Utilizing a Jigsaw Method in Teaching Reading Comprehension

Dela Zulvia Mariska[1*], Khoiriyah[1]

[1]*Universitas Nusantara PGRI Kediri, Indonesia*
Corresponding Author: delamariska0321@gmail.com

Article Info

ABSTRACT

Good reading comprehension allows the students to develop critical thinking and expand new knowledge which impacts on their education, careers, and daily lives. As second-language students, they have difficulties in understanding and responding to the texts they have read. The students have low reading motivation and limited vocabulary mastery. It makes them struggle to find the main idea, vocabulary meaning, reference words, and conclusion correctly. This article aims to provide information about the use of the jigsaw method as an innovative method in teaching reading comprehension. Jigsaw is a learning method that allows students to learn optimally through interaction with other students. This method requires students to learn and understand certain parts of the material for themselves and teach it to other students. So, they make deep representations of what they have read and learned. Applying the jigsaw method based on cooperative learning has great potential on the student's reading comprehension skills and it is an alternative learning method that creates a learning process that focuses on the students' center. This article discusses teaching reading, the concept of jigsaw, stages of teaching reading comprehension using the jigsaw, and the advantages of jigsaw.

1. INTRODUCTION

In the current era of globalization, the English language is very important for students as second language learners to master. Learning English as a foreign language aims to access information to increase the student's insight. Various literature, books, articles, and academic journals that function as sources of knowledge are written in English as the main language used to communicate in various scientific disciplines. Through good reading ability, students are able to read English faster while comprehending the content well (Khoiriyah and Gunarsih, 2019). Reading is the basic ability that must be mastered to achieve comprehension. The statement confirms that mastery reading comprehension skills are very necessary for students to understand information from various sources. Good reading comprehension ability allows students to expand their new knowledge and insight which impacts on their academic education, careers, and also daily life. Therefore, reading comprehension is an essential skill that plays an important role in the acquisition of knowledge. People usually say "*The more we read, the more knowledge we get*". It reflects a fundamental truth about the correlation between reading and knowledge. No wonder this skill became the main basis for the teaching-learning process in the world of education.

Reading comprehension is the main factor that determines the students' success in the learning process (Khorimah 2016). Students who have good reading comprehension skills can understand the subject matter more effectively so it has an impact on their academic outcomes in various subjects which improve. Zimmerman (2010) defined reading comprehension as the ability to understand what has been read. In practicing this skill, students as readers are not only just seeing and pronouncing each word in the text with correct pronunciation, but requires them to understand the meaning and content that is contained in a text cognitively so that they gain knowledge afterward.

In education, reading comprehension is used as a tool to measure the extent of students' understanding of the learning material or text. Saraswati et al. (2021) state that, successful reading comprehension is measured by the student's ability to respond to the information presented in the text. Reading comprehension involves the ability to think critically to analyze text content, draw conclusions, and connect new information with existing knowledge. This

ability is essential because it is directly related to the student's academic performance in various subjects. An example of the application of reading comprehension as a measuring tool is during exams. In this situation, students are often required to answer a series of questions that test their ability to comprehend the content of the text. The questions tested related explicit information in the text, main ideas, reference words, vocabulary meaning, and even inferential questions that required students to find information implicitly and to provide opinions or critical analysis based on the text. The teacher expects students to be able to answer all questions related to the text well. However, many students have problems with reading comprehension such as limited vocabulary mastery, lack of strategies in finding appropriate information, making it difficult for them to answer questions related to reading aspects, difficulty in understanding the topics discussed in the text, and students lack motivation to read the text make they tend to choose the wrong answer option.

Reading comprehension skills are often a challenge for students as second language learners because of their limitations in mastering vocabulary. Al-Khasawneh (2019) revealed that students' root problems in reading comprehension were caused by the lack of their vocabulary mastery. Without knowing the meaning of the words in the text, it is difficult for them to understand and respond to the text they have read. It causes students to struggle to find the main idea, vocabulary meaning, reference words, and make conclusions based on the text. Therefore, they find it difficult to answer questions correctly. Apart from that, when students are faced with long texts, they usually lose motivation to read because they think that it takes a long time and is difficult to understand its meaning (Samangun et. al 2024). It is in line with research conducted by Kweldju (1996) in Khoiriyah (2015) also found that the students considered that textbooks are useful for them. However, they are not interested in reading them because the lack of interest in reading, they are not having sufficient prior knowledge to understand the material in the book, difficult for them to comprehend the content in the book, and complex text organization structure.The existence of students' problems in understanding texts requires teachers to use various learning methods that can overcome these problems. But in fact, the teacher did not use a variation learning method in the classroom which caused the students low motivation (Fahlifi et. al 2023). The traditional method only focuses on the teacher to explain material in general without leading the students to understand the aspects of reading comprehension. This technique always emphasizes the teacher as a source of information and students only as listeners which allows them to be quiet, sit, and listen to the teacher so that there is no opportunity for students to interact to obtain additional information. It tends to be monotonous, makes students passive, and does not make them deeply understand the text. This condition prevents learning objectives from being achieved optimally (Rehalat, 2016). A less variation method makes students tend to lose interest and motivation. It causes a decrease in the quality of learning, a lack of comprehension of the reading text or material, and low student involvement in the learning process.

Hiebert and Raphael (1996) cited in Sulistyani et.al (2022) stated that the importance of reading comprehension makes the application of effective teaching instruction very necessary. Therefore, the innovative teacher requires fundamental changes in learning paradigms and methods to be more open to other methods. Innovative methods that can create an interactive, collaborative learning environment, motivate students, and make students involved and interact with the text without getting bored to achieve comprehension of the text are very necessary to implement. so that a teacher does not only introduce conventional subject matter, but also looks for ways to make learning more interesting, relevant, and interactive for students. The application of varied learning methods that are creative and interesting is essential to create a learning atmosphere that motivates students to be actively involved in the learning process to achieve an overall comprehension of the reading text. A method is the teacher's way of implementing learning activities so that the expected goals are achieved optimally (Sanjaya 2007:145). According to Joyce and Weil (1990) there are many ways to learn, therefore the learning methods required are also different. It is indicated that each method has a foundation, and goals, with advantages and disadvantages according to the goals to be achieved.

Nowadays, cooperative learning methods are often used because it is able to train students to learn optimally by working together with their teams. Jigsaw-based cooperative learning creates an active, interactive, fun, and enjoyable learning atmosphere for students so that they can easily understand reading texts easily. This method encourages students to gain a complete understanding of the material in depth. Applying the Jigsaw gave students high motivation and enthusiasm, affecting their comprehension of reading text (Mitsalina et. al, 2022)

This article aims to introduce the Jigsaw method based on a cooperative approach as an innovation that educators apply in teaching reading comprehension. It is very important for teachers to apply different learning methods because it makes the learning process more interesting and enjoyable. Therefore, it can prevent boredom and keep students motivated to achieve maximum learning outcomes. Each method certainly has advantages and disadvantages, as well as conventional methods. Choosing the right learning method is the key to success in achieving learning goals. The Jigsaw method is based on the cooperative approach, offering an interesting alternative to overcome the weaknesses of conventional methods and enable students to gain a better comprehension of reading. Through this article, it is hoped that educators can gain a more comprehensive understanding of the jigsaw method and apply it effectively in the practice of teaching reading comprehension in the classroom.

2. DISCUSSION

Jigsaw is an alternative method that can be used by teachers in teaching reading comprehension. Many researchers have proven that the jigsaw method can provide positive benefits for students to comprehend the material more deeply. In this discussion, the writer provides information about teaching reading comprehension, the concept of the jigsaw, the stages of teaching reading comprehension using the jigsaw method, and the advantages of the jigsaw method. By applying the jigsaw method in teaching reading comprehension, teachers can create an interactive, participatory learning environment so that it is expected that the teaching learning process will be effective and achieve maximum reading comprehension.

2.1. Teaching Reading Comprehension

According to Kimbly and Garmezy in Brown (2000:7), teaching is the activity of helping someone to learn how to do something by guiding, giving instructions, and providing knowledge caused by someone knowing something. Meanwhile, reading comprehension is a complex activity that involves the ability to think and interact with the text to understand its content so that readers can respond to the questions regarding the text well. In addition, Guthrie (2008) stated that to understand a text, readers must connect their initial knowledge with the topic presented in their reading. This means that prior knowledge greatly influences a person's understanding of the reading text.

According to Norman Bagas et. al (2021) teaching reading comprehension is a process in which teachers apply certain techniques, methods or strategies in teaching reading so that students can understand and master teaching materials effectively. It means teaching reading comprehension involves a conscious plan-set of steps that a good reader must use to make sense of text. In teaching this skill, teachers have the task of developing students' abilities in understanding and interpreting written texts. Therefore, this process involves teachers implementing various techniques to make students become good readers. To become successful in carrying out teaching reading comprehension, teachers must guide the several principles designed to lead the students in understanding the texts they read. Anderson in Nunan (2003) states that there are several principles;

a) Activating students' prior knowledge.

It is a key step in helping them understand new texts. This is done by relating the information they will read to what they already know. This process can be done through initial discussions or opening questions that are relevant to the topic of the text. For example, before reading about the influence of social media on students, teachers can ask students about their experiences using social media, as well as the positive and negative impacts they felt. In this way, students associate new information with existing mental schemas, so they can more easily understand and remember new information. Activating prior knowledge also makes students more interested and involved, because they feel they have a basic knowledge that is relevant to the topic that will be discussed.

b) Making the students ask questions. This process can start by asking students to read the title or beginning of the text and then write down questions about what they want to know more about

Becoming better understand the material, students can ask questions about topics that interest them. Teaching students to ask questions is an effective method for increasing their engagement and understanding of texts. This process can start by asking students to read the title or beginning of the text and then write down questions about what they want to know more about. Questions can include what, who, when, where, why, and how, all of which encourage students to think critically and more deeply about the content of the text. Teachers can facilitate question-and-answer sessions where students ask each other questions and look for answers in the text.

c) Guiding the students to assume and predict the information in the text.

This is done by combining information from the text with information from their previous knowledge. So, students can make predictions. Assumptions and predictions are important strategies in reading comprehension. Teachers can start by asking students to make predictions based on the title, image, or first paragraph of the text. For example, before reading a story about a hero, students could be asked to predict what conflicts the main character might face. After reading a portion of the text, students can then verify whether their predictions are correct or need to be adjusted. This process engages students in active thinking and connecting new information with existing knowledge, which helps them understand the text better and motivates them to continue reading to test their predictions.

d) Guiding the students to select the main ideas.

Identifying main ideas is a crucial skill in reading comprehension. Teachers can teach students how to find the main sentence in a paragraph, which often contains the main idea. By focusing on finding the main idea in the text, students will learn to filter important information from the text and ignore less relevant details. It will be very helpful in gaining a main understanding of the text that they have read.

e) Guide the students to take synthesis, or combining information to produce new knowledge.

Synthesis is a higher-level skill that involves combining information from different sources or passages of text to produce new understanding. Teachers can guide students in synthesizing by asking them to read several texts related to one topic and then combining each core of the information obtained. Making synthesis trains students to develop deeper analytical skills regarding reading.

The principles above are the basis for teachers to implement effective reading comprehension teaching that can develop reading skills comprehensively. Furthermore, Moreillon (2015) stated that three stages in teaching reading

comprehension are used to activate the students' knowledge and may take advantage of developing their comprehension of the text better.

a) Pre-reading

According to William (1984: 29), pre-reading aims to introduce and arouse interest in a topic. It prepared the students to activate their prior knowledge regarding the topics discussed in the text. At this stage, the teacher introduces a topic by encouraging students to skimming, scanning, and make predictions related to a text (Brown, 2007: 135). This is usually done by asking leading questions to students. So, readers can make predictions by reading the title, subtitle, and images to get a general idea about the content of the text.

b) During/while reading

While reading is a stage that assists students in focusing on the specific aspects of the text and assists them in understanding it better. This activity aims to familiarize students with the text being studied. William (1984:30) stated that reading helps the readers to understand the text structure, and the writer's purpose and clarify the text content. Reading involves activities to identify topic sentences, detail information, differentiate between general and specific ideas, and identify relationships between ideas. Therefore, students must be required to apply strategies like writing brief notes about the new information, asking questions, and formulating temporary conclusions. This can be done individually, with partners, or in small groups, depending on the class dynamics and objectives (Tanjung et.al, 2022)

c) Post-reading

Post-reading activities conducted after reading. For this stage, a teacher's activity is primarily to evaluate the students' comprehension of particular tasks. According to William (1984:30) this stage has aimed to consolidate or reflect what has been read. These activities are used to follow up and confirm what was learned for example answering questions during 'pre-reading' and 'while-reading' activities and also the teacher giving feedback for the students about the text or material that has been studied.

It can be concluded that teaching reading comprehension is a complex process that aims to help students understand and interpret texts. To achieve this goal, teaching reading comprehension requires a structured and directed approach, with a focus on developing comprehensive reading skills, as well as strategies that allow students to actively engage in the reading process and build deep understanding. Through an effective learning method, teaching reading comprehension can help students improve critical thinking skills that affect their comprehension.

2.2. The Concept of Jigsaw

The Jigsaw method is a way to learn the material in a cooperative learning style. Cooperative learning is based on the concept of students helping each other in small, heterogeneity groups to learn material. In this model, students work in small groups to achieve common goals (Johnson and Johnson, 2018). It develops students' problem-solving skills, critical thinking, and social communication skills to convey their ideas. Furthermore, Rusman (2013:201) states that cooperative learning is based on constructivism theory, in which students actively build their knowledge independently. It means that jigsaw-type cooperative learning encourages students to work together in groups to conduct discussions, solve problems, and search for information to gain a deeper understanding of the material. so that teachers no longer act as sources of information for students but as facilitators who guide, direct, and create a conducive learning environment.

Brown (2001) cited in Khoiriyah and Gunarsih (2019) defines that Jigsaw method is a special form of information gap in which each member of a group is given some specific information and the goal is to pool all information to achieve some objective. It indicates that jigsaw is a unique method in which each student in a group is given different specific information so that they need to share information each other to gain a comprehensive understanding of the topic material. Therefore, It can be said that Jigsaw is a method that works in the same way as a puzzle, namely consisting of several parts that are interconnected with each other. In this method, students are represented as pieces of a puzzle (Dhull&Verma, 2019). Each student in jigsaw has a piece of information about the material. If combined, they get complete knowledge. Gladstone (2013) also defined jigsaw as one of cooperative learning activities in which learners become proficient in different topics, and then teach other learners what they have learned. Each student in Jigsaw becomes a member of two groups namely home group and the expert group. The teacher divides students into several home groups, with each student in this group tasked with mastering a different part of the material. In addition, the jigsaw divided material into several parts. Next, students tasked with learning the same material become an expert group. Each expert group has a task to learn, comprehend, and master a different part of the material. Each expert group member has a piece of important information about part material. Finally, the students return to the first groups and share their findings, to maximize their learning on the topic studied (Oliveira & Brenno, 2019).

Jigsaw fosters a sense of responsibility among students to understand their own learning and also the learning of others. Thus, each student is required to master part of the material because the group's success in understanding the entire material depends on the contribution of each member to teaching material to other students. Jigsaw makes each group member have an important role because they have unique information that other groups need, thus encouraging collaboration, communication, and better understanding among students. This process provides opportunities for students to convey opinions and information that can improve communication skills and also self-confidence (Rusman, 2008.203).

The Jigsaw method has undergone several modifications. Elliot Aronson originally developed the jigsaw method. Several experts later modified the theory. It includes Slavin who developed Jigsaw II, Stahl's Jigsaw III, and Holliday's Jigsaw IV (Doymus in Maden, 2010). Jigsaw IV is the newest modification and involves the most complete version of the jigsaw series to get maximum on the teaching-learning process in class (Holliday, 2002). Jigsaw IV is designed to get a deep comprehension of the material. Therefore, it consists of complete steps among others such as introductions to learning material, first and second quizzes before and after students do peer teaching to ensure they understand the material, review the material, and re-teaching material after individual assessment.

Based on this explanation it can be concluded that jigsaw is a cooperative method which provides students with the opportunity to understand and teach each other parts of the material to other students so that all of the students get the same understanding regarding the entire material.

2.3. Stages teaching reading comprehension using jigsaw

The Jigsaw IV is designed for students to get deep comprehension of reading text. According to Dwight C. Holliday (2002). There are several steps in applying Jigsaw IV in the classroom. It is described below:

3.3.1 Introduce Learning Material

The teacher starts by introducing the learning material to students. This can be done in various ways, such as showing relevant videos or film clips or using novels, texts, or illustrated stories. This stage aims to attract students' interest in the material they will study. When students feel interested and motivated, they will be more involved in the ongoing learning process.

3.3.2 Dividing Home Group

Students in the class are formed into several small groups consisting of 4-6 students heterogeneously (Slavin, 2008). So that each group has students with high and low abilities to help each other gain understanding. The focus of the learning material in this stage is improving 5 aspects of students' reading comprehension abilities such as finding main ideas, literal information, reference words, vocabulary meaning and also making inferences because these aspects become obstacles for students to master these abilities. Focusing on these aspects can help students gain a deeper understanding when they are answering or responding to the reading comprehension questions. So that the number of members in the original group corresponds to the amount of material to be studied. Each student has a task to understand a different part. For example, the text studied is descriptive. In group A, student A1 is tasked with understanding topics related to the main ideas in the text, student A2 is tasked with understanding referential words based on the text, student A3 is tasked with understanding literal information in the text, student A4 is tasked with understanding vocabulary meaning in the text and student A5 is tasked with understanding the conclusions in the text.

3.3.3 Dividing Expert Group

Students who are tasked with studying the same part of the material from each group, gather into one team called the expert group. They are tasked with discussing parts of the material. For example, students in the main idea group held discussions related to "how to find main ideas based on the text, what is the characteristic of main ideas". Therefore, the teacher must determine in advance what students should discuss when they discuss in expert groups. They share insights, explain concepts that other members may not understand, and together create summaries of their portions of the material. These discussions help strengthen their understanding and prepare them to teach the material to other students.

3.3.4 First Quiz

This stage becomes the difference between Jigsaw IV and the previous Jigsaw. This stage aims to find out the extent to which students understand the part of the material they have studied before they teach it to other students who are studying different material. For this reason, students in each expert group are given questions about the same topic to test their understanding. According to Holliday, there is a rule of quizzes; Quiz items discuss the same things as expert sheets but have different forms of questions (true-false, essay, multiple choice, match).

3.3.5 Peer Teaching

Students return to their original group or it is usually called the home group. Each student in this group is responsible for teaching part of the material they have learned to their friends. So they will get complete information regarding all parts of the material. Indirectly, they learned, studied, and got an understanding outside of the topic they were studying.

3.3.6 Second Quizzes

To check whether each student understands each topic that has been explained by their friends, the second quiz is done. Therefore, this second quiz contains questions about all of the topic material that has been taught to their friends such as the main idea, literal information, reference word, vocabulary meaning, and making conclusions. Same as the first quiz, the students do this test in a home group, and the item test is used to check how far the students understand each part of topics differently than in the first quiz.

3.3.7 Review Material

Material Review aims to strengthen students' understanding of the material they have studied. At this stage, the teacher provides more explanation about the material that students have studied. After that, students give quiz games as stated by Holliday (2002) to increase collaboration and enthusiasm among students in each group. The teacher asks several questions related to the material to be answered by each group. Each team holds a discussion with their group to

answer. So, each home group competes to get the most points. It can make the students fun, and joyful in learning activities and also understand the material in more depth.

3.3.8 Individual Quiz

The individual quiz stage in the jigsaw is an important step that aims to ensure that each student understands the entire material they have studied previously well independently. Students are given individual tests to measure how far the students understand the material. The test contains five reading comprehension aspects such as finding the main idea, literal information, reference word, vocabulary meaning, and making a conclusion as a main focusing topic. Through individual quizzes, students will be more responsible for their own learning and more motivated to actively contribute in group discussions to achieve a more comprehensive understanding.

3.3.9 Re-teaching

This stage is useful for strengthening students' understanding of the material after carrying out an individual quiz. Teachers identify areas where students demonstrate inadequate understanding based on individual quiz results. Re-teaching involves re-explanation, providing additional examples, and in-depth discussion of topics that most students find difficult.

2.4. Advantages of jigsaw

Jigsaw is an excellent method that allows each student to have an important role and responsibility in the group. Thus, it encourages the students' active participation and cooperation. Maden (2010) stated that there are several advantages of Jigsaw in the teaching-learning process.

1. Jigsaw builds students' confidence. The jigsaw method focuses on the students learning together with their classmates in small groups. This method allows students to dare to explain, share their knowledge with their friends and also ask questions about things they don't understand. By acting as an expert on a particular topic, students feel more confident in understanding and conveying information.
2. Jigsaw makes students actively participate in the learning process through discussion, and sharing information with their friends. This activity encourages students to think critically, analyze information, and formulate questions related to the material. Through interaction and the exchange of ideas, students can deepen their understanding of the text.

In addition, Aronson (2008) also stated that jigsaw offers several advantages:

1. Jigsaw allows students to teach themselves about the material to gain a deep understanding of the material before teaching it to other friends. This process encourages students to be actively involved in finding information, understanding the material, and discussing in an expert group to deepen their understanding
2. Students require an in-depth understanding of the material in peer teaching.
3. Students become more fluent in English as they have to explain the material to their peers.
4. Each student engages in meaningful discussions in small teams. This is difficult to achieve in large group discussions where some students may not have the opportunity to speak or participate actively. In small groups, each student has an important role in contributing to discussions, sharing ideas, and expressing their views. This process creates an environment that supports active and collaborative engagement, allowing students to deepen their understanding of the reading material
5. In the peer teaching stage, each group is fostered in real discussion followed by a question-and-answer session therefore, each student should comprehend the material well.
6. Students are less dependent on teachers compared to traditional classrooms because they are not the primary source of knowledge. In Jigsaw, students become active learners to search for information and also become teachers as a source of information for other students. The stages in the jigsaw can develop their independence in learning, thereby enabling students to gain knowledge to master the material.

3. CONCLUSION

From the explanation above, it can be concluded that jigsaw is an innovative learning method that has proven effective for teachers in teaching reading comprehension because this method provides opportunities for students to understand each specific material such as determining literal information, reference words, main idea, finding the vocabulary meaning, and making inferences. Each learning stage in the Jigsaw method strengthens the student's comprehension of the material. An important factor that influences the success of this method is collaboration and interaction between students to master the material which emphasizes them as information seekers as well as sources of information for other students. Collaboration-based teaching between students allows them to become more motivated, active, and involved throughout the learning process to achieve maximum reading comprehension.

To achieve the success of the Jigsaw method, cooperation between teachers and students is required. The teacher must act as a facilitator in monitoring, helping students, and providing appropriate direction to ensure that each student gets equal opportunities to participate and learn. Students must help each other provide explanations to other students who have difficulties in understanding the material and each student must listen carefully to explanations from other students regarding different topics focused during peer-teaching. In this way, students will gain a complete and in-depth understanding of the entire material

4. REFERENCES

Al-Khasawneh, F. (2019). The Impact of Vocabulary Knowledge on the Reading Comprehension of Saudi EFL. *Journal of Language & Education Volume*, *5*(3).

Aronson, E. (2008). *The Jigsaw Classroom, Web Site Copyright,* Social Psycology Network. *Diambil pada tanggal*, *9*.

Gladstone, C. (2013). *The Jigsaw method: A cooperative learning strategy*.

Guthrie, J. T. (2008). Reading motivation and engagement in middle and high school: Appraisal and intervention.

Holliday, D. C. (2002). Jigsaw IV: Using Student/Teacher Concerns To Improve Jigsaw III.

Johnson, D. W., & Johnson, R. T. (2018). Cooperative learning: The foundation for active learning. *Active learning—Beyond the future*, 59-71.

Joice, B. and Weil, M. (1990). *"Models of Teaching"*. New Jersey: PrenticeHall Publishers

Khoiriyah and Gunarsih. (2019). "Enhancing students' reading comprehension through jigsaw at Vocational High School". *Journal of English Teaching and Research,* 4.3 29-38 https://karya.brin.go.id/id/eprint/19379

Khoiriyah, K. (2015). THE IMPACT OF DIRECTED READING THINKING ACTIVITY STRATEGY TOWARD THE LEARNERS'READING COMPREHENSION. *JURNAL EDUKASI: KAJIAN ILMU PENDIDIKAN.*, *1*(1), 1-10.

Maden, S. (2010). The effect of Jigsaw IV on the achievement of course of language teaching methods and techniques. *Educational Research and Review*.

Mitsalina, E., Garwan, H. N. A., & Filyang, R. (2022). The Effectiveness of Using Jigsaw II Technique in Teaching Reading Comprehension to the Tenth Grades Students of SMK Negeri 1 Gombong in the Academic Year of 2019/2020. *English Education and Literature Journal (E-Jou)*, *2*(01), 1-10.

Moreillon, J. (2015). Increasing interactivity in the online learning environment: Using digital tools to support students in socially constructed meaning-making. *TechTrends*, *59*, 41-47.

Norman Bagas, K., KHOIRIYAH, K., & WICAKSONO, A. (2021). *SUMMARIZING TECHNIQUE IN TEACHING READING COMPREHENSION* (Doctoral dissertation, Universitas Nusantara PGRI Kediri).

Nunan, D. (1991). Language teaching methodology: A textbook for teachers. *Pretence Hall International*.

Oliveira, B. R., Vailati, A. L., Luiz, E., Boll, F. G., & Mendes, S. R. (2019). Jigsaw: using cooperative learning in teaching organic functions. *Journal of Chemical Education*, *96*(7), 1515-1518.

Rusman. (2011). *Model-model pembelajaran: Mengembangkan profesionalisme guru*. Rajawali Pers/PT Raja Grafindo Persada.

Samangun, K., & Rosmayanti, V. (2024). The Effect of Jigsaw Method on Students' Reading Comprehension at Junior High School Students. *EDULEC: Education, Language, and Culture Journal*, *4*(1), 11-20.

Saraswati, N. K. R., Dambayana, P. E., & Pratiwi, N. P. A. (2021). An analysis of students' reading comprehension difficulties of eighth grade students at SMP Negeri 4 Tegalalang. *Jurnal IKA*, *19*(1), 34-45.

Sulistyani, S., Khoiriyah, K., Wicaksono, A., & Aji, M. P. P. (2022). Collaborative strategic reading (CSR) and its influence on students' reading comprehension. *Journal of English Education and Teaching*, *6*(3), 367-378.

Zimmerman, Jennifer "*Definition of Reading Comprehension*". eHow Contributor (2010)