

USING JIGSAW METHOD TO ENHANCE STUDENTS' READING COMPREHENSION

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Abstract: Reading is one of the important skill for students in the learning process. Reading is not only about reading a text but also comprehending and getting a knowledge from a written text. In learning process need a strategy especially in teaching reading. Jigsaw technique is a cooperative activity that can be considered as one of alternative strategy for teaching reading. In jigsaw, student divided into several group which given different material. After learning the material, students will go to expert group with the same material to discuss their material. Then student go back to their original group to share information or knowledge related to what they have learned. The teacher end jigsaw technique by giving a test or quiz. The Jigsaw technique has advantages in the learning reading process, such as ; Jigsaw help student recall more information, Jigsaw Strategy aids in the development of oral communication skills in students, Jigsaw improves students' social skills, Jigsaw builds confidence and self-esteem in students and Jigsaw aids in the advancement of race relations.

Keywords : Reading, Teaching Reading, Reading Comprehension, Jigsaw Technique

Abstrak: Membaca merupakan salah satu keterampilan yang penting bagi siswa dalam proses pembelajaran. Membaca tidak hanya tentang membaca teks tetapi juga memahami dan mendapatkan pengetahuan dari teks tertulis. Dalam proses pembelajaran diperlukan suatu strategi khususnya dalam pengajaran membaca. Teknik jigsaw adalah kegiatan kooperatif yang dapat dianggap sebagai salah satu strategi alternatif untuk mengajar membaca. Dalam jigsaw, siswa dibagi menjadi beberapa kelompok yang diberikan materi yang berbeda. Setelah mempelajari materi, siswa akan pergi ke kelompok ahli dengan materi yang sama untuk mendiskusikan materi mereka. Kemudian siswa kembali ke kelompok asalnya untuk berbagi informasi atau pengetahuan terkait dengan apa yang telah dipelajarinya. Guru mengakhiri teknik jigsaw dengan memberikan tes atau kuis. Teknik Jigsaw memiliki keunggulan dalam proses pembelajaran membaca seperti; Jigsaw membantu siswa mengingat lebih banyak informasi, Jigsaw membantu dalam pengembangan keterampilan komunikasi lisan pada siswa, Jigsaw meningkatkan keterampilan sosial siswa, membangun kepercayaan diri dan harga diri siswa dan yang terakhir adalah Jigsaw membantu dalam kemajuan hubungan ras.

Key Words: Membaca, mengajar membaca, pemahaman membaca, tehnik Jigsaw

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I. INTRODUCTION

Reading is considered a receptive skill, in which the learners do not need to produce the language but have to read, think, and do the interaction. Reading comprehension is a major factor in the activity of reading, where a reader builds understanding of a text. Reading comprehension levels can determine how effectively students absorb information offered in a text. In reading a text, students will become involved with many language aspects like vocabulary, pronunciation, and tenses. The construction of a text usually also provides the students with many kinds of pronouns. Understanding the problem or topic, then understanding why, who, how, when, and where an event occurs in the reading can improve reading comprehension. Reading comprehension needs students to focus on the content they are reading in order to discover the problem's subject matter quickly within the text.

The process of teaching English as foreign language might encounter some problems and difficulties, such as; passive student, difficult material, weak student tend to depend on smart student, time consuming and etc. Therefore, as a teacher need to be more adaptable in overcoming these problems and be more creative in

determining which teaching methods and techniques are more appropriate and effective by paying attention to their level of background knowledge. Working in a group or cooperative learning approach may become one of solution to overcome these problems. Jigsaw is an example of a cooperative learning approach. The phrase "cooperative learning" refers to a teaching style in which students are taught in groups in order to achieve common goals. Jigsaw learning is one type of cooperative education that emphasizes the presence of activities and interactions between students in order for them to encourage and support one another in the process of understanding the content so that they can attain their maximum academic potential.

According to Slavin (2008, page 10), students that work together to study and take responsibility for their peers have the potential to help other students learn as well. Students require extra exercises that are both more demanding and more interesting since they regularly report feeling bored when performing the reading assignment mentioned above. As a result, a range of reading methods that encourage students to be active participants in activities that evaluate their reading comprehension must be used to increase students' interest in reading. Learning through peer participation may be shown to be far more useful to students than learning

only through the emphasis of the classroom teacher.

As a result, it is thought that the best way to solve the problem is to work on it as a group. According to Wichadee (2003, pages 1-2), students who are uncomfortable speaking up in front of a large group are more comfortable doing so in a smaller group. The members of the group are able to fulfill their strengths and weaknesses when it comes to reading in English since each student comes from a different background and has a different set of talents when it comes to studying English that they can bring to the group. For example, a single student may have a large vocabulary that they may share with their peers who have a good grammatical basis.

Furthermore, the student who is failing will benefit from engaging with the student who is succeeding, and the student who is succeeding will be pleased that they are helping their friends who are suffering. When students work in groups, they are only responsible for learning their own subtopic or subtask; they are not responsible for learning their classmates' subtopics or subtasks. This is one of the issues with the practice of working in groups. For example, if one student in a group only has access to one topic from the reading text, but the entire group is expected to present all of the topics to the class and answer all of the questions posed

by both the teacher and the other students, the situation will quickly become dangerous for both the individual student and his group. Jigsaw puzzles are one type of cooperative activity that might be utilized to solve this problem.

According to Slavin (2008, page 111), the majority of Jigsaw working groups include a method through which students communicate the knowledge they have gathered with their peers and, in many cases, the entire class. Students are given quizzes on each topic, and the results are averaged to get team scores. As a result, in order for each team member to contribute to the overall performance of the group, they must not only complete the subtasks allocated to them but also communicate vital information to their fellow team members effectively.

The Jigsaw model is one such strategy that places an emphasis on collaborative work. The Jigsaw model emphasizes the team as the most important component. If they want to be eligible for an award, they must assist their classmates in learning about the topic. Students are required to motivate their classmates to achieve their full potential and to show their peers that education can be relevant, fulfilling, and enjoyable. The cooperative learning model emphasizes student interaction as a fundamental component. Students will converse with classmates and

close pals. Students should be able to readily learn the subject matter that is being presented to them in this manner due to the disparity in the partners' degrees of knowledge and reasoning. This is because children may understand an explanation given by a friend more easily than an explanation offered by a teacher.

According to the above description, teaching reading should encourage students to work together in groups to express ideas, share ideas, ask questions, and explain things to one another so that the reading comprehension learning process is more successful. This will guarantee that the pupil comprehends what they are reading. As a result, in order to overcome the aforementioned problems, a creative method or technique to improve students' reading competency is necessary. Based on the facts offered above, using jigsaws as part of cooperative learning is a simple technique to help students improve their reading comprehension abilities.

II. USING JIGSAW TECHNIQUE TO ENHANCE STUDENTS' READING COMPREHENSION

Reading Comprehension

Miller (2002, page 8) also described reading comprehension as the ability to understand or draw meaning from any type

of written text. This is accomplished by reading, and understanding is an important aspect of absorbing any sort of knowledge. On the other hand, being a good reader is not easy, especially when the English information being read is difficult to comprehend. Reading does not emerge spontaneously from listening to and mimicking spoken language as it does for other people.

Harmer (2012, p. 68) said that reading is valuable for language acquisition, and interesting reading will make language acquisition even more successful. By reading, students improve their use of words, grammar, and punctuation, as well as the way they write sentences, paragraphs, and other types of written work

To conclude, reading comprehension refers to how effectively a person comprehends the information included in the text they are reading

Teaching reading

Tarigan (2008, p. 86) stated that there are three approaches that are appropriate to teaching reading as follows:

1. Bottom-up approach

In bottom-up approaches, the readers try to produce a meaning one by one from the letters, words, phrases, clause, and

sentences. Brown (2004, p. 185) explained that bottom-up is process to find out meaning by way divides letters, words, and phrases. Similarly, Goodman in Brown (2004, p. 298) stated that the reader must first comprehend that there are several types of language signals. Letters, morphemes, syllables, words, phrases, grammatical cues, and discourse markers are all examples of these signals. After then, the reader must use their linguistic data processing processes to categorize the signals in a variety of ways.

From the statement above, the writer wants to conclude that bottom-up is approach that is used, in order the reader can create or construct a meaning by reading one by one letters, words, phrases, clause, and sentences.

2. Top-down approach

Readers must apply past knowledge obtained throughout the reading process in order to grasp the material offered in a book. Brown (2004, p. 358) suggests that in order to grasp the content, the reader needs use both their brains and their experience. The readers' past knowledge will have a big role in how effectively they understand the text. This might happen if they don't need to know anything about the issue. According to the preceding argument, the top-down method to reading necessitates the application of past information by

readers in order to make sense of the text. This is especially true when the reader is dealing with a topic that they are already familiar with; in this situation, understanding the substance of the text will be much easier.

3. Interactive approach

Interactive approach is the use a top-down and bottom-up strategy at the same time. Readers work their way up to the sentences from the letters, words, phrases, and clauses in an attempt to put together the meaning of the text. A top-down method of reading, on the other hand, depends on the reader's past knowledge to discern the meaning of the text. In the interaction between the readers' prior knowledge and their language abilities, interactive tactics, on the other hand, play a more balanced role. So, in interactive model the readers will read text correctly in all words or sentences within text and they will also use their background knowledge.

In summary, teachers can choose one of the three approaches above as one of appropriate approach to teaching reading today. That approach has advantages and disadvantages so teachers must choose based on students' skill.

Assesing Reading

Assessment of reading is the way that

teacher pay attention to give assessment to students in teaching reading. Brown (2004, p. 189-216) explained that there are four types that can be used for reading assessment: perceptive reading, selective reading, interactive reading, extensive reading.

1. Perceptive Reading

Perceptive is a set of fundamental and basic skills that include identifying alphabetic symbols, capital and lowercase letters, punctuation, words, and the relationship between grapheme and phoneme. Perceptual exams may include tasks such as reading aloud, writing answers, multiple-choice, and picture-cued items. Furthermore, the bottom-up processing approach can be applied.

2. Selective Reading

Individual letter and word recognition is a critical component of selective reading assessment assessments. The designer of the test focuses on the grammatical and lexical components of language, as well as a few conversational traits. The test maker can then include multiple-choice questions, matching questions, editing questions, picture-cued questions, and gap-filling questions in the exam. When employing selective, you may use a combination of bottom-up and top-down tactics.

3. Interactive Reading

This work entails identifying relevant aspects such as lexical, symbolic, grammatical, and discursive inside texts that are anywhere between extremely short and very long in duration. When dealing with interactive data, top-down processing rather than bottom-up processing might be used. Interactive reading exercises include cloze activities, spontaneous reading with comprehension questions, editing (larger texts), sorting tasks, and information transfer.

4. Extensive Reading

In extensive reading, texts have more than one page, for example, journal articles, technical reports, longer essays, short stories, and books. The tasks that are employed in extensive reading are skimming, summarizing, responding to reading, and note-taking.

Jigsaw Technique

Elliot Aronson, a University of California scholar, is the one who came up with the idea. This is the strategy to employ in order to provide youngsters with a motivator to study in order for them to improve their reading skills and achieve better outcomes. Teaching reading will be simplified since this technique requires the children to engage actively in the

classroom. They will be part of a group that has a mix of strong and weak students in variable proportions. Each group will have five to six students, and they will study together before each individual exam in order to achieve higher success, which will be assessed by an increase in their aggregate quiz score. When it comes to the work of other team members, each individual on the team must be responsible for his or her own job.

According to Slavin (2008, page 111), jigsaw is a method in which students share information they've gathered with both the group members with whom they're working and the other group members in the class. Students are given quizzes on each topic, and the results are averaged to get team scores. As a result, in order for the team to fulfill its objectives, team members must not only execute the tasks allocated to them but also communicate information effectively to the other team members.

According to Sumekto (2011, p. 72), Jigsaw is a cooperative learning strategy that allows each member of a "home" group to focus on a distinct aspect of a learning unit. Students will talk to people in other groups who have been given the same part, and once they understand it, they will teach it to someone in their own group.

To conclude, Jigsaw is a cooperative learning method which known as an effective method. It is because the teacher

act as a facilitator of learning and students can work together with their group. Every student has the responsibility to learn and to teach what they have learned.

Steps of Implementing Jigsaw Technique

Aronson (2000) explained that the jigsaw classroom is very simple use. These are the steps of jigsaw:

1. Divide students into jigsaw groups of five to six people. It is critical that the groups include individuals who are diverse in terms of gender, color, ethnicity, and ability.
2. Choosing one kid from each class to be the leader of their group. At the onset, this person should be the most mature student in the group.
3. Dividing the day's lesson into five or six segments. If you want to offer students the responsibility of writing an essay on a sports issue, for example, you may divide the subject into four independent stand-alone topics: (1) badminton, (2) swimming, (3) volleyball, and (4) running.
4. Assigning each student to a specific learning segment and ensuring that they have direct access to only that segment.
5. Allowing adequate time for students to study the topic twice and get comfortable with it before moving on to the next phase.

6. From an impromptu "expert group" formed by combining one student from each jigsaw group with other students assigned to the same puzzle piece. Allow time for students in expert groups to discuss the most significant component of their segment and to practice delivering it to the whole group.
7. The learner is reintegrated into the jigsaw group in which they were previously a member.
8. Instructing each student to share his or her portion with the rest of the class. Encourage people in the group to ask questions in order to have a better understanding.
9. Keep an eye out for any groups who are suffering while floating about the group and watching the process. If you observe any issues, such as a disruptive or domineering member, you should intervene as soon as possible. Finally, taking responsibility of the assignment will benefit the group leader the most. Leaders may be taught to intervene by whispering instructions until they get the hang of it. This can be repeated several times.
10. Give a test on the content taught at the end of the session so that the students understand that their time in this lesson is not wasted and that it does contribute to their grade.

Referring to several forms of development steps for the implementation of the Jigsaw type cooperative learning model as developed by several experts above, the steps for implementing the model in relation to teaching reading comprehension can be done as follows.

a. Submission of learning objectives.

In this initial step, the teacher directs students' minds to focus on the topic of the material to be studied along with the learning outcomes that are expected to be achieved in the learning process.

b. Generating learning motivation.

Generating student learning motivation is one of the activities that need to be presented in learning activities because one of the benefits is that students can bring up student learning enthusiasm during the learning process.

c. Organizing students into several heterogeneous study groups.

The teacher forms students into several study groups whose members are heterogeneously organized which will later be named as the original group where each group member consists of five students and each student member in the group will be given a card numbered 1 to 5.

d. Explanation of teaching materials.

The teacher explains the teaching

material followed by giving assignments in the form of quizzes to each member of the student group.

e. Formation of expert team groups.

Based on the number of cards owned by students in their original group, the teacher instructs each member of the student from the home group to form a new study group (expert group) which includes student members who have the same card number to discuss certain sub-materials. given in the form of a quiz.

f. Reports on the results of the expert group's work to their original group.

Each member of the home group who is involved in the expert group, after carrying out the discussion process for certain sub-materials, is then instructed to return to his original group of origin and is tasked with teaching each other the sub-teaching materials that he has mastered to his friends in the home group as a form of group report.

g. Home group discussion.

Provide opportunities for all members of the student group who are involved in the home group to master the entire sub-sub-quiz material given to them.

h. Appointment of representatives of the original group members for quizzes.

The members of the home group whose card number is mentioned are asked to appear on a quiz that includes all the sub-materials they have discussed together when they last joined their original group.

i. Group appreciation.

Giving appreciation to group members of students who appear to work on quizzes, as well as a form of appreciation to each group of origin after calculating their learning achievement scores.

With regard to the nine stages of implementing the Jigsaw type cooperative learning model which will later be applied in students' reading comprehension learning, it needs to be emphasized in the core of its implementation, especially those related to the tasks to be carried out, both in the expert group and in the home group.

Advantages and Disadvantages of Jigsaw Technique

It is vital to analyze both the advantages and disadvantages of a teaching technique. It is possible to create a good solution from either the advantages or disadvantages of a scenario, and it is expected that there will be a way to prevent the downsides of this strategy. The following are the items: advantages and disadvantages of jigsaw.

1. Advantages of Jigsaw Method

Aronson and Patnoe (2011, p. 69) explained that the advantages of Jigsaw Method are:

1. Jigsaw is good for students learning and overall academic achievement. Jigsaw games help children recall more information.
2. Jigsaw participation helps to students' overall pleasant experience with their schooling. The expert will be satisfied if they have a comprehensive understanding of their particular piece of the book and can pass it on to the others.
3. The Jigsaw Strategy aids in the development of oral communication skills in students.
4. Jigsaw improves students' social skills.
5. Jigsaw builds confidence and self-esteem in students.
6. Jigsaw aids in the advancement of race relations.

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

2. Disadvantages of Jigsaw Method

There are some disadvantages of using Jigsaw strategy based on Kholid (2009, p. 119), They are:

1. In a school context, jigsaw puzzles are a time-consuming leisure. Students will be split into two groups, each of which will focus only on learning a text.
2. Some children report feeling perplexed while engaging in the jigsaw puzzle.
3. While engaging in the jigsaw activity, a few students are unable to manage their given reading material.

Jigsaw Technique to Enhance Student Reading Comprehension

According to Anita Lie's research (2008, page 69). The students work in a cooperative atmosphere and are given multiple opportunity to assess the data. It has the potential to improve a person's ability to communicate with others. Also, according to Maden (2010, page 771), jigsaw can encourage more effective since it compels each student to provide a piece of the knowledge to the group. Each player is equally important in the Jigsaw challenge since they each have a distinct piece of the puzzle. Because of the reasons outlined above, Jigsaw is expected to increase the amount of collaboration and mutual acceptance within the group.

Jigsaw exercises prepare students for two unique components of their target language competency. To begin, the students must absorb the information snippets that have been presented to them

and explain the same to the other members of the group. Second, the students must devise a strategy for determining the solution to the problem. The Jigsaw technique, according to Slavin (1995, page 122), encourages students to work in groups with people from various backgrounds. Students' team scores are determined by a technique known as the improvement score system, and students on high-scoring teams may receive prizes or other kinds of recognition. One of the advantages of the Jigsaw method is that it encourages all students to read all of the information, which may make it easier for them to understand unified concepts.

However, the jigsaw technique develops listening, engagement, and empathy by giving each group member a substantial role to play in the academic activity. The members of the group will need to work closely with one another and function as a cohesive unit in order to achieve their goal. It will be difficult for any student to attain absolute achievement unless everyone works together successfully as a team. It makes it simpler for all of the students in the class to interact with one another, which encourages them to value one another as collaborators on the project they're working on.

Previous Related Research

Similar studies were investigated. A substantial number of academics have written papers about the influence of the jigsaw strategy on students' academic achievement. The goal of this study was to look at the impact of the jigsaw approach on students' academic performance. They've all come to the same conclusion: the jigsaw method helps kids improve their academic achievement, as well as their thinking and motivation.

Haryati (2009) published a thesis *The Effectiveness Of Teaching Reading Using Jigsaw Technique To The First Year Students Of SMP Al Islam Kartasura*. She got to the conclusion that there is a significant difference between the learners' pre-test and post-test performance. If the students' post-test performance is higher than their pre-test performance, then the jigsaw-based reading instruction was successful in boosting the students' overall attainment. The results of this research show that this method provides good and effective outcomes. Reading class has a few characteristics that set it distinct from other classes, including:

1. Students are enthusiastic about engaging in the teaching and learning process

2. Students are driven to finish assignments and do well in the classroom
3. Students can get a greater feeling of self-worth.

There are a few issues as well, including the following:

- (1) It necessitates more effort and time
- (2) children are not encouraged to share their work with the group
- (3) it creates a lot of noise in the classroom and is not regarded as seriously as other reading teaching approaches.

Pamungkas (2018) researched about Improving Reading Comprehension Through Jigsaw Technique. This study tried to determine if the Jigsaw approach may improve student reading comprehension and to explain the classroom environment in which the Jigsaw technique was used to teach reading comprehension to eighth-grade students at SMPN 3 Wonogiri. The participants in this study were students who were taught reading comprehension using the Jigsaw approach.

The study's findings may be summarized as follows:

1. Using the jigsaw method can help the students enhance their reading comprehension
2. Using the jigsaw method to instruct kids in reading comprehension might be an

effective way to urge them to study English.

From the previous research above, it can be seen that there is similar result on the applying jigsaw technique toward the development of students' achievement. The only difference is that each of the research uses different variables, methods, and the materials in improving students' achievement. There are some benefit and significant progress in the teaching progress. Therefore, it can be concluded that use jigsaw technique is effective to help the students to get better improvement, especially in reading comprehension.

III. CLOSING

Conclusion

Jigsaw is a method of cooperative learning that presses on shared attitudes or behaviors in learning or helping among others students. In the jigsaw class, students was divided into groups of five or six heterogeneous students. Each member is responsible for learning and mastering certain parts of the material given, then explaining it to the other group members. The Members of various origin groups would gather in expert groups to talk about and discuss the information that has been

delivered to each group member, as well as to assist one another in their studies. Following the conclusion of the expert group meeting, the members of the group will return to their original group (the origin) and endeavor to transfer the information obtained to the other members of their original group.

The reason why using the Jigsaw method, because jigsaw is a method of cooperative learning that can be applied to make learning reading comprehension easier by making all students to participate at once. On the other hand, the disadvantages are that in the crowded class conditions, weak students are more likely to do nothing or completely depend on students who are smarter and learning process may required longer time if teaching material quite difficult for students to comprehend.

So every teaching technique and method especially jigsaw technique have

their own benefit and weakness. Teacher must hold responsibility to be more creative to use which technique more effective based on their student condition.

Suggestions

There are some suggestions to make learning English better for the class. Those are served in the following part.

1. The teacher should prepare the material, students' work sheet, and question cards the day before the learning process begun.
2. Teachers should develop creativity in learning and using learning method so that students' reading comprehension can be further enhanced.
3. Teacher should manage time consumed so that learning activities are more effective and can improve student's reading comprehension maximally.

REFERENCES

- Anita Lie. 2005. *Cooperative Learning:Mempraktikkan Cooperative Learning Di Ruang Ruang Kelas*. Jakarta: Grasindo.
- Aronson, E. (2000). Jigsaw Classroom. (Retrieved From <https://www.jigsaw.org/> 10 January 2022).
- Aronson, E., & Patnoe, S. 2011. *The JigsawClass: Building Cooperation In The Classroom* (3rded). New York: Addison Wesley Longman.

- Brown, H. Douglas. 2004. *Language Assessment: Principle And Classroom Practices*. New York: Pearson Education.
- Harmer, J. 2012. *Essential Teacher Knowledge*. Pearson Longman
- Haryati, S. S. 2009. *The Effectiveness Of Teaching Reading Using Jigsaw Technique To The First Year Students Of SMP Al Islam Kartasura*. Doctoral Dissertation, Universitas Muhammadiyah Surakarta.
- Kholid, A. *Model Pembelajaran Kooperatif Tipe Jigsaw, Lampung: Magister Teknologi Pendidikan Fakultas Keguruan Dan Ilmu Pendidikan Universitas Lampung*, 2009.
- Maden, S. (2010). The Effect Of Jigsaw IV On The Achievement Of Course Of Language Teaching Methods And Techniques. *Educational Research And Reviews*, 5(12), 770-776.
- Miller, D. (2002). *Reading With Meaning: Teaching Comprehension In The Primary Grades*. Stenhouse Publishers.
- Pamungkas, N. G. (2018). Improving Reading Comprehension Through Jigsaw Technique. *Widya Wacana: Jurnal Ilmiah*, 13(1).
- Slavin, R. E. 2008. *Cooperative Learning Teori, Riset Dan Praktik*. Bandung: Nusa Media.
- Sumekto, D.R. 2011. *Pola Pembelajaran Model Jigsaw Bagi Siswa Sekolah*. Klaten: Pusat Penerbitan Unwidha. Vol. 75: 62-67
- Tarigan, H. G. 2008. *Membaca : Sebagai Suatu Keterampilan Berbahasa*. Edisi Revisi. Bandung: Angkasa
- Wichadee, S. 2003. The Effect of Cooperative Learning On English Reading Skill And Attitudes of The First Year Students At Bangkok University Bangkok : *BU Academic*.