.

Exploring Senior High School Students' Engagement In Jigsaw Vocabulary Classroom

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INTRODUCTION

Some students percieve that English is often as a crucial language (Kusnandar & Ikmal, 2017). Acquiring proficiency in English is essential for effective communication and seamless interaction with individuals from different countries and cultures during international travel or when engaging with foreigners (Rahmawati, 2021). Given the significance of English as a global language, individuals eagerly pursue the acquisition of this language (Khoshsima & Saed, 2016). Vocabulary serves as the fundamental basis for acquiring language skills (Teng, 2021). Language plays a crucial role as a basis for communication, a mirror of social reality, a catalyst for emotions, and a predictor of academic achievement (Dakhi & Fitria, 2019). To effectively communicate in a language, individuals must possess a comprehensive knowledge and command of its vocabulary, which enables them to comprehend and utilize the language accurately (Rahmawati, 2021).

Nevertheless, kids faced several challenges when acquiring vocabulary. An issue develops when students endeavor to translate a book without fully understanding the language (Hariyanto & Wulandari, 2019). Moreover, students often encounter challenges in comprehending specialized vocabulary and analyzing written or spoken discourse (Hariyanto & Wulandari, 2019). Teng (2021) suggests that a common reason for students' failure to achieve their vocabulary-related objectives is the absence of assistance in comprehending verbal and written discourse. In addition, several students lack comprehension of the importance of acquiring vocabulary outside of the classroom, whereas others need to develop self-directed learning skills by utilizing various resources or kinds

of linguistic input (Teng, 2021). The lack of vocabulary proficiency among Indonesian students is a pressing issue, and their quest for efficient methods to enhance vocabulary acquisition is growing more intense (Hanifa, 2013).

Conversely, students exhibit a preference for engaging in discussions with their peers as opposed to their teachers due to a heightened sense of ease and freedom in sharing personal anecdotes and viewpoints with friends. Consequently, students demonstrate a preference for cooperative learning over solo learning (Rahmawati, 2021).

Proficiency in vocabulary is crucial for English language instruction as it enables pupils to comprehend others and articulate their own perspectives (Hariyanto & Wulandari, 2019; Lessard-Clouston, 2013, 2021).

The comprehension of vocabulary on a daily basis relies heavily on the precise definitions of individual words (Robinson, 2000). Vocabulary teaching facilitates students' comprehension and communication in the English language (Lessard-Clouston, 2021). Moreover, as students enhance their proficiency and eloquence in English, it is crucial for them to acquire a broader range of useful vocabulary and develop their own personalized strategies for learning new words (Lessard-Clouston, 2021). Acquiring vocabulary is crucial and has numerous advantages, like expanding one's lexical repertoire (Nurdini & Marlina, 2017), fostering students' independence (Hanifa, 2013), facilitating movie comprehension (Schmitt & Schmitt, 2014), and cultivating literacy abilities (Schmitt & Schmitt, 2014).

Cooperative learning, a learning approach, has been applied in classroom settings by Abuhamda et al. (2020), Abed (2019), Esnawy (2016), and Toyokawa et al., (2021). Cooperative learning is a prospective instructional approach wherein learners strive to employ both personal and social abilities to achieve shared learning objectives within a group (Toyokawa et al., 2021). The cooperative learning model encompasses various varieties, one of which is the Jigsaw method (Abuhamda et al., 2021). Utilizing the Jigsaw method in the classroom is an effective strategy for promoting cooperative learning among students (Saputra et al., 2019).

The implementation of Jigsaw as a cooperative learning technique in language acquisition has garnered significant attention from multiple scholars. Dewi (2020) conducted a study to examine the empirical evidence regarding the effectiveness of the Word Jigsaw strategy on students' achievement in vocabulary for descriptive text. Siregar & Girsang, (2020) investigated the impact of using the jigsaw technique on students' vocabulary ability. Khakim & Anwar (2020) aimed to determine the improvement in students' vocabulary acquired through the Jigsaw method. Rahmawati (2021) explored the effectiveness of the teaching technique called Jigsaw in enhancing students' mastery of vocabulary. Umam (2021) examined the effect of the Jigsaw technique on improving students' vocabulary. Anggraini (2022) investigated the use of Jigsaw learning strategies to develop students' vocabulary. Lastly, Dayem et al. (2023) explored the engagement of students in learning vocabulary through the jigsaw method.

While there has been some research on vocabulary, there is currently a lack of evidence on students' involvement in learning vocabulary with the Jigsaw

method. Hence, the purpose of this study was to investigate student involvement in the acquisition of vocabulary using the Jigsaw techniqu.

METHODS

This study used a case analysis that specifically examines the students' involvement in Vocabulary Learning through the use of the Jigsaw exercise. The study comprises a total of six individuals. The participants were selected based on specific criteria, including their participation in the PBI (Purity Based of Islam) program. Purity Based of Islam is an organization that facilitates the transmission and safeguarding of Islamic religious principles via the use of foreign languages. This study included the participants in four class sessions. The sequence of gatherings comprised of an initial introductory meeting followed by three subsequent discussion meetings. This investigation was conducted at a vocational school in Karawang. This study included observation and interviews to gather data on student participation.

The observation was conducted by closely monitoring the participants' discussion activities in the classroom. Subsequently, the researchers captured the photograph while engaged in the process of conversation. The researchers utilized field notes to ascertain the process of debate. The study was done over a period of one month, with one meeting taking place each week. Subsequently, the interview took place once the learning process had been over. The interview procedure was conducted through direct, in-person interactions with each participant. The interview questions were conducted in Indonesian language to facilitate participants' comprehension of the questions' intended meaning.

RESULTS & DISCUSSION
Results
Students Engagement in Vocabulary Learning through Jigsaw Activity

There are three categories of engagement Behavioural Engagement, Emotional Engagement, and Cognitive Engagement (Fredricks et al. 2004), Of the them, the researchers selected Behavioural Engagement and Cognitive Engagement as the focal points of this study in order to examine the extent of student participation and willingness to engage in vocabulary learning through the Jigsaw exercise.

1. Students Behavioral Engagement

Through observations conducted throughout three learning sessions, it was determined that the students exhibited a favourable level of involvement with the learning activity. In this instance, the extent of student involvement was centred on the exchanges that took place among fellow students. Moreover, the analysis of student's participation, as reflected in their behaviour, was evident in the interactions observed during the Jigsaw activity discussion. Active student engagement can be observed through several markers, such as actively participating in discussions by replying to a peer's inquiry and contributing ideas (Ertel, 2021).

In this study, the researchers created a name tag for the students to facilitate their identification of their respective groups during the debate process. Subsequently, before to the discussion phase, the teacher allocated the primary cohort into

groups of five students each. The study consisted of seven primary groups, including the Alamanda Group, Akasia Group, Anyelir Group, Anggrek Group, Aster Group, Bougenville Group, and Camelia Group. Every individual inside the primary collective possessed a numerical identifier. This was the numerical designation of the expert group. Subsequently, while the students were still in their respective home groups, the teacher elucidated that each expert group would be assigned a novel vocabulary word and collaborate to accumulate information pertaining to the assigned term. Subsequently, the teacher instructed the students to relocate to their respective specialist groups.

Figure 1. 1 The students select the vocabulary.

In Figure 1.1, the teacher instructed each representative student from the expert group to select terminology. The designated student in the proficient group chose the vocabulary terms that the teacher had prepared. Group 1 in the Expert Group chose the words "Apologies", "Pull", "Language", and "Realise". Group 2 in the Expert Group selected the words "Bully", "Forgave", "Accept", and "Spicy". Group 3 in the Expert Group chose the words "Suggest", "Ashamed", "Prefer", and "Created". Group 4 in the Expert Group selected the words "Enjoy", "Experiment", "Suspicious", and "Destroy". Lastly, Group 5 in the Expert Group chose the words "Mean", "Wet", "Quarrel", and "Property."

Figure 1. 2 The discussion process of Expert group in Jigsaw activity

Following the students' selection of terminology, the teacher instructed them to return to their respective expert groups. Furthermore, the teacher provided the pupils with directions to determine the word's grammatical category, consult the dictionary for its precise meaning, and compose sentences that incorporate the word. Figure 1.2 illustrates that the students engaged in a discussion regarding determining the word's part of speech, consulting the word's dictionary meaning, and composing sentences that incorporated the word. The pupils utilised a dictionary to facilitate their discourse. Subsequently, the instructor instructed the students that during their time in their specialised group, they would moreover be had to contemplate the manner in which they would convey the information to the members of their primary group.

Figure 1. 3 The discussion process of
Main group in Jigsaw activity

Furthermore, the teacher ınstructed the kıds to return to the primary collective. In addition, the teacher requested that pupils discuss the newly acquired terminology from their expert groups. Figure 1.3 depicts the pupils encountering their peers within the primary groups. Within the primary cohort, the students disseminated their newly acquired lexicon among their peers.

Subsequently, the teacher distributed a vocabulary graphic organiser to the pupils, who proceeded to record all the newly introduced vocabulary in the organiser. In order to enhance the reliability of the collected data, the study included a visual representation of students' vocabulary acquisition using a Jigsaw activity in Table 1.1

Table 1. 1 Sample of Vocabulary Graphic Organizer.

No.	Word	Part of Speech	Meaning	Example
1	apologize	verb (t)	meminta maaf	I apologize to family.
2	pull	verb (t)	mencari	I pull the door.
3	wet	adjective	basah	Their carpet was wet.
4	mean	verb	berarti	This could mean trouble.
5	bully	verb	menggertak	Lina bullies me in the class.
6	forgave	verb	memaafkan	I forgave Lin's mistake.
7	enjoy	verb (t)	bersenang-senang	Musically there is a lot to enjoy.

8	experiment	noun	percobaan	I do experiments from leaves.
9	suggest	verb	menyarankan	When I bringing up weapon, my commander was suggesting me for grabbing it with my couple hands only.
10	ashamed	adjective	malu	My pad Ashamed, when I counted up to 10 he knew it wasn't 30.
11	language	noun	bahasa	I like to study language.
12	accept	verb	menerima	I would like to accept her confession directly.
13	prefer	verb	memilih	I prefer eat to make a food.
14	suspicious	adjective	mencurigakan	One of my friend's so suspicious.
15	quarrel	verb	pertengkaran	There is quarrel in about me and Aldi.
16	realize	verb (t)	sadar	I realize that she is mocking at me.
17	spicy	adjective	pedas	Yesterday, I ate a spicy food it made me stomach.
18	created	verb (t)	membuat	Yesterday I created a video.
19	destroy	verb (t)	menghancurkan	Yesterday, husnan tried to destroy a building by using tank.
20	property	noun (t)	properti	This book is the property of Brian.

Subsequently, utilising the obtained results, the participants actively engaged in the process of discussing Vocabulary learning through the Jigsaw exercise. The participants demonstrated their understanding of the word's part of speech, its dictionary meaning, and their ability to construct a sentence using the word. They then presented their newly acquired vocabulary with the Main Group after engaging in a discussion within the Expert Group.

Table 1. 2 Students' behavioral engagement in Vocabulary Learning through Jigsaw Activity

Categories	Themes	Examples
Behavior Engagement	Using Jigsaw activity as discussion technique in Vocabulary Learning	Students 1, 2, 3, 5, 6: "In learning using jigsaw activities, it is an activity that allows us to develop each other in terms of interacting with other students in the discussion process." Students 2: "Sharpen, develop and improve vocabulary." Students 2, 4, 6: "Increase cooperation between

		group."
		Students 1 and 3: "Increase insight and knowledge in learning methods."
		Students 3 and 4: "Train to make sentences from the new vocabulary acquired."
		Students 4 and 5: "Increase cohesiveness between group."
		Student 6: "Improve communication skills."
		Student 1: "Understand parts of speech in vocabulary."
	Favorite activity of students in using Jigsaw technique in Vocabulary Learning	Students 5, 6: "I like during the discussion process to make sentences from the vocabulary obtained."
		Students 3: "When doing jigsaw activities, I like the word selection process."
		Students 1, 2: "Looking for meaning from a vocab, because it's challenging and it can increase my hots also my soft skills in translating."
		Student 4: "I like the process of sharing with my friends to correct each other's answers."
		Student 2: "When looking for parts of speech because it can broaden my insight."

According to the data presented in Table 1.2, the majority of students have enhanced their ability to communicate with others while participating in vocabulary learning through the jigsaw exercise. Furthermore, three students reported that the implementation of the Jigsaw activity in vocabulary enhances collaboration among the group. Moreover, two students disclosed that this activity provided them with valuable insight and knowledge regarding learning methodologies. Subsequently, two students articulated that the use of the Jigsaw exercise in vocabulary acquisition facilitated the development of sentence construction skills using the newly acquired vocabulary. In addition, two students disclosed that the Jigsaw activity enhanced the sense of unity within the group.

In addition, the other students claimed that engaging in vocabulary acquisition through the Jigsaw activity enhances students' communication abilities, comprehension of vocabulary's parts of speech, and fosters the expansion and enrichment of their vocabulary. According to the data presented in Table 1.2, the students had a preferred activity when engaging in discussions about Vocabulary learning, specifically the Jigsaw activity. In addition, two students preferred the practice of engaging in discussion to construct sentences using the acquired vocabulary. Subsequently, two students preferred seeking a significance from a vocabulary. The pupils said that the pursuit of meaning is a demanding task that enhances their abilities.

In addition, the other students engage in collaborative sharing to rectify one another's replies, actively seeking for portions of speech as it enhances the students' overall understanding. Ultimately, these responses demonstrate the

behaviours exhibited by pupils in the realm of behaviour. In addition, a pupil enjoys the process of selecting words.

According to the interview conducted with the senior high school's English teacher, the majority of students encountered challenges in acquiring vocabulary proficiency. In order to address the issue, the teacher employed many techniques including the Jigsaw method, reading circles, and auditory approaches such as listening to music and engaging in daily activities to enhance their vocabulary. This instructional method instilled motivation in students and fostered a joyful experience while acquiring vocabulary.

2. Students' Cognitive Engagement

The study investigated student cognitive involvement in vocabulary acquisition utilising the Jigsaw technique through individual interviews to evaluate students' perspectives of their level of participation.

Table 2.1 Categories of students' cognitive engagement in Vocabulary learning

Categories	Themes	Examples
Cognitive Engagement	Action	All students: "Learn to know parts of speech, look for meaning, make sentences from vocabulary and learn to work together in a group."

through Jigsaw Activity

According to the data presented in Table 2.1, the students are actively engaged in the process of discussing. The students engaged in many activities, including identifying the part of speech of vocabulary words, searching for their meanings, and constructing sentences using the newly learned vocabulary in expert groups. Subsequently, the pupils disseminated the information regarding the newly acquired vocabulary within the primary collective. This enables students to comprehend the specific duties they need to do based on the assigned task.

Discussion

This study investigated students' level of involvement in vocabulary acquisition using a Jigsaw activity. The researcher employed field note data and observations to examine the behaviour and cognitive involvement of senior high school students who took part in this study. In addition, the researchers employed interviews to ascertain the reactions of both teachers and students about vocabulary acquisition through the utilisation of a Jigsaw exercise.

The study implemented Jigsaw exercises as a method for vocabulary acquisition. This study demonstrates that implementing the Jigsaw exercise in vocabulary acquisition leads to increased levels of active behavioural engagement and cognitive engagement among students. The findings align with prior research indicating that utilising Jigsaw activities in vocabulary acquisition serves as an effective instructional approach to enhance student participation through collaborative involvement among peers (Ertel, 2021). The study also discovered that engaging in Jigsaw activities during vocabulary acquisition stimulates students to actively engage in communication with their friends by exchanging

their thoughts. Consistent with prior research (Martin & Bolliger, 2018), this finding supports the notion that employing engagement strategies can encourage students to actively contribute their ideas. Additionally, students tend to favour peer discussions over interactions with teachers due to a greater sense of comfort and freedom in expressing their opinions (Rahmawati, 2021).

Furthermore, this study discovered that the implementation of the Jigsaw exercise in vocabulary learning enhances students' acquisition of vocabulary. This results aligns with earlier research studies that have shown that the Jigsaw activity enhances students' vocabulary acquisition(Dayem et al., 2023; Dewi, 2020; Khoshsima & Saed, 2016; Kusnandar & Ikmal, 2017; Nappu & Angraeni, 2017; Neno & Erfiani, 2018; Siregar & Girsang, 2020; Umam, 2021). Subsequently, the students foster cooperation by engaging in group discourse. Furthermore, this aligns with the findings of a previous study by Nappu and Angraeni (2017) which demonstrated that Jigsaw activities enhance collaboration and cooperative skills.

Additionally, it was found by Hu (2016) that these activities foster individual accountability and interdependence among students. Moreover, the utilisation of the Jigsaw technique enhances pupils' knowledge to a greater extent. The findings align with prior research indicating that the implementation of the Jigsaw activity can enhance the level of understanding for individual students (Nappu & Angraeni, 2017). The study also discovered that engaging in Jigsaw activities during vocabulary learning enhances students' communication skills.

Consistent with other research, the Jigsaw exercise fosters student communication to complete missing information and incorporate it with existing knowledge (Namaziandost et al., 2020).
This study unveiled novel insights indicating that the implementation of Jigsaw activity in vocabulary learning enhances students' sentence construction abilities, comprehension of parts of speech in vocabulary, and fosters more cohesiveness among groups. Nevertheless, certain students exhibit lower sensitivity and abstain from participating in the conversation process. These challenges can impact the unity among organisations.

CONCLUSION

The data analysed in the preceding chapter are utilised to present the study's conclusion. The data analysis on the implementation of the jigsaw strategy for vocabulary learning indicates that senior high school students demonstrate active engagement and participation throughout the learning process. The study's findings revealed that the jigsaw method promotes active communication among students through the exchange of ideas. Additionally, it enhances vocabulary acquisition, fosters cooperation through group discussions, enhances student knowledge, and cultivates communication skills.

Furthermore, according to the findings of this study, it can be concluded that students hold a positive perception of the Jigsaw exercise when it comes to acquiring vocabulary. This study demonstrated that the students exhibited high levels of enthusiasm and active participation in the learning activity. Additionally, they displayed a heightened comprehension of the vocabulary and fostered new friendships. The students thoroughly enjoyed and displayed keen interest in the process of acquiring new language.

This study, however, provides more evidence that students who utilise Jigsaw activities for vocabulary acquisition demonstrate enhanced sentence construction abilities, improved comprehension of vocabulary components of speech, and fostered group cohesion. Nevertheless, certain students must exhibit greater sensitivity and actively participate in the process of conversation. These challenges can impact the unity among organizations.

The findings indicate that the utilization of Jigsaw in language acquisition yields several advantages. This document provides English teachers with information on the utilization of the Jigsaw method for enhancing vocabulary acquisition in EFL students. Nevertheless, this research was conducted throughout four meetings. Every meeting has a duration of only 60 minutes.
Hence, it is recommended that the subsequent researcher meticulously consider the duration necessary to execute the learning procedures. It is essential to meticulously schedule the time in order for the researcher to effectively and successfully implement the Jigsaw activity's collaborative approach to acquiring vocabulary.

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