

CHAPTER II

LITERATURE REVIEW

2.1 Common European Framework of Reference for Language (CEFR)

2.1.1 Definition

Having a consistent measurement for each language skill, as English is a universal language, can help to assess the progress of acquiring language. Zaki and Darmi (2021) said that to ensure the educational language outcomes are clearly defined and accepted worldwide, a consistent framework for measuring language proficiency is necessary. The Common European Framework of Reference for Languages is a recognized framework developed by the Council of Europe. This framework provides a standardized basis for language learning, teaching, and assessment. Wolfer and Lew (2024) stated that CEFR has grown to serve as a significant resource in language education while using action-oriented descriptors.

Moreover, the CEFR serves as an organized and comprehensive framework that facilitates the planning, execution, and evaluation of language education. Language competence in CEFR is determined by several levels, and there is a clear description of learners' abilities in many language competences. With these levels, learning progress can be focused on meeting competency targets. As stated by Zaki and Darmi (2021), CEFR is an international framework that covers every aspect of education for language learning materials and examinations. Its function is not only a theoretical paradigm but also an instrument in language instruction throughout the world.

2.1.2 CEFR Level

The CEFR classified learners' language abilities into several levels. Language learners are divided into three groups, namely basic, independent, and proficient users (Council of Europe, 2001). Each category has different comprehension of numerous competencies, such as vocabulary range and grammatical accuracy, as well as coherence and cohesion. These reference levels

provide a foundation for comparing some language learning like test materials, courses, and curricula (Lew & Wolfer, 2024). With these grouping levels, the CEFR provides clear guidance in recognizing learners' language proficiency progress.

Each category in the CEFR indicates the learners' level of independence in using the language. Basic users are known as learners who are at the A1-A2 level and capable of understanding and using simple expressions. Meanwhile, independent users (B1-B2) can use language more independently in various situations, and proficient users (C1-C2) have more complex and flexible language skills in professional contexts (Council of Europe, 2001). This is also supported by research that states that the CEFR level indicates step-by-step progress in learners' language abilities, especially in vocabulary usage and communication (Wolfer & Lew, 2024). As a result, grouping CEFR users becomes an important basis in understanding learners' language proficiency levels.

2.1.3 Basic User of CEFR

Level A1 and A2 are the basic users in CEFR, which signifies the basic ability to learn a language. At the A2 level, learners may communicate daily with simple contexts like daily routines or personal details. Their competencies are still limited to the direct exchange of information on routine matters (Council of Europe, 2001). This indicates that basic users, especially A2 learners, are at a preliminary stage before advancing to higher levels.

In CEFR, the transition from level A2 to B1 is a critical phase in which students begin to shift from basic users to independent users. At the B1 level, learners can produce main points in an idea and form longer sentences while linking them together with limited cohesive devices. As learners progress to the A2 level, the introduction of abstract vocabulary and transactional language presents significant challenges, and these difficulties intensify at the B1 level, where learners struggle with a broader and more complex range of vocabulary (Jeon, 2025; Nguyen, 2024). Introducing the new comprehension scope, like vocabulary, will be useful in preparing learners as independent users. Therefore,

learning media are needed so that students will feel familiar with the changes in competency standards.

2.2 Vocabulary Acquisition

There are many components in learning English, one of which is vocabulary. As stated by Wero, Machmud, and Husain (2021), when learning English, the most fundamental thing that should be mastered by students is vocabulary. Laoli, Giawa, Zebua, and Namo (2025) also identified that acquiring vocabulary is important to developing language because it forms the learners' base for comprehension and communication. Before students learn other language skills, they should learn vocabulary as the first step (Afidah & Machfudi, 2022). Therefore, building a strong vocabulary foundation should not be missed in studying English.

Due to its function in expressing students' ideas, vocabulary is considered essential. Vocabulary has a connection with the other four language skills, namely, writing, reading, speaking, and listening. According to Yudha and Mandasari (2021), having a strong vocabulary is beneficial for learners to comprehend those four skills. Vocabulary acquisition greatly affects students' academic performance and practical abilities, enabling them to comprehend texts and communicate efficiently in the target language. Students with a rich vocabulary are considered better prepared to understand academic material and express their ideas orally and in writing.

Even though its role is very important in language learning, acquiring vocabulary is not easy. Afzal (2019) said that for non-native English speakers, understanding the word's meaning, the correct use of words, and guessing the meaning in text are challenges that must be faced. Learners easily forget the vocabulary they have just learned due to a lack of attention in the vocabulary study. Studying vocabulary in a conventional way has been regarded as a tedious approach (Hong et al., 2022). Based on these statements, it is necessary to use more appropriate methods in learning vocabulary so that students can learn other language skills.

2.3 Functional Vocabulary

Learning a language commonly starts with vocabulary introduction. One type of vocabulary in language learning is functional vocabulary. This category of vocabulary includes terms that help learners build grammatical structures and connect ideas in a sentence. In linguistic literature, this group of words is commonly known as “function words” or “grammatical words” due to their classification as “closed-class words.” As stated in Lee (2021), function words, often referred to as closed class words, are defined by their role in grammar rather than their meanings in the dictionary. In this research, the phrase “functional vocabulary” is used to highlight that these categories of vocabulary are the things that learners need to be familiar with.

In contrast to content words, words that have a dictionary meaning or physical form, functional vocabulary has the characteristics of an abstract word, where its understanding requires context. Because of this characteristic, it is difficult to use the functional vocabulary so that it is possible to make mistakes in choosing words in a sentence. As stated by Abdalla (2025), some issues related to the use of lexical and functional words can generally reduce the quality of a sentence. The issue revolves around students struggling to properly utilize pronouns, auxiliary verbs, and prepositions. Therefore, it is crucial to acknowledge the significance of functional vocabulary since it offers a key element in maintaining grammatical consistency.

To address these problems, the memory matching game, as an educational vocabulary resource in this research, includes the following three main topics of interconnected functional vocabulary.

1. **Conjunctions and Prepositions**

Conjunctions and prepositions are part of the functional vocabulary that play an important role in connecting language in a sentence. Conjunctions serve to connect words, phrases, or clauses to form logical relationships of meaning, such as addition, contrast, or causation. Meanwhile, prepositions function to indicate the relationship between a

noun or phrase and other elements in the sentence, such as relationships of time, place, direction, or other abstract relationships. Both types of words contribute to maintaining clarity of structure as well as coherence of meaning in communication, thereby enabling the delivery of messages in a more organized and easily understood manner (Teshaboyeva, 2025).

Although they play an important role in the formation of meaning, the use of conjunctions and prepositions remains one of the main challenges for learners of English as a foreign language. Research shows that EFL learners often make mistakes in the use of conjunctions, both in terms of number and accuracy of use (Sanosi, 2024). In addition, prepositions are also known to be difficult to master because their meanings and uses depend on context, which can lead to causing errors in their usage (Damayanti & Sundari, 2022). The most common errors found are incorrect uses of prepositions, which are largely influenced by learners' first language interference. Therefore, this indicates that conjunctions and prepositions play an important role in maintaining clarity of meaning as well as the relations between elements within a sentence.

2. Quantifiers

Quantifiers are words or phrases used to indicate the amount or quantity in a sentence, whether in a specific or nonspecific form (Hazem, 2017). In their usage, quantifiers function as part of a determiner that precedes a noun to provide information about the number or amount of an object. According to Sari (2010), quantifiers can be used with either countable or uncountable nouns to show the type of quantity intended. Additionally, quantifiers also have variations in meaning, such as indicating large, medium, or small amounts, depending on the type of word used.

In line with the important role of quantifiers, it is found that this topic causes considerable difficulty for English language learners. Research shows that learners often make mistakes in the use of quantifiers, especially in distinguishing their use with countable and uncountable

nouns (Sari, 2020). Some errors also occur because learners have not fully understood the use of quantifiers, so they often use them inappropriately or randomly (Hazem, 2017). Another factor influencing these errors is first language interference as well as the habit of translating directly without considering the context of use. This confirms that mastery of quantifiers is very important in vocabulary learning because it is directly related to the accuracy of language use in communication.

3. Modal Auxiliary Verbs

Modal auxiliary verbs are a part of auxiliary verbs used to add enhanced meanings of the main verb in a sentence. In general, these verbs are used to express various meanings such as ability, possibility, permission, and obligation, as well as to make predictions in communication (Almakrob et al., 2023). In their usage, modal verbs can not stand alone but are always followed by a main verb to create a more specific meaning (Luvuno & Ajani, 2022). Moreover, Ahmed (2021) mentions that a single modal can have more than one purpose based on the context of its use. This indicates that modal auxiliary verbs play an important role in expressing nuances of meaning as well as the speaker's perspective in a sentence.

The use of modal auxiliary verbs in English not only involves understanding their forms but also their meanings, which depend on the context, making it often difficult for EFL learners. Studies show that modal verbs are one of the most challenging aspects of grammar to understand due to the complexity of their functions and variations in meaning. Additionally, Kurniawan, Azhimia, Rahman, and Rahmadani (2024) said that learners also experience struggles in recognizing the functions, forms, and correct use of modals within sentence contexts. This difficulty is further reinforced by the fact that a single modal can have many meanings in various situations, which often leads to confusion for learners (Almakrob, Altamimi, & Altaweel, 2023). This suggests that in order for students to communicate with greater clarity and express

themselves effectively, they must have a solid understanding of modal auxiliary verbs.

2.4 Digital Game-Based Learning (DGBL)

As technology continues to advance, learning media also continues to evolve. DGBL, which stands for Digital Game-Based Learning, is a learning method that integrates content into games or digital applications. Salen (2004, as cited in Wang & Han, 2021), defines DGBL as a system in which users get involved in artificial conflict, which is defined by rules and produces measurable results. The same statement was made by Vnucko & Klimova (2023) that DGBL is a learning process through applications that were designed to accomplish educational goals. With DGBL, students can discover various aspects of the game while improving their skills and increasing knowledge.

Wati and Yuniawatika (2020) claim that by using games as a learning medium, students are always enthusiastic about learning, and teachers do not need to struggle to boost students' motivation. Teachers can also utilize educational games in every part of the learning process. With games, they can be used as quizzes, assessments, and a way to present teaching material. Research has proven the use of digital games in education has a beneficial impact on students. DGBL represents a potential solution to enhance the learning process (Ragni et al., 2023).

2.4.1 Digital Game-Based Language Learning (DGBLL)

Digital Game-Based Language Learning (DGBLL) is defined as the implementation of games that include learning progress for improving language proficiency. According to Wang and Han (2021), with DGBLL, it is believed that it can enhance students' motivation in learning a language. For foreign language learning, integrating DGBLL into teaching can be a great solution to address the technological and pedagogical barriers as well as to make language learning more engaging (Rahmatika et al., 2025). In addition, many teachers have a favorable opinion of DGBLL and acknowledge its potential to increase students' vocabulary retention while promoting interactive learning.

Govender and Moreno (2021) said that teaching methods such as a communicative approach that emphasizes interaction have been found to be effective for language learning. Nevertheless, the integrated use of game-based methods is proven to significantly raise students' engagement. It is also mentioned that learners with digital game exposure tend to have more target language vocabulary. This learning medium can facilitate the development of all majors in language skills while building students' vocabulary. Hong, Shen, Chin, and Chen, (2020) also stated that games can help learners to easily recognize and retain vocabulary.

2.4.2 Memory Matching Game

In this digitalization era, there are many game types, one of which is the memory matching game. Memory games provide educational activities that allow participants to use their memory skills to complete certain challenges, ranging from simple card games to crossword puzzles. Memory matching games require players to use their memory to turn over two cards at the same time to find a matching pair (Dirgantara & Sepatanto, 2020). Through games and playing, it can develop important cognitive skills that may support learners' future development. Memory games are crucial in this context because they require players to use their memory to match cards (Sivakumar, 2022). As a result, these activities make students actively use their memory, which helps develop important cognitive skills.

Malik, Ya Syak, Hasni, and Rahim (2019) stated that card games come with various characteristics and have physical and social benefits. It is easy to play while sharpening players' fine and gross motor skills. Based on Gardner's theory of multiple intelligences, playing memory card games encourages visual-spatial intelligence as it requires players to focus on card representations and movements. Additionally, card games are considered to be helpful in improving memory and comprehension (Haris et al., 2019). Hence, memory matching cards are appropriate to deal with learning material that is often forgotten.

During language learning, memory matching games employ memory

techniques to assist learners with limited vocabulary recall. Zimmerman (2014), in Razali, Amin, Kudus, and Musa (2017), points out that when vocabulary games are used in learning, students will likely get the chance to work on different parts of words, like spelling, word parts, meanings, or grammar. It is also stated that involving students in new experiences such as vocabulary games can help them remember new words with their meanings. Based on these statements, a memory matching game is not only entertainment but also a useful strategy in the learning process. With this game method, learners can learn vocabulary through modern media in a more engaging way.

2.5 Scaffolding Method

The scaffolding method is a teaching strategy that offers students short-term assistance until they can study on their own. The scaffolding concept is based on Vygotsky's theory of the Zone of Proximal Development. According to Akromah (2024), this method is common in the educational learning process to assist students as they progress to higher independence levels. In their study, a scaffolding method was employed, and it has a positive impact on vocabulary knowledge. Scaffolding enables students to complete tasks that were initially difficult by providing support that is then gradually reduced (Yildiz & Celik, 2020).

In educational game-based learning, scaffolding methods can be implemented through activities with simple states to be more complex. In their research, Van de Pol, Volman, and Beishuizen (2010, as cited in Mahan & Zarobe, 2025) suggest a four-step model for how scaffolding was commonly understood, namely, contingency, fading, transfer of responsibility, and internalization, where assistance is adjusted to students' needs and progressively reduced. Wu (2023) also supported this by saying that scaffolding will be more effective if used in task-based interactive activities because it may improve students' participation and comprehension. Furthermore, visual media and guided practice in scaffolding methods can help students grasp the knowledge more thoroughly (Muhammad et al., 2025). Therefore, the scaffolding method in this study will be integrated into

the memory matching game using three learning modes, namely translation, synonym, and blank sentence, which represent the stages of assistance from high to low levels.

1. Translation

Translation plays a role in vocabulary learning that serves as a form of scaffolding with the highest level of assistance because learners are given the meaning of words in their first language. Vocabulary learning strategies using a translation function to create a mental connection between L1 and L2, thereby facilitating the process of storing and retrieving vocabulary (Liashuk, 2019). Additionally, scaffolding in translation activities helps make tasks easier and supports students' gradual independence (Ali, 2022). Both studies show that translation functions as a learning strategy that helps build connections between the first language and the target language while facilitating learning tasks by providing initial assistance. As a result, the translation mode can be thought of as an initial stage of scaffolding in the context of game-based learning that aims to establish a base of vocabulary knowledge prior to students advancing to a level of higher meaning processing.

2. Synonym

Vocabulary learning through synonyms serves to help students understand the meaning relationships between words. Based on Ysmailylova and Imankulova (2025), synonyms play a significant role in expanding the vocabulary process and make learners learn to express ideas in varied forms. With mastering synonyms, students are able to avoid redundancy and produce more natural language in both writing and speaking. Learning synonyms using games can be enjoyable and more engaging (Barakayevich, 2024). Hence, the synonym mode can be seen as an advanced stage in game-based learning scaffolding that aids students in gaining a greater comprehension of vocabulary following the meaning introduction stage.

3. Blank Sentence

A blank sentence is an example of a vocabulary exercise that requires students to finish words in the context of a sentence. The blank sentence with multiple-choice answers is a widely used method for assessing vocabulary proficiency since it requires comprehending the meaning of words in context rather than simply identifying the form of the words (Kılıçkaya, 2019). It also mentions that testing vocabulary with multiple-choice tests encourages students to use vocabulary more productively since they are tired of inferring the meaning from the context. Sobolevská (2022) explains that multiple-choice questions often use straightforward sentences to present it. The memory matching game's blank sentence mode may thus be seen as the last step in scaffolding, which demands contextual knowledge but offers less support than the prior phase.

2.6 Android-Based Game

An Android-based game is one of the learning media that use mobile technology to facilitate the learning process via game-based activities. The selection of Android-based games is based on ease of access for users because Android is a well-known software in the telecommunications market (Nurchintyawati, 2022). Moreover, offline or online games on smartphones offer the flexibility to be played anytime and anywhere, and it is also easy to develop them based on student needs. According to Puspitasari (2022), given the monotonous English content and the limited use of digital media in the classroom, it is essential to create a game application based on Android to provide learning media that is relevant to the current generation and successfully advances students' vocabulary proficiency. Based on previous studies, Android-based games can be seen as educational tools for language learning. It helps learners to learn language by combining easy access, interactive features, and gaming features.

In addition to having interactive characteristics, Android-based games also play a role in supporting the development of language skills, especially in

vocabulary learning. The rapid advancement of technology makes mobile language learning applications widely used to develop language skills, especially vocabulary (Wahyuningsih, 2024). Moreover, language learning applications can assist and offer great availability to learners to acquire vocabulary. As stated by Mutmainah, Bajjuri, and Azise (2024), Android-based educational games are designed with learning activities that allow students to be actively involved in the learning process. As a result, Android-based games may be utilized as a teaching tool that uses technology to make learning fun and help students master their vocabulary.

2.7 Previous Studies

There are several studies regarding the use of the matching card game in the learning process, especially for vocabulary learning, which prove that this game is effective. A finding by Agustina, Manihuruk, and Situmeang (2024), aimed to know the impact of using memory games with modified cue cards on students' vocabulary mastery. The findings showed a significant increase in the average score in the experimental class from 47.9 to 74.5 after being given treatment using memory games. The similarity with this research lies in the use of memory game media for vocabulary acquisition and the study focus to the usage of nouns.

A similar study was conducted by Malik, Ya Syak, Hasni, and Rahim (2019), which aimed to promote the understanding of proverbs in English and Malay through the use of card games. This quantitative study involved 56 students as respondents using a questionnaire instrument to measure their experiences. The findings of the study indicate that the majority of respondents gave positive responses to the use of matching card games because they are considered capable of creating a fun learning atmosphere and increasing student engagement in understanding complex material. The use of the matching card game has been proven not only effective for complex figurative language material but also very potentially applicable in mastering various categories of functional vocabulary.

Another study conducted by Yudha and Mandasari (2021) focused on the

analysis of the use of various types of educational games to improve vocabulary skills in vocational high school students. This study, which used qualitative methods, demonstrates that using game-based methods in English classes is effective in reducing boredom and increasing student motivation to learn. The analysis shows that teachers must be creative in selecting the appropriate game medium to make the learning experience more fun and engaging. These findings provide a strong foundation for researchers to use matching card games as a creative solution in teaching functional vocabulary to remain engaging for students.

Based on the findings of the three previous studies, it can be determined that, despite the card game's effectiveness as a medium for enhancing English proficiency, certain aspects have yet to be explored. Research by Agustina, Manihuruk, and Situmeang (2024) is limited to the understanding of nouns, in contrast, Malik, Ya Syak, Hasni, and Rahim (2019) studied complex figurative language like proverbs, and Yudha and Mandasari (2021) focused on general motivational aspects. This study aims to address this gap by creating a memory matching game that is focused on practical language use. Unlike previous studies, this media aims to help students strengthen their language skills from level A2 to B1 by introducing and practicing functional vocabulary. Thus, this study not only adopts elements of interactivity and enjoyment from game media but also offers content specifications that are more relevant to the academic and professional needs of students.