

CHAPTER II

LITERATURE REVIEW

In this chapter discuss about review of related theories. This chapter explain about previous related and some pertinent ideas and conceptual framework. It can be explained more than one of related theories and studies into vocabulary game, genially-ai and how to increasing student vocabulary mastery in SMPN 8 Sekadau Hilir.

A. Nature of Vocabulary

The nature of vocabulary refers to the concept that vocabulary is not merely a collection of words to be memorized, but rather a comprehensive understanding of word form, meaning, and use in communicative contexts. In English language learning, vocabulary mastery serves as a fundamental foundation for students to develop other language skills. Therefore, vocabulary instruction should be designed in a contextual and interactive manner, such as through technology-based media Genially AI-based vocabulary games, so that students are not only able to remember words but also use them appropriately in real-life situations. Vocabulary encompasses interconnected aspects of language knowledge, indicating that understanding a word involves multiple dimensions and varying levels of mastery (Nation, 2013, p. 44). Recent research indicate that vocabulary is a core component of language competence as it plays a crucial role in understanding and conveying meaning effectively. Vocabulary knowledge does not only involve word meanings, but also includes

dimensions such as pronunciation, spelling, grammatical function, and contextual usage.

Furthermore, scholars distinguish vocabulary knowledge into two main dimensions, namely breadth and depth. Breadth of vocabulary knowledge refers to the number of words a learner knows, whereas depth of vocabulary knowledge refers to how well those words are understood, including meaning relationships, collocations, and usage in various contexts.

Moreover, one of the most widely used theoretical frameworks in vocabulary studies divides vocabulary knowledge into three main components, namely form, meaning, and use. Form includes phonological and orthographic aspects, meaning relates to the conceptual and referential understanding of words, while use refers to grammatical functions and contextual usage in both social and linguistic contexts.

B. Definition of Vocabulary

Vocabulary plays a crucial role in English language learning because it serves as the foundation for mastering other language skills. Therefore, vocabulary learning should be given greater emphasis in classroom instruction and should be supported by engaging and meaningful learning media to enhance students' motivation and retention. Vocabulary is a fundamental component of language that refers to the set of words known and used by an individual or a language community. In linguistics, vocabulary is considered the basis of communication because it enables learners to express ideas, understand messages, and interact effectively in both spoken and written forms.

Furthermore, when designing a language course or planning independent research, it is important to establish learning goals that enable learners to use the language according to their communicative needs (Nation, 2013, p. 11)

From a theoretical perspective, vocabulary knowledge is not simply the ability to recognize word meanings, but a multidimensional construct. According to Nation's framework, knowing a word involves three essential aspects: form, meaning, and use. Form refers to the spoken and written representation of a word, including pronunciation and spelling. Meaning involves the understanding of concepts, references, and associations of a word. Use refers to grammatical behaviour, collocations, and contextual appropriateness in communication. This model shows that vocabulary knowledge is complex and goes beyond memorization of word lists (Nation, 2013, p. 49).

In addition, vocabulary knowledge is also categorized into receptive and productive vocabulary. Receptive vocabulary refers to words that learners can recognize and understand when reading or listening, whereas productive vocabulary refers to words that learners can actively use in speaking and writing. Studies indicate that receptive vocabulary is generally larger than productive vocabulary, and both are essential for effective communication in second language learning.

C. Aspect of Vocabulary

Vocabulary knowledge consists of three main components, namely form, meaning, and use (Nation, 2013, p. 49). These components indicate that

knowing a word goes beyond simply understanding its definition; it also involves a comprehensive understanding of its structure, meaning, and use in appropriate contexts.

The form aspect refers to the structural features of a word, which include its spoken form, written form, and word parts. The spoken form involves how a word is pronounced and recognized in oral communication. The written form refers to the orthographic representation of a word, or how it is spelled in written language. Meanwhile, word parts refer to morphological elements such as prefixes, suffixes, and roots, which contribute to the overall structure and meaning of a word.

The meaning aspect relates to the semantic dimension of vocabulary knowledge, which includes the relationship between a word's form and its meaning, the concept or idea that the word represents, and the associations it has with other words. These associations may include synonyms and antonyms, which help form semantic networks and support deeper understanding of vocabulary items.

D. Types of Vocabulary

Vocabulary is an important component in language learning because it supports students in understanding and expressing ideas through communication. In learning English, vocabulary can be classified into several types based on how the words are used and understood by learners. Understanding the types of vocabulary helps teachers and students recognize how vocabulary knowledge develops in language learning activities.

According to Scott Thornbury (2002, p. 15), vocabulary knowledge consists of receptive knowledge and productive knowledge. Receptive knowledge relates to the ability to understand words, while productive knowledge relates to the ability to use words in communication. Thornbury states that “Receptive knowledge exceeds productive knowledge,” which means learners usually understand more words than they are able to use in speaking or writing.

Receptive vocabulary refers to the words that learners can recognize and understand when they listen to someone speaking or when they read a text. This type of vocabulary is commonly used in listening and reading activities. Students may understand the meaning of words, but they are not always able to use them actively in communication.

Productive vocabulary, on the other hand, refers to the words that learners are able to use actively in speaking and writing. This type of vocabulary requires students not only to know the meaning of words, but also to know how to pronounce, spell, and use them appropriately in communication.

Based on the explanation above, receptive and productive vocabulary are both important in language learning because they help students improve their understanding and communication skills in English.

E. Teaching Vocabulary

Teaching vocabulary should be seen as an interactive and meaningful process rather than a mechanical memorization activity. The researcher believes that many students face difficulties in learning vocabulary because it

is often taught in isolation without sufficient context or engaging activities. According to Nation (2013, p. 95) Direct vocabulary teaching plays an important role because the knowledge gained through such instruction can support incidental vocabulary learning through meaning-focused and fluency-based activities. Therefore, vocabulary teaching needs to be supported by innovative and attractive learning media that can increase students' motivation, such as game-based learning or AI-assisted platforms like Genially AI-based vocabulary games. Through such media, students are expected to learn vocabulary in a more enjoyable way while still achieving learning objectives effectively.

Teaching vocabulary is a crucial component of English language teaching that focuses on facilitating learners in acquiring, understanding, and using new words effectively. Vocabulary instruction is not limited to memorizing word lists, but it involves developing learners' ability to use words appropriately in different communicative contexts. Effective vocabulary teaching should integrate form, meaning, and use in a balanced way. Vocabulary learning is considered a gradual process that moves from initial exposure to full mastery. In addition, it is important to understand that teachers can improve students' vocabulary mastery by deepening their understanding of words that have already been taught and are partially familiar, even without introducing new vocabulary in the learning process (Schmitt, 2000, pp. 144-145).

Furthermore, modern approaches to vocabulary teaching emphasize the importance of contextualized and meaningful learning. Vocabulary should be taught in context rather than in isolation, because contextual learning helps learners understand how words function in real communication. In addition the integration of gamification features, such as points, badges, leaderboards, and interactive challenges, can greatly enhance learners' motivation, engagement, and feelings of achievement (Gunawan, 2025, p. 156). Besides, vocabulary learning becomes more effective when it is supported by interaction, repetition, and engagement with meaningful tasks.

In recent years, technology-enhanced vocabulary teaching has gained significant attention in English as a Foreign Language (EFL) classrooms. Digital tools such as mobile applications, multimedia platforms, and game-based learning environments provide interactive and engaging learning experiences for students. According to Boyinbode (2018, p. 185) Gamification can effectively increase learners' engagement and motivation when appropriately applied in both classroom and out-of-class learning environments. Game-based learning, in particular, has been proven to increase students' motivation, participation, and vocabulary retention. Through features such as scoring systems, challenges, feedback, and repetition, students are encouraged to actively engage in the learning process.

In addition, vocabulary teaching should consider the multidimensional nature of vocabulary knowledge, which includes breadth, depth, receptive vocabulary, and productive vocabulary. Vocabulary breadth refers to the

number of words learners know, while vocabulary depth refers to how well learners understand word meanings, collocations, and usage. Receptive vocabulary involves understanding words in listening and reading, whereas productive vocabulary involves using words in speaking and writing. Effective vocabulary instruction should aim to develop both dimensions in a balanced way.

Based on instructional practice, teaching vocabulary generally involves several stages. The first is the presentation stage, in which new vocabulary is introduced through context, images, or multimedia to help learners understand the meaning of the words. The second is the practice stage, where learners engage in controlled activities such as repetition, matching, or drills in order to reinforce their understanding and retention. The third stage is the production stage, in which learners are encouraged to use the vocabulary in communicative tasks such as speaking or writing so that they can apply the words in meaningful contexts. Finally, the evaluation stage is conducted to assess learners' vocabulary mastery through tests or performance-based tasks that measure their understanding and ability to use the target vocabulary.

These stages align with interactive and learner-centered approaches that emphasize active participation and meaningful learning experiences. In this research, the use of Genially AI-based vocabulary games is expected to support these stages by providing interactive visual learning, immediate feedback, and engaging activities that help students retain and apply vocabulary more effectively. Therefore, teaching vocabulary is not only about transferring

lexical knowledge but also about designing meaningful, interactive, and contextual learning experiences that enable learners to develop comprehensive vocabulary mastery.

F. Testing Vocabulary

Testing vocabulary is an essential aspect of language assessment that is used to measure learners' vocabulary knowledge and development. Vocabulary testing does not only evaluate how many words students know, but also how well they understand and use those words in context. In English language learning, vocabulary testing plays an important role in determining learners' progress and the effectiveness of instructional methods used in the classroom. Therefore, Nation (2013, p. 514) Vocabulary testing is comparable to assessment in other aspects of language knowledge and language use. Therefore, the principles of reliability, validity, practicality, and washback should also be taken into account when developing and evaluating vocabulary assessments.

From a theoretical perspective, vocabulary testing is closely related to the concept of vocabulary knowledge as a multidimensional construct. Testing should consider different dimensions of vocabulary knowledge, including form, meaning, and use. In addition, vocabulary tests should also measure both breadth (number of words known) and depth (how well words are understood and used). This is because vocabulary knowledge is not static, but develops gradually through exposure and practice in meaningful contexts. Therefore,

effective vocabulary testing should capture both recognition and production abilities of learners.

In educational practice, vocabulary tests are commonly classified into several types, such as recognition tests and production tests. Recognition tests measure learners' ability to identify the meaning or form of words, while production tests assess learners' ability to actively use vocabulary in speaking or writing. In addition, vocabulary tests can also be divided into discrete-item tests and contextualized tests. Discrete-item tests focus on individual words, whereas contextualized tests evaluate vocabulary use within sentences or passages. Each type of test has its own advantages depending on the purpose of the assessment.

In this research, vocabulary testing is conducted using a pre-test and post-test design. The pre-test is administered before the treatment to measure students' initial vocabulary knowledge, while the post-test is given after the implementation of the Genially AI-based vocabulary game to measure students' improvement. The comparison between pre-test and post-test scores is used to determine the effectiveness of the learning media in improving students' vocabulary mastery. This type of testing is widely used in experimental research because it allows researchers to identify learning progress objectively. In this study, students' vocabulary mastery is assessed based on four aspects: the number of words recalled, pronunciation, meaning, and spelling. These aspects provide a comprehensive evaluation of students' vocabulary mastery by measuring not only their ability to remember

vocabulary items but also their ability to pronounce, understand, and spell them correctly.

Furthermore, a good vocabulary test must fulfil the principles of validity, reliability, and practicality. Validity refers to the extent to which the test measures what it is intended to measure, reliability refers to the consistency of test results, and practicality refers to the ease of administering and scoring the test. Therefore, vocabulary test design should be carefully constructed to ensure that the results accurately reflect students' actual vocabulary knowledge.

In conclusion, vocabulary testing is not merely a measurement of word knowledge, but a comprehensive evaluation of learners' ability to understand and use vocabulary in various contexts. In this research, vocabulary testing through pre-test and post-test is used to assess the effectiveness of Genially AI-based vocabulary game in improving students' vocabulary mastery at the junior high school level.

G. Teaching Media

Teaching media is an important component in the learning process that functions as an intermediary for delivering instructional materials from teachers to students. Teaching media can take the form of tools, methods, or technologies used to help learners understand learning materials more easily, attractively, and effectively, especially in English language learning. Teaching media does not only function as a teaching aid, but also as a means of creating a more interactive and meaningful learning process. Instructional media can

stimulate students' thoughts, feelings, attention, and interest, thereby making learning more effective. In addition, teaching media can also help overcome limitations of space, time, and direct learning experience. Therefore, the appropriate use of media plays an important role in determining the success of classroom learning. Nowadays, educational technology is not only limited to the use of computers and projectors, but also includes Learning Management System (LMS) platforms, online learning applications, instructional videos, augmented reality, and artificial intelligence in education (Sitorus et al, 2025, p. 2). The integration of these technologies provides more innovative and engaging learning experiences that can increase students' motivation and participation in the learning process.

In modern education, teaching media has undergone a transformation from conventional tools to digital-based technologies. Digital media such as interactive multimedia, learning applications, and educational games are widely used in English language teaching. This is because technology-based media can provide more engaging, interactive, and enjoyable learning experiences for students. Gamification applies game mechanics such as points, badges, and leaderboards to non-game contexts in order to increase user motivation and engagement. In addition, one of the effective forms of teaching media in vocabulary instruction is game-based learning. Game-based learning provides opportunities for students to learn through enjoyable, competitive, and interactive activities. Through games, students can repeatedly practice vocabulary without feeling bored, which helps improve their memory retention

and understanding of the material. Features such as scoring systems, challenges, and feedback also increase students' motivation and engagement in the learning process.

In the context of this research, the teaching media used is the Genially AI-based vocabulary game. This media is a form of interactive multimedia based on technology designed to help students learn English vocabulary in an engaging and effective way. Genially allows the presentation of learning materials through visuals, animations, and interactive games that can enhance students' participation in learning activities. With its interactive and game-based features, this media is expected to create a more active, enjoyable, and meaningful learning environment.

Furthermore, the use of teaching media should be aligned with learning objectives, material characteristics, and students' needs. Effective teaching media should support students in achieving learning goals efficiently and effectively. Therefore, the selection of instructional media should not be arbitrary, but must be based on pedagogical considerations and classroom learning needs. Thus, teaching media plays a very important role in improving the quality of the learning process. In this research, the use of the Genially AI-based vocabulary game is expected to serve as an effective medium for improving students' vocabulary mastery and creating a more interactive and enjoyable English learning environment.

H. Game Based Learning

Game-Based Learning is a learning approach that uses games as learning media to create more interactive, enjoyable, and meaningful learning experiences for students. Game based learning is an approach that integrates learning material into games, enabling students to communicate with one another (Handayani & Febriani, 2025, p. 169). In English language learning, game-based learning can help students improve motivation, participation, and vocabulary mastery through engaging classroom activities. Therefore, the use of games in learning is considered effective because it encourages students to participate actively and learn in a more enjoyable atmosphere. In this section, the researcher discusses the definition of game, the benefits of vocabulary games, and the characteristics of effective educational games.

1. Definition of Game

Games are activities that are used to support the teaching and learning process in an enjoyable and interactive way. In classroom learning, games help students participate actively and create a more interesting learning atmosphere. Through games, students can improve their motivation, interaction, and understanding of learning materials. Therefore, games are often used as effective media in English language learning, especially in vocabulary learning activities. According to Gao and Gee (2023, p.1), game-mediated learning investigates how games can be used in facilitating second and foreign language teaching and learning. This statement explains that games can be used as learning tools to support second and foreign

language learning effectively. Games not only provide entertainment, but also help students develop language skills through meaningful interaction and participation in the learning process.

Based on the explanation above, games can be understood as learning activities that involve enjoyment, interaction, and participation to support the teaching and learning process. In English language learning, games are considered effective media because they help students learn vocabulary and practice language skills in more meaningful and engaging ways.

2. Benefits of Vocabulary Games

Vocabulary games provide many benefits for students in learning English vocabulary. Through games, students can learn vocabulary in a more enjoyable and interactive atmosphere. Games also help students participate actively during classroom activities and reduce boredom in the learning process. As a result, students become more interested and motivated to learn English vocabulary. Fatimah and Masduqi (2021, p. 68) explain that vocabulary games support vocabulary learning because games create a comfortable classroom atmosphere, maintain students' learning motivation, and provide meaningful learning experiences related to real-life situations. These advantages help students understand and remember vocabulary more effectively during the learning process.

Based on the explanation above, vocabulary games can be considered effective learning media in English language teaching. Games not only help students improve vocabulary mastery, but also encourage confidence,

participation, and interaction during classroom activities. Therefore, the use of vocabulary games is important to support meaningful and enjoyable vocabulary learning.

3. Characteristics of Effective Educational Games

Effective educational games are games that can support learning objectives and create meaningful learning experiences for students. In the teaching and learning process, educational games should encourage students to participate actively, interact with others, and stay motivated during classroom activities. In addition, effective games need to provide enjoyable learning situations so that students can learn comfortably and meaningfully. According to Yu (2023, p. 10), students who are actively engaged in game-based learning activities tend to achieve better learning outcomes because educational games encourage participation and involvement during the learning process. This statement shows that engagement and active participation are important characteristics of effective educational games.

Based on the explanation above, effective educational games are games that combine educational objectives with enjoyable and interactive learning activities. Therefore, educational games are considered important learning media because they can improve students' motivation, engagement, interaction, and vocabulary learning outcomes.

I. Genially AI

Artificial Intelligence plays an important role in supporting English language learning by helping teachers and students create more interactive and

engaging learning activities. AI-based platforms, such as Genially, can support vocabulary learning through interactive media, feedback, and digital learning experiences. Therefore, this section discusses the definition of Genially, the procedure of using Genially in learning, as well as the advantages and challenges of using Genially as learning media.

1. Definition of Genially

Genially is a web-based digital platform used to create interactive and multimedia learning content such as presentations, quizzes, games, and other educational materials. According to Tampubolon et al (2025, p. 818) Genially is one of the digital platforms that enables educators to design interactive and multimedia rich learning content. This platform enables users, particularly teachers, to design attractive and interactive learning media without requiring advanced programming skills. In educational contexts, Genially is widely used as an innovative instructional tool that supports interactive and student-centered learning. By integrating various multimedia elements such as text, images, audio, video, and animation, Genially allows learning materials to be presented in a more engaging and meaningful way. In English language teaching, especially vocabulary learning, Genially is considered effective because it provides game-based learning experiences that can enhance students' motivation and participation in the learning process. Genially AI refers to the integration of artificial intelligence-based features that assist users in designing and developing interactive learning media more effectively and efficiently. Genially AI can

help generate content ideas, structure interactive activities, and optimize instructional design according to users' needs. In educational contexts, Genially AI supports teachers in creating more adaptive, engaging, and easily developed learning media. It also contributes to more personalized and dynamic learning experiences for students. Therefore, Genially AI-based learning can be considered an innovative approach that combines artificial intelligence technology with interactive learning design to support language learning, particularly vocabulary acquisition. Therefore, Genially web based learning media is highly effective to use (Rahmawati et al, 2026, p. 231).

2. Steps in Using Genially

The use of Genially as a platform for creating interactive learning media begins with account registration, where users are required to create an account in order to access its features. After successfully logging in, users can select a suitable template based on their instructional needs, such as presentation, quiz, or interactive game templates. The next step is content design, in which teachers insert learning materials in the form of text, images, audio, video, and animations that are aligned with the learning objectives. After that, interactive elements such as buttons, hyperlinks, pop-ups, and navigation tools are added to enhance user interaction. The design is then customized by adjusting colors, fonts, backgrounds, and layouts to make the content more visually appealing for learners. Before publishing, the project is previewed to ensure that all features function properly. Finally,

the completed product is published online and shared with students through links or learning platforms.

3. Procedure of Using Genially in Learning

In classroom practice, the use of Genially-based learning media is implemented through several systematic stages. The process begins with the preparation stage, where the teacher prepares vocabulary materials and selects appropriate topics in accordance with the learning objectives. This is followed by the introduction stage, in which the teacher explains the learning objectives and provides instructions on how students will use the Genially-based learning media. During the implementation stage, students access the provided Genially link and participate in interactive vocabulary activities such as games or quizzes designed by the teacher. In the learning activity stage, students are required to complete tasks such as matching words, identifying meanings, or answering vocabulary questions within the platform. After the activities are completed, feedback is provided either automatically by the system or through teacher explanation to reinforce students' understanding. Finally, the evaluation stage is conducted using assessment tools such as pre-test and post-test to measure students' improvement in vocabulary mastery after the treatment.

4. Advantage and Challenges

Genially has several advantages as an instructional media in language learning. First, it is interactive and engaging, which can increase students' motivation and participation in learning activities. Second, it is user-friendly

and does not require advanced technical skills, making it accessible for teachers. Third, Genially supports multimedia integration, allowing the combination of text, images, audio, video, and animation within a single platform, which enhances the quality of learning materials. Fourth, its game-based features make learning more enjoyable and help reduce student boredom, particularly in vocabulary learning. Genially can create an interesting and innovative materials in the form of presentation (Syafitri & Sujannah, 2024, p. 337). In addition, Genially is flexible because it can be accessed online anytime and anywhere as long as an internet connection is available.

However, Genially also has several limitations. One of the main disadvantages is its dependence on a stable internet connection since it is fully web-based. In addition, some advanced features are only available in the paid version, which may limit users who rely on the free version. It also depends on digital devices such as smartphones, laptops, or tablets, which may not always be accessible for all students. Another limitation is that designing interactive learning media in Genially can be time-consuming, especially for beginners who are not familiar with the platform. Despite these limitations, Genially remains an effective and innovative learning media that can support vocabulary learning when used appropriately in the classroom.

J. Teaching Vocabulary Using Genially AI

Teaching vocabulary using Genially AI is an innovative instructional approach that integrates technology-based learning media with vocabulary instruction to enhance students' lexical competence. This approach combines the principles of vocabulary teaching with interactive digital tools supported by artificial intelligence features, which aim to create a more engaging, meaningful, and effective learning environment. In English language learning, particularly at the junior high school level, vocabulary mastery is considered a fundamental component that supports the development of other language skills such as listening, speaking, reading, and writing. Therefore, the use of Genially AI-based learning media is expected to facilitate students in acquiring and using vocabulary more effectively.

From a theoretical perspective, vocabulary learning using Genially AI aligns with the principles of active learning and student-centered instruction. According to vocabulary acquisition theory, learners need repeated exposure, meaningful interaction, and contextualized use of words in order to achieve long-term retention. Genially AI supports these principles by providing interactive vocabulary games, visual aids, and contextual exercises that allow students to learn vocabulary through practice rather than memorization. The integration of artificial intelligence also enables the creation of adaptive and engaging learning activities that can increase students' motivation and participation in the learning process.

In the implementation of vocabulary teaching using Genially AI, students are actively involved in interactive learning activities such as matching words with meanings, identifying correct vocabulary usage, completing quizzes, and participating in game-based tasks. These activities are designed to support both receptive and productive vocabulary knowledge. Receptive vocabulary is developed through recognition-based tasks, while productive vocabulary is enhanced through tasks that require students to recall and use words in context. This balanced approach helps students develop a more comprehensive understanding of vocabulary, including its form, meaning, and use.

Furthermore, Genially AI-based vocabulary learning provides immediate feedback, which is an important element in language learning. Feedback allows students to identify their mistakes and improve their understanding in real time. This feature also helps teachers monitor students' progress and adjust instructional strategies based on learners' needs. In addition, the game-based nature of Genially AI increases students' motivation and reduces learning anxiety, making vocabulary learning more enjoyable and less monotonous.

In this research, the use of Genially AI-based vocabulary games is implemented as a treatment to improve students' vocabulary mastery. The learning process is conducted through structured activities that include pre-test, interactive vocabulary learning using Genially AI, and post-test to measure students' improvement. The results of this process are expected to show that the use of Genially AI has a positive effect on students' vocabulary achievement.

Therefore, teaching vocabulary using Genially AI is considered an effective instructional strategy that combines technology, interaction, and meaningful learning. It not only helps students improve their vocabulary knowledge but also enhances their motivation, engagement, and overall language learning experience.

K. Related Studies

The integration of digital media and game-based learning has increasingly been used in English language teaching to improve students' vocabulary mastery and learning motivation. Several previous studies have investigated the effectiveness of interactive learning media and game-based platforms in enhancing students' language skills.

Nurjannah (2025) Genially is a web-based platform for creating multimedia content with features such as infographics, presentations, maps, games, and animated images. This research aims to assess the validity, practicality, and effectiveness of using Genially as a learning medium in history lessons at SMAN 2 Woja. The research employs a Research and Development (R&D) method based on the 4-D (Four-D) development model developed by Thiagarajan, with data collected through questionnaires. The analysis of the research results, as evaluated by two validators, shows that the Genially-based learning media achieved a validity percentage of 93%, categorizing it as highly valid, meaning the media is suitable for use. Furthermore, the practicality evaluation by media practitioners indicates a practicality percentage of 91%, also categorized as highly practical. Meanwhile, the analysis of effectiveness,

based on test scores obtained by students using Genially media, yielded an average score of 85%, which falls under the highly effective criteria. Therefore, the development of Genially-based learning media for history lessons at SMAN 2 Woja is deemed effective for use in the learning process. However, this research is still limited to the development (R&D) aspect and focuses on history learning, without specifically examining the improvement of English vocabulary mastery. In addition, the research does not focus on the use of Genially AI-based vocabulary games in an experimental setting using a pre-test and post-test design to measure students' vocabulary achievement. Therefore, there is still a research gap in the application of Genially specifically for vocabulary mastery improvement in English language learning, particularly at the junior high school level using a pre-experimental design.

Zahratul (2025) One alternative learning medium that can be used by students to improve vocabulary mastery in reading is gamification. However, there is still limited research analyzing the implementation of gamification as a teaching medium to help junior high school students expand their vocabulary, particularly in reading activities. The main purpose of this research is to identify the differences in vocabulary mastery improvement among ninth-grade students at a junior high school in Indonesia between those who use gamified learning media such as “Genially, Wordwall, and Blooket” and those who do not. This research employed a quasi-experimental design in which the researcher administered tests to collect the data. Furthermore, 62 students from a junior high school in Surabaya participated in this research, consisting of 31

students from class 9B as the experimental class and 31 students from class 9D as the control class. Based on the findings, the significance value was below 0.05 and the eta squared value was 0.406 at a moderate level, indicating that the vocabulary learning outcomes of the experimental and control groups differed significantly. Therefore, gamification significantly improved students' reading vocabulary mastery. However, the research used several gamification platforms simultaneously, so the specific effect of Genially was not clearly identified. In addition, the research mainly focused on vocabulary mastery in reading activities and did not specifically investigate the use of a Genially AI-based vocabulary game to improve students' vocabulary mastery. Therefore, the present research focuses on the use of a Genially AI-based vocabulary game as an interactive learning medium to improve junior high school students' vocabulary mastery.

Furthermore, Mujadidi (2023) Genially is one of the educational tools that supports interactive visual communication. Genially functions as a comprehensive online platform that enables teachers to create engaging presentations, interactive graphics, infographics, gamification, quizzes, breakouts, portfolios, and more, enriched with interactivity features and animation effects in a short time. The purpose of this workshop research is to examine students' perceptions of the impact of the gamification teaching method using the Genially platform and to enhance students' engagement and interest in education through ELT (English Language Teaching). In this research, various findings were identified related to respondents' views on the

gamification approach in teaching English using the Genially platform. The results show that the gamification approach through Genially receives a positive response from participants in the English learning process, particularly in increasing students' interest and motivation in learning English. However, the research still focuses on students' perceptions and learning motivation and does not specifically measure students' vocabulary mastery improvement through the use of Genially. In addition, the research does not employ an experimental design using pre-test and post-test to examine the effectiveness of Genially, and it has not specifically integrated a Genially AI-based vocabulary game in vocabulary learning at the junior high school level. Therefore, there is still a research gap in the aspect of measuring vocabulary mastery improvement in a more specific and measurable way. Thus, this research focuses on the use of a Genially AI-based vocabulary game to improve students' vocabulary mastery through a pre-experimental design with a one-group pre-test and post-test design.

Based on the previous studies above, it can be concluded that the use of interactive digital media and game-based learning platforms has a positive impact on students' learning outcomes and motivation in English language learning. However, most of the previous studies focused on improving reading skills, writing skills, or the development of learning media. Limited research has specifically examined the effectiveness of Genially AI-based vocabulary games in improving students' vocabulary mastery. Therefore, this research

aims to investigate the effectiveness of Genially AI-based vocabulary games in increasing students' vocabulary mastery.

L. Hypothesis

In this research, a hypothesis is formulated to determine whether the use of Genially AI-based games has a significant effect on students' vocabulary mastery. The hypothesis is developed as a statistical assumption that will be tested to answer the research problem and to measure the effectiveness of the treatment. Therefore, the hypotheses of this research are stated as follows:

H₀: There is no significant difference between students' vocabulary mastery scores before and after being taught using Genially Ai-based games

H₁: There is a significant difference between students' vocabulary mastery scores before and after being taught using Genially Ai-based games.

M. Framework

Vocabulary mastery is one of the essential aspects in English language learning because it serves as the foundation for the development of other language skills, such as listening, speaking, reading, and writing. However, in practice, many students still experience difficulties in mastering vocabulary due to learning processes that tend to be monotonous, less contextual, and less engaging. This condition leads to low motivation and limited student engagement in vocabulary learning activities.

To address this problem, an innovative, interactive, and motivating learning medium is required. One of the media used in this research is the Genially AI-based vocabulary game, a technology-based instructional media

that combines visual elements, interactivity, and game-based learning in vocabulary instruction. This media allows students to learn vocabulary through engaging activities such as quizzes, matching games, and contextual vocabulary exercises presented in digital form. Theoretically, the use of Genially AI in vocabulary learning is based on the principles of active learning and student-centered learning. Through this media, students are not passive recipients of information; instead, they actively participate in the learning process through interaction, repetition, and meaningful use of vocabulary in context. This is in line with vocabulary acquisition theory, which emphasizes the importance of form, meaning, and use, as well as the dimensions of breadth and depth in vocabulary learning.

In addition, the use of game-based learning through Genially AI can enhance students' motivation by creating a more enjoyable and less monotonous learning environment while also providing immediate feedback. As a result, students can more easily understand, remember, and use the vocabulary they have learned.

Based on the explanation above, it can be understood that the use of the Genially AI-based vocabulary game is expected to have a positive effect on students' vocabulary mastery. Therefore, this research measures students' achievement through a pre-test before the treatment and a post-test after the treatment to determine the effectiveness of the media in improving students' vocabulary mastery. Framework followed by diagram text.

Conceptual Framework Flow (Text Diagram)

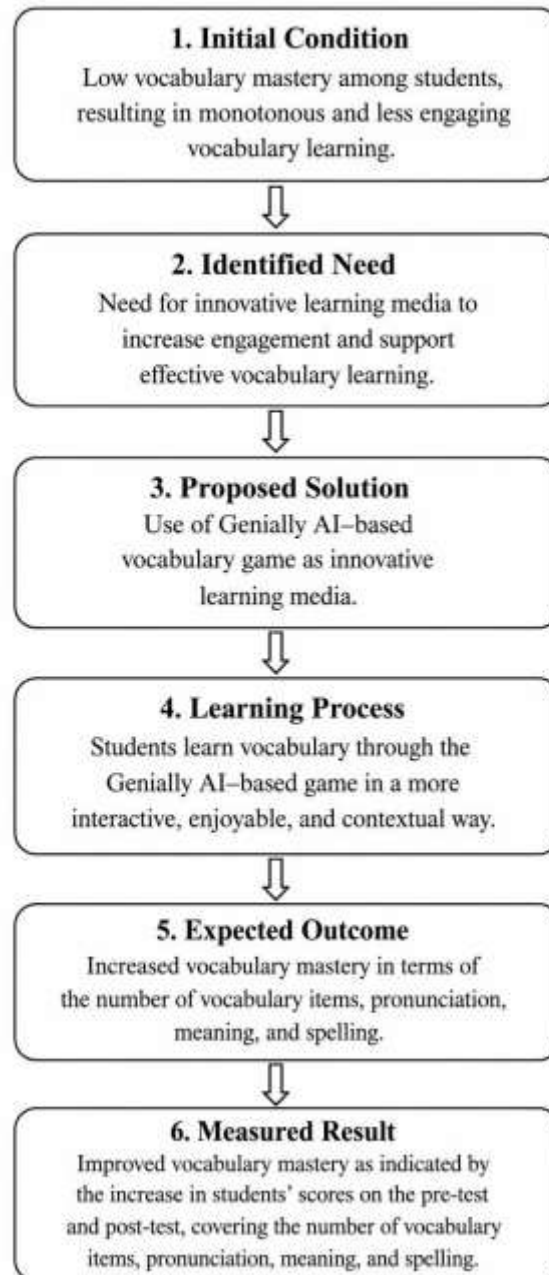


Figure 1. Conceptual Framework Flow (Text Diagram)