IMPROVING STUDENTS' READING COMPREHENSION USING THE JIGSAW TECHNIQUE AT STATE JUNIOR HIGH SCHOOL 32 SEMARANG – COLLABORATIVE ACTION RESEARCH

Novita Prasetya Ningsih, Liliek Soepriatmadji

Faculty of Law and Language University of Stikubank Semarang

Email: [1] novitaprasetyaningsih@mhs.unisbank.ac.id

[2] lilieksoepriatmadji@edu.unisbank.ac.id

Abstract

The purpose of this study was to find out if the jigsaw technique could help SMPN 32 Semarang's grade 8 students read more effectively and what the perception of students about using the jigsaw technique to improve their reading comprehension. There were 31 students in total who served as research subjects. The improvement that students experience is determined by the research using a cycle system. A pre-test was given before using the jigsaw technique, and a post-test was given after its application. The pre-test average for students was 87.5, and the post-test average was 92.5. The outcomes demonstrated that the jigsaw strategy was effective in improving student's reading comprehension. Based on their responses to the use of the jigsaw technique, which was very effective for them, it was concluded that they were interested and could work together with their group members to improve their reading comprehension.

Keywords: *Jigsaw Technique, Reading Comprehension*

INTRODUCTION

One of the key components of learning English is reading. It turns out that there is almost a lot that happens when junior high school students are given reading comprehension instructions, but many still experience difficulties ("Metacognition Lit. Learn.," 2006). The key element that has a significant impact on language learning is motivation. According to (Ahmadi, 2017) Reading motivation is one of the most significant aspects that is given particular attention in the teaching of foreign languages. Studies on reading motivation have attracted a lot of interest recently. This review study will take into account how reading motivation affects reading comprehension. Reading motivation, various forms of reading motivation, reading comprehension, and several models of reading comprehension are all defined in this work by the researcher. The analysis of this study revealed that reading motivation significantly benefited reading comprehension.

Reading comprehension is influenced by text complexity. Fluency in a language permits learners to comprehend a text more thoroughly. Because students learn new languages by hearing, oral aptitude is important for determining how competent a reader can be. By linking unfamiliar words to their context of use, students with a sufficient vocabulary can make sense

of them. Reading comprehension can use several techniques, one of which is the Jigsaw technique.

Reading comprehension can use several techniques, one of which is the Jigsaw technique. The jigsaw technique was used in the classroom because it allowed the teacher to concentrate on the language learners, which contributed to the interdependence of language acquisition (Mengduo & Xiaoling, 2010). Jigsaw is a cooperative learning method. It means the process of learning in which individuals learn in small groups with the additional help of one another. In contrast to our current educational system, which is based on competition, cooperative learning emphasizes collaboration (Singh & Agrawal, 2011).

When using the Jigsaw technique, the right method to use is Collaborative Action Research. Collaborative Action Research entails a methodical investigation of the data. Action researchers can analyze the data, but it actually works when a group of people who care about the result is involved. This kind of study advances knowledge, informs theory, and changes practice (Pine, 2013).

THEORETICAL FRAMEWORK

Definition of Reading Comprehension

Speaking, reading, writing, and listening are the four components of English that we must learn. When we speak in English, we unconsciously listen to what we and the other person are saying, which might be helpful for listening comprehension. Reading is another factor whose development can greatly benefit the other three. Reading is the process of deciphering the meaning of written or printed symbols, such as letters, words, and phrases. In order to understand the text's symbols and derive knowledge, concepts, and information from it, one must both intellectually and visually process the symbols. Reading often involves recognizing and comprehending words, understanding their context, and forming mental representations of the author's thoughts and concepts (Ehri, 2013). According to (Ulker, 2017) The concepts of reading and reading comprehension are different but connected. Reading is the process of understanding written symbols (letters, words, and sentences) and interpreting their meaning. Grammar rules, sentence structure, and words must all be visually discernible. To understand and interpret a text's substance is the aim of reading comprehension, on the other hand. It extends past reading's rote aspect. Reading comprehension is the ability to digest literature, comprehend the text's meaning rather than what the reader already knows (Muhammadiyah & Rappang, 2019). According toother expert (Chiara Levorato et al., 2004) To understand and analyze written texts requires the ability to read comprehension. Making inferences or conclusions about the provided information requires knowing more than just the meaning of the words on the page and the connections between ideas. Both a person's talents and their capacity for information processing have an impact on how well they can read texts. The advantages of reading comprehension include the capacity to comprehend and analyze a text, an increase in sustained attention when reading, and the potential for increased professionalism.

Definition of Jigsaw Technique

Jigsaw technique is a cooperative learning method where students have more responsibility than the teacher (Göer, 2010) This approach allows students more autonomy and control over their learning than traditional teacher-centered approaches. Instead than relying on the

teacher to cover all of the material, students take ownership of the subtopic they were given and do their own research or study to become educated in that particular area. They thoroughly investigate the subject they have been assigned using a range of sources and data. This delegation of authority from the teacher to the students promotes a learning environment that is centered on the students. It encourages students to conduct research, think critically, solve problems, and communicate clearly. It also fosters a sense of autonomy, independence, and accountability because students are responsible for their individual learning and for adding to the group's general understanding. According to (Voyles et al., 2015) The method aims to encourage student collaboration and interdependence in a group or classroom setting. The jigsaw method is especially designed to encourage interdependence and collaboration among students in a group or classroom setting. In the collaborative learning environment that will be established, students will work together to complete common learning objectives. According to (Aronson, 2016) The jigsaw method is based on the idea that each student has a specific knowledge base or area of competence. By cooperating and sharing their insights, like the parts of a jigsaw puzzle that come together to form a whole, students can develop a thorough understanding of a subject. The jigsaw method was primarily developed to promote interdependence and cooperation among students in group or classroom settings. It aims to create a learning community of students who work together to accomplish common learning objectives.

Definition of Collaborative Action Research

Action research is a methodical inquiry strategy used in the learning process with the goal of enhancing teaching and learning procedures in educational contexts. It entails educators and researchers working together to study certain problems or obstacles, put interventions into place, collect data, analyze the results, and make decisions that will improve the learning process. In this study, researchers used Collaborative Action Research as a method for obtaining data. According to (Tolima, 2016) Collaborative Action Research is research conducted in the classroom, usually researchers collaborate with teachers with the aim of improving the quality of the learning process and student learning outcomes by taking certain actions. And also as a tool to solve problems that arise during the learning process. According to (Gallos & Schein, n.d.) A study methodology known as collaborative action research (CAR) focuses on action, reflection, and collaboration to address real-world issues or challenges in a particular setting or community. It involves a team of people, usually educators or experts in a particular field, who collaborate to study and enhance procedures and results through methodical inquiry.

Theory of Decoding

According to (Quian Quiroga & Panzeri, 2009) When conducting collaborative action research on reading, decoding is the process of translating written or printed words into the sounds or meanings that go with them. The ability to recognize and comprehend individual letters, letter combinations, and words is crucial for reading. Decoding skills are essential for reading fluency and comprehension. Decoding is extensively studied and investigated in order to improve reading instruction and treatments. Together, academics and educators investigate and develop a better grasp of the techniques and strategies that can help students' decoding abilities. They might assess how successfully various pedagogical techniques, corrective procedures, or educational resources support pupils' decoding skills. Through collaborative action research in decoding, educators can gain more insight into

the specific challenges that students have and identify the most effective teaching methods to address those challenges. This research can aid in developing targeted treatments, provide research-supported advice for teaching decoding skills, and ultimately improve students' reading comprehension.

METHODOLOGY

A qualitative approach was used in this research. A qualitative approach is a research method that produces descriptive data in the form of oral or recorded statements made by individuals and data on observable behavior. Being a direct source of data, the qualitative approach has significant advantages (Muhammad Aris, 2014). Researchers used the Collaborative Action Research methodology for this study. Collaborative Action Research is research conducted by collaborating with a group of people to identify what is more successfully used in class to improve student learning and also identify what are the problems when presenting material. You can identify which teaching method is most successful in a given situation by comparing the student learning outcomes of different teaching methods. The steps in collaborative action research:

1. Planning

Researchers focus on who, what, where, and how the research will be carried out.

2. Action

Make a lesson plan that must be carefully thought out and can be an alternative learning for the future.

3. Observation

Monitor how the learning process takes place and record what events occur during the learning process using the observation list whether there are problems in the learning process or not.

4. Reflection

Analyze the data that has been obtained through action and observation to evaluate what is lacking and needs to be added in the next cycle.

This research was conducted at Junior High School 32 in Semarang with 8th grade students. Researchers chose this school because, based on field observations of the learning process, this school has not implemented the English language teaching process using the Jigsaw technique. Lack of teacher innovation in developing student learning processes so as to make learning less varied and students less enthusiastic about the learning process. Researchers chose the school so that it can help improve the teaching and learning process between teachers and students and find out what the obstacles are in the learning process. In this study, researchers used several instruments to obtain data including:

1. Interview: to find out students' perceptions of the application of the jigsaw technique to improve students' reading comprehension.

2. Observation: to find out what happened during the learning process.

3. Test: to determine student improvement before and after the implementation of the jigsaw technique.

4. Document: contains the school syllabus, which aims to equate the learning material provided to students.

Techniques to analyze the data used by researchers are coding and interpretation. Researchers code the results of interviews, observations and also tests. After that the results of the coding are interpreted.

FINDINGS AND DISCUSSION

Findings

Based on research question 1, To find out how the jigsaw technique can make students understand, the jigsaw technique is carried out by dividing students into four groups which are called "core groups". Then students join another group called the "expert group" after being given time to read and understand the contents of the text, students return to the main group to exchange ideas about what they read earlier. The tool used is in the form of descriptive text. Some of the texts used by researchers are taken from the internet and some are written by researchers. Researchers use the Voyant tool to determine the level of ease in reading text, as follows:

Table 1. Readibility Index

Title	Readibility Index	Classification
My Dog	1.242	Pre-Test
My Beloved Mother	2.560	Treatment Cy-1
A Bee	8.592	Treatment Cy-1
Soekarno	12.341	Post-Test Cy-1
White Rabbit	11.377	Treatment Cy-2
Borobudur Temple	12.729	Post-Test Cy-2

The researcher also made observations to find out what happened during the learning process and found out what were the problems in the class through the following table:

Table 2. Observation Result

NO.	ELEMENT	DURATION	RESULT
1.	Initiation	5'	The teacher greets and students answer the greeting. Then the teacher reviews the material that was discussed last week.
2.	Learning Process	70'	The teacher provides the material to be taught and also provides examples and practice questions so that students understand. Students listen and also ask the teacher when there is material they do not understand. Students were also involved in the elaboration process and students were very enthusiastic. Involving students when practicing questions is done in groups, the time allotted by the teacher to work on the

			practice questions is 15 minutes, and 30 minutes to work on the posttest.
3.	Material & Method	-	In this learning process using the jigsaw technique and the material provided is in accordance with the syllabus at Junior High School 32 Semarang.
4.	Closing	5'	The teacher reviews the material that has been taught that day and also concludes the essence of the material. The teacher also evaluates events during the learning process, namely that many male students do not pay attention. Then the teacher greets and students answer the greeting.
5.	Environment	-	The class is clean but the class feels hot, there is a fan but it doesn't feel good and the class is also not comfortable because there are many male students who talk and joke with friends so that the class is crowded.

The researcher also gave tests to students to find out whether the jigsaw technique could help improve students' reading comprehension. The researcher gave 3 tests including pretest, posttest 1, and posttest 2. The following are the results of the student tests:

Table 3. Pretest Analysis Result

Group Name	Score	Classification
Group 1	100	Very Good
Group 2	100	Very Good
Group 3	100	Very Good
Group 4	50	Fairly

Table 1. Posttest Analysis Result in Cycle 1

TOTAL SCORE	THE NAME OF GROUP	CLASSIFICATION
80	Group 1	Good
88	Group 2	Very Good
78	Group 3	Good

| 90 | Group 4 | Very Good |

Table 2. Posttest Analysis Result in Cycle 2

TOTAL SCORE	THE NAME OF GROUP	CLASSIFICATION
97	Group 1	Very Good
91	Group 2	Very Good
88	Group 3	Very Good
94	Group 4	Very Good

Based on research questions 2, to find out students' perceptions about the use of the jigsaw process in the learning process in order to improve students' reading comprehension, the researchers used an interview tool to explore student perceptions, and the results were:

Table 3. Interview Result

NO.	Elements/Variables	Answer
1.	Material	The descriptive text provided is easy to understand and the text is interesting.
2.	Method	The explanations given make it understandable, the examples given are also enough to make you understand, but the time given to do the practice questions is not enough so you are in a hurry when working on them.
3.	Media	The text provided is sufficient and not too long so it makes it easier to understand when reading. And the formation of groups like this is more understandable because they can work together with one another.
4.	Teacher	The teacher's explanation and articulation when explaining is clear enough to make it understandable, the teacher also provides practice questions to better understand the material being taught.
5.	Students	When working on the questions given by the teacher, all friends worked on the questions and no one bothered.
6.	Environment	The class environment does not feel comfortable because the class is stuffy and hot.

Discussion

a. The Jigsaw Technique Help Students' Understanding

Based on the results of researchers' observations on the learning process, the teacher uses four stages in using the jigsaw technique including:

1. Initiation
2. Learning Process
3. Methods and materials
4. Closing

The first initiation, in the initiation process the teacher greets and students answer the greeting. Then the teacher briefly reviews last week's material that has been discussed to remind students' memories.

The second learning process, in this process the teacher provides material that will be discussed that day, and also provides examples and students are involved in the elaboration process. Many students also ask if they feel they still don't understand. At the first meeting in cycle 1, students were given a pre-test before applying the jigsaw technique by identifying the structure of the description text given. The text given is entitled "My Dog" students only need to underline which includes the identification structure and which includes the descriptive text structure. The text is classified as very easy according to the Voyant tool, the readibility index is only 1,242. After conducting the pre-test, the teacher explained how to use the jigsaw technique by dividing the class into four groups, after which students were asked to count, and students with the same number joined into one group. The teacher gives treatment twice so that students become more understanding. The first treatment uses text entitled "My Beloved Mother", according to the Voyant tool the text is very easy, the readibility index is 2.560. And based on the results of interviews with students also students find it easy. Due to time constraints, the second meeting in cycle 1 was continued the next day. In the second treatment using a text entitled "A Bee", according to the Voyant tool, the text is included in the easy category, the readibility index is 8.592. According to students, the text is still relatively easy. After doing the treatment twice, the teacher gives post-test questions to test how well they understand reading. The text used is entitled "Soekarno" according to the Voyant tool the text is difficult for eighth graders, the readibility index is 12.341. Indeed, this text is longer than the previous text, but according to student, the text is still easy for students to understand because of the use of the jigsaw technique, namely by dividing the text into several parts so that it can make it easier for students to read. In the first meeting in cycle 2, the teacher briefly reviewed the material that was given last week so that students recalled. At this meeting the teacher gave another treatment using a text entitled "White Rabbit". According to the Voyant tool, the text was relatively difficult with a readability index of 11.377. After doing the treatment, the teacher gives a post-test by evaluating the failure in the first post-test, namely the lack of time to work on the problem, therefore the teacher gives 35 minutes to work on the problem. The text used is "Borobudur Temple", according to the Voyant tool, the text is difficult for eighth graders, the readibility index is 12.729. The text is indeed long, but applying the jigsaw technique by dividing the text into several chunks makes the text easier to understand.

The third method and material, in this learning process the teacher uses the jigsaw technique to improve students' reading comprehension and the material used is descriptive text and is in accordance with the syllabus at Junior High School 32 Semarang.

The last closing, in this process the teacher reviews the material that has been taught that day, and also evaluates what events occurred during the learning process. The teacher noted

that some of the male students played on their cellphones while being explained and also joked with their friends. After that the teacher closed the meeting and greeted, the students answered the greeting.

Based on the results of the researchers' observations, the classroom environment was not comfortable for learning, the class felt hot so that many students did not concentrate during the learning process.

b. The Jigsaw Technique Improve Students' Reading Comprehension

In this study, researchers used cycles to determine the results of the study. The cycle is divided into Cycle 1 and Cycle 2. In cycle 1 and cycle 2 it contains tests that will validate the results of student development using the jigsaw technique. In Cycle 1 there is a Pre-test before applying the jigsaw technique and a Post-test after applying the jigsaw technique, and the results from Cycle 1 are as follows:

- **The Students Ability in Identify Structure in Descriptive Text Based on Pretest**
    a. **Pre-test Implementation Planning**

    To do this pre-test, students will analyze the structure of the descriptive text to find out how much they understand the structure of the descriptive text. The teacher gives some descriptive text and students only need to outline which parts are included in the identification and description.

    b. **Implementation of Pre-Test**

    Researchers made observations on April 27, 2023. This observation was made in class "8E" because they had studied the subject of analysis in this study. The researcher uses descriptive text as material for research and is in accordance with the syllabus contained in SMP 32 Semarang which contains descriptive text about people, animals and objects. Before conducting the pre-test, the teacher reminded again about the material that had been studied and also gave examples. After that, students are divided by being given a description text which contains one paragraph which must be analyzed by students which are included in the identification section and which are included in the description section.

    c. **Pre-Test Condition**

    During the pre-test, the researcher made observations to find out what problems occurred during the learning process. From the observations of researchers, students actively ask questions, but there are several problems that occur, such as, students' motivation in learning to read is still relatively low, this is due to a lack of practicing English conversations so that their vocabulary is still small and a little difficult to understand reading. There were still some students who did not understand the structure of descriptive text, and they asked the teacher to explain it in more detail. When the teacher explained the material, many male students joked with friends and also played cellphones.

    d. **The Result of Pre-Test**

    Table 4.3 above describes the student qualifications, number of groups, and pre-test scores. Based on these results, there were 3 groups that scored 100 "Very Good", and 1 group received a score of 50 "Fairly". To achieve the research objectives, researchers must work hard to motivate students in learning to read using the jigsaw technique in cycle 1 and subsequent cycles. The pretest aims to determine students' ability to identify the structure of a descriptive text. The results obtained by students are:

1) In analyzing the structure of the descriptive text it is considered good, it is proven by the average student score of 87.5 and it is included in the "very good" classification. From the results of the students, only 1 group was still confused about the placement of the description text structure, they were reversed in the placement between identification and description.

2) During the pretest the students were very active in asking the teacher, the students asked for examples of the identification section and examples of the description section. The class situation was quite crowded because many male students were chatting with their friends.

- **The Student Ability in Reading Comprehension in Descriptive Text Based on Post-Test Cycle 1**

a. Post-Test Implementation Planning

To carry out this post-test which aims to improve students' reading comprehension in learning English, the researcher will use the jigsaw technique. Before conducting the test, the teacher explained about the procedures for implementing the jigsaw technique. First, the students in the class are divided into 4 groups called the "Core Group". After that students are asked to count, and students with the same number join into one group and are referred to as the "Expert Group". After that each group is given a piece of paragraph that must be read by each student. After that, students return to the core group to explain to each other group member what they read, and also answer questions given by the teacher.

b. Implementation of Post-Test

The researcher made observations on May 2, 2023. This was a continuation of the previous pre-test. In this post-test, the researcher used the jigsaw technique to improve students' reading comprehension. The researcher uses descriptive text which describes the person entitled "Soekarno". According to (Voyant, n.d.) the text, it is classified as a long text, but the researcher divides the text into one group of one paragraph. The text is in accordance with the material in the school syllabus. Then the student's task is to work together and explain what he has read after that he can answer the questions given correctly.

c. Post-Test Condition

During the post-test, the researcher made observations of the learning process, when the teacher was explaining there were several students who sat behind were joking with their friends not listening to the teacher's explanation. But not all students are like that, many also listen and even actively ask the teacher. The teacher also provides examples and students are involved in the elaboration. But the time given when working on the post-test was lacking, students were only given 20 minutes to work on it so that it made students rush and made student results not optimal. The text given is long, but the text is divided into 4 parts, a group of one paragraph which makes the text smaller.

d. The Result of Post-Test

From the Table 4.4 above contains the scores obtained by students in the Post-test 1, Group 1 gets a score of 80 which is included in the "Good" category, Group 2 gets a score of 88 which is included in the "Very good" category, Group 3 gets a score of 78 which is included in the "Good" category, and Group 4 gets a score of 90 which is in the " Very Good" category. The results of post-test 1 are considered not to have met the research target of the researcher, Another drawback is that based on the results of interviews with students, they say that the time given is insufficient so for cycle 2 the researcher will add more time so that students can maximize their results. In applying the jigsaw technique to help improve students' reading comprehension in Cycle I, the student results and progress are:

1) Student results on the application of the jigsaw technique to improve students' reading comprehension decreased compared to the results of the pretest. In posttest 1, the average student result is 84.
2) In this posttest students ask fewer questions than during the previous pretest. But it can be seen that when groups of students are formed, they can work together with one another. There was only 1 group that was very busy doing the posttest and it was quite disturbing for the other groups.

After going through Cycle 1, it was felt that the results of Cycle 1 had not reached the research target. Therefore, the researcher continued the research in Cycle 2 by paying attention to any problems that hindered Cycle 1. And these are the results of Cycle 2:

- **The Student Ability in Reading Comprehension in Descriptive Text Based on Post-Test Cycle 2**
  ### a. Post-Test Implementation Planning

  To carry out a post-test in Cycle 2, researchers observed several aspects that caused the results from Cycle 1 not to meet the research target. And among them is that the time given to do the test is less, so students cannot maximize when working on the questions given and students are in a hurry when working on them. Therefore, in Cycle 2, the researcher gave more time for students to work on questions and discuss with their group members. The procedure for using the jigsaw technique is still the same as in the previous cycle, namely by dividing students in the class into 4 groups, and students will later join other groups, after being given time to read and understand, students return to their original group to answer the questions given and explain what which he read to his group mates.
  ### b. Implementation of Post-Test

  In cycle 2, the researcher made observations twice on May 9 and 11 2023. Just like in the previous cycle, the researcher made observations in class "8E" at SMP Negeri 32 Semarang. Researchers still use descriptive text as a tool entitled "Borobudur Temple". According to (Voyant, n.d.) the text, it is classified as a long text, but the researcher divides the text into one group of one paragraph. The text is in accordance with the existing syllabus at school, namely descriptive text by describing objects. In the previous cycle

students were only given 20 minutes to do the test. In Cycle 2 students were given 35 minutes to work on the test.

c. Post-Test Condition

During the post-test, the researcher made observations to find out what obstacles occurred during the learning process. In cycle 2 there were more developments compared to cycle 1, all students paid attention when the teacher explained and gave examples and no one was busy. The class is also conducive compared to before, but there are obstacles in this class, namely the class is not comfortable because the students feel hot because the fan is not working properly, and there is a lack of ventilation because the class is located in the farthest corner and also lack of light, and other obstacles do not the availability of LCDs and projectors hinders the learning process when the teacher explains the material. Because LCD and projectors are the most important things in the learning process in the current era, because students prefer to see what is in front of them rather than listening to explanations.

d. The Result of Post-Test

From the table above contains the scores obtained by students in Post-test 2, all groups from groups 1-4 obtain grades that fall into the "very good" category, which means that their abilities have increased and they are able to understand reading well. With this jigsaw technique it is also very helpful for students in understanding a reading, for that because the results obtained by students have met the research targets of researchers, this cycle stops in cycle 2. In applying the jigsaw technique to help improve students' understanding in Cycle II, students experienced an increase compared to Cycle I, progress results and student results:

1) Students' results in learning to read using the jigsaw technique in Cycle II experienced an increase and were better than Cycle I and achieved the research target. The average student result is 92.5 which is included in the "Very Good" classification. Comparison in Cycle I students only get an average value of 84.

2) In this Cycle II students were very active in asking questions compared to the previous Cycle. Students also more easily understand reading and are able to explain to their friends about what they read. All group members also work together to work on the questions given by the teacher. Compared to the previous Cycle, the class situation was more conducive and less crowded than Cycle I.

- **Comparison of Students Score Against Learning English using The Jigsaw Technique**

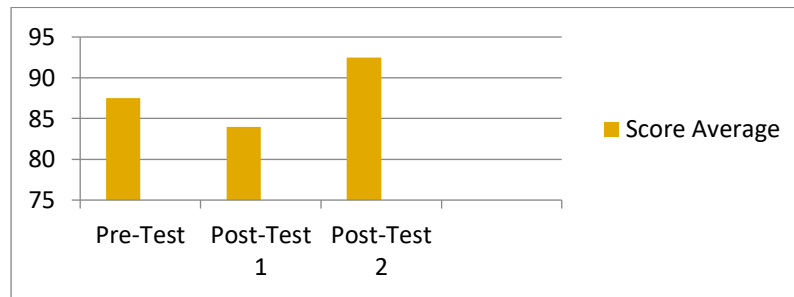*Table 4. Score Average Students*

Table 7 above presents the results of the average score obtained by students after learning English using the jigsaw technique. During the pre-test the average student score was 87.5 and during the Post test 1 the average student score was 84. That means there is a decrease in student scores and that makes researchers have to fight harder to maximize student results so that they can be more productive. Good. And in Post-Test 2 the average student score is 92.5. That means there has been an increase in results and students also understand the material provided. This means being able to answer research question number 1 which can be validated by test results that the use of the jigsaw technique is considered successful in improving students' reading comprehension, evidenced by an increase in value in cycle 1 and cycle 2.

c. The Students' Perceptions About Using The Jigsaw Technique to Improve Their Reading Comprehension

The researcher conducted interviews with students of class 8E to know their perception about using jigsaw technique to improve their reading comprehension. In interviews with students divided into six elements are:

1. Material
2. Method
3. Media
4. Teacher
5. Students
6. Environment

The first material, the material used for teaching is descriptive text, according to the students the material is easy because it has already been taught and the text is also interesting. The second method, the method used is the jigsaw technique. According to students, learning in groups makes them understand better because they can work together with other friends. The third media, the text given according to students is appropriate and not too long so it is easy to understand. The fourth teacher, the teacher's explanation and articulation when explaining is clear enough to make it easy for students to understand. The teacher also provides practice questions so that students understand more about the material provided. The fifth student, with the formation of groups, all group members work together to work on the questions given by the teacher. The sixth environment, the classroom environment does not

feel comfortable because the class feels hot so students don't focus on listening to the material delivered by the teacher.

The conclusions of the interviews stated that according to the students learning in groups using the jigsaw technique could help them to improve their reading comprehension by working together with a group of friends. They are also considered to understand the material better if their friends explain it rather than the teacher, because usually students explain it using everyday language vocabulary so it's easier to understand.

Researchers use a description text as a media to improve student reading comprehension. The researcher gave four meetings, the first researcher found that there were still some students who were still confused about the descriptive text structure, the second and thrid meeting researcher found that there were still students who did not understand the contents of the description text given. And at the last meeting, many students have understood and can explain again about the text he has read to his friends and the last score results indicate an increase in the results that have been made by students. Researchers use jigsaw techniques to improve students' reading understanding.

CONCLUSION

Based on the data that the use of jigsaw techniques is effective to assist students in improve reading comprehension. The increase can be seen from Posttest 1 with an average score of 84 and posttest 2 with an average score of 92.5. That means it shows that the understanding of reading students has increased significantly. And it can be concluded that the jigsaw technique can improve students' reading comprehension.

According to students, the use of the jigsaw technique is also very fun and helps them understand a text. They can work together to answer questions given by the teacher. They can also exchange ideas about what they read. Therefore this jigsaw technique is considered successful in helping to improve student understanding.

REFERENCES

Ahmadi, M. R. (2017). The Impact of Motivation on Reading Comprehension. *International Journal of Research in English Education*, *2*(1), 1–7. https://doi.org/10.18869/acadpub.ijree.2.1.1

Aronson, E. (2016). *Jigsaw in 10 Easy Steps*. 1–8.

Chiara Levorato, M., Nesi, B., & Cacciari, C. (2004). Reading comprehension and understanding idiomatic expressions: A developmental study. *Brain and Language*, *91*(3), 303–314. https://doi.org/10.1016/j.bandl.2004.04.002

Ehri, L. C. (2013). Learning to read and spell words. *Learning To Read: Basic Research and Its Implications*, *XIX*(1), 57–74. https://doi.org/10.4324/9781315044453

Gallos, J. V, & Schein, E. H. (n.d.). *Action Research*.

Göer, A. (2010). A comparative research on the effectivity of cooperative learning method and jigsaw technique on teaching literary genres. *Educational Research and Reviews*, *5*(8), 439–445.

Mengduo, Q., & Xiaoling, J. (2010). Jigsaw Strategy as a cooperative learning technique: focusing on the language learners. *Chinese Journal of Applied Linguistics (Foreign Language Teaching & Research Press)*, *33*(4), 113–125.

Metacognition in Literacy Learning. (2006). In *Metacognition in Literacy Learning*. https://doi.org/10.4324/9781410613301

Muhammad Aris, A. (2014). Qualitative Method. *Lincolin Arsyad*, *3*(2), 1–46. http://journal.stainkudus.ac.id/index.php/equilibrium/article/view/1268/1127

Muhammadiyah, U., & Rappang, S. (2019). *THE HUMOR STORY IN TEACHING READING COMPREHENSION*. 2(2), 77–87.

Pine, G. (2013). Collaborative Action Research. *Teacher Action Research: Building Knowledge Democracies*, *September*, 110–127. https://doi.org/10.4135/9781452275079.n6

Quian Quiroga, R., & Panzeri, S. (2009). Extracting information from neuronal populations: Information theory and decoding approaches. *Nature Reviews Neuroscience*, *10*(3), 173–185. https://doi.org/10.1038/nrn2578

Singh, Y. P., & Agrawal, A. (2011). Introduction To Co-Operative Learning Original Article. *Indian Streams Research Journal*, *1*(2), 1–9.

Tolima, U. (2016). *The Role of Collaborative Action Research in Teachers ' Professional Development*. *18*(1), 39–54.

Ulker, U. (2017). *Reading Comprehension Strategies*. https://doi.org/10.23918/vesal2017.a37

Voyant, V. (n.d.). *Voyant Borobudur Temple.pdf*.

Voyles, E. C., Bailey, S. F., & Durik, A. M. (2015). New Pieces of the Jigsaw Classroom: Increasing Accountability to Reduce Social Loafing in Student Group Projects. *The New School for Social Research*, *13*(1), 11–20.