IMPROVING READING COMPREHENSION BY USING JIGSAW STRATEGY AT STKIP PAHLAWAN TUANKU TAMBUSAI

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Abstract: This research was taken based on the students’ problem to memorize, apply, understand and comprehend the English texts. The students also cannot interpret the authors’ message. The purpose of this research is to improve the students’ reading comprehension of the first semester of English Study Program of STKIP Pahlawan Tuanku Tambusai. The participants of this research are the first semester students of English Study Program of STKIP Pahlawan Tuanku Tambusai. The classroom action research was done in four steps plan, action, observation, and reflection in three cycles. This study shows that Jigsaw Strategy can improve the students’ reading comprehension. Based on the data, the percentage improve significantly from the first to the third test. The first test, the percentage was 18.92%, then at the second test was 27.03% and at the third test was 45.21%. At the second and third cycles, there was no students could achieved this level, but the percentage directly increase to 35.14%. Therefore, the students’ reading comprehension can be improved through Jigsaw Strategy.

Keywords: Jigsaw Strategy, Reading Comprehension.

INTRODUCTION

English is used to exchange information in many aspects such as science, technology, culture and also social aspects. In this case, language gains have been reported at all proficiency levels, although to different extents (Education, 2015). Therefore, the Indonesian government puts English as a compulsory subject starting from Junior high school. The aim of this subject is to create students who have good abilities to use English effectively and efficiently. In order to reach these goals, and to improve the quality of teaching English, the language should be focused into four skills: listening, speaking, reading and writing.

In learning English, one of main skills that the student needs to acquire is reading. The purpose of teaching reading is to make the students able to read the text effectively. Therefore, students can get the information from the text they read and learn not only to understand the structure of the texts but also to comprehend the content of the texts.

Eskey in Editia (1988:4) states that reading is simply one of many ways in which human being go about their
basic business “making sense of the world”. On the other hand, people have their own reasons in reading a text, especially English texts. Many of them want to be able to read texts for their study, for their profession, or only for pleasure. Students have to read a text for their study. They can get useful information in the text. The teachers also read a text. They have to update the information especially in educational world.

To get the information from the English texts, the reader have to be able to read the English texts effectively and efficiently. Reading is a receptive skill. Elizabeth (2003) states that reading is about understanding in written text, which complex activity that involves perception and thought. According to Hornby (1995: 968), reading is a researcher’s way in which something interpreted and understood. In this case, readers can understand and comprehend something, knowledge or problem in this life though activity.

Reading is very important in teaching and learning a language. According to Neil (1971:25), reading includes recognition, reaction and use of meaning behind printed symbols, which means that recognition is working of eye movement to identify to different words and sentences.

The purpose of reading is to connect the ideas on the page to what we already know. According to McNiel (1980:4), most people agree that reading can help the reader in getting information and also saving their problems. Jeremy (1998: 68) adds the people read a text because they want to be able to read a text either for their careers, for their study or simply for pleasure. It means that they read a text for their purpose.

According to Jeremy (1989:69) the reading skills should be acquired by students. They need to be able to scan a text and skim a text to get general idea of the text that they read. Both teachers would expect them to be more utilitarian with literary work when reading comprehension.

In comprehending the texts, the readers need to prepare themselves by knowing some skills that they can apply while they are reading so that goal of reading can be achieved. McNeil (P.130) explains about some specific comprehension skills that can help the reader in reading activity, they are: Understanding sequence, interpreting sentence, interpreting meaning though punctuation, recognizing main idea in the paragraph, drawing logical conclusions, and obtaining meaning of words though text.

According to Nuttal (1982:14) “Reading is the meaningful interpretation of printed or written verbal symbols”. It means that reading is a result of interaction between the perception of graphic symbols that present language and the reader’s language skills, and the knowledge of the world. In this process, the reader
tries to create the meaning intended by researcher. From this definition, it can be concluded that in reading actively a reader brings his or her background knowledge, emotion, and experience.

Moreover, based on curriculum of Reading in KKNI of English Study Program of STKIP Pahlawan Tuanku Tambusai, the students learn to understand the text. There are several texts that are presented for the first semester students. Based on the curriculum, the purpose of teaching reading in that level is the students have be able to understand, to respond, and to comprehend the texts.

During the observation at the first semester of English Study Program of STKIP Pahlawan Tuanku Tambusai, the strategies that the teacher used are teacher asked students to read the texts, translate the texts, answer the question of the texts and collect students’ task. From the description above, the strategy that teacher used didn’t give a good learning process to the students. As a result, the students’ achievement in reading comprehension was not satisfied.

In relation to the students’ problem, they get difficulties to memorize, to apply, to understand and to comprehend the texts. As the result, the student cannot interpret the authors’ message. Based on the phenomena above, the researcher tried to apply a new strategy which is appropriate to improve the students’ reading comprehension. Effective reading involves active interaction between reader and text. That is to say, the reader makes use of his/her knowledge of vocabulary, sentences structures as well as prior knowledge of the subject area to get meaning from the text. One of the strategies is the use of Jigsaw Strategy.

Jigsaw strategy is a cooperative learning strategy that students study in a small group of their classmates (Mary, Thomas and Jan, 1995:226). A jigsaw activity is a group activity in which each member is dependent on the others for part of the information. In other words, in other to complete a task, group members must cooperate. A reading passage is divided into four or five parts. Make sure each part of the text can be read and understood independently. The class is divided into groups of four or five pupils, called expert groups. Each expert group is given one part of the text to learn. The purpose of these groups is to enable learners to help each other study the material. The pupils are then divided into study teams or home groups. Each study team has representatives from each of the expert groups. Each member of the group now teaches and shares his/her part of the text with the rest of the study team. The time given to the "sharing" phase depends on the difficulty and length of the material.

According to Mary, Thomas and Jan (1995:226), the original jigsaw was developed by Elliot Aronson to increase students’ interdependence. Instead of providing each student with
all materials to study independently, Aronson assigned students to teams and give each team member one piece of information. To have all components of the lesson, students were forced to fit their individual piece together of as if they were working jigsaw puzzle. The puzzle could not be completed unless each team member shared his or her piece.

Jigsaw reading is like playing jigsaw puzzle. Each student in a group is given part of story or text to read. Student has to read and comprehend it all by him/herself in other to report to other members of the group. After each member has reported the different parts of the story or text the group together re-arranges the parts to recover the original story.

The objective of jigsaw reading is to stimulate student’s mind to think creatively and freely. Students are given task to reconstruct the short story that had been twisted and turn. It also instills cooperation between members of the group in order to solve the solution. If students didn’t cooperative with each other, they can’t completed the task successfully.

For example each student in a group is given part of story or text to read. Student has to read and comprehend it all by him/herself in other to report to other members of the group. After each member has reported the different parts of the story or text the group together re-arranges the parts to recover the original story. The exercise asks students to put together two or more pieces of a written text that have been separated, thus requiring that students guess by using text structure and content clues. Other strategies, such as a range of cognitive strategies, are involved.

METHOD OF THE RESEARCH

This research is a classroom action research which aims to explain whether Jigsaw Staegy can improve the students’ reading comprehension of the first semester of English Study Program of STKIP Pahlawan Tuanku Tambusai. Kemmis and Taggart (1988:5) assert that action research is a research which provides the solution and investigation of the problem in education. In addition, Wallace (1998: 6) states that an action research is the area for developing and improving of the teachers’ ability in teaching their students. It intends to improve the students’ and the teacher’s ability. The terms of classroom action research describes the important characteristics of this research, such as; to use an idea in increasing knowledge or improve curriculum, teaching and learning process. The classroom action research provides some solutions in the classroom toward the problems that have been faced by the students in reading English text.

FINDING AND DISCUSSION
Based on the data achieved at the first semester of English Study Program of STKIP Pahlawan Tuanku Tambusai. The researcher decided to do action research at that class. The meeting was conducted for once a week, and the duration of time was 2 X 50 minutes. Then, she arranged some activities that she would apply. In addition, she also asked for help from a collaborator to help her in observing teaching and learning process in the classroom. After she had prepared all of things, she continued this study by taking action.

In this first cycle, the researcher applied Jigsaw Strategy for four meetings. She started her activities by dividing the students into several groups. Introduce the Jigsaw Strategy: explain the process to the class and explain that they work for both individual and team scores. Assign heterogeneously grouped students to study teams: the teams are assembled and the rules for the process are explained. Assemble expert groups: the students from the teams meet with their expert groups and are provided material to be mastered. Experts teach their team study teams: each expert is responsible for teaching their teammates the material. Evaluate and provide team recognition.

After students had been taught Jigsaw strategy, at the fifth meeting, the researcher wanted to know the students’ achievement in comprehending reading texts by giving test to them. The test items which used at the end of this cycle are similar to the previous test. Furthermore, the researcher computed the students’ answers in order to know their achievement after they had been taught Jigsaw Strategy. The table below shows the level of the students’ ability in comprehending reading texts at the first cycle:

| Rank | Ability Level | F | Percentage |
|------|---------------|---|------------|
| 80 – 100 | Good to Excellent | 0 | 0%         |
| 60 – 79 | Average to Good | 10 | 27.03%     |
| 50 – 59 | Poor to Average | 9 | 24.32%     |
| 0 – 49 | Poor | 18 | 48.65%     |

The level of the students ability at the first cycle was not really satisfied because there was still no students could reach the level of good to excellent. Then, the number of students who had poor ability in comprehending reading texts was more than half;

In conclusion, the students’ ability in answering some question in each components of reading comprehension were better than before, but unfortunately, the students ability
in identifying the genres of texts, social fiction, factual information, identify reference, tense is used in texts and the last, identify the generic structure of the texts were still need to be improved because the result was not satisfactory yet in the first semester. The students’ ability in comprehending reading texts were still far from good. The researcher got confused why it happened, but it did not occur so long because she could find the answer when she looked at the observation sheets and some notes from the collaborator about her activities in teaching reading through jigsaw strategy. And also the students’ behavior in learning reading. The researcher inferred that the students’ ability in comprehending reading texts was not satisfied yet because there were some factors that can influence it. The factors came from the teacher and students. The result of the observation showed that the students were not very active in learning reading through jigsaw strategy.

Furthermore, there are also some notes about the teacher’s and students’ activities in teaching learning process in the classroom below:

1. The teacher’s explanation could not be received well by the students because it was proved by the students’ responses to the teacher question.
2. The teacher spends too much time in dividing the students into several groups so it influence to the length of the time for the students in learning.
3. Teacher has problems in controlling the students’ activities in learning.
4. The teacher has problem in guiding the students to read the text in group because they prefer talking to reading.
5. Some students could not pay attention to the teacher’s explanation, and disturb the other students.
6. Some students prefer talking to reading the texts with their group.
7. Some students are very depending on the teacher, they always asked to the teacher about some meaning of the words on the text.
8. The students were not used to apply the strategies that teacher had taught to them because it is the first time for them to learn about jigsaw reading strategy.

The result of the observation above could answer the researcher’s question: why the application of jigsaw strategy has not satisfied yet. Based on weaknesses above, the researcher had to rearrange the planning taking action, so that an improvement could be achieved by the students. In this case, the researcher has to rearrange the planning in teaching reading though jigsaw strategy, it was hoped to create an improvement to the students’ achievement in comprehending reading texts.

Then, the researcher formulated, the result of the reflection that would be implemented at the second cycle:

1. The way of teaching reading to the students is still same as before, she still apply jigsaw strategy in teaching reading.
2. The researcher has to remind the students to study seriously and make them more active in giving response to the teacher question.

3. The researcher has to give award when the students able to answer her question, so it will motivate the other students.

4. The researcher needs to remind the students to apply the strategy that they have learned in reading and ask them to be independent.

The researcher continued this study into second cycle, because the students’ achievement at the first cycle was not satisfied yet. In this cycle, the researcher guidance to the students in applying the strategy in order to make them able in comprehending reading texts.

In the second cycle, the researcher still applied jigsaw strategy in teaching reading to the students, but there were some weaknesses at the first cycle that had to be improved, they are:

1. Teacher’s way in explaining the lesson
   The teacher had to give clearer explanation to the students, and ensure herself that they could explained the lesson.

2. Time management
   The teacher would try to manage the time effectively

3. Class control
   The teacher would invite all of the students in the classroom to involve in the discussion, so that the teacher could control them well.

4. Students’ score
   The students’ score had not satisfactory yet, so it must be increased.

The researcher started her class at the sixth meeting up to eight, time duration for each meeting was still same as before, 2 X 50 minutes. After she had finished the meeting, she gave the test to the students to the students at the tenth meeting, the test items were still same as before, there were 30 questions of reading texts. Then the researcher computed the students’ score at the second cycle, she classified the students’ score into several levels which is based on Harry’s rules.

The level of the student’s ability at this cycle was better than before. On the other words, there was an improvement achieved by the students. It was proved that there were 13 students or 35.14% students could achieved the level of good to excellent, 17 students or 45.95% students could achieved the average to good, 6 students or 16.21% students could achieved the level of poor to average, and there were only one student who reached the level of poor. This fact showed that the researcher was success to help the students to improve their ability in comprehending the texts through jigsaw strategy.

There were 3 students could answer 27 items from 30 items correctly. Then, there were also 3 students could answer 26 and 25 items
correctly. There were 4 students could answer 24 and 23 items correctly, 2 students could answer 22 items correctly, 3 students could answer 21 items correctly, 4 students could answer 20 items correctly, 1 student could answer 19 items correctly, 3 students could answer 18 correctly, 2 students could answer 16 correctly, 4 students could answer 15 items correctly, and 1 student could answer 14 items correctly.

Here, she also shows the result of the student individual ability in each component of reading comprehension: the students’ individual ability score in each component of reading comprehension also increased at the second cycle. At the first, it was proved by the number of the students who could answer question about the genre of texts, there were 29 students or 78.38% students could answer question correctly. 33 students or 89.19% students could answer the question about social function of the text. 33 students or 89.19% students could also answer the question about factual information. Then, there were 25 students or 56.76% students could answer the question about reference. 33 students or 89.19% students could answer question about tense is used in the texts. And also 24 students or 64.86% students could answer the question about generic structure of the texts.

At the second, the students’ ability in answering the question was also better than before. There were 34 students or 91.89% students could answer the question about the genre of text correctly. 22 students or 59.46% students could answer the question about social function of the texts. 28 students or 75.68% students could answer the question about factual information. 27 students or 72.97% students could answer question about reference. 24 students or 64.86% students could answer the question about tense is used in the texts. And also 24 students or 64.86% students could answer the question about generic structure of the texts.

At the third, there were 23 students or 62.16% students could answer the question about genre of the texts. 31 students or 83.78% students could answer the question about social function of the text. 24 or 64.86% students could answer the question about factual information. 24 or 64.86% students could also answer the question about reference. 33 students or 89.19% students could answer question about tense is used in the texts. 27 students 72.97% students could answer the question about generic structure of the texts.

At the fourth, there were 27 students or 72.97% students could answer the question about genre of the texts. 26 students or 67.57% students could answer the question about social function of the text. 24 or 64.86% students could answer the question about factual information. 21 or 56.76% students could also answer the question about reference. 24 students or
64.86% students could answer question about tense is used in the texts. 26 students 70.27% students could answer the question about generic structure of the texts.

At the fifth, there were 26 students or 70.27% students could answer the question about genre of the texts. 28 students or 75.68% students could answer the question about social function of the text. 26 or 70.27% students could answer the question about factual information. 24 or 64.86% students could also answer the question about reference. 24 students or 64.86% students could answer question about tense is used in the texts. 21 students 56.76% students could answer the question about generic structure of the texts.

In conclusion, the students ability in answering some question about genres of text, social function, factual information on the text, reference, tense is used in the texts and generic structure of the texts were better than before. However, the students’ ability in answering some question about lowest score among the other components, but this result was better that previous test.

Based on the result on the observation sheet and filed notes, the teacher and students’ activities in teaching learning process were better than before, so it gave influence to the students’ achievement in comprehending reading texts. The description of the students’ activities in learning reading through Jigsaw Strategy is below: based on the result of the observation in the cycle II, there was improvement to the students’ activities in the classroom. It showed that the student more active in teaching learning process. There were 60.14% students asked questions, 59.46% students answered question, 44.59% students giving comment and 49.32% students giving ideas. And then, in group working activity, there were 86.49% students who read the texts. 87.84% students discussed with their expert group. 87.16% students who teach their study team and 85.81% students made their study team reporting.

At the end of this cycle, the students’ achievement in comprehending reading texts was better than before. In this case, the researcher assumed she was success in applying Jigsaw Strategy in teaching reading to the students at the first semester of English Study Program of STKIP Pahlawan Tuanku Tumbusai.

The writer found that there was improvement to the students’ ability in comprehending reading texts trough Jigsaw Strategy in teaching reading. It could be seen from the students’ ability level in comprehending reading texts from the first test (pre-test), the second test (at the end cycle I), the third test (at the end the of cycle II).

The students’ base scores in comprehending reading texts were dominated by poor level of ability in
comprehending the texts, there were 62.41% students, but at the second test (at the end of cycle I) the percentage reduced, it become 48.65% and then at the third test (at the end of cycle II), the poor ability reduced significantly, it became 2.43%. At the second level (poor to average), the percentage of students’ ability level was 18.92% at the first test, then reduced occurred at the second level (poor to average), the percentage of students’ ability 24.32%, and at the third level was about 16.21%. Next, at the third level (average to good), the percentage improve significantly from the first test. Furthermore, at the first test, the percentage was 18.92%, then at the second test was 27.03% and at the third test was 45.21%. At the second and third cycles, there was no students could achieved this level, but the percentage directly increase to 35.14%.

The improvement achieved by the students can also be analyzed by using t-test. Here are the results of analysis:

| Variable | N   | M   | S   | $\bar{d}$ | d  | t-test | t-critical |
|----------|-----|-----|-----|----------|----|--------|------------|
|           |     |     |     |          |    |        |            |
| The second scores | 37  | 47.3 | 3.0 | 3.42     | 0.56| 7.61   | 2.0        |
| The third scores  | 51  | 55.81| 56  | 5.62     | 6.10|        |            |

The purpose of finding the t-value was to investigate the improvement of the students in comprehending reading texts. It means that t-test is higher than t-critical (t-test > t-critical). The increase is statically significant because t-test = 7.61 while t-critical = 2.0. However the second cycle has to be delivered because the average score of students in the first cycle has not achieved the standard minimum. The average score in first cycle is 51.81, while the minimum achievement is 60.

Then, the writer also compared the mean of second test and third test using t-test, the result as in the following:
Table 3.

Comparison the mean of second test and third test using t-test

| Variable | N  | M  | Sd | d  | t-critical |
|----------|----|----|----|----|------------|
|          | No | of | pairs |    |            |
|          |    |    |      |    |            |
| The      | 37 | 51.11 | 61.3 | -2 | 2.0        |
| scores   | 81 | 08.2 | 61.0 | 5  | 0.0        |
| The      | 70 | 92.0 | 61.8 | 5  | 0.0        |
| third    |    |      |      |    |            |
| scores   |    |      |      |    |            |

Based on the table above, the t-test is higher than t-critical. This result showed the significant increase in the students’ reading comprehending. In addition, the improvement achieved by the students could also be seen at the students’ the average scores in this cycle. The average score is 70.92, it means that they could more scores than the minimum achievement (60).

Actually the improvement reached by the students was also influenced by the students’ ability in applying strategies that have been taught by the writer through jigsaw strategy. They were success to apply the strategy. In line, jigsaw strategy is an effective strategy in improving the students’ achievement. (Science, Mitra, JI, & Email, 2016) They could understand the teacher explanation about the lessons. In addition, the writer as a teacher also had helped the students, she guided the students to be active in teaching learning process. This contribution is suitable with the purpose to apply jigsaw in teaching reading. However all of the students in this study worked together, they could follow all of procedures in teaching reading through jigsaw strategy.

In conducting this study, the writer found some strengths and weakness during the process of applying jigsaw strategy to improve students’ ability in comprehending reading texts. The strengths were as in the following:

1. The students were very interested in learning reading through jigsaw strategy because they could know some reading strategy so that they could apply it to help in solving some problems that they face while reading.
2. The students were interested in giving many ideas and they became active to give some ideas related to the topic given.

However, the writer also found some weakness as in the following:

1. At the beginning of the study, the writer found difficulties to guide the students to be independent reader because most of them were very depend on their teacher and their friend, they used to ask the meaning of words to their teacher or their friend.
2. In this study, creating jigsaw strategy not really effective
because the students could not do the writer's instruction, they prefer talking to reading the texts.

3. Most of the students could not understand if the writer taught using English, so the writer needed more time to translate by using gestures.

CONCLUSION

Based on the research, the researcher took some conclusion below:

1. The students’ reading comprehension was improved by application of Jigsaw Strategy in teaching and learning process.

2. Jigsaw strategy is an effective strategy in increasing the students’ activities in in the classroom at the first semester of English Study Program of STKIP Pahlawan Tuanku Tambusai.

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