

## INCREASING STUDENTS' READING COMPREHENSION ACHIEVEMENT USING JIGSAW TECHNIQUE

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Tujuan penelitian ini adalah untuk menemukan adakah peningkatan pencapaian pemahaman membaca siswa setelah diajari penggunaan *teknik Jigsaw*. Penelitian ini dilakukan karena nilai siswa masih rendah pada tes pemahaman membaca. Data diperoleh dari nilai Pretest-posttest dan kuesioner. Data yang telah dikumpulkan dianalisis dengan menggunakan T-test melalui SPSS versi 17.0. Hasil analisis data menunjukkan bahwa nilai rata-rata posttest siswa di kelas eksperimen (68,47) lebih besar dari nilai rata-rata pretest siswa (57,41) dengan peningkatan nilai 11,06. Berdasarkan data analisis dapat disimpulkan bahwa ada peningkatan pencapaian dalam pemahaman membaca siswa setelah diajarkan dengan menggunakan *teknik Jigsaw*.

The aim of this research is to find out whether there is an increase of the students' reading comprehension achievement after being taught using *Jigsaw technique*. This study was done based on the consideration that students still got low scores in reading comprehension test. The data were collected by employing Pretest-posttest items and questionnaire. The collected data were analyzed using Repeated Measure T-Test with Statistical Package for Social Science (SPSS) version 17.0. The result shows that the students' mean score of posttest in experimental class (68.47) is higher than that in the pretest (57. 41) with the 11.06 gained score. It is concluded that there is an increase in students' reading comprehension achievement after being taught using *Jigsaw technique*.

**Keywords:** *jigsaw technique, reading comprehension, students' achievement.*

## **INTRODUCTION**

Reading should be mastered well by the students because reading is an essential factor that influences one's activity in communication. Reading is likely something crucial for the students because the success of their study depends on their ability to read. If their reading skill is poor they will definitely have difficulty in making progress. Afflerbach (2007:12) states that reading is a dynamic and complex process that involves skills, strategies and prior knowledge. In reading, the readers should be able to manage every part of the text, because it is easy to gain the comprehension in reading when the readers are able to organize the text.

Based on the pre-research at the first grade of SMAN 1 Pesisir Tengah Krui Pesisir Barat on 25<sup>th</sup> February 2013, it was found that almost 70% students of SMAN 1 Pesisir Tengah had low ability in reading. It was proved by the statement from one of English teacher of SMAN 1 Pesisir Tengah Krui Pesisir Barat. He said that generally, the students had difficulty in comprehending an English reading text. The students had difficulty in finding the main idea of passage with long sentences. In addition to find the main idea, they had difficult to understand specific information, to make inference, to identify reference and to identify the meaning of difficulty of vocabulary in the reading text. It could be seen from their reading comprehension test scores which were mostly lower than the minimal mastery criterion (KKM) of that school which was 70.

The cause of the problems came from students' reading style. The students prefer to read alone with consideration that they feel convenient and can concentrate better. They do not try to discuss the text. Then the problem also came from the students' reading skill, there were some causes such as the limited vocabularies, sentence construction within paragraph, difficulties in finding the main idea, supporting details, reference and inference of the text. It was also found out that, the cause of the problem might be from the teacher. After asking some students, it was found that the teacher still used conventional technique in almost every teaching and learning process. The teacher just asked the students to read certain text in students' exercise book, and then he asked them to do the task following the text. The monotonous process of learning made the students discouraged to learn.

In this case, the writer focused on how to create situation where the students can involve and enjoy their learning process. The writer assumed that there should be some suitable techniques in teaching reading which could motivate the students to read all text so they could understand the information. The writer applied cooperative learning in teaching reading comprehension. *Cooperative learning* is one of learning strategies which is considered applicable and useful in increasing students' reading comprehension and make the students active during the learning process (Majid, 2007). Students must work in groups to complete tasks collectively. Furthermore, the teacher's role changes from giving information to facilitating students' learning. Everyone succeeds when the group succeeds. Cooperative learning has some

technique, they are; STAD, discussion, mind mapping, think pair and share, jigsaw, role playing etc.

In this research, the writer applied jigsaw technique in teaching reading. *Jigsaw technique* is a special form of information gap in which each member of a group is given some specific information and the goal is to pool all information to achieve some objectives (Brown, 2001:179). This technique is developed by Elliot Aronson (1978) involves the formation of Home Groups to resolve the task. The Home Groups allocate one member to each Expert or Research Group to gather data to bring back to the Home Group. For example, students are divided into small groups of five or six students each. Each member of the group is assigned a portion of an assignment or research project. Each member must research the material pertaining to their section of the project and be prepared to discuss it with their classmates.

Reading is considered an active process where the readers utilize their cognitive and mental capacities to figure out the internal meaning of the text. It is an interaction between the reader and the writer who has tried to convey a message to its readers. Therefore, in this process, the readers should be provided with instructional opportunities that allow them to successfully derive the meaning intended by the writer. Ali (2001) looked at the effect of using the jigsaw reading technique on the EFL pre- service teachers' reading anxiety and comprehension. The experimental group was instructed to read reading passages using the Jigsaw Reading technique while the control group read the same passages individually. Participants' comprehension was checked via a TOEFL test and their anxiety was evaluated using

a questionnaire designed by the author. Results showed that the lower anxiety among the experimental group participants led to their better performance in the comprehension of the reading passages.

Based on the statements, the objective of this research are to find out whether there is an increase of students' reading comprehension achievement after being taught through jigsaw technique.

## **METHOD**

In conducting this research, the writer used one group pretest posttest design (Hatch and Farhady, 1982:20). Pretest and posttest were administered to determine whether Jigsaw technique can be used to increase students' reading comprehension achievement. The questionnaire was administered in order to investigate what problems were faced by the students in learning reading comprehension using Jigsaw technique.

This research used one class. The class had both pretest and posttest, and 9 times treatments that consisted of 3 sessions of meetings, 3 sessions of structured instructions, and 3 sessions of unstructured instructions. Structured instruction refers to the activity that has been arranged before by the teacher, for example: the teacher prepares the material (about narrative text) and explains it. Then, the students answer the questions based on the material. Unstructured instructions refers to the activity that not having prepare yet. For example: After the class, the teacher asks the students

to find out other narrative text from the internet or newspapers and also tells them to answer the question that has been given, then it will be discussed in the next meeting.

The design can be illustrated as follows:

**T1    X    T2**

Where:

T1    : Pretest

X      : Treatment (using Jigsaw technique)

T2    : Posttest

(Hatch and Farhady, 1982:20)

## **RESULTS AND DISCUSSIONS**

The researcher used Jigsaw technique to find out the increasing of students' reading comprehension achievement. In this research, at the beginning of the activity, the pretest was administrated to investigate the reading comprehension achievement before being given treatments by the researcher. In experimental class, the average score was 57.41 with the highest score was 84 and the lowest score was 40. After conducting the pretest, the researcher was giving the treatments in experimental class by using Jigsaw technique.

Then, the posttest was administrated to see whether there was an increasing of students' reading comprehension achievement after being taught through Jigsaw

technique. From the result of the posttest, the average score was 68.47 with the highest score was 96 and the lowest was 56.

The result of the research indicates that the increase of students' reading comprehension scores in the experimental class after treatments was significant. The result shows that the students' mean score of posttest in experimental class (68.47) is higher than mean score of pretest (57.41) with the 11.06 gained score. The T-test also reveals that the result is significant ( $p < 0.05$ ,  $p=0.000$ ). It proved that  $H_1$  of this research was accepted.

In order to get the data of the students' problem in reading comprehension using Jigsaw technique, questionnaire was distributed. Based on the data obtained from the questionnaire, it was found that most students disliked English subject because they did not know its meaning. Although they disliked it very much, they were interested in learning it because English was an international language which had to be mastered in order to compete in occupation.

The students faced some difficulties while they were learning English, especially in reading comprehension which covered identifying main idea, identifying specific information, determining reference, making inference, and understanding difficult vocabulary. From those five aspects of the questions, the students mostly get difficulty on understanding vocabulary and making inference. Lack of vocabulary made them hard to understand the text. Then, they could not answer the questions

well. It also because students can understand what the text about so they can make the inference of the text.

Furthermore, according to the data of the questionnaire, some students tried to predict the content of the text through the title or after read the first paragraph and last paragraph of the text. They also used previous experience to guess what story would discuss in the text. Previous experience is very helpful for the students in comprehending the content of the text since they remembered their memory about what they had read or heard about the story. In this case, applying the jigsaw technique would help the students to comprehend the text since they was working in group. They also divided into expert groups and every expert group was given different aspect to be discussed.

In applying jigsaw technique in teaching learning reading, some students had no problems to the technique because they felt to be helpful by the technique. They could also comprehend the text because they could discuss and share to their member since they worked in group. Although, they felt easy to comprehend the text while learning using Jigsaw technique, they still have no motivation in learning English because English was very difficult according to them. It was also because of their English teacher who always taught them using monotonous technique.



## CONCLUSIONS AND SUGGESTIONS

Based on the result of the data analysis and discussion, the researcher draws a major conclusions as follow:

1. There is an increase of students' reading comprehension achievement after being taught through jigsaw technique at the first grade of SMAN 1 Pesisir Tengah Krui Pesisir Barat. This can be seen from the difference of students' mean score of pretest which increases from 57.41 up to 68.47 in the posttest with gain of 11.06 point. The result of hypothesis test shows that the hypothesis of this research is accepted ( $p < 0.05$ ,  $p = 0.000$ ).
2. Based on the result of pre test and post test, it is found that the students get improvement in reading aspect.
  - a. Reading comprehension aspect
    - ✓ The best increase of jigsaw technique is in identifying specific information (the increase score is about 31 points, see Table 9). Students ability in identifying specific information improved because jigsaw technique helps the students to get information while expert group shared information in home group.
    - ✓ The second is in making inference meaning. The students' increase score is about 25 points (see Table 9). It increase significantly because the students able to activate the background knowledge to predict inference meaning from the text.

- ✓ The third is in determining reference (the increase score is about 14 points, see Table 9). It increase because students able to develop the information.
  - ✓ The fourth is in identifying main idea, there is increase is 12 points; that is from 93 to 105 (see Table 9). It increase by relating information of the questions to take main point of the text;
  - ✓ The low increase is in understanding difficult vocabulary (the increase score is only 11 point, see table 9), since the students is still lack of vocabulary so this aspect get low achievement.
3. Based on questionnaire, most of students said the problems they faced during learning reading comprehension through Jigsaw technique could be divided as follow:
1. Understanding difficult vocabulary that the students faced during learning process. This problem might influence the next process because they have to understand the text first before they discuss with their groups.
  2. Making Inference was also a problem faced by students during learning process. The students get difficulty to figure out something did not tell in text.

By considering the conclusions above, the researcher proposes some suggestion as follow:

1. Suggestions to the teacher

- a. In this research, it was found that vocabulary aspect needs to be paid more attentions since this aspect became the lowly achieved during the application of Jigsaw Technique. This can be done by giving highly varied vocabulary in order to enrich the students' words list. The teacher may ask the students to make a sentence from those varied words to strengthen their comprehension on the meanings of the words in various contexts.
- b. Based on questionnaire, besides understanding vocabulary, students also have problem in making inference. The teacher has to be explicitly taught to students, modeled to students, and practiced by students. The teacher may start the lesson by asking several questions which are related to the text first in order to activate their background knowledge which may facilitate them in understanding the text.

2. Suggestions to other researchers

- a. Further researchers should more observe about understanding difficult vocabulary since in this research, vocabulary still get low achievement when the students learn reading comprehension through jigsaw technique.
- b. Since the researcher has applied questionnaire in order to see the students' problems during the application of Jigsaw technique, further researchers are suggested to apply other techniques in collecting the data, for example, interview or observation. By using other techniques, better results may be found out because they will not only be obtained from one point of view.

## REFERENCES

- Afflerbach, P. 2007. *Understanding and Using Reading Assessment K-12*. University of Maryland: College Park.
- Ali, Sami M. F. 2001. *The Effect of Using The Jigsaw Reading Technique on The EFL Pre-service Teachers' Reading Anxiety and Comprehension*. Cairo Governorate: Journal of Education College, Helwan University.
- Aronson, E., and Patnoe, S. 2011. *Cooperation in the Classroom: The Jigsaw Method* (3<sup>rd</sup> edition). New York: Pinter and Martin Ltd.
- Aronson, E. 2000. *Jigsaw Classroom*. <http://www.jigsaw.org/index.html>. (accessed February 19, 2013)
- Brown, H D. 2001. "Teaching by Principles" *An Interactive Approach Language Pedagogy*. San Francisco: San Francisco University Press.
- Brown, D. H. 2004. *Language Assessment. Principles and Classroom Practices*. New Jersey: Pearson Education.
- Hatch, E. and Farhady, H. 1982. *Research Design and Statistic for Applied Linguistic*. London: New Barry House, Inc.
- Majid, Abdul. 2007. *Perencanaan Pembelajaran*. Bandung: Rosada.