

CHAPTER II

LITERATURE REVIEW

2.1 Common European Framework of Reference for Languages (CEFR)

2.1.1 Definition of CEFR

The Common European Framework of Reference for Languages (CEFR) is an internationally acknowledged standard for identifying language ability. The CEFR, developed by the Council of Europe, provides a framework for language educators, institutions, and organizations to evaluate and indicate a learner's linguistic proficiency. The CEFR provides various 'can-do statements' indicating the capabilities a foreign language speaker can exhibit at every different skill level. This procedure is conducted to evaluate learners' proficiency and to develop educational resources designed to address gaps in learners' knowledge. This claim is supported by Sudaryanto and Widodo (2020), who say that the Common European Framework for Languages is an important guide to improve the understanding of language qualifications and help language teachers work together.

2.1.2 CEFR Proficiency Levels

The CEFR categorizes language proficiency into six levels: A1, A2, B1, B2, C1, and C2. From six levels, there are groups of three main levels: Basic User, Independent User, and Proficient User (Council of Europe, 2001). Basic Users are defined as learners who can use simple words and basic expressions in single-clause sentences. Independent users at level B1 have sufficient language range to describe unexpected situations, while at level B2, they are considered capable of expressing opinions or arguments using several complex sentence forms. Proficient users at level C1 are considered capable of using complex grammatical structures without limiting what they want to say, while level C2 is considered capable of utilizing comprehensive and reliable mastery.

2.1.3 Characteristics of Basic Users (Level A1 and A2)

The ability to understand frequently utilized vocabulary and expressions related to specific fields is known as the A2 level, or Low Intermediate. Achieving A2 proficiency in English requires a wide range of linguistic abilities (Portales et al., 2021). A2-level learners are able to comprehend the context of communication in simple, everyday tasks, including information exchange (Hartono et al., 2021). Elementary level (A2) learners must meet specific criteria, including proficient communication and a developing course for comprehensive verbal understanding. At the A2 level, learners commence the use of modal verbs, conjunctions, and more elaborate sentence constructions in alignment with the standards of intermediate language proficiency (Hawkins & Filipovic, 2012, as cited in Jeon, 2025)

2.2 English as a Foreign Language (EFL)

Currently, English serves not just as a means of communication among native speakers but also as a language institutionalized in numerous former British and American colonies and as a global lingua franca (Al-Mutairi, 2020). Kachru's concept, announced in 1985 with the title "World Englishes," facilitated novel perspectives on the global dissemination of the English language. Kachru (1985) defined the dispersion of English through three concentric circles, the Inner Circle, the Outer Circle, and the Expanding Circle. The Inner Circle defines the nations where English serves as the principal language utilized in everyday life and governmental institutions, including the United States of America, the United Kingdom, Canada, Australia, and New Zealand. The Outer Circle comprises nations with British colonial connections, where English is predominantly utilized in social and governmental contexts. Many nations under this group are former colonies of the British Empire, including India, Malaysia, Singapore, Ghana, and Kenya, among others. In these countries, English is utilized as a second language. The Expanding Circle comprises nations that incorporate English as a foreign language in their educational systems, primarily to facilitate communication with

the Inner and Outer Circles. Countries such as Turkey, Saudi Arabia, the United Arab Emirates, Japan, China, South Korea, and others are included.

In Indonesian educational institutions, English became required as a necessary subject from the elementary through university levels. Therefore, students must enhance their proficiency in language usage (Merentika, Jaya, and Theriana, 2023). Ristanti (2021) defined English as a Foreign Language (EFL): English that is studied by non-native speakers in countries where English is not the primary language. EFL is typically acquired in conditions where the community and educational institutions do not use English as the main tongue. Language learning strategies are crucial to achieve proficiency in English (Khansa, 2020). Learners that use English as a second language require more frequent practice to enhance their linguistic proficiency. These days, learners only get a few hours of English instruction each week and don't have much motivation to use the language outside of school (Liyana, 2022). The need for increased exposure to the language poses a significant problem for non-English-speaking learners. At times, learners might believe that their local environment rarely uses English, thereby limiting their chances to improve their language skills (Lubna & Toyyibah, 2024).

2.3 Scaffolding Method

The term "scaffolding" was first used by Wood et al. (1976), who defined it as a type of support that involves limiting the degrees of freedom accessible to a learner, highlighting relevant aspects of a task, and demonstrating solutions (Davis, 2015). Nurdin and Widiadi (2024) say that scaffolding, a method of helping learners solve problems, involves gradually reducing the amount of help they receive over time. It is a crucial strategy to ensure that educational challenges do not inhibit learners' capacity to assimilate new knowledge (Sari & Surya, 2017). Purwasih and Rahmadhani (2021) state that scaffolding aims to reduce the possibility of learners making errors. Therefore, learners acquire guidance to achieve their educational goals more efficiently.

Davis (2015) asserts that many people primarily view scaffolding as a mechanism for organization, which includes limiting degrees of freedom or providing additional information and guidance. Effective scaffolding also intentionally increases task complexity, thereby helping learners accomplish new and more intricate tasks. According to Sari and Surya (2017) the scaffolding methodology improves student learning through active engagement. Customizing scaffolding to meet the specific needs of learners is crucial in the context of English as a Foreign Language (EFL). Therefore, this application is systematically designed, starting with translation and synonym modes, then progressing to a more demanding blank sentence mode, which necessitates users to complete sentences with vocabulary acquired in the preceding modes.

2.3.1 Translation

Kumar Kalyani (2023) asserts that "The Translation Method" in English language pedagogy constitutes a fundamental method to language instruction that has profoundly influenced the development of language education throughout the years. This method has been utilized as a primary instructional strategy to enhance language learners' vocabulary, grammar, and comprehension by analyzing and contrasting linguistic structures across different languages. This method emphasized the importance of understanding grammatical structures and vocabulary through direct translation between the learner's native language (L1) and the target language (L2) (Shuwaib, 2024). Shuwaib (2024) additionally states, recently, there has been an increase in interest in the advantages of translation as a resource for language acquisition. This renewed focus is influenced by various factors, such as an increasing awareness of the cognitive advantages of bilingualism, a greater emphasis on intercultural skills within language education, and the prevalence of translation tools in our digital world.

2.3.2 Synonym

Synonyms are essential for language proficiency, facilitating nuanced expression, clarity, and vocabulary enhancement (Akbar & Zahid, 2025). Furthermore, Dong and Lin (2017) assert that the instruction of synonyms is a crucial component of vocabulary education. Teaching synonyms is an important part of vocabulary education (Kuswatun, 2017). Webb's (2007) empirical study, referenced in Sari et al. (2022), suggests that acquiring vocabulary with familiar synonyms may be easier to manage than learning words devoid of known synonyms, as learners can leverage their understanding of syntax and collocation from recognized synonyms to facilitate the acquisition of less common synonyms, thereby alleviating the cognitive load of learning.

2.3.3 Blank Sentence

Participants in an English Language Teaching (ELT) program focused on communicative language teaching and task-based learning exhibited markedly enhanced English language proficiency relative to those engaged in a conventional grammar-based program (Brown, 2015, as cited in Yudi et al., 2024). Rosnata, Agustiana, and Dibia (2021) state that the fill-in-the-blank question style used is in accordance with the characteristics of elementary school students, making it easier for students to learn the material; besides that, it can stimulate students to think critically. The fill-in-the-blank question necessitates that students demonstrate assimilated knowledge rather than engage in multiple-choice exercises (Li, 2020). Nonetheless, fill-in-the-blanks questions, which share structural similarities with multiple-choice questions (both requiring brief responses of one or a few words), are more objective and mitigate certain drawbacks of multiple-choice questions, such as the potential for guessing answers (Medawela et al., 2017).

2.4 Digital Game-Based Learning (DGBL)

Digital Game-Based Learning (DGBL) has become a global trend among scholars and professionals in recent years (Dan et al., 2024). Digital game-based

learning is an instructional approach that employs digital games to enhance the learning and teaching processes (Perrotta et al., 2013, as cited in Anastasiadis et al., 2018). Digital games can enhance learners' enjoyment and engagement in language acquisition (Cahyani et al., 2024, as referenced in Rahayu et al., 2024). Febrianti, Akbhar, and Kuswidyanarko (2020) assert that enhancing learners' engagement in education through the use of effective and innovative instructional approaches, such as Digital Game-Based Learning (DGBL), can facilitate the attainment of educational objectives. Digital Game-Based Learning (DGBL) can enhance learning resources, thereby improving usability and enriching the overall educational experience.

DGBL has been utilized for educational reasons recently, as it aids students in achieving certain learning outcomes through an engaging educational games methodology (Huang et al., 2010, as cited in Rahman et al., 2025). Research indicates that employing digital games for educational purposes, which integrate instructional preparation with essential elements of game design (including collaboration, decision-making, and feedback), generally enhances learner engagement (Serrano, 2019). DGBL is frequently recognized as a motivating, appealing, and engaging method due to its well-crafted game aspects, such as virtual characters, challenges, quests, awards, and avatars (Jabbar & Felicia, 2015, as quoted in Dan et al., 2024). Moreover, Adams in Sintaro (2020) asserts that a game is a playful endeavor characterized by an illusory atmosphere that seems authentic, wherein the participant seeks to achieve victory according to specific rules.

2.4.1 Digital Game-Based Language Learning (DGBLL)

Alyaz and Genc (2016) characterize digital game-based language learning as a contemporary innovation in language education contexts. Kazu et al. (2023) define Digital Game-Based Language Learning (DGBLL) as an educational experience that integrates technology and non-technological elements. DGBL integrates education and gaming, employs a digital platform as the medium, and incorporates game aspects to impart a certain skill or attain a particular learning

outcome (Chowdhury et al., 2024). Chowdhury et al. (2024) assert that in DGBLL, game elements are purposefully developed to teach a language ability or achieve a certain language-learning result.

Huang (2023) asserts that digital games have been created to enhance English language acquisition by advancing speaking, listening, reading, and vocabulary development for learners of English as a foreign language. Moreover, DGBLL may provide an efficient approach for English language learners to develop crucial linguistic skills (Acquah & Katz, 2020). The majority of studies on DGBLL indicated positive outcomes for student learning, primarily related to emotional or psychological states, with language acquisition following closely (Ting Hung et al., 2018). DGBLL offers numerous advantages: it exposes learners to L2 in genuine, significant factors, emphasizing both meaning and form, while fostering cooperation, creative problem-solving, and critical thinking (Gatrell, 2025).

2.4.2 Memory Matching Game

Gamification involves combining gaming elements into educational activities, significantly enhancing student engagement relative to traditional textbook-based learning techniques. Card matching games in language learning are a fun way to help students improve their vocabulary skills. This medium becomes useful since it successfully engages learners' attention and motivation in the educational process. Learners may find it easier to engage with challenging material as their language proficiency improves (Nevyta, Purba, and Hutagalung, 2023). Memory matching game demonstrates several characteristics that make it a beneficial choice for experimental research (Thibodeau et al., 2021).

Memory matching games can function as an efficacious educational instrument to augment vocabulary acquisition and promote retention among learners (Wahono et al., 2023). Memory matching games require players to reveal images attached to cardboard surfaces by pairing two cards, such as words with adjectives or images, to enhance memory and cognitive processing abilities. Memory matching games help the brain learn by systematically recognizing

images and words (Rosyad, 2015, as referenced in Meilani et al., 2025). Therefore, a memory matching game engages the sense of sight, encouraging the brain to remember the location of images that have been seen multiple times (Putri, 2015, as cited in Zein, 2019). Wardani (2022) asserts that the implementation of matching cards might enhance the engagement of learners, innovation, and creativity during the educational process, hence enhancing beneficial learning results.

2.5 Android-Based Educational Media

The increasing number of technological devices has markedly intensified, showing in both developing nations like Indonesia and wealthy countries (Sultan et al., 2025). According to StatCounter Global Stats statistics up to February 2019, Android OS mobile users in Indonesia constituted 50.13%, while Windows occupied the second position with 36.55% of users. Globally, Android holds the predominant market share at 36.5% (Saputri et al., 2020). The majority of Android users can currently access websites and applications, particularly educational games, at any time and from any location. Kuswanto et al. (2021) claim that media can enhance students' motivation for autonomous learning, enabling them to study at their pace and convenience.

The development of Android-based learning media has been a major concern in education. Android, a prevalent and accessible platform, possesses substantial potential to enhance the educational experience through interactive, visual, and mobile-compatible applications (Darwin et al., 2022). Android-based learning media offer several interactive components, such as animated films, simulations, and quizzes, hence augmenting the engagement and enjoyment of the learning experience (Hidayah et al., 2025). Hidayah et al. (2025) assert that digital learning media facilitate rapid and precise feedback, aiding students in recognizing their errors and enhancing their comprehension. Therefore, the objectives of establishing Android-Based Learning Media (ABLM) are likely to be effective, as contemporary students are digital-native learners who exhibit considerable creativity in using Android devices (Ndapa et al., 2023).

2.6 Previous Studies

The research conducted by Nevyta, Purba, and Hutagalung (2023) in the thesis entitled “Efektivitas Permainan Memory Matching Card Terhadap Peningkatan Kosakata (Wortschatz) Bahasa Jerman Siswa Kelas XI SMA YP HKBP Pematang Siantar” reveals that the mean pretest score of students was 48.68, which did not meet the KKM, while the posttest score was 87.00, exceeding the KKM. The results from data analysis and hypothesis testing validate the effectiveness of the matching-card learning medium in enhancing student vocabulary. The assessment of the N-Gain average test achieved a score of 0.7705, equating to 77%, therefore classifying it as successful. A study by Nevyta, Purba, and Hutagalung (2023) supports the utilization of memory games to enhance word recall. Nevertheless, it concentrated only on the German language.

In addition, Hidayah and Puspaningrum (2025) demonstrate that the card-matching technique significantly enhances memory skills through the integration of visual stimulation and collaboration. This study, conducted in elementary schools and focusing on general topics, demonstrates improved memory skills, thereby providing a solid foundation for developing English vocabulary learning aids for elementary-level English learners. This underscores a deficiency in the research of Hidayah and Puspaningrum (2025) the card-matching study concentrated just on students in primary school and offered only generic information, overlooking functional vocabulary.

A previous study entitled “Designing a Matching Card Game to Improve Cognitive Memory in Children” by Zein (2019) produced an engaging Android application that functions as a leisure activity, develops memory capabilities, promotes problem-solving, and cultivates user focus. The game's design reflects a dedication to offering an alternative method for enhancing memory. Consequently, to enhance this study, the researcher created an Android-based card-matching application for college students that is engaging while maintaining its core objective: enhancing English word comprehension.

Three prior research studies have investigated the design and efficacy of memory matching games. Among these three prior research studies, none has

investigated the application of Android-based memory matching educational media for university students. Therefore, this study created a memory matching game for A2-level English learners, primarily aimed at students in the second semester of the Applied Foreign Languages Study Program at Universitas Diponegoro. This study integrates concepts and methodology from the three preceding studies, encompassing the research methods employed during the research and development stage, as well as the theoretical framework that underpins the design of the memory matching game.