Improving The Eighth Grade Students' Reading Comprehension Achievement Through Jigsaw IV

Martha Eka F., Bambang Arya Wija Putra., Made Adi AT

E-mail: firmanima3@gmail.com

English Language Education Department Jember University Jln. Kalimantan 37, Jember 68121

> Abstract: this research was intended to improve the eighth grade students' reading comprehension achievement and participation by using Jigsaw IV Technique in one of junior high schools at Bondowoso. The reaserch design was Class Action Research with the research participant were the VIII B grade. The average results of students' participation in cycle 1 achieved the minimum target percentage that is 75% based on table 4.3. Besides, the result of reading comprehension test showed that there were 19 students (79%) achieved the criteria of success and 5 students (21%) got \leq 65. Hence, **Implementing** Jigsaw IV could improve students' comprehension achievement and students' participation. Moreover, Jigsaw IV technique made the students actively participated in the teaching learning process and the Jigsaw IV activities were more interesting for the students. Jigsaw IV technique be able to accustomed the students to create cooperative situation in the class activities.

> **Keywords:** Jigsaw IV Technique, Reading comprehension, class action research

INTRODUCTION

English which is well known as an international language and it is taught as one of the subjects in junior and senior high schools. It has four skills, those are: reading, speaking, listening and writing. Those skills should be mastered by students. Students who want to continue their study they should have good scores of English. In other words, Students need reading comprehension skills at all educational levels. (Özdemir and Akyol, 2019:563). It indicates that from the fourth skills of English, reading skill has a big influence for them, especially for Indonesia students as EFL learners. Therefore, reading is a need for EFL learner, they have to learn and master it. Related to reading skill, Indonesian society could be said as a society who does not have good reading habit and culture, so their reading skill is not sufficient (Murtono, 2015: 206). This low reading culture is caused by some factors, such as student's weak motivation, the lack of coordination among teachers, and especially the lack of analysis at student's requirements in composing reading learning material (Alwasilah in Murtono, 2015:209).

Reading is about how students understand a written text that has certain information. It causes a complex activity that involves both thought and perception in understanding a word, sentence, and paragraph in the context. In addition, reading is not only a receptive activity to collect information, but also an activity that points to certain different concepts as "interpreting, analyzing, or attempting to make predictions" (Myers and Palmer, 2002). In conclusion, reading is an activity that includes some cognitive process that is not easy to do, especially for EFL students.

A preliminary study by interviewing the English teacher at one of junior high schools in Bondowoso showed that among the eighth grade classes from it, VIII B class had lower score among the other classes in achieving the minimum standard requirement score. There are 24 students in the class B. The average of the reading test score was 60, 25 while the standard requirement score in this school is 65. The result of reading test showed that 8 students from 24 students or 33% achieved the standard score and 16 students from 24 students or 67% obtained below 65. It indicates that the students of VIII B class had difficulties in reading achievement. In other words, the teacher informed that there were several problems that made students have difficulties dealing with reading achievement. The first problem is vocabulary limitation. This is commonly happens for EFL learners, especially for Indonesia students, because English is not their mother tongue, and it makes them have difficulties to understand unfamiliar vocabulary. The second problem is lack of motivation. They think that English is difficult to learn since they are not accustomed to using English as their tool to communicate each other in their daily life. Moreover, the teacher also informed that students were passive in teaching learning process of English subject, especially in reading process because they felt lazy to read a long English text that consists of unfamiliar vocabularies for them. The result of the interview above showed that the students need a new technique to help them improve their reading achievement, enjoy and motivate in the teaching learning process period.

To prevent the problem above, the teacher needs to find a compatible technique in teaching reading. Slavin *et al* (1985:6) stated in his book that cooperative learning methods are structured, systematic instructional strategies capable of being used at any grade level and in most school subjects. In other words, cooperative learning seems to be a technique that is suitable for any level of education subject. Aronson in 1978 introduced one of earliest cooperative learning technique to the world of education, namely jigsaw. In Jigsaw, each student in five- to six group members is given unique information on a topic that the whole group is studying. After the students have read their sections, they meet in "expert groups" with their counterparts from other groups to discuss the information. Next, the students return to their groups and teach their teammates what they have learned. The entire class may take a test for individual grades at the end (Slavin, 1982:9).

In addition, jigsaw IV is commonly known as the newest series of Jigsaw. It was introduced by Holliday in 1995. Holliday (2002:1) stated that the major difference among Jigsaw II, III and IV is found in an introduction to the lesson, and the two quizzes that check for accuracy of information gathered by the students. A third slight difference is the re-teaching of material that was considered not learned by the students after reviewing the assessment. It indicates that Jigsaw IV is created to equip lack of previous jigsaw implementation in classroom teaching learning process.

Studies of Jigsaw had been done by some researchers. Maden in 2010 did research about the effect of Jigsaw IV on the achievement of course of language teaching methods and techniques. The research result showed that there were

considerable differences in favor of the experimental group in terms of academic achievement and retention level in language teaching methods and techniques. Besides, it was concluded that students have positive attitudes towards Jigsaw IV. Besides, Tran and Lewis in 2012 investigated about The Effects of Jigsaw Learning on Students' Attitudes in a Vietnamese Higher Education Classroom. As the result of the study, students in the experimental group appreciated most working with others and getting help, discussing and sharing information and teaching others, and they enjoyed the jigsaw context. In addition, Hoerunnisa and Suherdi in 2017 did a research about The Effectiveness of Jigsaw in Improving Students' Reading Comprehension. The results of the research indicated that using Jigsaw to teach reading comprehension made students tend to be active during the teaching and learning process, and it improved their comprehension about the descriptive texts. It can be concluded that from previous researchers above Jigsaw and Jigsaw IV were effective in English teaching learning process especially for reading and in improving students' attitude in English course. Unfortunately, previous researchers above did not examine Jigsaw technique to improve students' reading achievement and students' participation in teaching learning activity. Hence, in filling the gap, it is necessary for the writer to do a research dealing with students' reading achievement and participation in teaching learning process. Therefore, the writer is interested in conducting class room research entitled "Improving the Eighth Grade Students" Reading Comprehension Achievement through Jigsaw IV".

LITERATURE RIVIEW

Reading Comprehension

Reading is known as the four skills of English and it is being taught in every education level. Pang et al (2003) defined Reading as understanding written texts. It is a complex activity that involves both perception and thought. Reading consists of two related processes: word recognition and comprehension. Word recognition refers to the process of perceiving how written symbols correspond to one's spoken language. Comprehension is the process of making sense of words, sentences and connected text. It indicates that, in every reading activity there will be comprehension activity too. These activities happen in the same moment. In addition, readers also need to use their background knowledge, vocabulary, grammatical knowledge, and experience with reading text to help them understand written text.

Comprehension is a dynamic process of a reader that has information from the text and knowledge to allow them in constructing meaning during and after reading activity. In other words, Duke in Abbas Pourhose in Gilakjani (2016:230) stated that comprehension is a process in which readers make meaning by interacting with text through the combination of prior knowledge and previous experience, information in the text, and the views of readers related to the text. Besides, Catherine (2002:11) claimed that Comprehension entails three elements: the first is the reader, in comprehending a text, a reader must have a wide range of capacities and abilities. These include cognitive capacities (e.g., attention, memory, critical analytic ability, visualization ability), motivation inference. (a purpose for reading, an interest in the content being read, self-efficacy as a reader), knowledge (vocabulary, domain and various types of topic

knowledge, linguistic and discourse knowledge, knowledge of specific comprehension strategies). Second is the text, the features of text having a large effect on comprehension. Comprehension does not occur by simply extracting meaning from text. During reading, the reader constructs different representations of the text that are important for comprehension. These representations include, for example, the surface code (the exact wording of the text), the text base (idea units representing the meaning), and a representation of the mental models embedded in the text. The third is the activity; a reading activity involves one or more purposes, some operations to process the text at hand, and the consequences of performing the activity. Prior to reading, a reader has a purpose, which can be either externally imposed (e.g., completing a class assignment)

Reading Comprehension Achievement

Achievement is a thing which has been done successfully by people dealing with their effort, courage, or skill. As Huge (2003:12) stated that achievement is a test that is done to measure how students have achieved the objective of their learning. It indicates that to know students' comprehension achievement, a reading test and its score of it are needed to prove how the students have achieved their reading comprehension achievement successfully. There are some elements to indicate students' reading achievement, those are: word comprehension, sentence comprehension, paragraph comprehension and text comprehension. Each element will be explained as follows:

A. Word Comprehension

Before students understanding a sentence in text, firstly, they should understand each word meaning in a sentence, as Duke (2011:56) states that a good reader attempts to know unfamiliar words. It indicates that word comprehension is a basic ability for students to help them in understanding the whole text. It can be said that students have understood the whole text if they have comprehend each word of sentences in the text.

The example of word comprehension

Last week, my school had a study tour to Saung Angklung Mang Udjo in Bandung. We started our journey very early in the morning. There are six buses to take our groups. We stopped in the rest area before went directly toward Bandung.

(Adopted from https://englishadmin.com/2021/03/contoh-soal recount-text-smp-pilihan-ganda-beserta-jawabannya.html)

b. walk d. run

The best answer is A. Trip, because the word "journey" has the same meaning with the word "Trip".

B. Sentence Comprehension

After comprehending word, students also need to comprehend a sentence to help them knowing the main point of a paragraph. Grellet (1995:15) states that paragraph is not made by one sentence or clause, but paragraph is built by some

sentences that have relation with the other sentences. Hence, it is important for students to have ability in comprehending a sentence. In addition, Comprehending sentence means understanding the whole words in order to get the gist of the sentence (Zuraida, 2016). Besides that, Grellet (1996) argues it is very crucial to train the students to look for the 'core' of the sentence that is subject + verb. It indicates that knowing the form of the sentence it will help the students to catch up the idea stated by the writer.

The example of sentence comprehension

Hendra and I camped in the mountain last weekend. It was very beautiful and very quiet there. The air wash fresh. The location of our camp site was on the top of a hill, so we could see the scenery around us.

(Adopted from https://englishadmin.com/2021/03/contoh-soal recount-text-smp-pilihan-ganda-beserta-jawabannya.html)

where was the location of the camp?

a. top of the mountain

c. nearby the lake

b. nearby the river

d. top of a hill

The best answer is D. Top of a hill, because the writer had told the location of their camp was on top of a hill

C. Paragraph Comprehension

Dorothy and Lisa (2005:11) defined paragraph is a group of sentences about a single topic. It often between five and ten sentences long, but it can be longer or shorter, depending on the topic. While the sentences of it explain the writer's main idea (most important idea) about the topic. In addition, a paragraph is a unit of thought made up of a set of related sentences. All the sentences of the paragraph work together to develop a single idea. A paragraph can stand alone as an independent discussion of one idea, or paragraphs can be put together into a larger unit such as an essay (Robitaille and Conelly, 2007:55). In Comprehending a paragraph, students need to know each sentence point of it and relates them one another in order students will get the main point of a paragraph.

The example of paragraph comprehension

It was the beginning of July, My parents and I were in a plane heading home from our vacation.

A crew announced the passengers that we were going to land in the airport in a few minutes. While listening to the announcement, I was looking outside through the window and saw how dark the sky was. It was raining heavily and lightning sparked here and there.

(Adopted from https://englishadmin.com/2021/03/contoh-soal recounttext-smp-pilihan-ganda-beserta-jawabannya.html)

u. the fighting outside scared the writer

The best answer for the question is C. A crew was announcing that they are going to land soon. The answer is stated in the first sentence of second paragraph.

D. Text Comprehension

Text comprehension occurs when readers derive meaning as a result of intentionally interacting with the text and they get the most out of their reading by using their experiences and knowledge about the world, their understanding of vocabulary and language structure (David, 2014:101). In other words, in comprehending a text, students need to comprehend the meaning of each word, the sentence and the main idea of each paragraph in the text in order they are able to know what the text is about and what kind of message the writer wants to deliver to the reader.

The example of text comprehension

Last weekend, I visited my pen pal's house. His Name is Anto. There were many activities I did there. In the morning, Anto and I had breakfast. We had traditional food. I liked it very much.

After breakfast, he took me to the garden behind his house. The garden was very big and beautiful. There is a big bird cage in the garden. There were many kinds of birds in that cage. I spent a long time feeding the birds. I also took pictures with those beautiful birds.

After visiting the bird cage, Anto and I went to the flower garden not far from his house. We took a rest and had lunch under a big tree and watch butterflies flying above colorful flowers. In the afternoon, we swam in the pool in the backyard. It was so fun. I really enjoyed my time with Anto.

contoh-soal-recount-text-dan-kunci.html

The text above tells us about.....

a. a holiday at a friend's place

c. a big bird cage

b. a picture of a bird

d. a big garden

The best answer is A. A holiday at a friend's place, because from the passage above provides the information about A holiday at a friend's place.

Cooperative Learning

Cooperative learning is an approach of teaching which has group goals where for one member of the group are supposed to succeed the other member to comprehend the materials. As a result, positive interdependence develops within the group – the peers support and motivate one another, leading to more positive peer relations and more social acceptance of one another. Moreover, Cooperative learning is an alternative classroom structure that has been shown to facilitate academic learning, positive peer relations, and positive attitudes toward school (Johnson & Johnson 1989; Slavin 1990 in Robyn M.Gillies 2008:96). In addition, cooperative learning is suggested since it has some advantages. Within cooperative situations,

individuals find outcomes that are beneficial to themselves and beneficial to all other group members. Cooperative learning is the instructional performance of small groups so that students work together to boost their own and each other's learning.

In other words, cooperative learning has plenty of methods. One of the methods is jigsaw. Jigsaw is one of the cooperative learning techniques introduced by Aronson in 1978. Jigsaw, based on Aronson (1978), is one of the earliest of the cooperative learning methods. Each student in a five- to six-members group is provided some unique information based on the topic given that the whole group is discussing. After the students have read their sections, they meet in "expert groups" with their friends from other groups to discuss the information. Next, the students return to their groups and teach their teammates what they have learned. The entire class may take a test for individual grades at the end.

Jigsaw Technique is a type of cooperative learning and actively encourages students to help each other in the mastery subject matter to get maximum achievement. This is a cooperative learning Technique that reduces racial conflict among school children, promotes better learning, improves student motivation, and increases enjoyment of the learning experience (Nurbianta, 2018:71). It indicates that Nurbianta (2018) suggested jigsaw is recommended for teaching learning process. Aronson (2008) also suggested that Jigsaw is an effective way in teaching and learning, especially in learning reading comprehension. In addition, jigsaw IV is commonly known as the newest series of Jigsaw. It was introduced by Holliday in 1995. Holliday (2002:1) stated that the major difference between Jigsaw II, III and IV is found in an introduction to the lesson, and the two quizzes that check for accuracy of information gathered by the students. A third slight difference is the re-teaching of material that was considered not learned by the students after reviewing the assessment. It indicates that Jigsaw IV is created to equip lack of previous jigsaw implementation in classroom teaching learning process.

Jigsaw Technique

Jigsaw is one of the earliest cooperative learning Techniques which is introduced in world of education by Aronson in 1978. Its Technique lets students learn a material from teacher in a group, in which each student in the group has their own comprehension on the material to succeed the group goals. In addition, Group members must work together as a team to accomplish a common goal; each person depends on the others. No student can succeed completely unless everyone works well together as a team (Schreyer Institute for Teaching Excellence, 2007:1). In Jigsaw, each student in a five- to six-member group is given unique information on a topic that the whole group is studying. After the students have read their sections, they meet in "expert groups" with their counterparts from other groups to discuss the information. Next, the students return to their groups and teach their teammates what they have learned (Aronson, 1978 in Robert E. Slavin 1985:7).

Slavin (1995:122) in Restu Widoyoko (2013:23) stated that in Jigsaw Technique, students work in heterogeneous teams. The scores that students contribute to their team are based on the improvement score system, and students on high scoring teams may receive certificates or other recognition. The advantage of Jigsaw Technique is that all students read all material, which may make unified concepts easier to understand. In addition, Aronson (2008) claimed that a wide variety of subject matter can be adapted for use with the jigsaw format. On the whole, narrative material that emphasizes reading and comprehension skills is the easiest to work with in groups. Because of this, the area of social studies - including history, civics,

geography and so forth - is perhaps the most naturally suited to the Technique. The major skills involved are reading and comprehension. Jigsaw has been successfully used, however, in teaching math, language arts, and biology, although those subjects are more difficult to adapt.

Jigsaw IV Technique

Jigsaw IV is commonly known as the newest series of Jigsaw. It was introduced by Holliday in 1995. Holliday (2002:1) stated that the major difference between Jigsaw II, III and IV is found in an introduction to the lesson, and the two quizzes that check for accuracy of information gathered by the students. A third slight difference is the re-teaching of material that was considered not learned by the students after reviewing the assessment. It indicates that Jigsaw IV is created to equip lack of previous jigsaw implementation in classroom teaching learning process. In addition, an introduction to the lesson is to get students interest to learn the lesson while two quizzes that check for accuracy of information is to make sure that the information which is gathered from each expert member in expert group is suitable for answering the material and the re-teaching material is use when there some students misses an information of the lesson.

According to Holliday (2002: 4), there are nine steps to conduct Jigsaw IV Technique:

- 1. Teacher divides students into 4-6 person home groups. The group should be diverse in term of gender, ethnicity, race and ability.
- 2. Teacher gives formal introduction to enhance the students' interest to the topic of the lesson. The teacher can introduce the lesson by lecturing to the whole group, showing a picture or video related to the topic, giving some questions related to the topic, etc. the introduction of the lesson can be done while the students are still in home groups.
- 3. Teacher distributes the expert sheet to the students. Then the students move from their home group to their expert group based on the same expert sheets they are receiving.
- 4. Students master their expert sheet in the expert group.
- 5. Teacher gives a quiz to each expert group based on their expert sheet. The purpose is to check the understanding of the task.
- 6. Students return to their home groups to teach and tutor their members.
- 7. Teacher gives the second quiz to the home groups to check the understanding on all the materials they have learned.
- 8. Teacher gives the individual assessment to all students.
- 9. Teacher re-teaches any material missed, it is optional. It is needed if majority of the students still do not understand about the information of the material given.

From the description above it indicates that Jigsaw IV Technique activities are made to complete the lack of previous Jigsaw Technique activity. On the other words, its activities make students understand the material well and it lets them to have good reading skill in answering the comprehension question.

REASERCH METHODS

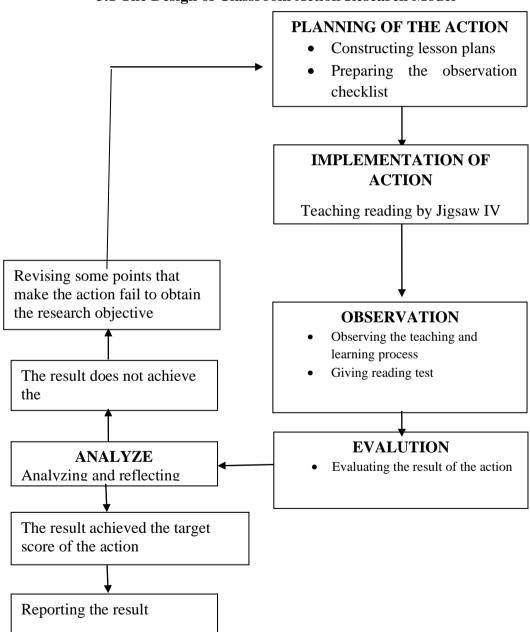
Research Design

The objective of this research is to improve the eighth grade students' reading comprehension through Jigsaw IV at one of junior high school in Bondowoso. Based on the research purpose, the design that will be applied is classroom action research

(CAR). it is an activity in class to solve problems related with the students' achievement. Ferrance (2000) defined action research as a process in which participants examine their own educational practice systematically and carefully, using the technique of research. Allwright and Bailey (1991:2) mention that classroom action research is a research centers on the classroom, and simply tries to investigate what actually happens inside the classroom. As a result, classroom action research refers to an action done in the classroom to solve issues and problems inside the classroom.

In this classroom action research, the researcher used classroom action research with cycle model and in each cycle consists of four steps. They are: (1) Planning the action; (2) Implementing of the action; (3) Observing of the action; and (4) Reflecting the action (Kemmis and McTaggart, 1992).

3.1 The Design of Classroom Action Research Model



(Adopted from Kemmis and McTaggart, 1988:14)

Research Context

This classroom action research will be conducted in one of junior high schools at Bondowoso. This school was chosen as the research area because of some reasons. The first reason was that the headmaster had given permission to the researcher to conduct the research at the school. The second reason was that the English teacher had never used this technique in teaching reading to the students.

Research Participants

The research participants of this classroom action research had been decided before, they were the VIII B class grade students conducted in one of junior high schools at Bondowoso in the 2021/2022 academic year. Based on the result of the previous reading assignment, the VIII B grade students had the lowest percentage than the other class of VIII. So, this class needs a classroom action research to improve their achievement, especially in improving reading comprehension.

Data Collection Method

In this research, the researcher used four kinds of data collection methods. Those were reading comprehension test, observation checklist, interview and documentation. These methods of data collection were used to collect the data.

Interview

In this research, an interview was conducted with the English teacher to get detailed information about the use of English curriculum, the teaching materials, the English books, teaching media and the techniques or strategies.

Reading Comprehension Test

Reading comprehension test was used to collect students' reading comprehension achievement data. Huge (1989) states that a test refers to any structured attempt in the form of a list of questions and other instruments to measure language ability. In addition, the result of tests will show to the researcher of groups' or learners' achievement in reading comprehension especially in comprehending word, sentence, paragraph and text.

Observation

Observation is one of the ways to collect students' participation primary data. Moreover, Arikunto (2002:229) pointed out that the effective way for doing observation was by using instrument paper. Hence, the researcher used an observation checklist to record students' participation during the implementation Jigsaw IV technique in teaching reading.

Table 3.4 Observation checklist of students' participation

	No	Name	Indicator					Total	Active	Passive
			1	2	3	4	5			

The indicators observed are:

1. The students discuss with their group in answering expert question.

- 2. The students do quiz 1 on the materials given in expert group.
- 3. The students share the information they got from expert group to their home group.
- 4. The students do quiz 2 on the materials given in the home group.
- 5. The students do the review process.

Note:

Active: When the students fulfill at least 3 indicators.

Passive: When the students fulfill less than 3 indicators.

3.4.4 Documentation

According to Creswell (2012), documentation involved public and private records such as newspaper, personal journal and letters. In this case, the researcher used documentation to get data about the names of the participant in VIII B class, the total number of VIII B participation and the previous score in reading comprehension test conducted in one of junior high schools at Bondowoso 2021/2022 academic year for the research.

Data Analysis Method

After implementing jigsaw IV technique the observation data checklist will be analyzed quantitatively based on the data from students' participation percentage while reading class by using this formula as below:

$$E = \frac{A}{N} \times 100\%$$

Notes:

E = the percentage of the students' who participated actively teaching reading Process by using Jigsaw IV technique

A = the number of the students who participated actively

N =the total number of the students (the subject)

(Cohen et al, 2000:326)

To analyzed students' reading achievement test result uses the formula as below:
$$E = \frac{A}{N} \times 100\%$$

Notes:

E = the percentage of the total number of the student whose score is ≥ 65

A = the number of the students who got score ≥ 65

N =the total number of the students (the subject)

(Cohen et al, 2000:326)

The criteria would be used to evaluate the research success were as follows:

- 1. 75% of the students had achieved minimum requirement standard score that was 65 by using Jigsaw IV technique.
- 2. 75% of the students were actively involved in teaching and learning process by using Jigsaw IV technique

FINDINGS

The result of the Action Cycle 1

The action in Cycle 1 was conducted in two meetings and the reading test was administered after the action in the cycle was done. The first meeting was done on May 17th 2022 and the second meeting was done on 27th May 2022. Then the reading test was conducted at 3rd June. The procedure of the cycle consisted of 4 stages. Those are; planning the action, implementing the action in cycle, monitoring (by observation) and evaluating, and analyzing and reflecting.

The planning and the implementation of the action for meeting 1 and meeting 2 were implemented in the activities as stated in Lesson plan 1 and Lesson plan 2 (Both lesson plans were presented in Appendices I and J). The time allocation for each meeting was 2x40 minutes. The total number of the students in VIII B was 24 students which were divided into 5 groups consisted of 4-5 students for each. The distribution of the groups was done by the researcher and the English teacher based on the previous score on the preliminary study.

The observation and the evaluation of the action research were conducted in every meeting during the teaching learning process. The observation was focused on students' participation based on the observation checklist containing five indicators covering: (1) The students discuss with their group in answering expert question; (2) The students do quiz 1 on the materials given in expert group; (3) The students share the information they got from expert group to their home group; (4) The students do quiz 2 on the materials given in the home group; (5) The students do the review process. The students were classified as active students if they fulfilled at least three indicators. They were classified as passive if they fulfilled less than three indicators of five indicators. The English teacher functions as an observer to observe the students' participation in meeting 1 and meeting 2, while the researcher functions as a teacher teaching the students. The evaluation conducted was process and product evaluation. The process evaluation was done by doing observation. Meanwhile, the product evaluation was done by giving a reading test.

The analysis and the reflection of the action research were done to evaluate the result of the observation in the two meetings and the students' score in the reading test. The evaluation was conducted to evaluate the students' participations and their reading comprehension achievement after they had been taught by using Jigsaw IV technique.

A. The Result of the Students' Participation in Cycle 1

Classroom observation in cycle 1 was done by the researcher in two meetings, the first meeting was done on May 17th 2022 and the second meeting was done on 27th May 2022. Its purpose is to observe and know the students' participation during the teaching learning process of reading by using Jigsaw IV technique.

The English teacher used an observation checklist as the observation guide to see the students' participation during the teaching learning process. The observation checklist used by the English teacher had five indicators, those are: (1) The students discuss with their group in answering expert question; (2) The students do quiz 1 on the materials given in expert group; (3) The students share the information they got from expert group to their home group; (4) The students do quiz 2 on the materials given in the home group; (5) The students do the review process. The students were considered as active students if they fulfilled at least three indicators of the observation checklist above. And also, the observation was considered as successful if at least 75% of the students participated well during the teaching learning process of

reading by using Jigsaw VI technique. The result of the observation in meeting 1 can be seen in table 4.1below.

Table 4.1 the Students' Participation Percentage in Meeting 1 Cycle 1

Category	Meeting 1		
Active	$\frac{19}{24} \times 100\% = 79\%$		
Passive	$\frac{5}{24} \times 100\% = 21\%$		

The table above shows that all the students of VIII B attended the class in meeting 1. The students were divided into 6 groups which had 4 members each groups, it was called home group. Next, the 6 home groups became 4 expert groups which had 6 members in the groups, it formed based on the same paragraph from the text given. There were 4 different paragraphs for 4 expert groups. The students' name of the home groups and the expert group were listed in Appendix H.

When expert groups' activities was going on, the students should comprehend the paragraph they got together. Afterwards, the students needed to do a task which was formed of matching the words with the meaning, the task that was given by the researcher to the students had purpose to help them in dealing with the unfamiliar words. Hence, the students should be able to comprehend the paragraph well. Moreover, when they went back to their home group they should inform about their paragraph content to the other member of the home group.

When the students went back to their own home group, each member of the home group needed to present the content of the paragraph that had already comprehended in the expert group to the Home group member. It made them understand the whole story of the text. This kind of activity was the main point of the Home Group, in which the students shared the content of their own paragraph to the others in the home group. In addition, the students in home group needed to do a quiz for the home group to check their understanding about the whole story of the text.

As a result of the observation in first meeting of cycle 1, there were 14 students who were active to discuss with their group in answering expert question, 22 students were active in doing quiz 1 on the materials given in the expert group, 8 students shared the information they got from expert group to their home group, 12 students did quiz 2 with their the home group, and 14 students did review process based on the observation checklist on Appendix E. The result from table 4.1 above showed that there were 19 out 24 students fulfilled at least 3 indicators of the students' participation, and 5 from 24 students did not fulfill at least 3 indicators of the students' participation in the first meeting.

Besides, the observation in the second meeting of cycle 1 showed that there were 18 students who were active to discuss with their group in answering expert question, 23 students were active in doing quiz 1 on the materials given in the expert group, 14 students shared the information they got from expert group to their home group, 23 students did quiz 2 with their the home group, and 16 students did review process based on the observation checklist on Appendix F. and the result from table 4.2 below showed that there were 21 out of 24 students fulfilled at least 3 indicators

of the students' participation, and 3 from 24 students did not fulfill at least 3 indicators of the students' participation in the second meeting.

Table 4.2 the Students' Participation Percentage in Meeting 2 Cycle 1

Category	Meeting 2		
Active	$\frac{21}{24} \times 100\% = 87\%$		
passive	$\frac{3}{24} \times 100\% = 13\%$		

Based on the Tables 4.1 and 4.2 above, the observer showed the average results of students' participation to know whether it could achieve the minimum target percentage which was 75% or not. It would be presented in the following table.

Table 4.3 the Average Result of the Students' Participation in Cycle 1

No	Mosting	Percentage			
110	Meeting	Active	Passive		
1.	Meeting 1	79%	21%		
2.	Meeting 2	87%	13%		
	Total	166%	34%		
	Average	83%	17%		

Based on the table 4.3 above, it shows that the students' participation in the teaching learning process of reading by using Jigsaw IV technique achieved the minimum target percentage that is 75%.

B. The Result of Reading Comprehension Test in Cycle 1

The reading comprehension test in Cycle 1 was implemented to measure the students' reading achievement after conducting the action in meeting 1 and meeting 2. It was conducted in the third meeting, on 3rd of June 2022. The test consisted of 2 recount texts and 20 test items. The test items are word comprehension, sentence comprehension, paragraph comprehension and text comprehension. The time allocation for the test was 60 minutes. The students' comprehension score was analyzed by using Cohen et all's formula. The result of the test was presented In Table 4.4 below.

Table 4.4 the Result of the Students' Reading Comprehension Test in Cycle 1

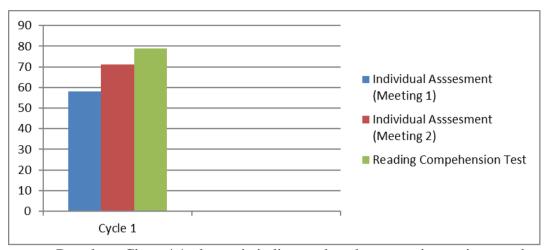
No.	Initial names	Minimum Standard Score	Score	Achieved	Not achieved
1	A R	65	90	$\sqrt{}$	
2	A N	65	75		
3	A D	65	65		
4	ASB	65	70		
5	A M	65	75		
6	DV	65	80	V	

7	DA	65	60		$\sqrt{}$
8	FSH	65	80	$\sqrt{}$	
9	F	65	70	$\sqrt{}$	
10	ΗN	65	85	$\sqrt{}$	
11	I W	65	85	$\sqrt{}$	
12	I	65	60		$\sqrt{}$
13	INS	65	70	$\sqrt{}$	
14	LD	65	80	$\sqrt{}$	
15	L	65	55		$\sqrt{}$
16	MDV	65	85	$\sqrt{}$	
17	MAA	65	80	$\sqrt{}$	
18	MZA	65	60		$\sqrt{}$
19	MYH	65	75	$\sqrt{}$	
20	NΗ	65	70	$\sqrt{}$	
21	R A	65	65	$\sqrt{}$	
22	SH	65	60		$\sqrt{}$
23	Y	65	70	$\sqrt{}$	
24	AP	65	85	$\sqrt{}$	
		Total		19	5
	Forn	nula	$E = \frac{A}{N} \times 100\%$	79%	21%

Based on the table 4.4 above, it indicated that 19 of 24 students had achieved the minimum score in the test cycle 1. It means that there were 19 students (79%) who got the score of at least 65 in the reading comprehension test. Besides, there were 5 students (21%) who could not achieve the minimum score. In this research, cycle 1 was considered to be successful if 75% of the total students achieved the minimum score that was 65. It shows that the students' reading comprehension achievement in cycle 1 achieved the criteria of success that is more than 75% of the students fulfilled the target score. Hence, the cycle was stopped.

In addition, the chart below was the number of students who achieved the target score of reading comprehension test from meeting 1 to the reading comprehension test.

Chart 4.1 The Percentage Number Of The Students Who Achieved The Target Score Of Reading Comprehension Test In Cycle 1



Based on Chart 4.1 above, it indicates that there was increasing number of students who achieved the target score of reading comprehension test. The number of students who achieved the target score in meeting 1 was 58% (14 students), it increased to 71% (17 students) in meeting 2 and became 79% (19 students) in reading comprehension test. The students' individual assessment score from Meeting 1 and Meeting 2 were list in Appendix G.

C. The Reflection in Cycle 1

The researcher and English teacher conducted reflection after the result of observation and reading comprehension test were administered in the end of Cycle 1. This action had an objective to find out whether or not the proposed action research reached the criteria of the success.

The result of the observation showed that there were 19 students (79%) of 24 students had participated actively in the teaching learning process of reading in meeting 1 while in meeting 2 there were 21 students (87%) of 24 students participated actively in teaching learning process.

Besides, the result of students' reading comprehension test in Cycle 1 had fulfilled the target sore of the research. There were 19 students (79%) of 24 students could reach the target score ≥ 65 .

Based on the data analysis above, it could be concluded that the observation on students' participation during the reading teaching learning by using Jigsaw IV technique and the reading comprehension test in cycle 1 had achieved the criteria of success that were 75% of students had participated actively in the teaching learning process and 75% of the students got score \geq 65.

DISCUSSION

After the Cycle had conducted, the result of the current study showed that Jigsaw IV had significant effect toward students' participation and students' reading comprehension achievement. The finding result of the study was based on the observation data and reading comprehension score gained during the implementation of Jigsaw IV in teaching and learning reading in Cycle 1. It was found out that the students' reading comprehension score and participation increased from Meeting 1 to the last meeting of the research.

The finding of the study strengthened Aronson's suggestion (2008) that Jigsaw is an effective way in teaching and learning, especially in learning reading comprehension. In the classroom action research in Meeting 1 there some students

had not fulfilled the target score of the research. Some of them still got under 65 in doing the first reading comprehension task given by the researcher. It was because the students were not accustomed to Jigsaw IV technique before and it caused some of the students were not participated well in the Jigsaw group activities. Nevertheless, the students' reading comprehension scores in meeting 2 were increased. It was because they had been familiar with the implementation of Jigsaw IV technique until the students actively participated in the Jigsaw group activities. The students' participation in the Jigsaw activities had influenced to their reading text comprehension. Besides, the reading test result given in Cycle 1 had fulfilled the target of the research.

Additionally, the implementation of Jigsaw IV technique in this case could help the students improve their participation in the teaching learning reading process. In Jigsaw IV technique, each student in the group had their own role to be contributed, when the students were in expert group they should understanding the paragraph that was given by the teacher in the home group, after that when they back to their home group they should tell the main point of the paragraph. Hence, the students could learn how to deal with their responsibility in giving meaningful contribution to the Jigsaw IV activities.

The result of the observation showed that the students' participation increased from Meeting 1 to Meeting 2. This finding was in line with the finding of Maden (2010), Van Dat Tran and Lewis (2012). They found that Jigsaw promotes positive attitude and improve students' participation in the teaching learning process.

The findings of the current study were supported by some previous researches in the same field. Wachyuningsih (2011) found out that Jigsaw could improve two indicators achievement of reading, those were: identifying the topic of the text and identifying communicative purpose of the text. Moreover, the class situation was more conducive after implementing Jigsaw technique. Widoyoko (2013) investigated the effect of using jigsaw technique on students reading comprehension ability of SMK Muhammadiyah Bawang. The result of the study found that there was significant difference in the reading comprehension ability between the students who were taught by using Jigsaw and those who were taught without using it. In addition, the research findings imply the use of Jigsaw technique in teaching reading is effective. Besides, Sabah (2016) also investigated the effect of using Jigsaw cooperative strategy on ESL students' achievement in reading comprehension in community collage of Qatar. The result reported that Jigsaw technique empowers students to take charge of their learning, encourages peer tutoring and it enhances their learning autonomy. In addition, Hoerunnisa (2017) conducted her research of the effectiveness of Jigsaw in improving students' reading comprehension. The result of the study found that Jigsaw could be applied effectively to teach reading comprehension. Besides it, it also encourages students' interest in learning reading comprehension, and the students tend to be active during the teaching and learning process. Yuhanik (2018) found that the Jigsaw model of cooperative learning in teaching reading is effective to increase reading comprehension and student's participation.

In summary, the finding of the current study revealed that implementing Jigsaw IV in teaching learning reading could improve students' reading comprehension achievement and students' participation. Moreover, Jigsaw IV technique made the students actively participated in the teaching learning process and the Jigsaw IV activities were more interesting for the students. Jigsaw IV technique be able to accustomed the students to create cooperative situation in the class activities.

Nevertheless, the researcher realized that there was still weakness in conducting this research. It caused of time limitation given by the school until the Cycle of the research can only be done in one cycle. Although, the result of the study has already achieved the target of the research, the future researcher is expected to add more cycle to ensure the validity of the research.

CONCLUSSION

Based on the result of the data analysis and discussion, it can be concluded that the implementation of Jigsaw IV technique could improve the participation of VIII B students during the teaching learning process of reading recount text at one of junior high schools in Bondowoso. The improvement was proven by the percentage of students who participated in the teaching learning reading in the class from 79% in meeting 1 to 87% in meeting 2. And the average result of students' participation in Cycle 1 reached 83%. Besides, the implementation of Jigsaw IV technique could improve the VIII B students' reading comprehension of recount text at one of junior high schools in Bondowoso. The improvement could be seen from the increasing number of the students who achieved the target score from Meeting 1 to Meeting 2. The number of students who achieved the target score increased from 58% (14 students) in Meeting 1 to 71% (17 students) in Meeting 2 became 79% (19 students) in reading comprehension test.

REFERENCE

- Allwright, D. & K. Bailey. 1991. *Focus on the Language Classroom*. Cambridge: Cambridge University Press.
- Arikunto, S. 2002. *Prosedur Penelitian: Suatu Pendekatan Praktek.* Jakarta: Rineka Cipta.
- Aronson, E. 1978. *The jigsaw classroom, jigsaw in 10 easy steps*. Retrieved on February 2022 from http://www.jigsae.rg/steps/html
- Aronson, E. 2008. *tips*. Retrieved on 25 February 2022 from http://www.jigsae.rg/steps/html
- Cohen, L. M. 2000. *Research Method in Education (5th Edition)*. London: Taylor and Francis Group.
- Creswell, J. W. 2012. *Planning, Conducting, and Evaluating Qualitative and Quantitative Research*. Boston: Pearson Education.
- David, A.S. 2014. How to Brain Learns To Reads. London: CORWIN.
- Dorothy, E.Z. and Lisa, A. R. 2005. *Academic Writing from Paragraph to Essay*. Sevilla: Macmillan.
- Duke, N.K., Pressley, M., & Hilden, K. 2004. *Difficulties With Reading Comprehension*. In C.A. Stone, E.R. Silliman, B.J. Ehren, & K. Apel

- (Eds.), Handbook of language and literacy: Development and disorders (pp. 501–520). New York: Guilford.
- Ferrance, E. 2000. *Action Research*. Providence: Northeast and Islands Regional Educational Laboratory.
- Gillies, M, R. Ashman, A and Terwel, J. 2008. the teachers' role in implementing cooperative learning n the classroom. New York: Springer.
- Grellet, Francoise. 1992. *Developing Reading Skills: A Practical Guide To Reading Comprehension Exercise*. Cambridge: Cambridge University Press.
- Hoerunnisa, N and D. suherdi. 2017. The Effectiveness of Jigsaw In Improving Students' Reading Comprehension. *Journal of English and Education*. 5 (1):1-12.
- Holliday, Dwight C. 2002. *Jigsaw IV: Using Student/Teacher Concerns To Improve Jigsaw III*. U.S: Educational Resourcesinformation Center (Eric).
- Huges, A. 2003. *Testing for Languages Teacher*. Cambridge: Press Syndicate of the University Of Cambridge.
- Kemmis, S., & Taggart, R. Mc. 1992. *The Action Research Planner*. New York: Springer.
- Maden, S. 2010. The effect of Jigsaw IV on the achievement of course of language teaching methods and techniques. *Educational Research and Review*. 5(12): 770-776.
- Murtono. 2015. Cooperative Learning Model toward a Reading Comprehensions on the Elementary School. *Education and Practice*. 6(18): 208-216.
- Myers, S.S. and Palmer, C. 2002. *Types of reading questions*. Washington DC: Gallaudet University English Department.
- Nurbianta and Dahlia, H. 2018. The Effectiveness of Jigsaw Method in Improving Students Reading Comprehension. *ETERNAL* (English teaching journal). 9 (1): 70-86.
- Özdemir, E. C. and Akyol, H. 2019. The Development of a Reading Comprehension Test. *Educational Research*.7(2): 563-570.
- Pang, E. S. Muaka, A. Bernhardt, B.E. and Kamil, L.M. 2003. *Teaching reading*. Chicago: The International Academy of Education (IAE).
- PourhoseinGilakjani, A. 2016. How can students Improve their reading comprehension skill?. *Macrothink*. 6(2): 229-240
- Robitaille, J. and Connelly. R. 2007. *Writer's Resource from Paragraph to Essay*. Boston: Thomson Wadsworth.

- Sabbah, S.S. 2016. The Effect of Jigsaw Strategy on ESL Students' Reading Achievement. *Arab World English Journal (AWEJ)*. 7 (1): 445-458.
- Slavin, R. 1982. *Cooperative learning: students teams*. Wasington D,C: National Education Association.
- Slavin, R., Sharan, S., Kagan, S., Lazarowitz, R.H., Webb, C. and Schmuck, R. 1985. *Learning to cooperate, cooperating to learn*. New York: Plenum Press.
- Snow, C.E. 2002. Reading for understanding toward an R&D program in reading comprehension. Santa Monica: RAND.
- Tran, V.T. and Lewis, R. 2012. The Effects of Jigsaw Learning on Students' Attitudes in a Vietnamese Higher Education Classroom. *International Journal of Higher Education*. 1(2): 09-20
- Wachyuningsih, S. Martono and Endang, S. 2011. Improving Students' Reading Skill by Using Jigsaw Technique. *English Education*. 1 (1): 70-77.
- Widoyoko, R. 2013. The Effect Of Using Jigsaw Technique On Students' Reading Comprehension Ability Of SMK Muhammadiyah Bawang. *Thesis*. Yogyakarta: English Education Department Faculty Of Languages And Arts State University Of Yogyakarta.

Yuhanik. 2018. Using Jigsaw Model to Improve Reading Comprehension Of Ninth Graders Of Smpn 1 Karangploso. *IJOLTL*. 3(1): 51-64.

Zuraida, U.A. 2016. Implementing Jigsaw IV Technique to Improve the Eleventh Grade Students' Narrative Text Reading Comprehension Achievement. *EFL Education Journal*. 6(8): 585-598