be learned in all books of learning English in the classroom besides reading, structure, dialogue and pronunciation. There are words list, footnotes on reading and words exercises.

⁶ Horby, *Oxford advanced learner's dictionary of current English*. (New York: Oxford university press, 1995) P. 1331

⁷ Carter, Ronald, *Vocabularies and Language Teaching*. (New York: Cambridge, 1988) P. 42

all language. Thus, teacher should have the good method to make the students interested in learning English vocabulary easily.

3. Type of Vocabulary

Lado states that there are two types of vocabulary, function words and content words. Function words are words that must be learned in connection with the use in the sentence and which are limited in number or some lexical units of words that are used to express grammatical function. They consist of interrogators, preposition, auxiliaries, determiners, coordinator, etc. and then the content or lexical words are words whose meaning is recorded in dictionary and often stated by means, definition, synonym, antonym, contextual explanation, and can be learned in small group around life situation. They consist of noun, verb, adverb, and adjective¹¹.

4. Levels of vocabulary

There are three levels of vocabulary; elementary, intermediate, and advanced¹².

- a. Elementary vocabulary is words that are easy to learn. They usually consist of simple words like person, animals or things in the classroom. In

¹¹ Lado, Robert, *Language teaching: A scientific approach*. (New York: McGraw-Hill, 1966) P. 115 - 117

¹² Stainback, Susan Bray. And Stainback William C, *Educating children with severe maladaptive behaviors* . (New York: Stratton, 1980) P. 89

1. Learners need tasks and strategies to help them organize their mental lexicon by building networks of association.
2. Teachers need to accept that learning new words involves a period of “initial fuzziness”.
3. Learners need to win themselves of a reliance on direct translation from their mother tongue.
4. Words need to be presented in their meaning, their register, their collections, and their syntactic environments.
5. Teacher should direct attention to the sounds of view words that are particularly stressed.
6. Learners should aim to build threshold vocabulary as quick as possible.
7. Learners need to be actively involved in learning of words.
8. Learners need multiple exposures to words and they need to retrieve words from memory repeatedly.
9. Learners need to make multiple decisions about words.
10. Memory of new words can be reinforced if they are used to express personality relevant meanings.

11. Not all vocabulary that the learners need can be “taught”: Learners will need plentiful exposure to talk and text as well as training for self learning.

C. Using Games to Teach Vocabulary

Games are often only to fill in a few minutes before the end of the lesson at class. The teacher does not realize yet that games can be used as one of the education aid in learning and teaching process of English. Some experts state the uses of game as follows:

Using games is the prompt for vocabulary teaching. It means that through the games, the teachers can teach their students effectively especially in vocabulary mastery¹⁴.

Dale says that an important objective of vocabulary instruction is to develop an interest in words. The student whose curiosity about words is aroused is likely to increase his/her vocabulary and to become more discriminating¹⁵.

As we know that using games is as prompts for vocabulary teaching. It means that through the games, the students will get the advantages, such as the students' vocabulary mastery will increase and it will increase and it will not make the students bored.

¹⁴ Ibid, P.80

¹⁵ Dale, Edgar. *Technique of Teaching Vocabulary*. (USA. Held Educational Education Publications: 1971). P.302

The way of activities which can be conducted in an English classroom based on the use of computer software especially in the field of vocabulary mastery as follows²⁰:

1) Drill and Practice

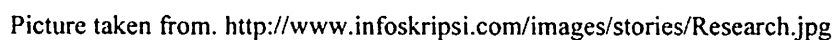
It is kind of process to apply rules-work with concrete problem and grasp the materials. It is a kind of fast-paced check on discrete points of students' knowledge. In this case, there are 2 characteristics of grammar in this practice.

- a) Weak grammar motivates the students to study the forms.
- b) Strong grammar motivates or challenges the students' grasp of principles and teaches the students to learn from the error they have made.

2) Games

Games are familiar enough to be used in teaching vocabulary but in this context the game are computer software and need little instruction to be explained. This is really helpful in solving the barriers or obstacles in vocabulary acquisition and also reaching the goal of subject-matter mastery. Good games are well-disguised simulations. Mirescu states that games can either applied individually or with

²⁰ Hope, G.R. Taylor. H.F, *Using Computers in Teaching Foreign Language* .(New Jersey,1984) P.17



B. Research Setting and Subject

This study will be conducted at SMP IPIEMS Surabaya. This school uses Multi Media Laboratory to motivate students' interest in learning English. The subject of this study is the eight grade students of SMP IPIEMS Surabaya with consideration that they still like the activities which promoted a lot of fun, such as games. In addition, digital crossword was not implemented before.

C. Population and Sample

Population is a set (or collection) of all elements possessing one or more attributes of interest²⁸. The population of this study is the eight grade students of SMP IPIEMS Surabaya. There are ten classes. Each class consists of around 34 students. A sample is a part of the researched population. The researcher will take class VIII D for the sample because the students of this school were not only in less of vocabulary, but also lack of motivation to learn English.

D. Research procedure

The study will be conducted under the following procedures: preliminary study, planning, implementing the action, observing and reflection.

1. Preliminary Study

²⁸ Suharsimi Arikunto, *prosedur Penelitian: suatu pendekatan Praktek*, (Jakarta: PT. Bumi Aksara, 2008), edisi revisi V, h. 108

In relation to the application of action research, the researcher will make a prior preparation to the implementation of the action based on preliminary study. In this case, the researcher will prepare a suitable model of using digital crossword as a media to teach vocabulary, design a lesson plan; prepare instructional material and media, criteria of success, and test.

The lesson plan is designed by considering the following items: (a) Several stages, (b) Time allocation, (c) Stage aims, (d) Procedure of

teaching and learning activities, (e) Instructional material, (f) Assessment and evaluation.

b. Instructional Material and Media

In this research, the English teacher prepares the instructional material and digital crossword as a media which are suitable to the topic for vocabulary class, the material is taken from text book or others sources, the material and the media must be interesting and are able to support the teaching learning process.

c. The Criteria of Success

The criteria of success are set up in order to judge whether the implementation of the action is effective or not. Therefore, the criteria of success are used to see whether the application of using digital crossword in the teaching of vocabulary succeeded or failed.

There are three criteria used in the research to measure the success of the action, they are as follows:

- 1) The teacher has good performance in implementing digital crossword materials
- 2) The students are enthusiastic and approximately 75 percent of them participate during the teaching and learning process

- 3) More than or equal to 75 percent of students' score of vocabulary test is greater than or equal to 70.

3. Implementing the Action

After the planning finished, the teacher implements digital crossword that has been designed before to the eight grade of SMP IPIEMS Surabaya. The teacher teaches the students in the classroom based on the lesson plan has been made and the English teacher as the observer in doing teaching and learning process in the classroom.

4. Observing the Action

Observation is conducted to identify the classroom activities occurring during the teaching and learning process. The observation is conducted when the action is being implemented in the classroom. Observation checklists and field notes are used to facilitate the observer conducting the observation. These observations are used to monitor the teacher's step of action and the student's response toward the action given by the teacher during the teaching and learning process. The result of the observation and the field notes will become input for the improvement of the teacher performance in the following meeting.

a. Instruments and Data Collection Technique

1) Observation checklist

The observation checklist contains some indicators that facilitate the researcher to collect the data. The indicators are about topic, teacher's activity and the students' activity. There are 24 items in teaching and learning activity. Those items describe the activity from the beginning until the ending of teaching and learning process that should be applied by the teacher.

Then, in the researcher gives the explanation from the each items above based on the result of observation checklist in order to make the data clearly and understandable.

2) Field-notes

The field-notes are used to investigate the teacher's and the students' activities which are beyond the observation checklists. They contain written descriptions of what the observer heard, saw, experienced and thought when reflecting the data during the teaching and learning process in the classroom²⁹. These field notes are intended to anticipate the possibility of losing the relevant data during the implementation of action. The aspects include the appropriateness to vocabulary task, the practicality and ease of the media used, and the student's attitudes and problems during the implementation of digital crossword.

3) Testing

A test may be constructed primarily as devices to reinforce learning and to motivate the students or primarily as a means of assessing the students' performance in the language. A test is needed

²⁹ Suharsimi Arukunto, *Op cit*, h.78

On the last meeting, the observer observes the teacher and the students' activities in implementing stage while the product of the test is taken after teaching learning process as a quiz. The observer interprets the data to decide whether the action done is successful or not. If it is not successful, the teacher decide a new plan for the next cycle with hope that next cycle had a better result than the previous one. Overall, there was an improvement during teaching learning process and the student's vocabulary mastery.

E. Data analysis technique

In this research, the writer used qualitative and quantitative manner. There are two things connected to quantitative data analysis, which are the results of a tasks and questionnaire. The results of tasks are analyzed to measure the students' ability and mastery in vocabulary skill. To analyze this, the writer counts the mean score. And the questionnaire distributed to know the students' attitude, interest, and opinion about the use of digital crossword to teach vocabulary.

1. To find out mean score, the researcher uses a formula:

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

M = Mean
 $\sum X$ = Total of the students' score
 N = Total of the students

around the yard because there are some trees that make the yard comfortable as a playground.

All the teachers of SMP IPIEMS SURABAYA are very competent in their fields. Each teacher gives top priority to discipline and responsibility in performing his or her duties. Not only the teachers but also all the school workers consider discipline and responsibility as most important matter. The teachers and the school workers work each other to keep the school's good reputation and the students' quality.

All students of SMP IPIEMS SURABAYA are considered as selected students who have many achievements. Their interaction with their teachers is very good. One of strategic class is VIII D. They are 34 students consisting of 18 boys and 16 girls. They use computer laboratory that is well equipped with loud-speaker and an OHP (over head projector) in front of the classroom. The OHP is used as the facility to explain the material during the teaching and learning process. The students of class VIII D have sufficient knowledge in English skill.

B. The Description of Teacher's Activities in Implementing Digital Crossword Technique

There are two cycles (each cycle is two meetings) in this research. The topic was different in each cycle. The teacher had prepared the topic that will be used in implementing digital crossword technique. The description of the teacher's activities in implementing digital crossword is explained as follows:

1. First Cycle

Teacher : What is your experience when you are in vacation?

Student (1) : I'm very happy because I can see a beautiful place

Student (2) : I'm very happy because in Jogja I bough many clothes and souvenirs

Then, Teacher began to explain the instruction and give example how to play digital crossword on computer that would be played by them. It focused on new vocabularies, especially in *noun and adjective*. After everything was settled, the teacher went to the next activities.

The teacher gave 10 words in the crossword, and then teacher asked students to identify and answer the question individually in digital crossword on their computer. They did it in 10 minutes.

After they finished doing it, Teacher checking students' answer and discuss the material (part of speech including noun and adjective) in peer checking. The teacher guided the students in discussion. He asked the questions one by one in the digital crossword. The students looked interesting by saying the right answers loudly. At that time, he wrote the answers and gave the translation of the word in Indonesian. He did it until the whole of the questions had been answered.

To measure their memory about the words which have been quizzed and measure students' vocabulary mastery, the teacher asked students to answer the word in digital crossword again. 5 of the words

are same from the first crossword but explained in different clue and added by 5 new words. They did it in 10 minutes.

After they finished doing it, Teacher checking students' answer and discuss the material in peer checking. The teacher guided the discussion as like in the first quiz.

Once again, to measure their memory about the words which have been quizzed in first crossword, the teacher asked students to answer the word in digital crossword. 5 of the words are same from the first crossword but explained in different clue and added by 5 new words. They did it in 10 minutes.

After they finished doing it, Teacher checking students' answer and discuss the material in peer checking. The teacher guided the discussion as like in the first quiz.

The last test, teacher asked to use their word that was played in digital crossword before in daily activities by the answering gap fill quiz in the computer. It used to find out the improvement of students' vocabulary mastery after using digital crossword.

2). the second meeting

In the second meeting, the teacher started by saying greeting to the students and checking the students' attendance to create conducive atmosphere. The teacher gave information to his students that they

would play digital crossword again, but in *different topic* and *different aspect*. The topic *visiting Bali*, it focused on *the past tense verbs*.

The similarity of the game with the first meeting was not only the rule of the game that the winner of the game was person who did the crossword perfectly as quickly as possible, but also the steps of the game was still the same with the first meeting (start from giving the instruction until the discussion of crossword).

After they finished doing it, Teacher checking students' answer and discuss the material (identify language feature; simple past) in peer checking. The teacher guided the students in discussion. He asked the questions one by one in the digital crossword. The students looked interesting by saying the right answers loudly. At that time, he wrote the answers and gave the translation of the word in Indonesian. He did it until the whole of the questions had been answered.

At last, still in same with the first meeting. Teacher asked to use their word that was played in digital crossword before in daily activities by the answering gap fill quiz in the computer. It used to find out the improvement of students' vocabulary mastery after using digital crossword.

c. Observing

Second cycle was conducted in two meetings. The first meeting was on November 29, 2010 and the second meeting was on December 1, 2010. Here also presented the implementation of the action plan in two meetings.

a. Planning

First of all the teacher prepared the lesson plan (appendix 9 and 10). Then the teacher divided the students in pair. It was classified by asking the students who sit in the same desk to work as a group. After that, the teacher gave the theme: my personal experience. Then, he also prepared the digital crossword game in pair.

b. Acting

After doing the planning, the researcher did some activities in this acting stage in two meetings:

1). the first meeting

In the first meeting, the teacher started by saying greeting to the students and checking the students' attendance to create conducive atmosphere. Before teaching, he had prepared the topic, which would be used to teach vocabulary using digital crossword. In this meeting, the teacher selected topic under title *my personal experience*.

In warming up activities, the teacher made statements or questions related to the topic thought picture on OHP (Over Head Projector) to invite the students' background knowledge. The

After they finished doing it, Teacher checking students' answer and discuss the material in peer checking. The teacher guided the discussion as like in the first quiz.

The last test, teacher asked to use their word that was played in digital crossword before in daily activities by the answering gap fill quiz in the computer. It used to find out the improvement of students' vocabulary mastery after using digital crossword.

2). the second meeting

In the second meeting, the teacher started by saying greeting to the students and checking the students' attendance to create conducive atmosphere. The teacher gave information to his students that they would play digital crossword again, but in *different aspect*. The topic *my personal experience*, it focused on *the past tense verbs*.

The similarity of the game with the first meeting was not only the rule of the game that the winner of the game was group who did the crossword perfectly as quickly as possible, but also the steps of the game was still the same with the first meeting (start from giving the instruction until the discussion of crossword)

After they finished doing it, Teacher checking students' answer and discuss the material (identify language feature; simple past) in peer checking. The teacher guided the students in discussion. He asked the questions one by one in the digital crossword. The students looked

At last, still in same with the first meeting. Teacher asked to use their word that was played in digital crossword before in daily activities by the answering gap fill quiz in the computer. It used to find out the improvement of students' vocabulary mastery after using digital crossword.

The observer collected the information from the teacher and the students' activities during acting stage by using observation checklist. He ticked the observation checklist in term of yes or no. if the activities written in the observation checklist happened in the teaching-learning process, he ticked the observation checklist in yes column. Meanwhile, if the activities written in the observation checklist did not happen in teaching-learning process, he ticked the observation checklist in no column (Appendix 3 and 4). Finally, he scored his students' quizzes.

The researcher did reflection that focused on the analysis of the teaching-learning process and the result of students' test (quizzes). In this cycle, the students gave the significant improvement both in teaching-learning process and the daily test (quizzes). The students were good in

well after the teacher had given example how to fill the grid of digital crossword.

From the observation checklist, it could be seen that the teacher got difficulties to manage the class. Some of them were still confused about how to answer digital crossword questions on the computer. In addition, they also got difficulty in using their ability to identify. It made the teacher dominate the class. He had to be very active and translated each of the instructions in Indonesia. Therefore, the implementation of crossword puzzle game must be changed in another technique. As a result, the teacher changed it *into pair work* in the next cycle.

b. Second Cycle

Second cycle was conducted in two meetings. The first meeting was on November 29, 2010 and the second meeting was on December 1, 2010. In the second cycle, students were no more confused with the mechanism of the strategy although the teacher gave them a new topic. There were no remarkable things to be reflected in this cycle because the activity has been done well. To begin with, the teacher gave motivation to the students and aroused their schemata about the topic through picture as a media to gather the students' attention. The result of learning was that students were able to answer the digital crossword questions well.

2. The Result of Field Notes

When the teacher implemented the strategy in the classroom, the observer monitored the teaching and learning activities by making notes on some important to be discussed in the reflection stage. The result of the field notes would be used to add some information that might not be covered by the items in the observation checklist. In the reflection stage, the result of the field notes was considered for the next cycle of the research. Below is the field note of the first and second cycle.

a. first cycle

In the beginning of the meeting, teacher also explained the students about the purpose of teaching. Since the mechanism of the strategy was conducted individually, the teacher had prepared the hand out well. Students' responses were good, but they were not active in the class. Several students correctly answered some questions about the topic.

However, there were still some things to be considered more on the next cycle, for example the classroom domination, students' attitude when strategy was implemented in the classroom, and the students' problem with the mechanism of strategy.

b. Second cycle

As the result of reflection from the first cycle, the researcher decided to change the technique from the *individual work* into *in pair work*.

Then, he told that the winner of the game was the pair who did digital crossword perfectly as quickly as possible. The students seemed very curious to solve the crosswords. They were motivated to be the winner of the game. Since it motivated the students to learn new vocabularies, they used their ability to identify, and also able to memorize new vocabularies related to the topic. Therefore, the teacher did not dominate the class again.

3. The Result of the Questionnaire

The questionnaire concerns about the development of the classroom activity after the implementation digital crossword technique. This development includes the students, point of view on using digital crossword technique in teaching and learning process, the topic of text, the teacher's role, and the advantages of digital crossword technique.

The questionnaire consists of 16 questions. The question number 1 up to 2 concerns about the students' opinion of English lesson especially in vocabulary activity. The question number 3 up to number 6 concerns about the students' opinion of using digital crossword technique. The question number 7 up to number 10 concerns about the students' opinion of the topic. The question number 11 up to number 14 concerns about the teacher's role. In addition, the question number 15 up to number 16 concerns about the students' opinion of the advantages of digital crossword technique.

second is about students' score. However the result of field notes will be used to provide some information that may not be covered by the items in observation checklists.

The first is about the application of digital crossword technique. In this case the students got some problems. They might a little bit confusing with the implementation of digital crossword because it was the first time for them to apply such strategy. Therefore, they did not feel free express their own ideas and the teacher much more dominated the classroom.

The second is about students' score. There are four quizzes in a meeting, each of the quizzes was consist of 10 items and demand 10 minutes in finishing. In doing the quiz, the teacher asked students to identify and answer the question individually in digital crossword on their computer. To avoid the confusion, the teacher translated the instruction in Indonesian. During the first cycle, the teacher made the average of the scores for each meeting. Therefore, their progress could be seen in the total scores for each meeting. It could be seen in table 2.

Table 2. The Students scores' of the quizzes

	1 st meeting	2 nd meeting
Average	7.21	7.6
Score min.	3	4
Score max.	10	10

b. Second cycle

After the implementing strategy in the first cycle was not running well, the teacher decided to make the second cycle. In this cycle showed improvement in implementing the strategy. The teacher also no more dominated the classroom so that the students were motivated to memorize the vocabulary. They were also active to participate in the classroom.

By considering the total average scores, the best result was in the last cycle, so that, it was used to answer the research question that crossword puzzle game fitted the students' problem to improve their vocabulary mastery.

Based on the reason above, it could be concluded that digital crossword game fitted the theory to teach English vocabulary to the

second grade students of junior high school and fitted the students' problem in vocabulary mastery.

2. The Discussion of the Result of Questionnaire

In the description of research findings, the result of questionnaire has been briefly explained. The result of questionnaire will be analyzed based on the research problem that is going to be revealed. In this part, the discussion will be divided into five matters. The first is about the students' responses of English lesson especially in vocabulary activity, the second is about the students' responses of using digital crossword, the third is about the students' responses of the topic, the fourth is about the students' responses of teacher's role, and the last is about the students' responses of the advantages of using digital crossword.

The first is about the students' responses of English lesson especially in vocabulary activity. Based on the result of questionnaire, it could be concluded that most of the students liked English lesson. Although 26, 47% of the students stated that they rather liked English lesson, 73, 52% of the students admitted that they liked learning English especially in vocabulary activity.

The second is about the students' responses of using digital crossword technique. Based on the result of questionnaire, it could be concluded that the technique applied by the teacher was interesting. Although 17, 64% of the students admitted that the technique was not too interesting, 67, 64% of the

The third is about the students' responses of the topic. Based on the topic's level in the result of questionnaire, the data showed that 55, 8% of the students admitted that topic was interesting and 44, 11% said that the topic was not difficult. It could be concluded that the topic was interesting and easy to understand since the topic presented by teacher.

The last is about the students' responses of advantages of using digital crossword. After the implementation of the strategy, there were 52, 94% of the students who stated that this technique was necessary to be implemented in SMP IPIEMS Surabaya. In addition, there were 58, 82% of the students agreed that this technique was beneficial to improve students' vocabulary mastery. Based on the result of questionnaire, it could be concluded that this

technique has many advantages for the students in enhancing their vocabulary mastery.

In conclusion, the above discussion showed students' responses toward the implementation of the strategy was gradually good because the students admitted by themselves that this strategy was useful for them.

fitted the students' problem in improving their vocabulary mastery. Therefore, it could be concluded that the digital crossword fitted the theory of teaching English vocabulary to the eight grade students of Junior High School since the digital crossword fitted the students' problem.

B. Suggestions

Based on the results and discussion of the data analysis, there are some suggestions in the use of digital crossword to teach English vocabulary to the eight grade students of Junior High School.

For the teacher:

1. How the teacher creates the non treating situation while the students are learning. The teacher supposed to tell the students that they will play a game. It will make them interested and excited. Therefore, it will create the enjoyable situation. Furthermore, do not forget to explain the instructions and the rules clearly and understandably. It is very important in the successfulness in playing the game.
2. The teacher has to pay attention in allocating the time. It is used to make the implementation of game is effective and does not waste the time. Beside that, the teacher has to control the students' interaction and observe the students' motions. As a result, they will not pay the game without an aim, because at the end of learning and teaching process, the students are expected to learn new vocabularies easily and the aims will be reached.

[illegible]

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