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### STUDENTS' PERCEPTION ON JIGSAW STRATEGY IN ENGLISH TEACHING AND LEARNING ACTIVITIES

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**Abstract:** Jigsaw is a simple cooperative teaching strategy that can make students interested in learning activities. This study investigated tenth-grade students' perceptions of the jigsaw strategy as a teaching and learning approach at MA Al Hikmah 1 Brebes. Mixed method which including both quantitative and qualitative design were applied in this current research. Quantitative data were collected through questionnaires administered to 75 students, followed by qualitative data through interviews. Findings revealed that students generally held positive views of the jigsaw strategy, perceiving it as an effective tool for improving comprehension, fostering collaboration, and enhancing active learning. However, challenges related to implementation, such as time constraints and teacher preparation, were identified. The conclusion of this study is that the Jigsaw strategy can be an effective alternative to improve student motivation and learning outcomes in learning English.

**Keywords:** jigsaw strategy, learning activity, student perceptions

### INTRODUCTION

The effectiveness of English language teaching remains a significant challenge in global education systems. Despite extensive research, numerous issues persist in English language instruction across various countries. One of the primary culprits is the selection and implementation of appropriate teaching strategies. Teaching strategies can be defined as "specific actions undertaken by teachers to facilitate learning, making it more efficient, enjoyable, independent, effective, and adaptable to new situations" within the context of second or foreign language acquisition (Sulistyo et. al., 2022).

One strategy that can be implemented in English language learning is the Jigsaw technique. Jigsaw is a teaching strategy that emphasizes the importance of students working collaboratively to solve problems or create something. Jigsaw engages students in learning as they each have individual tasks to complete within a group (Handayani et. al., 2022). Furthermore, Hadayani et. Al. (2022) explained that employing Jigsaw encourages student participation in class activities and lessens reliance on the teacher. Additionally, using the jigsaw strategy could improve students' ability to solve problems.

Several studies have confirmed the effectiveness of the jigsaw strategy in the context of English language learning. Agustina et. al. (2019) found in her research that students have a positive perception of using jigsaw in teaching speaking skills. This research indicates that jigsaw not only facilitates a more effective and efficient understanding of the material but also provides a more enjoyable learning experience. In line with Agustina's findings, Abdillah et al. (2023) reported similar results in the context of reading instruction. Their research shows that students feel more motivated and engaged in the learning process when using the jigsaw strategy. The aforementioned studies collectively demonstrate the efficacy of the jigsaw strategy in enhancing students' English language learning experiences. Their findings indicate a strong preference among students for collaborative learning environments facilitated by this approach.

Many schools have been implemented the strategy, one of them is MA Al-Hikmah Sirampog. This school has successfully integrated the jigsaw learning strategy into its English language curriculum for the past four years. The choice of this strategy was motivated by the need to address the common challenge of declining student interest and motivation during afternoon English classes. By implementing jigsaw, teachers aim to increase student engagement, foster social interaction, and deepen their understanding of the material. The results of this implementation have shown an increase in student interest, even during less productive times. This indicates that jigsaw is an effective approach in the context of English language learning at this school. While the teacher has reported the success of the jigsaw strategy, the absence of research focusing on students' perspectives leaves a gap in our comprehensive understanding of this method's effectiveness at MA Al-Hikmah Sirampog. This study aims to fill this gap by answering the question: "How do students perceive the implementation of the jigsaw strategy in the context of English language learning at this school?".

## **LITERATURE REVIEW**

### **Students' Perception**

How individuals perceive events significantly influences their judgments, including their views on education. According to Sahin (2011), students' perceptions of their learning experiences can impact their decision to attend a particular institution. Moreover, these perceptions can indirectly contribute to academic success. While Remali et al., (2018) found that learning styles do not necessarily determine academic achievement, they emphasized the importance of considering students' individual perspectives when designing learning experiences. Students should be empowered to choose courses that align with their perceived needs and goals. Haman et al. further categorized learning perceptions into three primary dimensions: challenge, interest, and delivery method.

### **Jigsaw Strategy**

Jigsaw learning is a collaborative approach that encourages students to share information and build a complete understanding together. By working in groups and becoming experts on specific parts of a topic, students actively participate in the learning process. According to Sahin (2011), this method can help students feel more confident and engaged in their roles as learners. Jigsaw is a cooperative learning strategy that involves group interdependence. Students share specialized information to collectively construct a complete understanding of a topic. This approach, as described by Brown (2003) and echoed by Haryudin and Argawati (2018), fosters collaboration and accountability among learners.

Cooperative learning encompasses a variety of strategies, including Jigsaw, Structural Approach, Group Investigation, Student Team Investigation, and Curriculum Packages. However, Jigsaw has emerged as a particularly popular and adaptable method due to its flexibility and versatility (Musriza et.al, 2021).

Effective jigsaw implementation relies on five key components: individual responsibility, group interaction, promoting positive interdependence, teaching interpersonal skills, and reflecting on group processes. Research consistently demonstrates that cooperative learning, including Jigsaw, enhances academic performance, critical thinking, problem-solving, and social skills while reducing anxiety and boosting self-esteem.

The jigsaw method offers a multitude of benefits for classroom learning. By taking ownership of their education, students become more deeply engaged with the subject matter, fostering a comprehensive understanding. Furthermore, jigsaw promotes the development of essential life skills, such as communication and time management, through collaborative group work. This approach encourages dialogue, cooperation, and independent learning. As students work together, they refine their questioning, feedback, and critical thinking abilities. Ultimately, the jigsaw strategy has been shown to enhance students' cognitive skills, particularly problem-solving and analysis, leading to improved academic performance.

The jigsaw approach offers a multitude of benefits for classroom instruction. Primarily, it empowers students to take ownership of their learning, thereby fostering a deeper and more comprehensive understanding of the subject matter. Active engagement in the learning process, facilitated by the jigsaw method, is instrumental in constructing robust knowledge.

Beyond cognitive gains, the jigsaw strategy cultivates essential interpersonal skills. Collaborative group work promotes effective communication, time management, and teamwork. Moreover, it provides a platform for students to develop critical thinking and problem-solving abilities as they synthesize information from diverse perspectives and articulate their ideas clearly. By engaging in peer-to-peer instruction, students enhance their communication skills, including questioning, clarifying, and providing constructive feedback.

## **METHOD**

This study employed a mixed-methods approach, combining quantitative and qualitative research designs (Creswell & Creswell 2018). A sequential explanatory strategy was adopted, whereby quantitative data were collected and analyzed initially, followed by qualitative inquiry to provide deeper insights. A questionnaire was administered to gather quantitative information about participants' attitudes, opinions, and behaviors. Subsequently, interviews were conducted to elucidate and expand upon the quantitative findings.

To investigate students' perceptions of jigsaw strategy implementation at MA Al-Hikmah 1 and its impact on English language learning, a questionnaire-based survey was conducted. Data was collected from 75 students across three classes (X IPA1, X IPS1, X Excellent) over a three-week period (October 10-31). A structured questionnaire, adapted from Mahdum, Hadriyana, & Safitri (2019), was employed. The questionnaire consisted of ten closed-ended items using a Likert scale ranging from Strongly Agree to Strongly Disagree to measure students' attitudes. The questionnaire was translated into Indonesian

to enhance clarity and comprehension. The framework of the questionnaire is showed below.

**Table 1. Framework of jigsaw questionnaire**

No.	Indicators	Questionnaire
1.	Encouraging learning using a jigsaw strategy.	Learning is done using an exciting jigsaw strategy. Using the jigsaw strategy is fun. This learning is following the learning I want.
2.	Actively exchange opinions and active in-class learning.	Jigsaw strategy learning encourages you to work together with friends. Students are not afraid to ask questions and share in discussions.
3.	How can this problem be solved.	Learning using the jigsaw strategy is easy to understand. English subjects have many benefits for everyday life. When given a task, I do it with full responsibility. Jigsaw learning with the previous learning strategy did not affect my interest in learning English.
4.	Discuss in groups to understand the whole material in its entirety.	English is a subject that I like. I can follow the way of learning by utilizing this new strategy (strategy jigsaw). I feel happy if English lessons can be done by studying in groups with peers. While learning English using the jigsaw strategy, I became more active in learning activities because I found the teaching interesting.
5.	Analyzing learning materials.	I am able to understand the strengths and weaknesses of friends in the group. The media used can help to understand the material being explained. I feel I have a lot of new information with this jigsaw learning strategy.

To complement the quantitative data and delve deeper into students' perceptions of the jigsaw strategy, semi-structured interviews were conducted. These interviews were based on a purposive sample of four participants selected from the questionnaire respondents. Data was collected through face-to-face or telephone interviews, with the flexibility for group discussions if necessary. The interview guide was adapted from the questionnaire to elicit detailed information about students' experiences with the jigsaw strategy. Interviews were conducted in Indonesian to facilitate open and in-depth responses.

This study adopted a sequential explanatory mixed-methods design, collecting and analyzing quantitative data initially, followed by qualitative data to provide deeper insights. The quantitative findings were subsequently integrated with the qualitative results to form a comprehensive understanding. Quantitative data were analyzed using descriptive statistics, specifically frequencies and percentages, calculated using Ms Excel. While, qualitative data analysis employed thematic analysis, involving initial, axial, and selective coding to identify key themes. Interview transcripts were manually analyzed to

extract and categorize data related to students' professional development, competence, and digital literacy.

## **FINDINGS AND DISCUSSION**

This chapter presents the findings of a study investigating students' perceptions of the jigsaw strategy in English language learning at MA Al Hikmah 1 Benda Sirampog School, Brebes Regency. The research question guiding this study was: "How do students perceive the implementation of the jigsaw strategy in the context of English language learning at this school?"

Data were collected through a questionnaire administered to all 75 grade 10 students. To gain deeper insights, five students were randomly selected for follow-up interviews. These participants are hereafter referred to as R1, R2, R3, R4, and R5. Quantitative analysis of the questionnaire revealed an overall positive perception of the jigsaw strategy, with a mean score of 72.5 out of a possible 100, and a range of 55 to 87.5.

### **Students' Perception on Jigsaw Strategy**

The results of this study are explained comprehensively by formulating several major themes that represent perceptions, namely: encouraging learning with the jigsaw strategy, actively exchanging opinions in active learning in the classroom, how can this problem be solved? discussing in groups to understand all the material in its entirety, analyzing learning materials.

#### ***Encouraging Learning Using a Jigsaw Strategy***

*a. Learning is done using an exciting jigsaw strategy.*

Quantitative findings revealed that the majority of students (78%) perceived the jigsaw strategy as easy to understand. These results were corroborated by qualitative data, with participants expressing positive views about the strategy's clarity and efficiency. Students reported that collaborative learning facilitated comprehension, reduced task completion time, and fostered mutual understanding. It is proved by this following statement:

Excerpt 1

When we do the exercise in group, we feel more confident. (Student 1)

The study demonstrated that the jigsaw technique significantly enhanced students' understanding of core concepts. By observing peers' diverse learning approaches, students were able to adapt their own strategies effectively. These findings align with the notion that cooperative learning paradigms can deepen comprehension in complex subjects within higher education (Asif et al., 2012).

*b. Using the jigsaw strategy is fun.*

The majority of students found the jigsaw strategy enjoyable, with 77% expressing positive attitudes. Qualitative data corroborated these findings, with participants citing novelty and ease of understanding as key factors contributing to their enjoyment. The interviewee comment:

Excerpt 2

It's such a fun activity when we do it together in group. (Student 3)

To enhance engagement, instructional games can be integrated into learning activities. These experiential learning opportunities foster critical thinking and problem-solving skills. A guessing game, for example, can stimulate language and cognitive processes.

Interview participants emphasized the jigsaw strategy's effectiveness at the MA level, suggesting adaptations to materials to ensure equitable learning experiences. Beyond cognitive benefits, the strategy promoted speaking skills through student presentations and discussions. Overall, the jigsaw method emerged as an engaging and effective cooperative learning approach that fosters communication and critical thinking (Suspartianan, 2022; Alfaruqy, 2021).

*c. Learning is following the teaching I want.*

Student responses to item nine indicated a moderate level of agreement (63%) that the jigsaw strategy facilitated learning. While a majority expressed positive views, a significant portion remained neutral, suggesting a need for further clarification. Interview data supported this, with some participants expressing confusion about the jigsaw process. The result of interview show:

*Excerpt 3*

Because it improves learning outcomes, improves memory, can be used to achieve a high level of reasoning, encourages the growth of intrinsic motivation (individual awareness). (Student 4)

Although the jigsaw strategy demonstrated potential for enhancing student learning, the results also highlight the importance of clear instructional guidance (Asif, 2012). While many students found the strategy engaging, a lack of detailed explanations contributed to mixed perceptions. These findings align with broader research indicating the effectiveness of active learning strategies, such as jigsaw, in various disciplines, including health professional education.

***Actively Exchange Opinions Active In-Class Learning***

*a. Jigsaw strategy learning encourages you to work together with friends.*

A substantial majority of students (81%) reported increased confidence in discussing topics after implementing the jigsaw strategy. This finding was corroborated by the questionnaire data, which indicated that the strategy fostered cooperation and self-assurance among students. This result was supported by the interviews' result:

*Excerpt 4*

We must prepare to teach and share the subject with other group members in addition to learning the assigned material and we happy to do that. (Student 3)

The results suggest that the jigsaw method can significantly enhance students' confidence and engagement in the learning process. By creating a collaborative environment and providing opportunities for active participation, the jigsaw strategy empowers students to take ownership of their learning (Efendi-Hasibuan, et.al. (2020). Johnson & Johnson (1994) explained, effective teacher facilitation, incorporating diverse learning resources, and creating a supportive

classroom atmosphere are crucial to maximizing the benefits of this approach.

- b. *Students are not afraid to ask questions and share in discussions.*

A significant majority of students (75%) reported feeling comfortable asking questions and participating in class discussions when using the jigsaw strategy. Questionnaire and interview data supported these findings, indicating a positive correlation between the jigsaw method and increased student engagement. It can be proved by the following interview excerpt:

Excerpt 5

Because we do activities in group, it is possible for us to ask anyone including the teacher without afraid" (Student 2)

The jigsaw approach fosters a collaborative learning environment where students actively seek clarification and share knowledge. This aligns with the principles of discussion-based learning, which emphasizes problem-solving and critical thinking skills. By encouraging peer-to-peer interaction, the jigsaw strategy empowers students to become active participants in their learning process (Refai, 2012; Islam 2020).

### ***How Can This Problem Be Solved?***

- a. *Learning using the jigsaw strategy is easy to understand.*

Students demonstrated a moderate level of agreement (70%) regarding the jigsaw strategy's effectiveness in enhancing learning. While a majority found the approach beneficial, a significant proportion expressed uncertainty, suggesting a need for improved instructional clarity.

Regarding the strategy's perceived engagement, results were mixed. While a considerable number of students found the jigsaw approach interesting, a substantial portion remained neutral, indicating potential limitations in its implementation. Interview data revealed challenges in adapting the strategy to different age groups and student learning styles. It is proved by the interview excerpt below

Excerpt 6

We in the team independently utilize learning resources to understand the subject matter. Furthermore, we engage in collaborative learning activities such as tutorials, quizzes, and discussions to strengthen understanding and share knowledge. (Student 1)

To maximize the effectiveness of the jigsaw strategy, it is essential to provide explicit guidance and support to students. By carefully considering student needs and tailoring the approach accordingly, educators can enhance student engagement and learning outcomes (Islam, 2020).

- b. *English subjects have many benefits for everyday life.*

A substantial majority of students (78%) perceived the jigsaw strategy as beneficial for improving English language skills and real-world applications. While positive attitudes predominated, a notable proportion of students expressed neutrality, indicating a need for further exploration of the strategy's impact. The

interview result said:

Excerpt 7

So far, I haven't seen many benefits in my daily life because I live in a village where Javanese is the first language, and English is a foreign language. There are no tourists, and I haven't worked unless I was accepted as an assistant tour guide in Bali. But there are definitely benefits, but I think it's more about the benefits in the field of work. It is difficult to apply English in the village. Moreover, we prospective English teachers must definitely be able to speak English, and the benefits will be felt by students. (Student 2)

The jigsaw method's emphasis on peer interaction and collaboration was recognized as a key strength. However, challenges related to individual learning styles and teacher implementation emerged. Effective jigsaw implementation requires careful consideration of student diversity and the provision of clear guidance to ensure optimal outcomes (Faculty et.al., 2022).

Cooperative learning, including the jigsaw strategy, offers a framework for promoting student engagement, problem-solving, and critical thinking. By incorporating elements of group objectives, individual accountability, and opportunities for success, educators can create effective learning environments that cater to diverse student needs.

*c. When given a task, I do it with full responsibility.*

A majority of students (73%) reported a strong sense of responsibility and commitment to their tasks when using the jigsaw strategy. While generally enthusiastic about the approach, a portion of the student body expressed mixed feelings, indicating potential areas for improvement. This quantitative result is supported by the qualitative result, where the students happy to do the activities like what they say by this following interview excerpt

Excerpt 8

Yes, I will work with full responsibility because if I do it seriously, I will indirectly understand the material. (Student 5)

The study revealed that students who actively engaged with the jigsaw strategy demonstrated increased understanding of the subject matter. However, the effectiveness of the strategy was contingent on clear task instructions, appropriate workload, and effective teacher guidance. To optimize student learning, it is essential to balance individual and group accountability, while fostering a sense of ownership over the learning process (Efendi-Hasibuan, et.al., 2020).

*d. Jigsaw learning with the previous learning strategy did not affect my interest in learning English.*

A significant majority of students (54%) expressed dissatisfaction with traditional, teacher-centered instruction, indicating a desire for more engaging learning experiences. There was a general consensus among students that innovative teaching strategies, such as the jigsaw method, could enhance their understanding of English. It is proved by the interview excerpt.

Excerpt 9

Depends; if the previous learning focused on the student's center, of course, it would maintain interest, but if it focused on the teacher center, it might increase interest too, although not like in the first option. (Student 2)

However, the implementation of the jigsaw strategy encountered initial resistance due to its novelty and the students' familiarity with more traditional approaches. The collaborative nature of the jigsaw method, requiring students to work in small groups and share expertise, presented challenges for some learners (Alfaruqy, 2021).

Despite these obstacles, the jigsaw technique offers potential benefits, including increased student engagement and opportunities for peer-to-peer learning. To maximize the effectiveness of the jigsaw strategy, careful planning and implementation are essential to address students' initial concerns and build their confidence in collaborative learning.

***Discuss in Groups to Understand the Whole Material in Its Entirety***

*a. English is A Subject that I Like*

Student attitudes towards English lessons were mixed, with a moderate level of interest (65% positive responses). Many students expressed difficulties in learning English, suggesting a need for more engaging teaching methods. One of the students said:

Excerpt 10

Neutral because I like math, and English makes me feel less confident because many of my peers are better at it but by learning English through jigsaw, I feel my English better. (Student 1)

The jigsaw strategy offers a potential solution by transforming the classroom into a collaborative learning environment. Through group interaction and knowledge sharing, students can develop a deeper understanding of the subject matter (Alfaruqy, 2021; Islam 2020). This approach can also enhance motivation and enjoyment of learning English.

*b. I can follow the way of learning by utilizing this new strategy.*

A majority of students (67%) agreed that the jigsaw strategy enhanced their understanding of the subject matter. This cooperative learning approach involves dividing content into segments, which students then master and share with their peers. By actively engaging in both learning and teaching, students develop a deeper comprehension of the material. One of the interviewees explained

Excerpt 11

I myself do not understand how the jigsaw strategy works in practice. Maybe if it was explained before the lesson, but I like this strategy because we can do everything in group. (Student 3)

Successful jigsaw implementation relies on effective teacher guidance and strong student collaboration. Students must be committed to sharing knowledge and supporting their peers. While the strategy may initially present challenges, its potential for improving learning outcomes is significant.

- c. *I feel happy if English lessons can be done by studying in groups with peers.*

A substantial majority of students (76%) expressed a strong preference for collaborative learning environments. The results indicate that group-based learning activities, such as the jigsaw strategy, align with students' preferred learning styles and can potentially enhance their overall educational experience.

Excerpt 12

I feel happy if learning English is done in groups so that we can exchange ideas and increase knowledge. (Student 1)

This finding supports the notion that social interaction and peer-to-peer learning are crucial components of effective language instruction (Tuanany, 2019; Syafii, 2020; Suspartiana, 2022).

- d. *While learning English using the jigsaw strategy, I became more active in learning activities because I found the teaching interesting.*

A significant majority of teachers (73%) reported that the jigsaw strategy enhanced the overall enjoyment and engagement of their students. While the effectiveness of jigsaw implementation can vary, the findings suggest that when implemented effectively, it can create a more dynamic and stimulating learning environment. The qualitative data showed by the following interview excerpt

Excerpt 13

Of course, because it can increase self-confidence to learn English and further improve communication between peers. (Student 5)

Interview data corroborated these findings, with participants emphasizing the positive impact of jigsaw on student confidence and knowledge acquisition. These results align with previous research by Alfaruqy (2021); Sahin (2011); Refai (2012), which demonstrated the efficacy of jigsaw and peer tutoring strategies in improving student outcomes.

- e. *I am able to understand the strengths and weaknesses of friends in the group.*

A substantial majority of students (78%) reported recognizing both the benefits and drawbacks of group collaboration. This suggests a mature understanding of the dynamics involved in peer learning.

Excerpt 14

Daily classroom interactions provide opportunities to develop an understanding of classmates' personalities. When working in groups, these individual characteristics become more apparent. For instance, one group member might excel in neat and organized written work but be reserved in discussions. Another might demonstrate strong leadership and creativity but struggle with impatience and self-control. These contrasting attributes are inevitable in group settings. (Student 2)

Peer groups serve as essential developmental contexts, offering opportunities for social interaction, skill development, and identity formation. While lacking formal structure, they foster a sense of belonging and shared

responsibility. The jigsaw method effectively leverages these group dynamics by creating structured opportunities for peer-to-peer learning and support (Oluwakemi, 2021).

Research on peer learning underscores the importance of peer leaders in facilitating student success. By acting as both intellectual and social role models, peer leaders can significantly enhance student engagement and learning outcomes. The jigsaw method aligns with this perspective by promoting collaborative learning and the development of interpersonal skills.

### **Analyzing Learning Materials**

- a. *The media used can help to understand the material being explained.*

A moderate level of agreement (69%) was found regarding the importance of media in enhancing learning. While students recognized the potential of media to facilitate understanding, the integration of media within the jigsaw framework presented challenges. The study revealed a preference for traditional teaching methods among some students, potentially due to a lack of familiarity with technology or specific media integration strategies.

Excerpt 15

Yes, because the appropriate media will affect our understanding in comprehending the subjects we get. (Student 1)

Despite these challenges, the jigsaw classroom demonstrated potential for fostering critical thinking and timely task completion (Asif, 2021). These findings align with previous research highlighting the positive impact of cooperative learning environments on student outcomes.

- b. *I feel I have a lot of new information with this jigsaw learning strategy.*

A significant majority of students (73%) reported that the jigsaw strategy fostered a more engaging and interactive learning environment. By providing opportunities for student-centered discussion and presentation, the jigsaw method shifted the classroom dynamic from passive to active learning. This collaborative approach encouraged peer interaction, knowledge sharing, and the development of interpersonal skills.

Excerpt 16

Yes, because the information obtained is not only from one or two people, but we can get information from people who are in the same group. (Student 2)

The jigsaw strategy's emphasis on group accountability and shared responsibility aligned with the principles of cooperative learning (Handayani et al., 2022). By working together to achieve common goals, students developed a sense of belonging and mutual support. This collaborative environment has the potential to enhance students' listening skills through peer interaction and information sharing.

### **CONCLUSION**

Jigsaw Strategy is one of the most popular cooperative learning and teaching strategies nowadays. There have been many studies that have shown positive results

related to the implementation of the jigsaw strategy. The findings of this study indicate that tenth-grade students at MA Al-Hikmah 1 Brebes generally hold positive perceptions of the jigsaw strategy. This is shown by the percentage of the questionnaire results of 72,5% obtained from 75 respondents and 16 statements from 5 indicators, namely: encouraging jigsaw strategy learning, actively exchanging opinions during active in-class learning, can formulate problems, discussing in groups, and understanding the entire material. Students reported increased understanding of subject matter and a more engaging learning experience. However, the successful implementation of the jigsaw strategy was hindered by various challenges.

Insufficient school resources, limited teacher training, and time constraints posed significant obstacles to effective strategy integration. Additionally, student disengagement, often attributed to scheduling conflicts and fatigue, impacted the overall implementation process.

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