

CHAPTER II

LITERATURE REVIEW

A. Concept of Vocabulary

1. Definition of vocabulary

In language teaching, vocabulary holds equal importance with grammar and pronunciation because students continuously learn and expand their knowledge. A strong vocabulary is essential for effective communication. Vocabulary is one of the most fundamental components in language learning. In linguistics and language teaching, vocabulary is defined as a collection of words that are known, understood, and used by a learner to express ideas and comprehend messages in both oral and written forms. Mastery of vocabulary is not only about the ability to recognize words but also includes a deep understanding of their forms, meanings, functions, and contextual usage. Vocabulary encompasses the words we know and use, as well as terms used by others in specific topics (Tarigan et al., 2024). Having a broad vocabulary facilitates communication and is crucial in language learning (Richard & Renandya in Rusdi, 2002).

In the context of teaching English as a Foreign Language (EFL), vocabulary plays a vital role. (Crismeilani et al., 2025) emphasizes that for young learners, vocabulary learning is the foundational basis for building the four language skills: listening, speaking, reading, and writing. The richer a student's

vocabulary, the higher their ability to understand texts, express ideas, and interact with other speakers. According to Richards and Schmidt (2013) in the Longman Dictionary of Language Teaching and Applied Linguistics, vocabulary is defined as *"a set of lexemes, including single words, compound words, and idioms that form the basis of a language."* This means vocabulary not only includes single words like book or run but also complex expressions like take off, look after, or idioms like once in a blue moon. Thus, mastery of vocabulary involves understanding various lexical forms used in everyday communication. Furthermore, Thornbury (1997) asserts that vocabulary is *"the building blocks of language,"* the basic elements that allow a person to comprehend and produce sentences. Without adequate vocabulary mastery, one cannot understand reading materials, listen well, write effectively, or speak fluently. In other words, vocabulary mastery is a primary requirement for successful communication in a foreign language.

Mastery of vocabulary begins to facilitate our understanding and application of English in communication (Fitria & Muliasari, 2022). Vocabulary learning can be divided into two types: receptive learning and productive learning. Receptive vocabulary is the capacity to recognize words and remember their meanings, while productive vocabulary (productive learning) is the capacity to recognize words and

remember their meanings, as well as the capacity to speak or write at the appropriate time (Dakhi, 2019). From the cognitive psychology perspective, vocabulary also includes mental structures that organize word knowledge in long-term memory. According to Teng 2025, effective vocabulary learning demands high cognitive involvement, meaningful repetition, and the use of independent learning strategies. Thus, the more frequently words are used in various contexts, the stronger their semantic and phonological associations are stored in the learner's memory.

Therefore, vocabulary is very important because it is the main foundation in language learning and usage. A broad and deep mastery of vocabulary allows students to understand, express, and communicate effectively in various contexts, both oral and written. Without adequate vocabulary mastery, language skills such as listening, speaking, reading, and writing cannot develop optimally. Simamora and Oktaviani (2020) state that vocabulary mastery is one of the most important aspects in English.

2. The Importance of Vocabulary

Vocabulary is the most fundamental component in language learning because all language skills : listening, speaking, reading, and writing, greatly depend on how well someone masters the words used in communication. Without sufficient vocabulary mastery, the ability to understand

messages or express ideas will be very limited. Mastery of vocabulary is crucial for learning English because adequate vocabulary knowledge is a basic criterion for English proficiency, and the role of teachers in helping students achieve their goals is important (Hafizhah & Widi, 2022). According to (Oktorinna et al., 2022), vocabulary is one of the essential sub-skills in learning a language to construct sentences, communicate, and improve the four skills: listening, speaking, reading, and writing. A lack of vocabulary is one factor that may contribute to students' laziness in learning languages, especially English.

Nation (2022) explains that vocabulary plays a vital role because it provides the foundation for all language skill aspects. He emphasizes that to become an effective communicator, learners need sufficient knowledge of word forms, meanings, and uses. This knowledge enables learners to understand language input (such as texts and conversations) and produce language output (speaking and writing) correctly.

Thus, vocabulary has a very important role in language learning because it is the basis for all language skills and the core of effective communication. A broad vocabulary allows students to understand messages, express ideas, and actively participate in language interactions. Therefore, in English teaching, vocabulary development must be a primary focus,

involving contextual, interactive, and meaningful learning strategies to optimize students' vocabulary mastery.

3. Types of Vocabulary

Several experts classify vocabulary into two types: **Active vocabulary** and **Passive vocabulary**. Harmer (1991) explains the difference between the two. **Active vocabulary** consists of words that students have learned and are expected to use in communication. Meanwhile, **Passive vocabulary** consists of words that students can recognize when they see or hear them but usually are not yet able to pronounce correctly.

In addition, (Mutmainna, 2023) divides vocabulary into two types: **Receptive Vocabulary** and **Productive Vocabulary**.

- a. **Receptive Vocabulary**, refers to words that a person can understand when reading or hearing them. This means that students know the meaning of a word when it appears in reading or conversation.
- b. **Productive Vocabulary**, refers to words that a person can use in speaking or writing. Mastering this type of vocabulary means that students are able to pronounce the word correctly, write it accurately, spell it, and use it in an appropriate sentence structure.

From the explanation above, it can be concluded that receptive vocabulary is easier for students to master when they frequently hear and read the words. Conversely,

productive vocabulary is easier to understand when students pay attention to sentence patterns and grammar rules so that they can use the words correctly.

Experts also categorize vocabulary into several types. Thornbury (2020) explains that words can be grouped into eight categories:

- 1) Noun: refers to things or objects, for example bits, pieces, records, players.
- 2) Pronoun: includes personal pronouns, possessive pronouns, reflexive, reciprocal, demonstrative, relative, interrogative, and indefinite pronouns, such as I, them.
- 3) Verb: describes actions, for example like, looking, doing, to look.
- 4) Adjective: provides qualities or descriptions to nouns, such as old, second, new.
- 5) Adverb: explains verbs, adjectives, or other adverbs, for example up, cheerfully.
- 6) Preposition: words placed before nouns/pronouns to show relationships among sentence elements, such as for, like.
- 7) Conjunction: connecting words between words or sentences, such as and, or.
- 8) Determiner: words placed before nouns to indicate or identify them, for example my in my boyfriend or that in that strange woman.

From the explanation above, it can be concluded that receptive vocabulary is more easily acquired through frequent exposure to reading and listening activities, whereas productive vocabulary develops through practice using words in sentences and applying grammatical rules. In addition, vocabulary can also be categorized into word classes such as nouns, verbs, adjectives, adverbs, pronouns, prepositions, conjunctions, and determiners. Understanding these types of vocabulary helps teachers determine appropriate learning targets and teaching techniques. Considering the characteristics of the Word Search Puzzle, which emphasizes word recognition activities, this study will focus on receptive vocabulary, particularly basic vocabulary in the form of nouns, verbs, adjectives, and adverbs, as these categories most frequently appear in word search games and are relevant for improving students' ability to recognize and understand word meanings in the context of learning English.

4. Techniques of teaching vocabulary

Teachers must use various techniques in teaching vocabulary to keep students interested. According to (Berthy D. Wattimena, 2022), vocabulary comprehension becomes more effective if the meaning of words is shown using visual media, body language, or direct objects. To increase the effectiveness of vocabulary teaching, teachers apply various approaches in

the classroom. According to (Lubis, 2021), vocabulary teaching strategies can be grouped into three main types:

a. Formal Practice: This approach focuses on regular practice activities and systematic repetition of vocabulary. The goal is for students to use words correctly through activities such as oral repetition or using bilingual dictionaries. This method usually appears in traditional learning guided directly by the teacher. Characteristics include:

- 1) Structured learning with repeated exposure.
- 2) Use of drills, word lists, and looking up meanings in dictionaries.
- 3) Helps improve pronunciation and strengthens memory of vocabulary.
- 4) Dominant in teacher-centered classrooms.

b. Functional Practice: Emphasizes vocabulary learning through real contexts. Instead of memorizing, students learn words through direct experience, authentic language use, and media such as films or conversations. Characteristics include:

- 1) Focus on understanding vocabulary in real situations.
- 2) Developing incidental learning from meaningful language exposure.
- 3) Utilizing media (films, songs, stories) and social interaction.

- 4) Helps students know word meanings associatively, not just translation.
- c. Memorizing: This strategy highlights visual techniques and meaning connections to strengthen vocabulary memory. By linking new words with images, specific concepts, or the first language, students find it easier to remember. Characteristics include:
- 1) Using images, mnemonics, and other memory aids.
 - 2) Connecting new vocabulary with prior knowledge.
 - 3) Facilitating recall through visual association and word categories.

(Wahyudin et al., 2021) explains that mastering vocabulary requires several stages. She mentions five important steps, namely recognizing new words, understanding their forms, knowing their meanings, storing the forms and meanings in memory, and being able to use them. The initial stage begins when students encounter words they have never known before usually words that are difficult to spell, understand, or use. To comprehend these words, students need to move on to the second step, which is paying attention to spelling and pronunciation. The third step is carried out to understand the meaning of the word. The fourth and fifth steps aim to ensure that students truly master the new vocabulary, namely by consolidating its form and meaning in memory and then using it in communication.

Based on the explanation above, it can be concluded that vocabulary learning will be more effective when teachers are able to apply various strategies that are appropriate to students' needs and characteristics. Therefore, the diversity of instructional techniques is essential to maintain students' learning motivation and to enhance vocabulary understanding more effectively throughout the learning process, in which the researcher uses a digital word search puzzle game as a medium for teaching vocabulary.

5. Purpose of Vocabulary

In general, vocabulary plays a crucial role in second language learning. When learners possess limited vocabulary, their ability to communicate effectively is also hindered. Some of the main purposes of vocabulary mastery include conveying thoughts and opinions, expressing ideas in social life, fostering motivation at the early stages of learning, understanding basic vocabulary needed for interaction, and improving the ability to choose appropriate words and expressions.

According to Miller (2020), the objectives of mastering vocabulary are divided into four reasons:

- a. Vocabulary development is directly related to academic achievement.
- b. A child's vocabulary size in kindergarten can predict their reading ability.
- c. Vocabulary helps children think and understand the world.

d. Extensive vocabulary knowledge provides children with unlimited access to new information.

Overall, vocabulary functions as a means of expressing ideas, supporting communication, helping students learn basic words more easily, and assisting them in understanding and remembering vocabulary more effectively.

B. Concept of Word Search

1. Definition of Word Search Puzzle

The Word Search Puzzle is a learning media in the form of a puzzle game that challenges players to find hidden words arranged within a letter grid on a game board. This game usually presents a collection of letters forming a matrix where users search for and mark hidden words. The words can be arranged horizontally (left-right or right-left), vertically (top-bottom or bottom-top), diagonally, and sometimes in certain winding patterns. This Puzzle is often used for entertainment, cognitive recreation (attention and pattern exercise), and also as a vocabulary learning media in classrooms or self-learning platforms. Word Search is a game that is easy for students to play, especially those who are just beginning to learn vocabulary in a foreign language (Alifudin, 2019) This media has considerable educational benefits, and its difficulty level can be adjusted to the students' abilities and needs. The way to play is by finding certain words hidden in a letter box. The words can be arranged horizontally, vertically, or diagonally.

Because the words searched for are mixed with other letters, this game demands students to be more careful, meticulous, and focused while searching.

The Word Search game was originally designed and published by Norman E. Gibat in the Selenby Digest on March 1, 1968, in Norman, Oklahoma. Word search puzzles usually are randomly arranged within a square box. In the box, hidden words can be found horizontally, vertically, and diagonally. The puzzle became very popular and various other versions followed the original design. Some teachers in Norman's schools even requested reprints to use in their classes. One teacher then sent the puzzle to friends in various schools across the country. Undoubtedly, one of the widely spread copies eventually inspired someone to sell the idea to syndicators. This game requires coordination of the eyes, brain, and hands.

Word Search games provide students with an opportunity to learn vocabulary through fun and challenging activities. According to Manurung (2020), using this puzzle media has been proven to help students master vocabulary better while also increasing their motivation to participate in learning. (Rahmat Fachrudin et al., 2024) define word search puzzle media as a form of game presenting word puzzles arranged in letter grids. Therefore, a basic strategy needed to solve this game is recognizing the initial letter of the word to be found

within the letter collection (Marcella & Zulikhatin Nuroh, 2023).

Using word search allows students to actively engage in the vocabulary learning process, enhance memory retention, and help them understand the context of word usage in real life (Lumbanraja et al., 2025). According to Sukstrienwong, the goal of this game is to find words hidden in the letter grid. While searching for words, players read and memorize the words during play, which helps them learn the words and their spelling, letter by letter, in the puzzle. In conclusion, the purpose of the word search puzzle is to enhance students' vocabulary through activities of recalling words, finding hidden words, and spelling letters one by one within the puzzle.

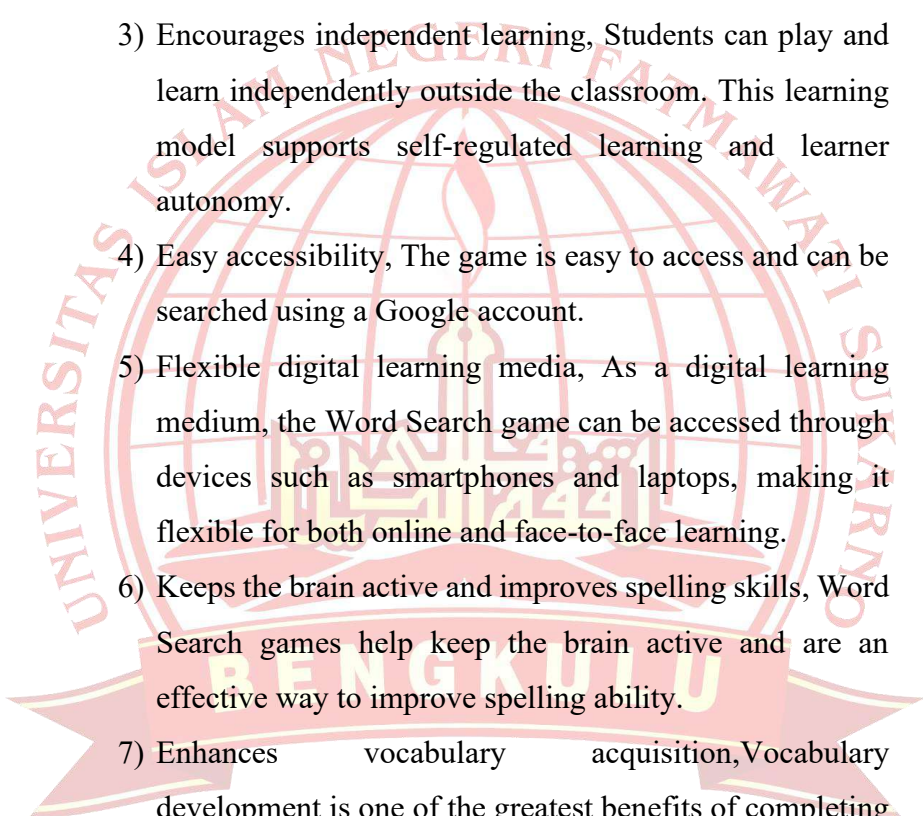
2. Advantages and Disadvantages of the Word Search Puzzle

a. Advantages

The Word Search game is used when teachers aim to encourage students' creativity, because through this type of learning activity, students are expected to match questions with the correct answers found in the puzzle. (Daulay, 2025)

There are several advantages of using the Word Search game as follows:

- 1) Customizable content, Teachers can create their own games based on the desired topics or play existing puzzles by choosing various themes such as animals, food, music, and others.

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- 2) Provides immediate feedback, In digital word search puzzles, correct words are highlighted instantly. This real-time feedback has been proven to accelerate the learning process and help students correct their mistakes independently.
 - 3) Encourages independent learning, Students can play and learn independently outside the classroom. This learning model supports self-regulated learning and learner autonomy.
 - 4) Easy accessibility, The game is easy to access and can be searched using a Google account.
 - 5) Flexible digital learning media, As a digital learning medium, the Word Search game can be accessed through devices such as smartphones and laptops, making it flexible for both online and face-to-face learning.
 - 6) Keeps the brain active and improves spelling skills, Word Search games help keep the brain active and are an effective way to improve spelling ability.
 - 7) Enhances vocabulary acquisition, Vocabulary development is one of the greatest benefits of completing word search puzzles.
 - 8) Develops cognitive skills, Word Search games train the brain to recognize patterns, identify letters, and objects, which are fundamental cognitive skills. In addition, they

also enhance focus and concentration, memory, problem-solving skills, and categorization ability.

Based on the explanation above, the Word Search game is highly beneficial in the process of teaching and learning English, particularly in vocabulary learning. This medium makes students more active in the classroom. Moreover, the strategy is simple and easy to apply, enabling students to understand and enjoy the learning process.

b. Disadvantages

Although Word Search puzzles have many advantages, this medium still has several weaknesses that need to be considered when used as a learning tool. One of the most frequently complained drawbacks is the presence of distracting advertisements, as is common in mobile-based game applications. In addition to the issue of advertisements, the level of difficulty is not very varied. By default, Word Search often only changes the grid size or the direction of the words. There is not always a mechanism to adjust levels according to students' abilities for example, from beginner to advanced (Istarani, 2020)

Furthermore, Word Search does not provide automatic feedback on the meaning or usage of the words, such as definitions, example sentences, or pronunciation audio. This game only requires students to search for and mark words, rather than use them in spoken or written communication.

It also does not provide detailed learning data, where teachers cannot view statistics of each student's mastery, such as how quickly they complete the game or which words are frequently answered incorrectly.

3. Types of Word Puzzle Game

According to (Anggreni, 2017), there are several types of word puzzles. Some of them are as follows :

a. Word Search Puzzle

This puzzle consists of a grid of letters, usually arranged in a square or rectangular shape. The player's task is to find and highlight hidden words located within the grid. The main objective is to locate all the concealed words that appear in various directions.

Figure 2.1 Word Search Puzzle



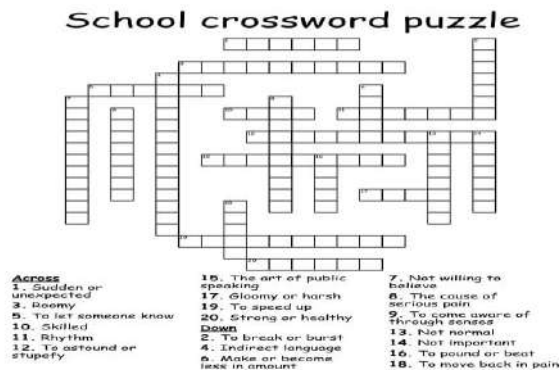
Source: <https://www.treevalleyacademy.com>

b. Crossword Puzzle

This type of puzzle consists of white and black squares arranged in a grid. The player must fill the white squares with letters that form words or phrases according to the given

clues. In languages written from left to right, the answers are typically filled in from left to right and from top to bottom. The black squares function as separators between the words.

Figure 2.2 Crossword Puzzle

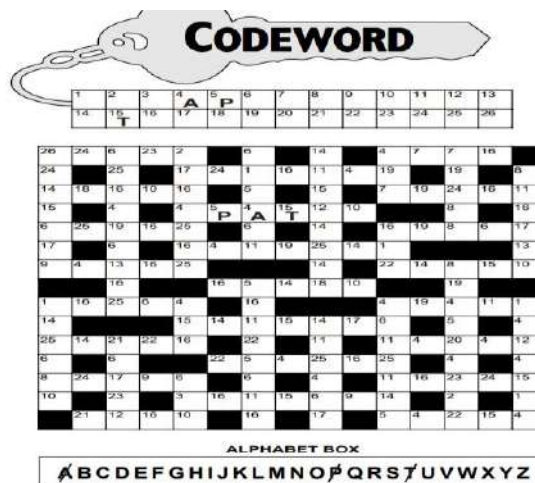


Source : https://wordmint.com/public_puzzles/

c. Code Word Puzzle

In this puzzle, players are asked to complete words similar to a crossword, but without clues. Each letter of the alphabet is replaced with a number from 1 to 26. Usually, only one word is already filled in as an initial hint, and from there, players must guess the remaining letters to complete all the words.

Figure 2.3 Code Word Puzzle



Source : <https://puzzculture.com/tag/codeword/>

In this study, the type of game used is a word search, an educational game Puzzle available on the Google and designed to help users find hidden words within a letter grid. Students are required to locate hidden words arranged horizontally, vertically, or diagonally. The words to be found are predetermined as the target vocabulary for learning. The Puzzle is designed to help students recognize word forms, improve focus and accuracy, and strengthen memory through the visual activity of searching for and marking words. With its interactive and enjoyable nature, this word search Puzzle is used as a tool to enhance students' vocabulary mastery, particularly in terms of word recognition (receptive vocabulary) and spelling reinforcement. This Puzzle was chosen because it has a simple interface, is easy for junior high school students to use.

4. Purposes and Benefits of Using Word Search

a. Purposes

The purpose of using Word Search Puzzles is directly related to the development of students' vocabulary. According to Vossoughi, Word Search Puzzles are games that help students find hidden words arranged in various directions, such as vertically, horizontally, and diagonally. This type of game not only expands vocabulary mastery but also makes the learning process more enjoyable. Meanwhile, Sukstrienwong (2021) explains that the essence of this game is to find words within a grid of letters. While searching for words, students read, recall, and spell each letter. This process supports students in understanding word forms and strengthens both their spelling skills and vocabulary.

Overall, the main goal of Word Search Puzzles is to help students improve their vocabulary mastery by engaging in activities that involve finding hidden words, recalling word forms, and gradually practicing letter spelling.

b. Benefits

Several benefits of using Word Search Puzzle/games for improving students' vocabulary are as follows:

- 1) Significantly improves vocabulary mastery

In the study “*The Effect of Word Search Puzzle Games on the Vocabulary of Sixth-Grade Students*” it was found that the students’ average vocabulary scores increased from 54.00 (pre-test) to 82.00 (post-test). This indicates that Word Search Puzzles significantly help students expand their vocabulary (Fitria, 2023).

2) Enhances students’ motivation and interest in learning

Many students reported that they enjoyed the new learning method using Word Search Puzzles, as it made the vocabulary learning process more engaging and enjoyable (Wahyudi & Kusumahwardani, 2024). Other studies also show that Word Search Puzzles reduce students’ reluctance to explore new vocabulary, making them more active in learning.

3) Effectively aids vocabulary retention

Because Word Search Puzzles require students to search for and repeatedly read words within the letter grid, this strengthens their memory of word forms and spelling, allowing vocabulary to be retained more effectively (Fitria, 2023). This media also helps students recognize letter patterns and word structures, which are essential practices for mastering both active and passive vocabulary (Noviyanti & Werdiningsih, 2023).

4) Supports contextual and interactive learning

Due to its game-based and competitive/active nature, Word Search Puzzle makes the learning process less monotonous. Students do not merely memorize word lists; instead, they play and discover words, making learning feel more meaningful and enjoyable. This approach accommodates various learning styles, especially for visual and kinesthetic learners (involving eye movement and hand coordination).

Overall, the use of Word Search Puzzles whether in Website form or worksheet form has been proven effective as a vocabulary learning media. Its main benefits include expanding students' vocabulary, increasing motivation and learning interest, improving vocabulary retention and recall, and making the learning process more interactive and enjoyable. Therefore, this method is highly suitable for language teaching.

5. Procedures of using Word Search Puzzle

- a. Step one : Log in to a Google account and search for **“Word Search Puzzle.”**

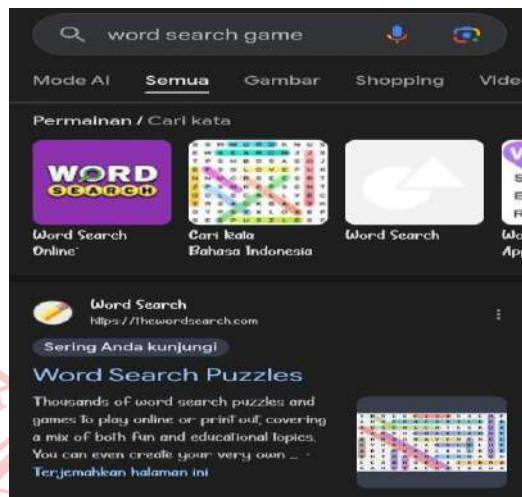


Figure 2.4 Word Search in the Google

- b. Step two : After that, the initial interface of the Word Search Puzzle appears with a “Menu” option. In the menu, there are several options, namely **Word Search Maker**, **More Puzzles**, and **Search**.



Figure 2.5 Initial display of Word search

Through “**Word Search Maker**,” users can create their own game according to the desired theme, while “**More Puzzles**”

allows users to play directly by choosing from several available topics.

The screenshot shows the 'The WordSearch' website interface. At the top, there's a 'Menu' button. Below it, a red banner states 'Puzzle cannot be saved while errors exist' with a 'Manage existing puzzles here' button. The main form has fields for 'Title' (containing 'Adjective') and 'Description' (containing 'Bahasa Inggris'). Below these is a 'Word List' section with instructions: 'Between 10 and 30 words. Puzzles are randomly generated using a selection of your words at play time.' There are three radio buttons for 'Small', 'Long', and 'Big'. To the right, there are two topic suggestion boxes: 'Television Shows' with a list including 'The Simpsons Characters', 'Family Guy Characters', 'Grey's Anatomy', 'Full House', 'Star Trek', and 'Bones'; and 'Sitcoms' with a list including 'Friends', 'The Big Bang Theory', 'Modern Family', 'Two and a Half Men', '2 Broke Girls', and 'How I Met Your Mother'. A 'Teen Television' section is partially visible at the bottom.

Figure 2.6 Word Search Maker and More Puzzle

c. Step three : After finishing creating the game, select the “Subject” and click “Submit.”

The screenshot shows the 'Subject' selection screen. It has two radio buttons: 'Myself, family, friends etc' (which is selected) and 'Non-Personal (recommended)'. Below the radio buttons is a red banner that says 'Please select a subject'. Underneath is a green box with a warning: 'Be very careful when putting personal information online. Do not use full names, addresses etc. Remember, puzzles are public and can be seen by anybody.' At the bottom is a large yellow 'Submit' button.

Figure 2.7 display indicates that the game has been successfully created

d. Step four : The game is now ready to be played, Click “Play” to play immediately, then click “Begin.”

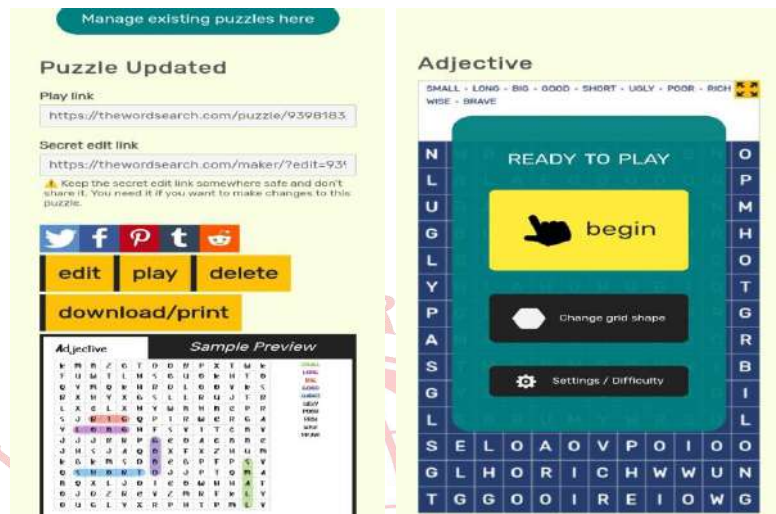


Figure 2.8 Display for starting the game

- e. Step five : select the words listed at the top corner of the screen. Each correct word will appear in bold. The words can be found vertically, diagonally, or horizontally.



Figure 2.9 Display of playing the Word Search Puzzle

- f. Step six : When all the words have been found, the game is finished.



Figure 2.10 Final display of the Word Search Puzzle game

The following are the steps for students to play a word search puzzle using a mobile phone or laptop:

- 1) Access the game by clicking the link shared by the teacher or the game creator.
- 2) Click **“Begin”** to start the game.



Figure 2.11 Display for starting the game

- 3) Find each word listed at the top of the screen. The words can be searched vertically, diagonally, or horizontally, Each correctly found word will be highlighted.



Figure 2.12 Display of playing the Word Search Puzzle

- 4) Once all words have been found, the game is completed

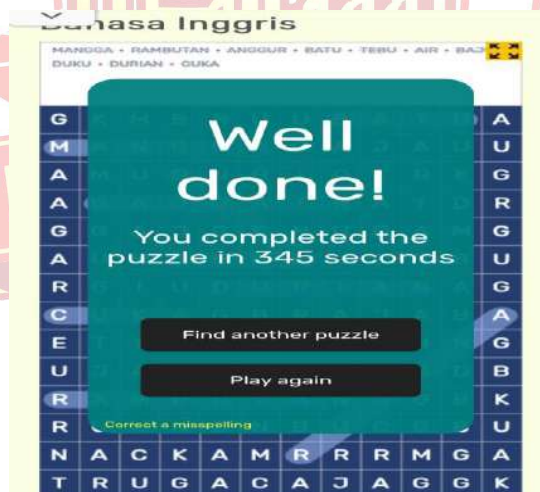


Figure 2.13 Final display of the Word Search Puzzle game

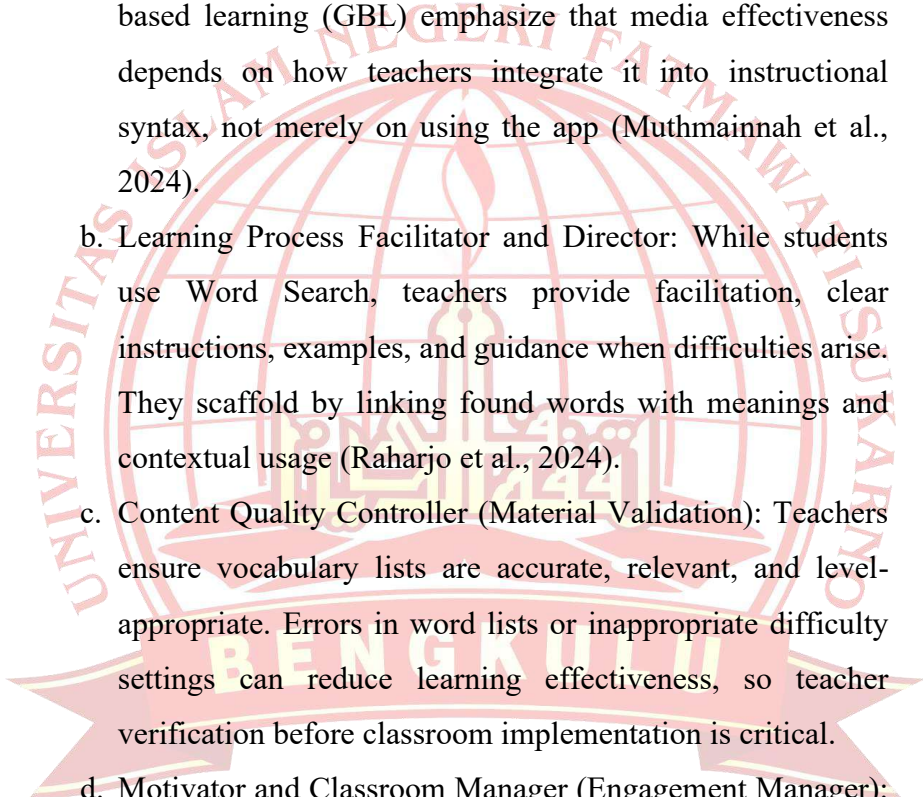
C. The role of Word Search Puzzle to Vocabulary

The Word Search Puzzle serves as a digital learning media based on game-based learning that requires students to find certain words within a letter grid. In the context of English language learning, this Puzzle plays an important role in helping students strengthen vocabulary mastery. Specifically, the Word Search app contributes significantly to vocabulary learning, particularly in enhancing word recognition, reading accuracy, vocabulary retention, and learning motivation. This media not only promotes more active student engagement but also provides an enjoyable and independent learning experience aligned with the advancement of educational technology.

1. The role of the teacher in the Word Search Puzzle

The role of the teacher in the Word Search Puzzle is essential to creating active, interactive, and enjoyable learning. Teachers do not merely deliver material but act as motivators, facilitators, and evaluators in the learning process using word search puzzles. Teachers introduce the material before students begin working on the puzzle to ensure understanding of the activity's context and objectives.

According to (Megawati, 2020), teachers motivate and facilitate active, interactive, and enjoyable learning through word search media. They also evaluate student work outcomes and ensure comprehension before proceeding to the next stage. The teacher's roles include:

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- a. Learning Planner/Designer: Teachers design how the Word Search app is integrated into lesson plans, select relevant word lists aligned with learning objectives, determine time allocation, difficulty levels, and supplementary activities (discussions, sentence construction tasks). Studies on game-based learning (GBL) emphasize that media effectiveness depends on how teachers integrate it into instructional syntax, not merely on using the app (Muthmainnah et al., 2024).
 - b. Learning Process Facilitator and Director: While students use Word Search, teachers provide facilitation, clear instructions, examples, and guidance when difficulties arise. They scaffold by linking found words with meanings and contextual usage (Raharjo et al., 2024).
 - c. Content Quality Controller (Material Validation): Teachers ensure vocabulary lists are accurate, relevant, and level-appropriate. Errors in word lists or inappropriate difficulty settings can reduce learning effectiveness, so teacher verification before classroom implementation is critical.
 - d. Motivator and Classroom Manager (Engagement Manager): Teachers leverage gamification elements to boost motivation while maintaining focus on learning objectives. GBL studies highlight teachers' crucial role in balancing fun and learning.
 - e. Observer and Assessor: Teachers monitor student performance, completion time, difficulty patterns.

- f. Feedback Provider: After gameplay, teachers give feedback (corrections, explanations of meanings, extended exercises like sentence creation or contextual discussions). Teacher feedback is vital to transform word search tasks from mere word recognition into deep understanding. GBL literature emphasizes reflective practice's importance.

2. Role of Students in the Word Search Puzzle

The role of students in the Word Search Puzzle is crucial for the success of the learning process, as they are required to be more active, independent, and critical in solving the word puzzles. Students act as active participants in learning, actively searching for and finding hidden words in the puzzle according to the theme of the material. The main roles of students include:

- a. Active Learners: Students actively search for words, recognize letter patterns, and solve puzzles requiring cognitive processing. This active engagement enhances cognitive involvement and attention to the orthographic form of words. Systematic research on Word Search indicates that repetitive activity in the puzzle strengthens vocabulary recognition and retention (Sitanggang et al., 2024).
- b. Self-Regulated Learners (SRL): The Puzzle usage encourages students to manage their learning time, monitor progress, and adjust strategies. Recent literature emphasizes SRL's role in effective digital learning; technology that supports SRL improves learning outcomes when students

can set goals, monitor, and reflect on their achievements (Seo et al., 2023).

- c. Practitioners of Repetition and Retrieval Practice: Continuous word searching leads to repeated exposure and retrieval practice, reinforcing vocabulary storage into long-term memory. Numerous studies on digital game-based learning find that game elements facilitating repetition enhance vocabulary retention (Prastiwi & Lestari, 2025).
- d. Self-Observers: Students can use instant feedback provided by the app (correct word highlights).
- e. Intrinsic Motivators: Gamification elements intrinsically motivate students to practice more; when guided by teachers, this motivation results in increased practice frequency. Studies on GBL show that games enhance motivation, positively impacting learning outcomes (Putri & Firdaus, 2025)

D. Previous Study

Several studies on word games and vocabulary mastery have been conducted. The first study was carried out by (Vu et al., 2021) entitled *“Using Word Games to Improve Vocabulary Retention in Middle School EFL Classes”* This study used a quasi-experimental design with a mixed methods approach in two 7th-grade classes, namely an experimental group and a control group, over eight weeks. The results showed that students who learned with word games achieved a much higher increase in vocabulary scores

compared to the control group. In addition, the questionnaire and interview results indicated that students felt the learning became more enjoyable, not boring, and helped them remember vocabulary for longer. The second study by (Wahyudi & Kusumahwardani, 2024) entitled “*The Effectiveness Of Word Search Puzzle Game As Media For Teaching Vocabulary*” this study aims to determine the effectiveness of the Word Search Puzzle game as a vocabulary learning media for junior high school students. The study used a quasi-experimental design with a one-group pretest-posttest model involving 20 first-grade students of SMPN 03 Kamal Bangkalan. The analysis results showed a significant improvement in students' vocabulary mastery after being treated using the Word Search Puzzle game. The students' average scores increased significantly, and statistical tests proved that this game had a positive effect on vocabulary learning. In addition to improving learning outcomes, this game also made students more motivated, active, and enthusiastic in the learning process. Therefore, the authors concluded that the Word Search Puzzle is an effective and feasible media to be used in teaching English vocabulary at the junior high school level.

Third, the research by Goumas et al., (2020) titled “*Wordsearch, an Educational Game in Language Learning*” This study used a qualitative approach involving 11 students aged 12–15 years who played the game several times. The results of the study showed that Wordsearch is easy to use, is able to increase

students' learning motivation, and makes the vocabulary learning process more enjoyable. In addition, this game has the potential to help students remember vocabulary in the long term because it combines visual elements, interaction, and repetition. The students also showed high intrinsic motivation and tried to improve their own performance each time they played. Furthermore, the fourth study was conducted by Rokhmah, H (2020) entitled *“Word Search Game as a Valuable Technique in Enhancing Students’ English Vocabulary Mastery”* Through this game, students can learn new vocabulary in an enjoyable way, thereby increasing their motivation and engagement in the learning process. The word search activity helps students remember the spelling and meaning of words more strongly through indirect repetition. In addition, the Word Search Game creates an interactive learning atmosphere and reduces students' boredom and anxiety when learning English. The results of the study show that the use of the Word Search Game has a positive impact on improving students' vocabulary mastery, so this method is feasible to be used as a supportive teaching strategy combined with other teaching methods.

The fifth study by Simatupang et al., (2020) titled *“Gamifying Teaching Elementary English: Word Search Game to Reach Vocabulary Mastery”* This study used an experimental design with two experimental groups, namely class IVA and IVB at Karya Tani Kandis Private Elementary School. Class IVA was taught using the Word Search Game, while class IVB used the Board Game. Both

classes were given pre-tests and post-tests to measure vocabulary mastery. The instrument consisted of a vocabulary test of 20 items. Data were analyzed using tests of normality, homogeneity, t-test, and N-Gain to observe improvements and differences in learning outcomes. The results of the study showed that the class that learned using the Word Search Game obtained a higher post-test score (mean 83.60) compared to the class with the Board Game (mean 69.80). The t-test (Sig. 0.000 < 0.05) indicated a significant difference between the two classes. The N-Gain value for the Word Search class (0.47) was in the moderate category, while the Board Game class (0.09) was in the low category. Thus, the Word Search Game was proven to have a significant effect on improving students' vocabulary mastery.

Table 2.1 Previous Studies

NO	Research	Title	Result	Similiarity	Difference
1.	(Vu et al., 2021)	Using word games to Improve vocabulary Retention in Middle School EFL Classes	This study employed a quasi-experimental design involving an experimental and a control group. The findings revealed that the use of word games significantly improved students' vocabulary	Both studies investigate the use of word games in improving English vocabulary mastery among EFL junior high school students.	Vu et al. (2021) employed various types of word games with a focus on vocabulary retention, whereas my study utilizes a digital-based Word Search and emphasizes

			achievement. Questionnaire and interview results also showed that students found the learning process more enjoyable and effective in enhancing vocabulary retention.		overall vocabulary mastery.
2.	(Wahyudi et al., 2024)	The effectiveness of word search puzzle game as media for teaching vocabulary	This study aims to examine the effectiveness of the Word Search Puzzle game in improving junior high school students' vocabulary mastery. The results indicate a significant improvement in students' vocabulary achievement as well as their motivation and active participation, suggesting that the Word Search Puzzle is an effective medium for	Both studies examine the Word Search Game as an instructional media for enhancing vocabulary mastery through a quantitative approach.	Wahyudi et al. (2024) highlight the effectiveness of the Word Search Puzzle Game as an instructional media, whereas my study specifically investigates the influence of the Word Search Game within a specific school and location context, namely SMP 25

			teaching English vocabulary.		Bengkulu City, with a focus on eighth-grade students.
3.	Goumas et al., (2020)	Word search an educational game in language learning	The findings indicate that Word Search is easy to use, enhances students' learning motivation, and makes vocabulary learning more enjoyable while supporting long-term vocabulary retention.	Both studies address the Word Search game as an instructional media in enhancing students' vocabulary mastery.	Goumas et al. (2020) focus on Wordsearch as an educational game in language learning in general, with a broader scope and not limited to a specific educational level or location. In contrast, my study examines the effect of the Word Search Game on the vocabulary mastery of eighth-grade students and uses a quantitative

					research design to measure improvements in students' learning outcomes.
4.	Rokhmah, H (2020)	Word search game as a valuable technique in enhancing students' english vocabulary mastery	The Word Search Game enhances students' motivation, engagement, and vocabulary mastery by creating an enjoyable and interactive learning environment, making it a feasible supportive strategy in English vocabulary instruction.	Both studies investigate the Word Search Game as an instructional technique for enhancing students' English vocabulary mastery.	Rokhmah (2020) emphasizes the Word Search Game as a general teaching technique without focusing on a specific school or class, whereas my study examines the effect of the Word Search Game on eighth-grade students at SMP 25, using a quantitative design to measure improvements in students'

					vocabulary mastery.
5.	Simatupang et (2020)	Gamifying teaching elementary english: word search game to reach vocabulary mastery	This experimental study compared the Word Search Game and Board Game in improving students' vocabulary mastery. The results showed that the Word Search Game produced higher post-test scores and significantly better learning gains, indicating its effectiveness in enhancing students' vocabulary mastery.	Both studies used the Word Search Game as a media to improve students' vocabulary and measured the students' initial and final abilities through vocabulary tests.	The study was conducted on elementary school students with two experimental groups (Word Search vs. Board Game).

E. Theoretical Framework

This research is entitled *"The Influence of Using Word Search Puzzle on The Vocabulary Mastery of Eighth Grade Students at SMP 25 Bengkulu City."* In this study, there are two main variables that are the focus of the research:

- 1. Variable X (Independent Variable)** The use of the Word Search Puzzle as a Game-Based Learning Media, A Learning media that integrates elements of entertainment and

interactivity from games into the learning process to enhance students' motivation, engagement, and learning outcomes. In this study, the media refers to the Word Search Puzzle used to help students learn vocabulary in a more enjoyable and meaningful way (Nurhalimah, 2020). The Word Search Puzzle is a hidden word search game designed to help students recognize and remember vocabulary in an enjoyable and interactive way. Through this game, students are invited to find certain words within a collection of random letters, so they can become more familiar with the form, spelling, and meaning of those words.

2. Variable Y (Dependent Variable) Student Vocabulary Mastery, which refers to the students' ability to understand and use English vocabulary both orally and in writing. Vocabulary mastery includes the aspects of form, meaning, and use. In the context of the Word Search Puzzle, the main focus of the research is usually on improving recognition (receptive vocabulary) and strengthening lexical memory through repeated exposure and word-search activities. This theoretical statement serves as the foundation for measuring the research outcomes (e.g., vocabulary mastery pre-test and post-test scores) (Dağdeler, 2023). Vocabulary improvement is measured after students use the Word Search Puzzle. The purpose of this study is to determine how much the Word Search Puzzle can help students enhance their vocabulary and

whether there is a positive change in their learning outcomes after using the Puzzle.

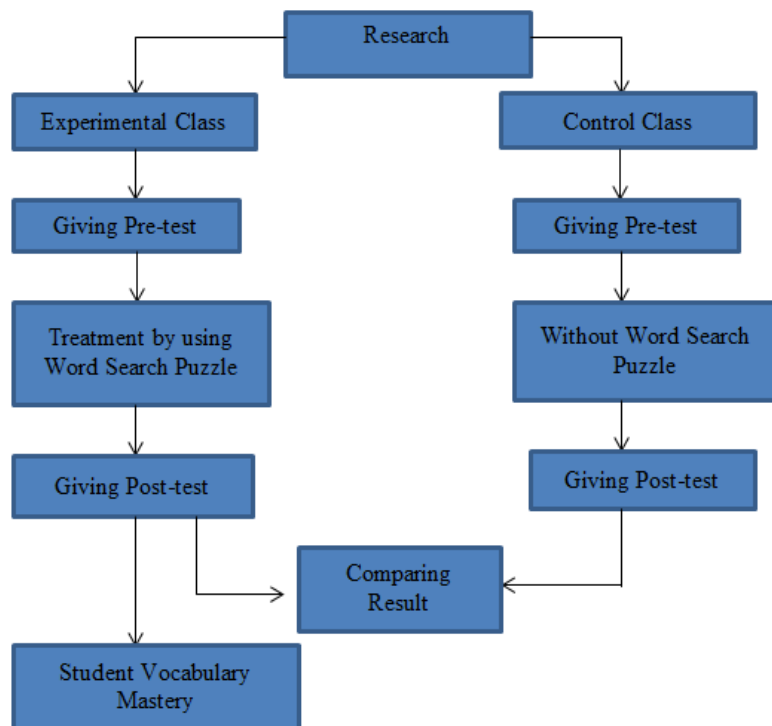


Diagram 2.14 Conceptual Framework

F. Hypothesis

Based on the research problems that have been identified, the researcher formulates the following hypotheses:

1. Null Hypothesis (Ho): There is no significant influence of using the Word Search Puzzle on improving the vocabulary mastery of eighth-grade students at SMP 25 Bengkulu City.

2. Alternative Hypothesis (Ha): There is a significant influence of using the Word Search Puzzle on improving the vocabulary mastery of eighth-grade students at SMP 25 Bengkulu City.

