

**THE USE OF JIGSAW STRATEGY IN IMPROVING STUDENTS'
ACHIEVEMENT IN READING COMPREHENSION AT THE FIRST
GRADE OF SMAN 1 ABUNG SELATAN**

(A Script)

**By
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**ENGLISH EDUCATION STUDY PROGRAM
DEPARTMENT OF LANGUAGE AND ARTS EDUCATION
FACULTY OF TEACHER TRAINING AND EDUCATION
UNIVERSITY OF LAMPUNG
2017**

ABSTRACT

THE USE OF JIGSAW STRATEGY IN IMPROVING STUDENTS' ACHIEVEMENT IN READING COMPREHENSION AT THE FIRST GRADE OF SMAN 1 ABUNG SELATAN

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The aims of this researcher were (1) to find out whether there was an improvement of students' reading comprehension skill after being taught using Jigsaw strategy, (2) to find the aspect of reading that improved the most after being taught by using Jigsaw strategy. This research was conducted on the first grade of SMAN 1 Abung Selatan. The samples of this research were two classes, X1 and X2 which consisted of 25 students chosen randomly through lottery.

One group pretest and posttest was used as the design of the research. The instrument for collecting data was reading test. The instruments of this research were reading test (pretest and post test). Pretest and posttest were used to see the difference of students reading comprehension achievement before and after being taught through Jigsaw strategy. Paired sample t-test was done to find out whether the difference was significant between the pretest result and the post test result.

The result of the research showed that there was a statistically significant increase of students' reading comprehension ability after the implementation of Jigsaw strategy. In addition, finding details information was the reading aspect that improved the most. According to the result of the research, the implementation of Jigsaw strategy in teaching reading could help the students to comprehend the material well. It means that Jigsaw strategy is an appropriate strategy to improve students' reading comprehension.

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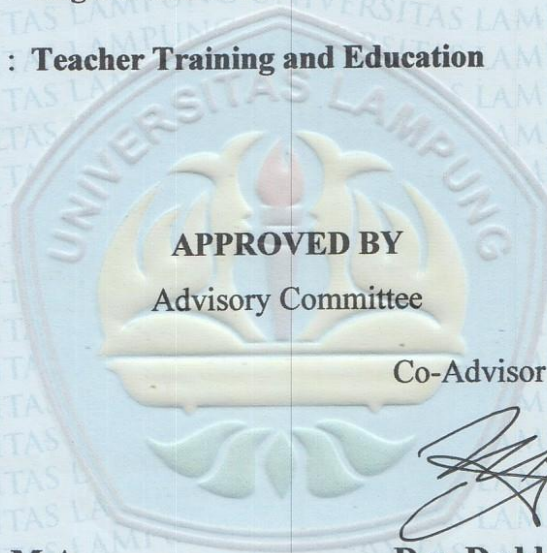
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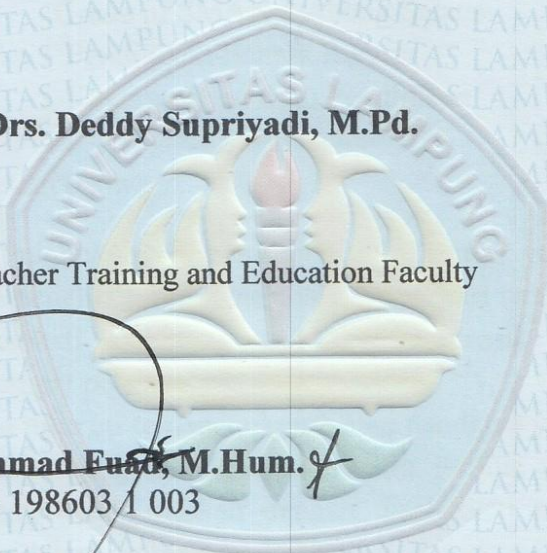
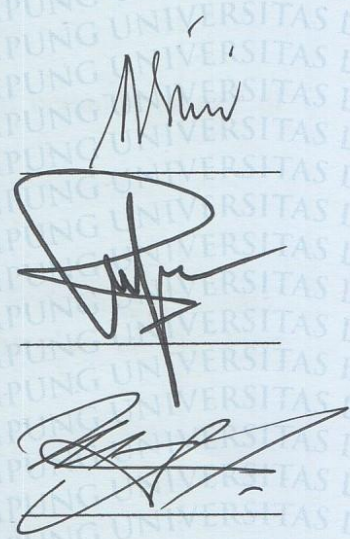
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CURRICULUM VITAE

TeikaAmeiratrini was born in Bandar Lampung, on June 17, 1995. She is the third daughter among three siblings from incredible parents, Nurhali and Tri RediMurniati.

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MOTTO

“Our job is to teach the students we have.

Not the ones we would like to have.

Not the ones we used to have.

Those we have right now.

All of them.”

-Dr. Kevin Maxwell

DEDICATION

Alhamdulillah, this script would humbly be dedicated to:

My beloved parents, Nurhali (Alm) and Tri Redi Murniati, S.Pd.

My beloved sister and brothers, Pratiwi Nur Endah Widiati,

Muhammad Iqbal Dwi Bekti, and Muhammad Arthur Azhid

My grandfathers and grandmothers

My beloved lecturers at the English Department;

My beloved friends, people who love me; and

My beloved almamater, University of Lampung

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In this case, the writer would like to express her deep gratitude and respect for those who have contribution in helping and supporting her to get this script finished.

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In the end, the writer believes that her writing is still far from the perfection. There might be weakness in this research. Therefore, constructive input and suggestions are expected to compose better script in the future.

Bandar Lampung, Agustus 2017

Teika Ameiratrini

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I. INTRODUCTION

This chapter presents several points such as the background of the problem, research questions, objectives of the research, uses of the research, scope of the research, and the definition of key terms. The contents of the chapter are presented as follow.

1.1 Background of the Problem

The existence of English is no longer being a brand new thing for everyone. Even it has already been used as a modern language in Europe since the seventeenth century. It replaced the popularity of Latin which was used in that time. As the time goes by, English successfully becomes an International language where a big number of countries use it as a mean of communication. This condition demands the need of English for everyone who wants to get involved in global community, since it holds so many life aspects including education. It leads English to become one of the very important subjects taught at school, especially in Senior High School level. In that level, students have to master the comprehension written and spoken form of English.

English has four language skills; those are listening, speaking, reading, and writing. They are supported by some components; they are vocabulary, grammar,

and pronunciation. 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 to 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 process of reading does need a comprehension. When the reader does not comprehend the information in the text, the reading skill is totally meaningless. The students need to understand the idea and information that they can get from the text. The comprehension does really occur when the reader understands fully information and idea written in the text. There will be no reading when there is no comprehension.

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.

Students are dealing with a number of problems in comprehension of reading skill. The problems 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 of how successful the reading comprehension is.

The affection problem is closely related to an emotion of the readers. 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 become a reader. Sadly, the problem faced by students nowadays is having a low motivation. The low motivation itself is occurred by personal interest and desire of students to read. It is also supported by the way how they think of their own ability. They begin to doubt their reading ability, because they are not confident enough to be able comprehending the text. The feeling of dilemma only just causes them limitation to do what they are actually able to do. This kind of situation leads the students to have a low motivation to read. The obvious evidence is showed as they are faced by the length of paragraph which is quite long. The length of paragraph causes a big deal for students, so that it directly impacts to their motivation become lower. They are instantly not interested to read the entire of the text, as they may think that they will not get the entire

information stated in the text. The less the motivation of reading they get, the less interest to read they have.

This case is also seen, as students are demanded to have a monotone and exact same way in learning reading activity. Where mostly students are required to read the text, and in the end teacher will ask the information they get from it. For some students who have low motivation, it would definitely decrease their interest to get mastered in this skill. Thus, the low motivation problem leads to the low comprehension of reading skill in the end.

The mastery of reading skill is surely needed, since it becomes the crucial and hard part that students face nowadays. It is really seen, since English is one of the parts of national examination. Reading section is the special case being faced by the students for English subject in national examination. Some of the students get so much difficulty in comprehending the idea or information from the text. Most of the case, sometimes they ignore the reading section, since it is pretty boring to deal with the long paragraph. When it comes to the teaching learning at class, the teacher perhaps does not show an interesting way to get students comprehend the text. It seems so boring where commonly students just sit and read the text. That situation does not engage the involvement of between teacher and students there. The students should be guided to find the main idea, information, vocabulary, and etc.

The class atmosphere has to be planned well so that students get the opportunity to interact and engage each other. In this interaction students will enjoy learning process. It is also needed the activity which involves a cooperation of the students.

This becomes the teacher's job to create the teaching strategy which provides the activity where it attracts students' attention more. In order 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. Therefore, the teacher should provide effective and applicable strategies to their students.

The use of teaching strategy surely needs to be concerned enough in choosing and implementing it in the class. It will determine of how successful the material delivered by teaching depends on the strategy being used. The teaching strategy itself should be interesting enough for the students, and it hopefully can bring something fun and attractive for them to get involved in class activity. As far as the researcher knows, mostly nowadays students are not interested enough to study reading skill in such a usual and boring way. The strategy of the learning process would be so much better, if there is an innovation for the way of delivering it.

The researcher thinks that one of the great strategies that can be used for teaching reading comprehension is by using Jigsaw strategy. Based on what Maden (2010:771) states, Jigsaw strategy can enhance cooperative learning by 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 are obligated to master the text, as they are given chances to comprehend the reading very well.

As a cooperative learning strategy, jigsaw strategy has a strong point in communication. The communication is built among peers. It is built while the learners are obtaining the missing information that they collect, and in the end they will integrate them all to become a complete information. This strategy does have a link with the reading comprehension. It trains the students to be responsible in understanding about the information that they need to expertise about. In delivering or presenting the comprehension they have got, the communication plays a big role in that part. Since so, communication is completely needed in reading comprehension during the jigsaw strategy applied.

There are so many things that can be taken from this strategy. Students are encouraged to learn in group task, so they are required to do the activities together with the group partners. The social personality is also built here among the students, as they interact together with their group members. When this strategy applied, each of the students become expert of what text part they have got. The next duty they have to do is teach and learn the other members about the material they are expert in. As Yunita (2016) says that this is an interesting teaching strategy where the students are able to learn and teach each other and every student becomes an expert here. Hence it is a way for students to work cooperatively and help each other to learn new material and each group will get different material from the teachers. Through this strategy, the students cooperate with their friends and have many opportunities to improve their communication ability. In Jigsaw strategy, the students have the opportunity to improve their responsibility to their learning and they can cooperate with the other students to learn the material.

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.

According to the explanation above, the researcher applied Jigsaw strategy to improve students' comprehension in reading. It is expected that by using Jigsaw, the students can take the information from the text well. The researcher also had a thought in assuming the theories that Jigsaw gave opportunity for the students to understand deeper about the text easily. Besides to produce students' comprehension, by applying this strategy could also make the students more active and they easily shared idea with other students. Students were believed to gain more motivation. It was really hoped that students' reading problems would be overcome by using this strategy.

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.

1.2 Formulation of the Problem

In line with the background above, the researcher formulated two main research questions to be addressed, they were as follows:

- a. Is there any increase in students' reading comprehension in recount text after being taught through Jigsaw at SMAN 1 Abung Selatan?
- b. What aspect of reading improves the most after being taught by jigsaw strategy?

1.3 Objectives of the Research

Based on the background above, the objectives of the research are:

- a. To find out whether teaching using Jigsaw strategy can increase students' reading comprehension in recount text or not.
- b. To find out the aspect that improves the most after being taught by Jigsaw strategy.

1.4 Uses of the research

The uses of research are as follow:

1. Theoretically

The results of this research can be used as the reference for those who want to conduct a research in English teaching process.

The findings of the research study are expected to enhance the theory of teaching strategy in English, and support evidence to the exiting research finding which have revealed the importance of having and experimenting different strategy concerning teaching reading.

2. Practically

The result of this study is intended as valuable informative feedback to both the English teacher and students SMAN 1 Abung Selatan. For the

teacher, the present research study is intended to be used as reference in planning a better teaching strategy in teaching reading. Teachers are expected to improve their teacher strategy to increase the students' reading skill by using the appropriate strategy. Furthermore, the finding of this study is hoped to inspire and motivate students to learn reading. They can improve their achievement of reading comprehension. Besides that, the researcher expects that the student will enjoy the class. By enjoying themselves in the class, they will be easier to build their motivation besides they will focus on their material.

1.5 Scope of the Research

This research was quantitative research. It focused on investigating the use of Jigsaw strategy in increasing students' reading comprehension achievement. The participants were the students of the first grade of SMAN 1 Abung Selatan. The reason why the researcher chose the senior high school students with an assumption that they had already had experienced learned about recount text.

1.6 Definition of Terms

Reading

It refers to a process of conveying a meaning from a written text in both literal or non literal from which in the other side reading also deals with understanding of a text.

Reading Comprehension

Reading comprehension is a set of reading activities done by people which need high level process that involve eyes and brain to get the gist or messages from certain printed materials.

Jigsaw Strategy

Jigsaw strategy is a cooperative learning model that consists of several members in one group that are responsible for the lesson materials and able to teach the topic to other members of group, by discussion activities which help the students to be active in the class.

II. LITERATURE REVIEW

This chapter elaborates theories being used, i.e. review of previous studies, concept of reading, aspect of reading, reading text, teaching reading comprehension, strategies in teaching reading comprehension, concept of Jigsaw strategy, advantages and disadvantages of using Jigsaw strategy, the procedure of applying Jigsaw in the class, theoretical assumption, and hypothesis.

2.1 Review of Previous Studies

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 be overcome by having the Jigsaw strategy applied in the class activity. The result revealed that improving reading comprehension through jigsaw was an effective strategy.

The second research that had ever conducted related to Jigsaw strategy in reading skill is by Dedi (2010) has compared between Jigsaw Cooperative Learning and SQ3R technique in increasing students' reading comprehension achievement. He has found out that there is a difference of students' reading comprehension achievement between those who were taught through Jigsaw Cooperative Learning and those taught through SQ3R technique. The mean score of the posttest in the experimental class using Jigsaw Cooperative Learning was higher

than the mean score of pre test was 60.37 the average score of posttest was 70.50 and the increase was 10.13. Meanwhile in control class those taught through SQ3R, the mean of pre test and post test increase the students' reading comprehension achievement significantly. That happened because jigsaw can motivate students to study since they work within their groups.

Another previous research is coming from Ahmad (2013). Even though this research was conducted without using Jigsaw, but it used small group discussion to measure how effective it was to the application of this strategy in students' reading comprehension. The strategy of his research has the same thing in common with Jigsaw strategy, since it uses a cooperative learning also. The result of the research said that it was successfully effective to improve students' reading comprehension. Small group provides opportunities for students' initiation, for face-to-face, give and take, for practice in negotiation of meaning for extended conversation changes. It involves many students' participation, so that it engages the students to be active together.

Based on the previous researches above, however, it seems that their research are not really concerning about the aspects of reading skill mostly influenced by the implementation of Jigsaw strategy. This case initiates the researcher to find further about the aspect being improved the most after being taught by this strategy. There for, in answering this question the researcher will conduct this research.

2.2 Review of Related Literature

The researcher proposed a review of related literatures which has a correlation with this research as basic concepts:

2.2.1 Concept of Reading

Reading is one of the language skills that plays an important role for a learner to get the input from the written text. The process of reading needs a good comprehension in order to produce the understanding about the idea or information. The reading process is totally meaningless, when there is no comprehension.

Reading is the process of looking at a series of written symbols and getting meaning from them. When we read, we use our eyes to receive written symbols (letters, punctuation marks and spaces) and we use our brain to convert them into words, sentences and paragraphs that communicate something to us.

According to Afflerbach (2007), reading is a dynamic and complex process that involves skills, strategies, and prior knowledge. Reading is a “social event” and that reading is socially situated. The meaning of reading is including the information that we read to build or construct meaning, and in order to do so we are required to use particular skills and strategies. Many skills, strategies, and prior knowledge are demanded as the part of how successful the process of reading is. Each of these things mentioned are having the various roles.

As it has been stated by Grabe and Stoller (2002:9) reading is the ability to draw meaning from the printed page and interpret this information appropriately. However, without quibbling over the exact wording of such a definition, it is,

nonetheless, insufficient as a way to understand the true nature of reading abilities.

From the definition above the researcher concludes that reading is an activity where the learners are digging up the idea or information from the text using their background knowledge and also the comprehension. It is also generally defined as a process of identifying written or printed text to understand its meaning.

2.2.2 Aspect of Reading

Reading is an astoundingly complex cognitive process. According to Nuttal (1985), there are five aspects of reading which help the students to comprehend the English text: main idea, specific information, reference, and vocabulary. These aspects are explained below:

1. Determining Main idea

Finding the main idea of a paragraph is one of the most important reading comprehension skills. In some paragraph, the main idea is not explicitly stated in one sentence. Instead, it is left to the reader to infer or reason out. It can be said that main idea has the most important information developed from author throughout the paragraph.

2. Finding the Specific Information or Part of Text

There is some information that covers as the specific information that develops the topic sentence. They are definition, examples, facts, comparison, analogy, because, and effect statistics and quotation.

3. Finding Reference

Words or phrases used before or after the reading material are called as reference. The purpose of reference is to prevent the repletion of words or phrases. It eases the reader to find out the meaning of the words specifically.

4. Finding Inference

Inference is about prediction or guessing about unknown thing related to the information in the text. It is needed a logical connection that bridges the thing that readers know and the thing they do not know.

5. Vocabulary

Vocabulary is essentially needed when the reading process is going. It consists of the stock of word used for anyone in speaking or even producing the utterance for reading.

In summary, reading comprehension is basically about determining main ideas, finding the specific information, finding references, finding inference and vocabulary.

2.2.3 Reading Text

The text classification may differ from one theory to another. Based on what Derewianka (2003), she states that the various reading text is divided into a number of genres. The genres are identified as critical to success in educational contexts through an examination of syllabuses, textbooks, student texts and assignments, and the language challenges posed by the school curriculum. Those genres are description, information report, procedure, recount, explanation, story

genres, response genres, and exposition. They are divided based on generic structure and language feature dominantly used as well.

In this research, the researcher tends to concern more about recount text. The reason why the researcher chooses this kind of text is because it is used in the curriculum, and mostly students are found getting difficulties in comprehending the content. The recount text itself has a definition as a text that retells events or experiences in the past. Its purpose is to inform or to entertain the audiences. There is no complication among the participants and that differentiates from narrative text. The recount text is more likely the text that describes the experiences that has been passed by way of retelling the events in chronological order of occurrence. The recount text is distinguished by the type of text in a group recount the narrative because it focuses on the sequence of events of events. So, in recount text cannot be found a variety of issues explored by the author.

Each text type has a different generic structure. This structure is different because of the purpose and function of the text is also different. The structure is chosen for the measure in the text written objectives. The recount text has its generic structure, those are as following:

1. Orientation:
2. Series of Events:
3. Reorientation

The recount text also has language features which are commonly about:

1. Introducing personal participant
2. Using chronological connection

3. Using linking verb
4. Using action verb
5. Using simple past tense

Those language features may give students help in identifying the characteristic of recount text, and perhaps teachers are helped in understanding regarding the recount text.

In reference to the explanation above, the researcher determines one of the kinds of the text that is recount text as the material used in this research.

2.2.4 Teaching Reading Comprehension

Among the other skills, reading becomes one of the crucial skills that anyone has to master. People who want to move forward need a lot of self improvement, including expanding their ability in language aspects. English has already become an international language, so everyone has to learn it. It is for various purposes. It can be used for increasing their knowledge that is able to raise their career or just to learn the culture. Reading comprehension is totally needed for this kind of case. It is wide open for anyone, especially for students. Students learn reading in order to get the understanding and comprehension from the text they read. It is also being tested on their final examination, and it proves how important the reading comprehension is.

As Edward Fry (2007:7) states that reading comprehension is you teach a student to read by helping him or her to learn the relationship between the printed words and their meaning. Meanwhile, reading is viewed as an interactive, social cognitive process involving a text, a reader, and social context within which the

activity of reading takes place. It means that the reader constructs meaning through his transaction with the written text. The transaction involves interpretation which is influenced by his experience, language background, cultural framework, and purposes of reading. Besides that, he further mentions six component skills and knowledge which can be gained from the reading process such as: word, identification, enlarge the vocabularies, formal discourse structure knowledge, content/world background knowledge, evaluation skills/strategies, compare information from another sources, there are mental process from reading. In conclusion, there are several advantages from the reading process.

Harmer (1998: 70) explains that there are principles behind the teaching of reading. Each of them can be explained as follows.

- a) Reading is not a passive skill. Reading is a receptive skill nonetheless it does not mean that in reading, the reader is just passive in the reading activities. The reader has to comprehend the text through understanding the words mean, and understanding the argument. If the reader-the students do not do these things, it means that they are just touching the surface of the text and they will easily forget it.
- b) Students need to be engaged with what they are reading. Students who are not engaged with reading text will not actively interested in what they are reading. They will be engaged and get much more in their reading when they are faced with interesting topics or the topic they like and challenging tasks.
- c) Students should be encouraged to respond to the content of a reading text, not just the language. It is important to study the generic structure and the

grammatical aspect of the reading texts like the way they use language, the number of the paragraphs they contain, and how many times they use relative clause. Though, it is important to know the content of the text. The students should be given opportunity to respond the message of the text so they will be engaged to express their feeling about the topic.

d) Prediction is a major factor in reading. When the readers read the book or article, usually they have an idea of the content even they have not read before. It is because they have a hint through the book cover in the book and the photograph and headlines in the article. In so doing, the teacher should give students hints so they can predict what is coming too. It will make them to be more engaged readers.

e) Match the task to the topic. The teacher should choose good reading tasks such as the right kind of question, engaging, and useful puzzles. The most commonplace passage can be designed with imaginative and challenging task.

f) Good teachers exploit reading texts to the full. A reading text consists of words, sentences, ideas, and descriptions. Good teachers integrate the reading text into interesting class sequences, using the topic for discussion and further tasks using the language for study and later activation.

The use of appropriate strategy is totally needed by a professional teacher. In order to reach the students' comprehension of the reading skill, so the researcher assumes that an active and effective learning process needs to be applied. The researcher thinks the students may need an appropriate strategy that gives a

chance to be more active in the class. In this case, the students need to stimulate their interest and knowledge. Based on what Harmer says the principle of reading skills play the essential process of learning. Reading is not known as the passive skill, since the reader has to be active in finding the comprehension from the text.

From the explanation above, the researcher concludes that teaching reading comprehension should provide an activity where it can engage students in comprehending the text. The researcher believes that by using an appropriate strategy in teaching reading would increase students' reading comprehension.

2.2.5 Strategies in Teaching Reading Comprehension

The ultimate goal of reading is comprehension. It allows the reader to make sense of what the text is about. The teacher should instill in students important strategic methods to improve comprehension. Strategic reading methods can help students achieve their academic needs especially resulting to a good comprehension. In order to achieve it, so the teacher needs to implement comprehension strategies. Comprehension strategies itself are conscious plans — sets of steps that good readers use to make sense of text. Comprehension strategy instruction helps students become purposeful, active readers who are in control of their own reading comprehension.

There are several ways in teaching reading comprehension using some strategies. The strategies are created so that it can help the students achieve the goal of having good comprehension. Here are the several ways in teaching reading comprehension using strategies:

1. Think-Pair-Share Strategy

Think-Pair-Share is a reading comprehension strategy in which students work together to solve a problem or answer a question about an assigned reading. This strategy allows all students time to individually think about the reading and the answer to the question.

2. Know, Want to Know, and Learned Strategy (KWL)

K-W-L (Ogle, 1986) is an instructional reading strategy that is used to guide students through a text. Students begin by brainstorming everything they Know about a topic. This information is recorded in the K column of a K-W-L chart. Students then generate a list of questions about what they Want to Know about the topic. These questions are listed in the W column of the chart. During or after reading, students answer the questions that are in the W column. This new information that they have Learned is recorded in the L column of the K-W-L chart.

3. Question Answer Relationship (QAR)

Question-Answer relationship (QAR) is a strategy to be used after students have read. QAR teaches students how to decipher what types of questions they are being asked and where to find the answers to them. Four types of questions are examined in the QAR.

4. Jigsaw Strategy

Jigsaw is a cooperative learning strategy that enables each student of a "home" group to specialize in one aspect of a topic. Students meet with

members from other groups who are assigned the same aspect, and after mastering the material, return to the "home" group and teach the material to their group members. With this strategy, each student in the "home" group serves as a piece of the topic's puzzle and when they work together as a whole, they create the complete jigsaw puzzle.

All of the reading strategies above have the same purpose that is to achieve students' comprehension. They are differentiated from the various way of implementation and also benefit. Among these various reading strategies, the researcher decides to apply Jigsaw strategy in conducting the research.

2.2.6 Concept of Jigsaw Strategy

As it is stated before that the researcher intends to take Jigsaw as the strategy that applied in the reading comprehension research. Related to that condition, so the researcher reveals more about what Jigsaw strategy is.

Jigsaw is one of the strategies that can be used in the teaching-learning activity. It is categorized as cooperative learning that makes the students more active in the group work. The jigsaw strategy was first developed in the early 1970s by Elliot Aronson. Since then, hundreds of schools have used the jigsaw classroom with great success. Aronson (2000) states that jigsaw is a cooperative learning strategy that reduces racial conflict among school children, promotes better learning, improves student motivation, and increases enjoyment of the learning experience. "Jigsaw activity is based on the information-gap principle which the class is divided into groups and each group has part of the information needed to complete an activity" (Richards, 2002: 19). The class must fit the pieces together to

complete the whole. In so doing, they must use their language resources to communicate meaningfully and so take part in meaningful communication practice.

The jigsaw classroom is very simple to use. Aronson, et al.(1978:124) stated that teachers just have to follow these steps in teaching reading:

1. Divide students into 5 or 6 person jigsaw teams. The team should be diverse in terms of gender, ethnicity, race, and ability.
2. Appoint one student from each team as the leader. Initially, this person should be the most mature student in the team.
3. Divide the day's lesson material into 4-5 segments.
4. Assign each team to read the text, making sure that each learner only has direct access to their individual segment.
5. Give the team member time to read over their segment at least twice and become familiar with it. There is no need for them to memorize it.
6. Ask the students from each team that have the same segment to form expert groups. Give each student from the expert groups some time to discuss the main points of their segment and to rehearse the presentations that they will make to their jigsaw team.
7. Bring the students back into their home teams.
8. Ask each person in the team to present his/her segment to their team. Encourage others in the team to ask questions for clarification.
9. The teacher floats from team to team, observing the process.

In jigsaw strategy, the students are expected to be more challenged so they will be active in participating the course. In addition, Brown (2001: 185) defines that jigsaw strategy 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 objective. Berkeley-Wykes (cited in Ali, 2001) defines the jigsaw reading strategy as the strategy in which a reading text is cut into segments and the task of the students is to restore it to its proper order – to make sense of the text.

Arends (1997) states that Jigsaw strategy is one of the type's cooperative learning which consists of several members in one group who are responsible for part of the material and can teach the material to other members in this group. This strategy builds students' awareness in learning and understanding the text. It deals with the cooperative activity in two main groups "home group" and "expert group". The home group refers to the group where they firstly come from, and the expert group is the group where they master only one segment that will be presented in the home group.

By using this strategy, the teacher assigns different segment of the text to each member of home groups. The students research their assigned segments, then meet in expert group with members of other group assigned to the same segment to discuss refines their understanding of subject. The member of expert groups returns to their home groups to deliver or give a presentation about their segment to entire member of home group. In this jigsaw strategy, the teacher does not actively get involved in the discussion. The teacher only facilitates the students when they find the difficulty in explaining their segment.

2.3 Advantages and Disadvantages of Jigsaw

In using teaching strategy, it must have its advantage and disadvantages. Both of the advantages and disadvantages can be taken for good solution, and it's expected to have the way in avoiding the disadvantages from this strategy. These are the following jigsaw's advantages and disadvantages.

2.3.1 Advantages of Jigsaw Strategy

According to Arronson and Patnoe (2011) the advantages of Jigsaw Method are:

1. Jigsaw promotes student learning and academic achievement. It may happen, because every student is actively involved in both 'expert group' and 'home group. They are fully responsibility to master their segment of text, and this situation indirectly increases students' academic achievement through total responsibility they own during the activity.
2. Jigsaw increases students' retention. Jigsaw offers the puzzle activity which means the students try to memorize paragraph and interpret it to the members of the group.
3. Jigsaw enhances students' satisfaction with their learning experience. The satisfaction will appear as the expert fully understands about their own part text and deliver it to the others.
4. Jigsaw strategy helps students to develop skills in oral communication. Not only in reading by understanding, while explaining to their 'home group' it surely helps the students to have more practice on speaking activity.

5. Jigsaw develops students' social skill. They are required to move to different group, and they need to discuss, good social skill must be developed in this stage.
6. Jigsaw promotes students' self esteem. A good self esteem is develop when the students are insisted to be an 'expert' means that they must pretend to really know, and the only way to know everything is understand the text well.
7. Jigsaw helps to promote race relation. Jigsaw makes the students help one another and if many races in the class exist, it means that the students will break the gap and unconsciously build warm relations with each others.

These advantages give many positive impacts to students, as they are demanded to be active and also well-socialized with another students.

2.3.2 Disadvantages of Jigsaw Strategy

There are some disadvantages of using Jigsaw strategy based on Kholid, et al. (2009). They are:

1. In the classroom learning, jigsaw is a time-consuming activity. The students need to spend their time in two groups by only learning a text.
2. There are some students who feel confused during jigsaw activity.
3. There are some students who are unable to handle their reading material in jigsaw activity.

Briefly, in the teaching learning activities, every single method or media always has the advantages and the disadvantages. It is truly natural, but jigsaw has more

advantages then disadvantages. Because of that the researcher used this media in this research.

2.4 Procedure of Applying Jigsaw in the Class

Jigsaw activity in reading skill is developed for each student within group in order to reach a good understanding of one reading form an assigned set to explain it to other in the groups. When all the pieces of stories are put together, the students in the groups should have the whole part of the stories. Explaining material to one another helps students to understand the material in a way that is far deeper than when they read material on their own or when they only discuss it in a conventional. Based on the implementation of the jigsaw classroom (Aronson, 2000), the researcher modified the activities of teaching reading comprehension process. The procedures areas follow:

1. The teacher divides the class into four to five groups. This group is also called as the home group.
2. After being separated into home groups, each of students in the class is asked to mention number from one up to four. The one up to four refers to expert 1, expert 2, expert 3, and expert 4.
3. For those who get the same number will be gathering around into one group. These new formed group are called as expert groups.
4. When they have already known their expert group, the students will be leaving their home group and be together with the expert group.
5. Each of the expert group is given the different segments of the texts. The segments are coming from the part of the text.

6. As each of students has already gathered around with the expert group, so it's their time to dig the information about the segment they have.
7. Each student is assigned one segment from each recount text to learn. Students will only have direct access to only their own segment.
8. They are given several minutes to read and discuss it together with their expert group members.
9. Students will be given time to read over their segment at least twice to become familiar with it. Students do not to memorize it.
10. Students in this expert group should be given time to discuss the main points of their segment and rehearse the presentation they are going to make to their jigsaw group.
11. When the expert group has already been familiar enough with the segment they read, now it's their time to come back to their jigsaw home group.
12. As they have already gathered around with their jigsaw home group, each of the experts that masters their own part segments start to deliver the information that they get from the expert group.
13. Since each of the students in the groups is the combination of experts who master different segments, so in this step they are required to be responsible in retelling their own segments.
14. The students are given time to give presentation one by one based on the number of the expert group in each of their home jigsaw group.
15. The students are required to give the presentation based on the order of the number of the expert group they have.

16. All of the students work on group in delivering presentation simultaneously.
17. To make the condition stay conducive, the teacher asks the students to pay attention to each of the students delivering the information from their own segments.
18. The teacher visits around the group and facilitate the students in case they have difficulties on explaining the segment.
19. After all the members of the jigsaw group have done presenting their segments, the teacher will give several question as task to each group related about the entire text.
20. The students will discuss and work on the task together with their partner in groups.

Based on the Jigsaw strategy procedures above, Aronson shows that each of the procedures has a strong correlation to the application of reading skill. It is convinced that the Jigsaw strategy is able in covering the aspect which needs to be mastered in reading. The researcher thinks that by implementing this strategy, the students can easily comprehend the material very well. In the implementation of Jigsaw reading, the text given to group is in form of jumbled text. The main benefit of jigsaw reading is, it can cover more reading in a shorter amount of time and allows students to think deeply about an important part of the text. It is believed that the Jigsaw strategy would be very useful in order to increase students' reading ability.

2.5 Theoretical Assumption

There is a couple of problems students face nowadays related to reading skill comprehension. These problems put them in difficulties of comprehending the text. They apparently get the difficulty in motivation factor mostly. The motivation plays a very important role in determining of how successful the reader in catching the idea or information in the text. Once the reader has a low motivation, thus it can impact to their comprehension. The low motivation leads to the poor comprehension that students can get.

Therefore to overcome such kind of problems, the researcher believed that the problem created by low motivation could be solved by implementing one of the interesting strategies. In teaching reading comprehension, there are some strategies that can help the teacher to reach the aim of teaching learning process. For this research, jigsaw was chosen as a strategy in teaching reading comprehension. By applying this strategy, each learner has essential information. No one has the same information. In this case, the students share the information to bridge the gap. This is what makes the jigsaw strategy so effective. Shortly to conclude, it seems that jigsaw strategy can be used to increase students' reading comprehension achievement.

2.6 Hypothesis

The theoretical assumption above leads to the following hypothesis:

1. There is a significant increase in the students' reading skill from the pretest to the posttest after the implementation of jigsaw strategy for understanding the reading recount text.

These are all the researcher covers in this chapter such as review of previous studies, concept of reading, aspect of reading, reading text, teaching reading comprehension, strategies in teaching reading comprehension, concept of Jigsaw strategy, advantages and disadvantages of using Jigsaw strategy, the procedure of applying Jigsaw in the class, theoretical assumption, and hypothesis.

III. RESEARCH METHOD

This chapter discusses about design of the research, population and sample, data collecting techniques, the instruments, try out of the instruments, scoring system, research procedure, data analysis, and hypothesis testing.

3.1 Design of the Research

This study is intended to find out whether teaching using Jigsaw strategy can increase students' reading comprehension in recount text or not and to find which aspect that is improved the most. In conducting the research, the researcher used true experimental design by giving different topics for each treatment in every test. The researcher used two classes in which the students were given two three treatments and two times tests. According to (Hatch and Farhady, 1982), the formulated is:

T1 X T2

Where:

T1 = Pretest

X = Treatments

T2 = Posttest

3.2 Population and Sample

The population of this study was the first year students of SMAN 1 Abung Selatan in academic year of 2016/2017. There were two classes as the sample of the study. Regarding that most of the students have the almost closely same English proficiency, so the researcher took two classes randomly by naming the label as the try out and after treatment class.

3.3 The Instruments

The instruments used for this research were reading tests to reveal students' reading comprehension. It was provided two reading tests. They were the try out item and reading test item. The try out item was given in the very beginning meeting before conducting the treatment, while students had the reading test item after they had the treatment conducted. It meant that the result of reading test item showed how far the students' got in reading comprehension showed by their score. The reading test was done as the product of the teaching learning process. The test focused in identifying the main ideas, specific information, vocabulary, making reference, and inference of each paragraph of the text. The text used was recount text where the students were required to analyze the content of the text, and they did the comprehension questions given. The improvements of students' skill could be obtained by their result of the test.

3.4 Data Collecting Technique

In collecting the appropriate data, the researcher applied one data collecting strategy for answering two research questions of this research. The strategy was

using a set of reading comprehension test. The researcher used two kinds of test, i.e. pre-test and post-test. The data is explained as follows:

1. Pre-test

The pre-test was conducted before the treatment in order to find out how far students' competence in reading comprehension. This test was given after having a try out test. The test was in written form of multiple choices that consists of 30 questions along with four questions of answers (A, B, C, and D). The aim of this test was to measure the competence of the student toward reading comprehension before the treatment conducted.

Table 1. Students' Pretest Score by Aspect of Reading

Aspects of Reading	Items Number	Percentage %
Determining Main Idea	2, 5, 11, 18, 22, 29	20
Identifying Information Details	1, 7, 13, 16, 23, 28	20
Finding Inference	3, 10, 12, 15, 19, 25	20
Identifying Reference	4, 8, 17, 20, 24, 27	20
Understanding Vocabulary	6, 9, 14, 21, 26, 30	20
Total	30	100

This table belongs to the description of students' pretest score analyzed by aspect of reading. Each of the aspect has 6 numbers of questions, so the total numbers were 30 questions. The correct answers had different percentage, the lowest aspect of reading was from finding inference

2. Post-test

After the students had treatment on learning reading through jigsaw, the researcher gave them post test to measure their improvement in comprehension of reading taught by jigsaw strategy. The item of post test was similar with pre-test which is 30 items with four choices done in 45

minutes. The difference of pre-test and post-test was only in order of the number of the test.

On the other hand, to collect the appropriate data for answering what aspect improved the most, the researcher used the specification of aspect of reading skill to analyze in detail about the aspect that stood out more.

3.5 Try Out of the Instruments

Try out test was conducted to know the quality of the reading test as the instrument of the research such as validity, reliability, level of difficulty and discrimination of power. The try out test contained 40 multiple choice items with five options (a, b, c, and d). The students were given 90 minutes to do the try out. In order to measure the test was good, the tests were analyzed as follows:

3.5.1 Validity of the Reading Test

There are two basic types of validity, those are content validity and construct validity based on Hatch and Farhady (1982).

Content validity

Content validity is concerned whether the test is sufficiently representative and comprehensive for the test. In the content validity, the material is given suitable with the curriculum. Content validity is the extent to which a test measures a representative sample of the subject matter content, the focus of content validity is adequacy of the sample and simply on the appearance of the test (Hatch and Farhady, 1982; 251).

The topic chosen was recount text. The topics are the representative of reading materials of School Based Curriculum or KTSP as a matter of tailoring the lesson to students' need. To know whether the test had a good content validity, the items of the test discussed with the expert (advisors), the researchers' colleague, and the English teacher of Senior High School.

Construct Validity

It concerns to whether the test is actually based on the theory of which it means to know the language that is being measured. In this research the researcher focuses on reading comprehension in the form of recount texts. Nuttal (1985) states that the relation validity of the instrument refers to construct validity in which the question represents five of sort reading skills, i.e. determining main idea, finding detail information, reference, inference and vocabulary mastery. Skills of reading in the test are a part of the construct validity and the item numbers are a part of the content validity. The test compares to the table of specification to know whether the test has a good reflection of what has been taught. A table of specification is an instrument that helps the test constructor plans the test.

3.5.2 Reliability

Reliability of the test can be defined as the extent to which a test produces consistent result when administrated under similar conditions (Hatch and Farhady, 1982:243). Split-half strategy is used to estimate the reliability of the test and to measure the coefficient of the reliability between odd and even group, Pearson Product Moment formula is used as follows:

$$r_1 = \frac{\sum xy}{\sqrt{[\sum x^2][\sum y^2]}}$$

r_1 : Coefficient of reliability between odd and even numbers items.

x : Odd number.

y : Even number.

x_2 : Total score of odd number items.

y_2 : Total score of even number items.

xy : Total number of odd and even numbers.

(Lado, 1961 in Hughes, 1991:32)

The criteria of reliability are:

- 0.80 – 1.00: high.
- 0.50 – 0.79: moderate.
- – 0.49: low.

To know the coefficient correlation of whole items, Spearman Brown's Prophecy Formula will be used to determine the reliability of the whole test. The formula is as follows:

$$r_k = \frac{2r_1}{1 + r_1}$$

r_k : The reliability of the test.

r_1 : The reliability of the half test.

(Hatch and Farhady, 1982:246).

As the try out was administered, the result of the computation by using Pearson Product Moment formula showed that the reliability of the half test (r_1) was 0.97. Then, by using Spearman Brown's Prophecy formula, it was found that the reliability of the whole test items (r_k) was 0.98. According to criteria of the reliability test the reliability of 0.89 point belongs to very high level, so it indicated that the data collecting instrument in this research was reliable and good. Therefore the results of the test were believed as the reflection of their reading ability which was accurate and consistent.

3.5.3. Level of Difficulty

Arikunto (2006) says that the test item are good if they are not too difficult and not too easy or in the other word the difficulty level is average. The classification of the difficulty level was as follow (Arikunto, 2006):

0,0 – 0,3 = too difficult

0,3 – 0,7 = average

0,7 – 1,0 = too easy

The formula that was used to determine the difficulty level of each test item is as follow:

$$LD = R/N$$

In which:

LD = level of difficulty

R = the number of correct answers

N = the number of students taking the test

After the try out was conducted, the result showed that 10 out of 40 items were poor on the difficulty level. They could be classified into two categories: 5 items (9, 11, 14, 30, 33) of 10 items scored less than 0.30 (< 0.30). It showed that the items were too difficult for the students. Then, there were 5 items (3, 12, 17, 38, 40) scored higher than 0.70 (> 0.70). This showed that the items were too easy.

3.5.4. Discrimination Power of the Test

Discrimination power refers to “the extent to which the item differentiates between high and low level students on that test. A good item which is according to this criterion is one in which good students did well, and bad students failed (Shohamy, 1985:81).

$$DP = \frac{\text{Upper} - \text{lower}}{\frac{1}{2}(N)}$$

DP = discrimination power

Upper = proportion of “high group” students getting the item correct

Lower = proportion of “low group” students getting the item correct

N = total number of students

The criteria are follows:

LD = 0.00-0.20 = poor

LD = 0.21-0.40 = satisfactory

LD = 0.41-0.70 = good

LD = 0.71-1.00 = excellent

(Arikunto, 2006)

After the try out was conducted and analyzed, it was found that thirty items were good and rest, ten items were bad and dropped. Based on the text analysis, it was finally decided that 30 items were good and the rest, 10 items were bad and should be dropped because they did not fulfill the criteria of the level difficulty and discrimination power. The researcher only administered 30 items that were satisfactory to be used in the pretest and the posttest.

3.6. Scoring System

Arikunto's formula was used in scoring the students' result of the test. The higher score was 100. The researcher calculated the average of the pre-test and post-test by using this formula:

$$S = \frac{R}{N} \times 100$$

Where:

S is the score of the test

R is the right answer

N is the total of the items

3.7 Research Procedures

In collecting the data, the researcher following procedures were used; they are:

1. Determining the research problem

The first step of this research was determining the research problem. The researcher determined the kind of problems that appeared in class.

2. Determining the population and selecting the sample

The population of this research was the tenth grade of SMAN 1 Abung Selatan and the samples were chosen by using random sampling. The researcher took two classes.

3. Arranging the material that are taught

The researcher arranged the material and prepared the lesson plan. The researcher used recount text for treatments. The materials were based on KTSP 2006.

4. Administering the try-out test

The try-out was conducted in the first meeting. The try-out class was the class which was not selected for the experimental classes, but it had the same characteristic as the samples. This test was given to the students in order to determine the quality of the test used as the instrument. Then, this test was expected to measure the validity and the reliability of the pretest and the posttest and to determine which item should be revised for the pretest and the posttest. The test consists of 40 items which contained four options (ABCD) and the time allocation was 90 minutes.

5. Administering the pre-test

The pretest was conducted before the treatments. It was used to know how far the students' reading skills before the treatment from the researcher. The researcher used short story as the media and it was applied which focused on the students' reading comprehension ability. The students had to choose the correct answer from the four options (A, B, C, or D).

6. Implementing the treatment Jigsaw strategy

After the pre-test, the researcher conducted the treatment in three meetings, and it took 90 minutes for each meeting of the treatment. The researcher taught reading comprehension through Jigsaw by using recount text.

7. Conducting the post-test

After the treatments were given, the researcher conducted the post test to find out whether there was any improvement between their score in the pre-test and the post-test. The tests were multiple choices test with 30 questions done in 45 minutes.

8. Analyzing the data

The pretest and posttest results were analyzed using Repeated Measures t-test in order to compare the data from both of the mean score. The difference between the pre-test and posttest were found out by comparing both of the result. This was intended to show whether there was an increase or not after being taught using the Jigsaw strategy.

9. Concluding and reporting the result of analysis data

The researcher made a conclusion based on the analysis taken by the data.

The data came from the pre-test and posttest. Based on it, there was conclusion and report in the script.

These are the several procedures that were used by the researcher in conducting the research.

3.8 Data Analysis

The researcher computed the students' score in order to find out the students increasing in reading comprehension ability of report text by using jigsaw strategy. Here are the some steps to analyze the data:

1. Scoring the pretest and posttest
2. Tabulating the results of the tests and calculating the scores of the pretest and posttest.
3. Determining the conclusion from the tabulated result of the test given that statistically analyzing the data by using statistical computerization.

3.9 Hypothesis Testing

The hypothesis testing is used to prove whether the hypothesis proposed in this research is accepted or not. The improvement of students' reading comprehension will be approved at the significant level of 0.05 in which $\alpha < 0.05$ (Setiyadi, 2006: 97). To determine whether the hypothesis is accepted or rejected, the following criteria of acceptance is used:

Ho : There is no significant improvement of students' reading comprehension after being taught by using jigsaw strategy.

H₁ : There is a significant improvement of students' reading comprehension after being taught by using jigsaw strategy.

The criteria are:

Ho (alternative hypothesis) is accepted if *alpha level* is higher than 0.05 ($\alpha > 0.05$).

H₁ (null hypothesis) is accepted if *alpha level* is lower than 0.05 ($\alpha < 0.05$).

This chapter has discussed about design, population and sample, data collecting techniques, the instruments, try out of the instruments, scoring system, research procedure, data analysis, and hypothesis testing.

V. CONCLUSIONS AND SUGGESTIONS

This chapter is intended to elaborate the conclusion and suggestion. The conclusion and suggestion of the study are hopefully able to contribute positively to the English teaching process and for the further research, particularly in using jigsaw strategy in reading class.

5.1. Conclusions

Based on the results of data analysis and discussions, the researcher draws the conclusions as follows:

1. The implementation of Jigsaw strategy can improve students' reading comprehension achievement of recount text. It is proven, since there is an increase of students' reading score after being taught through jigsaw strategy at the first grade student of SMAN 1 Abung Selatan.
2. There is an aspect that improves the most after being taught through Jigsaw strategy. Among the fifth aspects of reading, the identifying details information becomes the most improved aspect after the implementation of jigsaw strategy. It can be seen that it gained 51.34%, while for the other aspects: the determining main idea had 31.33% increase from the pretest

score, the finding inference collected 25.34% score, the identifying reference was 21.33%'s increase, and the understanding vocabulary gained 19.33%. It is obvious that the identifying detail information was the aspect that improved the most after being taught by jigsaw strategy.

5.2 Suggestions

Referring the conclusions above, the researcher would like to propose some suggestions 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's proven that there's only one aspect that stands out the most. 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 highly raise in a balance number among the other aspects. It hopefully helps the students to get more comprehension in reading activity.

This chapter has elaborated the conclusion and suggestion of this research.

REFERENCES

- Afflerbach, P. 2007. *Understanding and Using Reading Assessment K-12*. University of Maryland: College Park.
- Ahmad, C. 2013. *The Effectiveness of Small Group Discussion Technique in Teaching Reading*. Bandung: Universitas Pendidikan Indonesia.
- Ali, S. 2001. The Effect of Using Jigsaw Reading Technique on the EFL Pre-service Teachers' Reading Anxiety and Comprehension, *Journal of Education College*, Vol2(3), 1-21.
- Arends, R. 1997. *Classroom Instructional and Management*. New York: McGraw Hill Companies.
- Arikunto, 2006, *Prosedur Penelitian, Suatu Pendekatan Praktek*. Jakarta: Rineka Cipta.
- Aronson, E., & Patnoe, S. 2011. *The Jigsaw Class: Building Cooperation in the Classroom (3rd ed.)*. New York: Addison Wesley Longman.
- Aronson, E. 2000. *Jigsaw Classroom*. Retrieved from: <http://www.jigsaw.org/>. Accessed on January 10th 2017.
- Brown, H.D. 2001. *Teaching by Principles: and Interactive Approach to Language Pedagogy*. New York: A Pearson Education Company.
- Dedi. 2010. *A Comparative Study of Reading Comprehension Achievement Between Students Taught Through Jigsaw Technique and SQ3R Technique*. Bandar Lampung: University of Lampung.

- Derewianka, B. 2003. Trends and Issues in Genre-Based Approaches. *REL C Journal*. 2.136-137. Retrieved from: <http://rel.sagepub.com/content/34/23>
Accessed on February 10th 2017.
- Edward, B. 2007. *How to Teach Reading for Teacher, Parents and Tutor*. San Fransisco: Teacher Created Resources.
- Grabe, William and Fredicka L. Stoller, 2002. *Teaching and Researching Reading*. England: Pearson Education.
- Harmer, J. 1998. *How to Teach English*. Cambridge: Longman.
- Hatch, E. and Farhady, H. 1982. *Research Design and Statistical for Applied Linguistics*. Los Angeles: New Bury House Publisher Inc.
- Kazemi, M. 2012. The Effect of Jigsaw Technique on the Learners' Reading Achievement. *The Case of English as L2*. Vol4:3.181. Iran: Autumn.
- Kerlinger, F.N. and Elazar, J. Pedhazur. 1988. *Multiple Regression on Behavioral Research*. New York: Rinehaert and Winstion, Inc.
- Lado, R. 1977. *Language Testing*. New York: Mc. Graw Hill.
- Larsen-Freeman, D. 2000. *Techniques and Principles in Language Teaching*. New York: Oxford University Press.
- Lyman, B. H. 1971. *Test Scores and What They Mean*. Englewood Cliffs: Prentice- Hall, Inc.
- Maden, S. 2010. *The Effect of Jigsaw IV on the Achievement of Course of Language Teaching Methods and Techniques*. Educational Research and Review. Turkey: Cumhuriyet University.
- Nuttal, C. 1985. *Teaching Reading Skills in Foreign Language*. London: Heinemann Educational Books.
- Purwanti, Y. 2011. Recount Text. Retrived from (<http://englishbontang.blogspot.com/2011/08/recount-text-definition-sample.html>). Accessed on January 20th 2017

- Richards, J.C. and Renandya, W.A. (Ed.). 2002. *Methodology in Language Teaching: An Anthology of Current Practice*. Cambridge: Cambridge University Press.
- Sahin, A. 2010. Effects of Jigsaw II Technique on Academic Achievement and Attitudes to Written Expression course. *Educational Research and Reviews*. Vol5(12), 777-787.
- Setyadi, B. Ag. 2006. *Metode Penelitian Untuk Pengajaran Bahasa Asing: Pendekatan Kuantitatif dan Kualitatif*. Bandar Lampung: University of Lampung.
- Shohamy, E. 1985. *A Practical Handbook in Language Testing for The Second Language Teacher*. Tel Aviv: Tel Aviv University.
- Skinner, B. F. 1974. *Reinforcement Theory*. New York: Knopf.
- Suparman, U. 2012. *Developing Reading Comprehension Skills and Strategies*. Bandung: Arfino Raya.
- 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.
- Wood, D. 2005. *Formulaic Language and Communicative Language Teaching*. Plenary Address, TESL Kitchener Waterloo Annual Meeting. Renison College. Ontario: University of Waterloo
- Yunita, N. 2016. *Developing Students' Reading Through KWL (Know, Want to Know, Learned) and Jigsaw Techniques at Islamic Secondary School*. Bandar Lampung: University of Lampung.