# Improving Students' Achievement in Reading Comprehension through Jigsaw Strategy at SMAN 1 Abung Selatan

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Abstrak. Tujuan penelitian ini adalah untuk mengetahui apakah ada peningkatan yang signifikan secara statistik pada kemampuan pemahaman siswa dalam membaca setelah belajar menggunakan strategi Jigsaw. Penelitian ini adalah penelitian kuantitatif. Subjek penelitian ini adalah 25 siswa tingkat pertama SMAN 1 Abung Selatan, Lampung Utara. Dua set tes reading digunakan sebagai alat untuk pengambilan data. Hasil penelitian menunjukan bahwa ada peningkatan yang signifikan secara statistik pada kemampuan pemahaman siswa dalam membaca setelah penerapan strategi Jigsaw. Dapat disimpulkan bahwa strategi Jigsaw dapat memfasilitasi siswa dalam meningkatkan kemampuan membaca.

Abstract. The aim of this research was to find out whether there was a statistically significant increase of students' reading comprehension ability after the students were taught using Jigsaw strategy. This research was quantitative. The subjects were 25 students of the first grade of SMAN 1 Abung Selatan, North Lampung. Two sets of reading tests were used as the research instrument. The result of the research showed that there was a statistically significant increase of students' reading comprehension ability after the implementation of Jigsaw strategy. This suggests that Jigsaw strategy facilitates the students to improve the reading achievement.

Keywords: Reading Comprehension, recount text, Jigsaw Strategy.

## INTRODUCTION

The existence of English is no longer being a brand new thing for everyone. It demands the need of English for everyone who get involved in global community, especially in education aspect. It leads English to become one of the important subjects at school. have Students to master the comprehension written and spoken form of English. While English has four language skills, those are speaking, listening, reading, writing. English has a big role of the development of the subject at school. It has been inserted in curriculum by the government. This situation leads to the point of how important the mastery of English for all the students. To learn about this language properly, all of the skills are required to be mastered.

Reading is one of the most important skills that needs to be comprehended well. As it can be seen now, the more modern technology world has, the more use of international language is needed. The use of English keeps increasing, so does the reading skill. Reading holds an important role as it is explore someone's knowledge, furthermore by reading students will enlarge their vocabulary directly. It will be so much easier for everyone who has a good skill in reading, since they are able to understand the development of knowledge, science, and technology. Most of the book, articles, and journal of science are written in English nowadays, so that becomes the reason why English is essential enough to be mastered.

The fact appearing sometimes is that not every single person is good at reading. The students face this kind of hard situation many times. As the researcher conducted the pre research in SMAN 1 Abung Selatan, the students stated that they had a difficulty in comprehending the reading text. They also said that they were not motivated enough to deal with reading text material. They are dealing with a number of problems in comprehension of reading skill. The problem itself may come from various factors. The factors that affect reading comprehension that is stated by Harris and Smith in Sutarsyah (2013:35) are divided into two categories. The first one comprises five factors which are internal to the students, which are background experience, language abilities, thinking abilities, affection, and reading purpose. The second one covers two factors external to the reader and it includes the nature of the text to be read and physical factor. The researcher tends to assume that the affection becomes the crucial problem how successful the reading comprehension is.

The affection problem is closely related to an emotion of the readers. The readers' comprehension could be measured by the condition of their emotion. The affective factor easily seen is motivation. When we are talking about motivation to read, this describes students' enjoyments, their wants, and their behaviors surrounding reading. Students with skill may be capable, but without will, they cannot reader.The become a less motivation of reading they get, the less interest to read they have. Sadly, the

problem faced by students nowadays is having a low motivation. In the end, it may bring them to the low comprehension in reading.

In order to solve students' problems, the researcher thinks that application of an innovative strategy increase students' reading comprehension. To make students become active and get involved in reading activities, it is needed to teach them the various reading strategies because reading with various strategies would create students to be critical and creative readers. The researcher thinks that one of the great strategies that can for teaching reading used comprehension is by using Jigsaw strategy. Based on what Maden (2010:771) states, Jigsaw strategy can cooperative learning enhance making each student responsible for teaching some of the materials to the group. Jigsaw strategy itself is as a cooperative learning method that has a specialty used for teaching various language skills for example writing, reading, listening, and speaking. By using this strategy, students obligated to master the text, as they are given chances to comprehend the reading very well.

Thus, in this research the writer used Jigsaw strategy as an alternative approach to create an active teaching learning process in order to increase students' achievement in reading skill. According to Aronson (2000), strategy or cooperative structure commonly used in high school is Jigsaw strategy, because it is considered as the efficient way to learn the material in peers. Jigsaw strategy is an efficient way to

learn the course material in a cooperative learning style which encourages listening, writing, engagement, and empathy by giving each member of the group an essential part to play in the academic activity.

To support this study, there are several studies on Jigsaw in increasing reading comprehension skill. One of them was conducted by Winten (2013). Her research showed that the reading comprehension problem could overcome by having the Jigsaw strategy applied in the class activity. The result revealed that improving reading comprehension through jigsaw was an effective strategy. Dirgantara (2013) has investigated whether there is significant difference of students' achievement in reading achievement of descriptive text before and after being taught through Jigsaw Cooperative Learning. He has found out that there is significant difference of students' achievement in reading achievement before and after being taught through Jigsaw Cooperative Learning. His result indicates that the increase of students' reading comprehension scores in the experimental class after treatments was significant. It increased from 49.76 to 57.97. So, he concludes that Jigsaw Cooperative Learning can be used to increase students' reading comprehension achievement because the students could discuss and work together to accomplish their learning task, and enables students understand the reading task better and easier through group work.

Based on these problems and reasons, the researcher would like to find out about what aspect that improved the most after being taught by jigsaw strategy in reading comprehension.

# **METHODS**

The subjects of this research were the first grade students of SMAN 1 Abung Selatan which consisted of 25 students who had problems in reading class. The researcher implemented jigsaw improving the strategy aims at students' reading comprehension achievement their active and participation toward the reading class. The researcher limited the material in this study by using the recount text as the material of teaching and the test of reading comprehension.

This research was quantitative. In conducting the research, the researcher applied one group pretest-posttest design. The researcher used one class where the students received pre-test before treatments and they received post-test after the treatments. For the data collection instruments. researcher used pretest and posttest for reading test. The pretest was applied after doing a try out test. The test was in written form of multiple choice consisted of 30 questions in 60 minutes. The posttest was administered after the treatments in which the questions were the same with the pre-test but the number was re-arranged.

The treatment was conducted in three meetings using one kind of text, that was recount text. To make sure the valid reading test items, the researcher used the suitable material based on the curriculum. In order to make sure that data instruments were reliable, she

applied person product moment. After getting the result of the test, the students' score of pretest and posttest were analyzed by using Paired Sample t-test which computed using SPSS 16 program.

# **RESULTS**

The implementation of using Jigsaw strategy in teaching reading comprehension brought a significant result in the first meeting until the third meeting. The improvement showed that there's an increase in students' motivation and an active participation of students' reading activity.

Before conducting the treatments, the researcher administered the pretest to identify the ability of the students before they got the treatments. As the result, the total score of pretest was 1049; the mean score of pretest was 41.96; the highest score was 56.6; the lowest score was 33.3. From the result of the test, the students' score were various.It is seen that students who have 20-40 score are 12 students, those who have 41-50 score was 10 students and those who have 51-60 score was 3 students. The result showed that most of the students' scores were lower than minimal mastery criterion (KKM) of SMAN 1 Abung Selatan which required the students to get 75. It indicated that the students' reading comprehension achievement was poor.

After implementing three treatments to the students using Jigsaw strategy, the researcher administered the posttest to know whether there was increase of students' reading comprehension achievement or not. From the result, it was found that the total scores of post test in the experimental class was

1792.5. The mean score of post test was 71.7; the highest score was 86.6 and the lowest score was 63.3.

Table 1. The Analysis of the Hypothesis Testing

#### **Paired Samples Test**

	<u>-</u>	Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confiden Interval of the Difference				Sig. (2-taile
					Lower	Upper	t	df	d)
F	Pair 1 Posttest - Pretest	2.97360E1	10.49837	2.09967	25.40249	34.06951	14.162	24	.000

The table shows that the significant level was lower than 0.05, and it indicates that there is a significant different of students' reading achievement before after and treatment. It can be said that Jigsaw strategy can be used to improve students' reading comprehension ability.

From the results of pretest and posttest, it can be inferred that there **Table 2. The Improvement of Each Aspects** 

was an increase on students' reading comprehension ability after being taught by using Jigsaw strategy. The mean score of the pretest was 44.17 increased to 63.59 in the posttest with the gain score was 19.42. Moreover, the researcher also found out the improvement of each aspects of reading. It can be seen on the table below:

Aspects Of Reading	Pretest (%)	Posttest (%)	Increase (%)	
Determining Main Idea	41.33	72.66	31.33	
Identifying Details Information	34.66	86	51.34	
Finding Inference	40.66	66	25.34	
Identifying Reference	44	65.33	21.33	
Understanding Vocabulary	49.33	68.66	19.33	

According to table 2 above, each of the aspects of reading comprehension had gained from the pretest to posttest. It could be said that Jigsaw strategy improved the students' reading comprehension in all aspects of reading, such as determining main idea was 31.33%, identifying information

details was 51.34%, finding inference was 25.34%, identifying reference was

21.33%, and understanding vocabulary was 19.33%. Among all of the aspects, the aspect that improved the most was details information. In the pretest it was 34.66%, and it increased to 86%. The total gain was 51.34% which is the highest than other aspects, so it

could be concluded that the aspect that improved the most was details information.

#### **DISCUSSIONS**

The results of the research indicated there was a significant improvement of students' reading comprehension ability after being taught by using Jigsaw strategy. The researcher found that as the students were taught using Jigsaw strategy, they found it easier to find the information contained in the reading text. In the application of Jigsaw strategy, the students need to be active to dig as much as the information that they could collect. The information was obtained by actively sharing to the members of their same segment partners. Within the activity that made them active, the information they gathered would be a lot easier to get. In the result, they obtained many details information about the whole text.

The use of jigsaw strategy contributed students' toward reading comprehension ability. The use of jigsaw strategy supported students in doing the task easier, since they could discuss and work together to solve their learning problems through group work; the lower achievers could learn from the faster ones. Those students who take on a teaching role often find that teaching someone else leads their own improved their understanding of materials. opinion This supported by Sahin (2010), he argues that "Jigsaw technique allows students to actively participate in learning process. By being constantly subjected

to this method, students should feel more comfortable about their roles" (p. 778).

The group discussion that Jigsaw strategy created made students responsible in understanding the part of their section. It is supported as it was said that through jigsaw strategy, the students learnt a material from their friends in their groups. A material is divided into sections, and one section is for each student to take care of. The students who are responsible from the same section get together and form a new group in which the goal is for the students to master the section of the material and to enable them to teach the other members in their original learning group later (Aronson et al, 1978).

The researcher found that jigsaw strategy also encouraged students to improve their achievement. Having students work together in a group work often results in a higher level of learning and achievement than could obtained individually. happened because students feel more positive about being able to complete a task with others than by working individually. It is supported Johnson et al (1991) as cited in Garfield (1993) who said that a necessary condition for this is called positive interdependence, the ability of group members to encourage and facilitate each other's efforts

The activities that students had during the implementation of jigsaw strategy in reading class, they were less reliant on teacher as they learnt from other students. It gave a chance to each student in groups to be more responsible for their own learning. It successfully overcome teacher's problem in making students be active in comprehending the reading passage. As Sami Ali (2001) looked at the effect of using the jigsaw reading technique on the EFL pre-service teachers' reading anxiety comprehension. experimental The group was instructed to read reading passages using the Jigsaw Reading technique while the control group read the same passages individually. Those activities in teaching learning process showed that jigsaw technique fostered positive interdependence among students, and motivated each other to stimulate their thinking, helped students respect one another as students knew that each of them needed to promote each other success, encouraged weaker students optimize and assisted strong students to identify gaps in their understanding.

Jigsaw strategy provides a cooperative learning. It is proven as the treatments were given. This cooperative learning technique helps students in and out of the class. Larsen-Freeman (2000) argues that cooperative learning means that learners learn from each other in the groups. She highlights the issue that the way that learners and teachers work in the group makes an activity cooperative not merely the group configuration. She continues cooperative learning, teachers teach students collaborative or social skills so that they can work together more effectively" (p. 164).

The findings of this research confirmed the previous study (Winten:

2013), which showed that the reading comprehension problem could be overcome by having the **Jigsaw** applied in the class strategy activity. The use of jigsaw technique can challenge the students. It can be seen from the enthusiasm and their participation in the teaching learning process. The studentscan get the information from the discussion among the students so that thestudents were interested in the lesson. Then, they can get a high chance to success. Based on the explanation of the finding, it can be inferred that Jigsaw strategy could improve students' reading comprehension.

## CONCLUSIONS

Based on the results of the data analysis and discussion, the researcher concludes that Jigsaw strategy is appropriate to be used for reading comprehension, because it improve the students' achievement. It makes the students more active and motivated. It also improves students' participations and responses during the treatments. Moreover, finding information details is the aspect of reading which improved the most, because the students are directed to work related to it.

## **SUGGESTIONS**

Based on the result of the study and conclusion, the researcher would like to suggest as follows:

1. The English teacher is suggested to apply jigsaw technique in teaching reading since based on the results of

- this research and the previous research, jigsaw technique can be used to increase students' reading comprehension achievement significantly.
- 2. The implementation of Jigsaw strategy is indeed improving students' reading comprehension. It successfully improved the aspects of reading comprehension based on the research conducted. Even so, there is still one thing that needs to be concerned about, that is the jigsaw strategy hasn't shown that it could improve all the aspect in

a balance result. According to this research, it shows that there is one aspect of sub skill that improves with the significant number. The rest is on the average number. Hence, in another occasion as this strategy is applied, the English teacher should find another way to overcome this situation, where all the aspects of reading can raise a high significant raise in a balance number among the other aspects. It hopefully helps the students to get more comprehension in reading activity.

## REFERENCES

- Ali, S. 2001. The effect of using jigsaw reading technique on the EFL pre-service teachers' reading anxiety and comprehension, *Journal of Education College*, Vol 2(3), 1-21.
- Aronson, E, & Patnoe, S. 1978. The jigsaw class: building cooperation in the classroom (2nd ed.). New York: Addison Wesley Longman.
- Dedi. 2010. A comparative study of reading comprehension achievement between students taught through jigsaw technique and SQ3R technique. Bandar Lampung: University of Lampung.
- Larsen-Freeman, D. 2000. *Techniques and principles in language teaching*. New York: Oxford University Press.
- Maden, S. 2010. The effect of jigsaw IV on the achievement of course of language teaching methods and techniques. Turkey: Cumhuriyet University.
- Sahin, A. 2010. Effects of jigsaw II technique on academic achievement an attitudes to written expression course. *Educational Research and Reviews*. Vol 5(12), 777-787.
- Sutarsyah, C. 2013. *Reading theories and practice*. Bandar Lampung: Lembaga Penelitian Universitas Lampung.
- Winten, K. 2013. *Improving reading comprehension through jigsaw technique at the Eighth students of SMPN Satu Atap Jungutan in academic year 2012/2013*. Denpasar: Mahasaraswati University.